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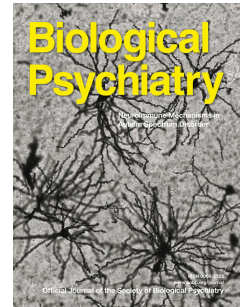
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# Accepted Manuscript

Cortical brain abnormalities in 4474 individuals with schizophrenia and 5098 controls via the ENIGMA consortium



Theo GM. van Erp, Esther Walton, Derrek P. Hibar, Lianne Schmaal, Wenhao Jiang, David C. Glahn, Godfrey D. Pearlson, Nailin Yao, Masaki Fukunaga, Ryota Hashimoto, Naohiro Okada, Hidenaga Yamamori, Juan R. Bustillo, Vincent P. Clark, Ingrid Agartz, Bryon A. Mueller, Wiepke Cahn, Sonja MC. de Zwarte, Hilleke E. Hulshoff Pol, René S. Kahn, Roel A. Ophoff, Neeltje EM. van Haren, Ole A. Andreassen, Anders M. Dale, Nhat Trung Doan, Tiril P. Gurholt, Cecilie B. Hartberg, Unn K. Haukvik, Kjetil N. Jørgensen, Trine V. Lagerberg, Ingrid Melle, Lars T. Westlye, Oliver Gruber, Bernd Kraemer, Anja Richter, David Zilles, Vince D. Calhoun, Benedicto Crespo-Facorro, Roberto Roiz-Santiañez, Diana Tordesillas-Gutiérrez, Carmel Loughland, Vaughan J. Carr, Stanley Catts, Vanessa L. Cropley, Janice M. Fullerton, Melissa J. Green, Frans Henskens, Assen Jablensky, Rhoshel K. Lenroot, Bryan J. Mowry, Patricia T. Michie, Christos Pantelis, Yann Quidé, Ulrich Schall, Rodney J. Scott, Murray J. Cairns, Marc Seal, Paul A. Tooney, Paul E. Rasser, Gavin Cooper, Cynthia Shannon Weickert, Thomas W. Weickert, Derek W. Morris, Elliot Hong, Peter Kochunov, Lauren M. Beard, Raquel E. Gur, Ruben C. Gur, Theodore D. Satterthwaite, Daniel H. Wolf, Aysenil Belger, Gregory G. Brown, Judith M. Ford, Fabio Macciardi, Daniel H. Mathalon, Daniel S. O'Leary, Steven G. Potkin, Adrian Preda, James Voyvodic, Kelvin O. Lim, Sarah McEwen, Fude Yang, Yunlong Tan, Shuping Tan, Zhiren Wang, Fengmei Fan, Jingxu Chen, Hong Xiang, Shiyong Tang, Hua Guo, Ping Wan, Dong Wei, Henry J. Bockholt, Stefan Ehrlich, Rick PF. Wolthusen, Margaret D. King, Jody M. Shoemaker, Scott R. Sponheim, Lieuwe De Haan, Laura Koenders, Marise W. Machielsen, Therese van Amelsvoort, Dick J. Veltman, Francesca Assogna, Nerisa Banaj, Pietro de Rossi, Mariangela Iorio, Fabrizio Piras, Gianfranco Spalletta, Peter J. McKenna, Edith Pomarol-Clotet, Raymond Salvador, Aiden Corvin, Gary Donohoe, Sinead Kelly, Christopher D. Whelan, Erin W. Dickie, David Rotenberg, Aristotle Voineskos, Simone Ciufolini, Joaquim Radua, Paola Dazzan, Robin Murray, Tiago Reis Marques, Andrew Simmons, Stefan Borgwardt, Laura Egloff, Fabienne Harrisberger, Anita Riecher-Rössler, Renata Smieskova, Kathryn I. Alpert, Lei Wang, Erik G. Jönsson, Sanne Koops, Iris EC. Sommer, Alessandro Bertolino, Aurora Bonvino, Annabella Di Giorgio, Emma Neilson, Andrew R. Mayer, Julia M. Stephen, Jun Soo Kwon, Je-Yeon Yun, Dara M. Cannon, Colm McDonald, Irina Lebedeva, Alexander S. Tomyshev, Tolibjohn Akhadov, Vasily Kaleda, Helena Fatouros-Bergman, Lena Flyckt, Geraldo F. Busatto, Pedro GP. Rosa, Mauricio H. Serpa, Marcus V. Zanetti, Cyril Hoschl, Antonin Skoch, Filip Spaniel, David Tomecek, Saskia P. Hagenaars, Andrew M. McIntosh, Heather C. Whalley, Stephen M. Lawrie, Christian Knöchel, Viola Oertel-Knöchel, Michael Stäblein, Fleur M. Howells, Dan J. Stein, Henk Temmingh, Anne Uhlmann, Carlos Lopez-Jaramillo, Danai Dima, Agnes McMahon, Joshua I. Faskowitz, Boris A. Gutman, Neda Jahanshad, Paul M. Thompson, Jessica A. Turner

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Cortical brain abnormalities in 4474 individuals with schizophrenia and 5098 controls via the  
ENIGMA consortium

Running title: Meta-analysis of cortical brain abnormalities in schizophrenia

Theo GM van Erp<sup>1</sup>, Esther Walton<sup>2</sup>, Derrek P Hibar<sup>3,4</sup>, Lianne Schmaal<sup>5,6,7</sup>, Wenhao Jiang<sup>8</sup>, David C Glahn<sup>9,10</sup>, Godfrey D Pearlson<sup>9,10</sup>, Nailin Yao<sup>9,10</sup>, Masaki Fukunaga<sup>11</sup>, Ryota Hashimoto<sup>12,13</sup>, Naohiro Okada<sup>14</sup>, Hidenaga Yamamori<sup>13</sup>, Juan R Bustillo<sup>15</sup>, Vincent P Clark<sup>15,16</sup>, Ingrid Agartz<sup>17,18,19</sup>, Bryon A Mueller<sup>20</sup>, Wiepke Cahn<sup>21</sup>, Sonja MC de Zwarte<sup>21</sup>, Hilleke E Hulshoff Pol<sup>21</sup>, René S Kahn<sup>21</sup>, Roel A Ophoff<sup>21,22</sup>, Neeltje EM van Haren<sup>21</sup>, Ole A Andreassen<sup>17,23</sup>, Anders M Dale<sup>24,25</sup>, Nhat Trung Doan<sup>17</sup>, Tiril P Gurholt<sup>17</sup>, Cecilie B Hartberg<sup>17</sup>, Unn K Haukvik<sup>17,23</sup>, Kjetil N Jørgensen<sup>17,26</sup>, Trine V Lagerberg<sup>23</sup>, Ingrid Melle<sup>17,23</sup>, Lars T Westlye<sup>23,27</sup>, Oliver Gruber<sup>28,29</sup>, Bernd Kraemer<sup>28,29</sup>, Anja Richter<sup>28,29</sup>, David Zilles<sup>29,30</sup>, Vince D Calhoun<sup>15,16</sup>, Benedicto Crespo-Facorro<sup>31,32</sup>, Roberto Roiz-Santiañez<sup>31,32</sup>, Diana Tordesillas-Gutiérrez<sup>31,32,68</sup>, Carmel Loughland<sup>33</sup>, Vaughan J Carr<sup>34,35</sup>, Stanley Catts<sup>36</sup>, Vanessa L Cropley<sup>37</sup>, Janice M Fullerton<sup>38,39</sup>, Melissa J Green<sup>34,38</sup>, Frans Henskens<sup>40</sup>, Assen Jablensky<sup>41</sup>, Rhoshel K Lenroot<sup>34,38</sup>, Bryan J Mowry<sup>42,43</sup>, Patricia T Michie<sup>44</sup>, Christos Pantelis<sup>37,45</sup>, Yann Quidé<sup>34,38</sup>, Ulrich Schall<sup>46,47</sup>, Rodney J Scott<sup>33,47</sup>, Murray J Cairns<sup>33,47</sup>, Marc Seal<sup>48</sup>, Paul A Tooney<sup>33,46,49</sup>, Paul E Rasser<sup>49</sup>, Gavin Cooper<sup>49</sup>, Cynthia Shannon Weickert<sup>34,38</sup>, Thomas W Weickert<sup>34,38</sup>, Derek W Morris<sup>50,51</sup>, Elliot Hong<sup>52</sup>, Peter Kochunov<sup>52</sup>, Lauren M Beard<sup>53</sup>, Raquel E Gur<sup>53</sup>, Ruben C Gur<sup>53</sup>, Theodore D Satterthwaite<sup>53</sup>, Daniel H Wolf<sup>53</sup>, Aysenil Belger<sup>54,55</sup>, Gregory G Brown<sup>56</sup>, Judith M Ford<sup>57,58</sup>, Fabio Macciardi<sup>1</sup>, Daniel H Mathalon<sup>57,58</sup>, Daniel S O'Leary<sup>59</sup>, Steven G Potkin<sup>1</sup>, Adrian Preda<sup>1</sup>, James Voyvodic<sup>55</sup>, Kelvin O Lim<sup>20</sup>, Sarah McEwen<sup>60</sup>, Fude Yang<sup>61</sup>, Yunlong Tan<sup>61</sup>, Shuping Tan<sup>61</sup>, Zhiren Wang<sup>61</sup>, Fengmei Fan<sup>61</sup>, Jingxu Chen<sup>61</sup>, Hong



Xiang<sup>62</sup>, Shiyong Tang<sup>62</sup>, Hua Guo<sup>63</sup>, Ping Wan<sup>63</sup>, Dong Wei<sup>64</sup>, Henry J Bockholt<sup>16,59,65</sup>, Stefan Ehrlich<sup>66,67</sup>, Rick PF Wolthuis<sup>66,113,114</sup>, Margaret D King<sup>16</sup>, Jody M Shoemaker<sup>16</sup>, Scott R Sponheim<sup>20,69</sup>, Lieuwe De Haan<sup>70</sup>, Laura Koenders<sup>70</sup>, Marise W Machielsen<sup>70</sup>, Therese van Amelsvoort<sup>71</sup>, Dick J Veltman<sup>72</sup>, Francesca Assogna<sup>73,74</sup>, Nerisa Banaj<sup>73</sup>, Pietro de Rossi<sup>73,75,76</sup>, Mariangela Iorio<sup>73</sup>, Fabrizio Piras<sup>73,74</sup>, Gianfranco Spalletta<sup>73,77</sup>, Peter J McKenna<sup>78,79</sup>, Edith Pomarol-Clotet<sup>78,79</sup>, Raymond Salvador<sup>78,79</sup>, Aiden Corvin<sup>51</sup>, Gary Donohoe<sup>50,51</sup>, Sinead Kelly<sup>80,81</sup>, Christopher D Whelan<sup>3</sup>, Erin W Dickie<sup>82</sup>, David Rotenberg<sup>82</sup>, Aristotle Voineskos<sup>82</sup>, Simone Ciufolini<sup>83</sup>, Joaquim Radua<sup>19,78,79,83</sup>, Paola Dazzan<sup>83,84</sup>, Robin Murray<sup>83</sup>, Tiago Reis Marques<sup>83</sup>, Andrew Simmons<sup>83</sup>, Stefan Borgwardt<sup>85</sup>, Laura Egloff<sup>85</sup>, Fabienne Harrisberger<sup>85</sup>, Anita Riecher-Rössler<sup>85</sup>, Renata Smieskova<sup>85</sup>, Kathryn I Alpert<sup>86</sup>, Lei Wang<sup>86,87</sup>, Erik G Jönsson<sup>17,19</sup>, Sanne Koops<sup>21</sup>, Iris EC Sommer<sup>21</sup>, Alessandro Bertolino<sup>88</sup>, Aurora Bonvino<sup>88</sup>, Annabella Di Giorgio<sup>89</sup>, Emma Neilson<sup>90</sup>, Andrew R Mayer<sup>16</sup>, Julia M Stephen<sup>16</sup>, Jun Soo Kwon<sup>91,92</sup>, Je-Yeon Yun<sup>93,94</sup>, Dara M Cannon<sup>95</sup>, Colm McDonald<sup>95</sup>, Irina Lebedeva<sup>96</sup>, Alexander S Tomyshev<sup>96</sup>, Tolibjohn Akhadov<sup>97</sup>, Vasily Kaleda<sup>96</sup>, Helena Fatouros-Bergman<sup>98</sup>, Lena Flyckt<sup>98</sup>, Karolinska Schizophrenia Project (KaSP)<sup>99</sup>, Geraldo F Busatto<sup>100,101</sup>, Pedro GP Rosa<sup>100,101</sup>, Mauricio H Serpa<sup>100,101</sup>, Marcus V Zanetti<sup>100,101</sup>, Cyril Hoschl<sup>102</sup>, Antonin Skoch<sup>102,103</sup>, Filip Spaniel<sup>102</sup>, David Tomecek<sup>102</sup>, Saskia P Hagenaars<sup>104,105</sup>, Andrew M McIntosh<sup>90,104</sup>, Heather C Whalley<sup>90</sup>, Stephen M Lawrie<sup>90</sup>, Christian Knöchel<sup>106</sup>, Viola Oertel-Knöchel<sup>106</sup>, Michael Stäblein<sup>106</sup>, Fleur M Howells<sup>107</sup>, Dan J Stein<sup>107,108</sup>, Henk Temmingh<sup>107</sup>, Anne Uhlmann<sup>107,109</sup>, Carlos Lopez-Jaramillo<sup>110</sup>, Danai Dima<sup>111,112</sup>, Agnes McMahon<sup>3</sup>, Joshua I Faskowitz<sup>3</sup>, Boris A Gutman<sup>3</sup>, Neda Jahanshad<sup>3</sup>, Paul M Thompson<sup>3</sup>, Jessica A Turner<sup>2,16</sup>

<sup>1</sup>Department of Psychiatry and Human Behavior, University of California, Irvine, Irvine, CA, USA

<sup>2</sup>Imaging Genetics and Neuroinformatics Lab, Department of Psychology, Georgia State University, Atlanta, GA, USA

<sup>3</sup>Imaging Genetics Center, Mark and Mary Stevens Neuroimaging & Informatics Institute, Keck School of Medicine of the University of Southern California, Marina del Rey, CA, USA

<sup>4</sup>Janssen Research & Development, San Diego, CA, USA

<sup>5</sup>Orygen, The National Centre of Excellence in Youth Mental Health, Melbourne, VIC, Australia

<sup>6</sup>Centre for Youth Mental Health, The University of Melbourne, Melbourne, VIC, Australia

<sup>7</sup>Department of Psychiatry and Amsterdam Neuroscience, VU University Medical Center, Amsterdam, The Netherlands

<sup>8</sup>Department of Psychology, Georgia State University, Atlanta, GA, USA

<sup>9</sup>Department of Psychiatry, Yale University, New Haven, CT, USA

<sup>10</sup>Olin Neuropsychiatric Research Center, Institute of Living, Hartford Hospital, Hartford, CT, USA

<sup>11</sup>Division of Cerebral Integration, National Institute for Physiological Sciences, Okazaki, Aichi, Japan

<sup>12</sup>Molecular Research Center for Children's Mental Development, United Graduate School of Child Development, Osaka University, Suita, Osaka, Japan

<sup>13</sup>Department of Psychiatry, Osaka University Graduate School of Medicine, Suita, Osaka, Japan

- <sup>14</sup>Department of Neuropsychiatry, Graduate school of Medicine, The University of Tokyo, Bunkyo-ku, Tokyo, Japan
- <sup>15</sup>University of New Mexico, Albuquerque, NM, USA
- <sup>16</sup>Mind Research Network, Albuquerque, NM, USA
- <sup>17</sup>Norwegian Centre for Mental Disorders Research (NORMENT), K.G. Jebsen Centre for Psychosis Research, Institute of Clinical Medicine, University of Oslo, Oslo, Norway
- <sup>18</sup>Department of Psychiatric Research, Diakonhjemmet Hospital, Oslo, Norway
- <sup>19</sup>Department of Clinical Neuroscience, Centre for Psychiatric Research, Karolinska Institutet, Stockholm, Sweden
- <sup>20</sup>Department of Psychiatry, University of Minnesota, Minneapolis, MN, USA
- <sup>21</sup>Department of Psychiatry and Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht, The Netherlands
- <sup>22</sup>UCLA Center for Neurobehavioral Genetics, Los Angeles, CA, USA
- <sup>23</sup>Norwegian Centre for Mental Disorders Research (NORMENT), K.G. Jebsen Centre for Psychosis Research, Division of Mental Health and Addiction, Oslo University Hospital, Oslo, Norway
- <sup>24</sup>Departments of Neurosciences, Radiology, Psychiatry, and Cognitive Science, UCSD, La Jolla, CA, USA
- <sup>25</sup>Center for Translational Imaging and Precision Medicine, San Diego, CA, USA
- <sup>26</sup>Department of Psychiatric Research, Diakonhjemmet Hospital, Oslo, Norway
- <sup>27</sup>Department of Psychology, University of Oslo, Oslo, Norway

<sup>28</sup>Section for Experimental Psychopathology and Neuroimaging, Department of General Psychiatry, Heidelberg University Hospital, Heidelberg, Germany

<sup>29</sup>Center for Translational Research in Systems Neuroscience and Psychiatry, Department of Psychiatry, Georg August University, Göttingen, Germany

<sup>30</sup>Department of Psychiatry, University Medical Center Göttingen, Göttingen, Germany

<sup>31</sup>Department of Psychiatry, University Hospital Marqués de Valdecilla, School of Medicine, University of Cantabria-IDIVAL, Santander, Spain

<sup>32</sup>CIBERSAM, Centro Investigación Biomédica en Red de Salud Mental, Santander, Spain

<sup>33</sup>School of Biomedical Sciences and Pharmacy, University of Newcastle, Newcastle, NSW, Australia

<sup>34</sup>School of Psychiatry, University of New South Wales, Sydney, NSW, Australia

<sup>35</sup>Monash University, Melbourne, Australia

<sup>36</sup>University of Queensland, Brisbane, QLD, Australia

<sup>37</sup>Melbourne Neuropsychiatry Centre, University of Melbourne & Melbourne Health, Melbourne, VIC, Australia

<sup>38</sup>Neuroscience Research Australia, Sydney, NSW, Australia

<sup>39</sup>School of Medical Sciences, University of New South Wales, Sydney, NSW, Australia

<sup>40</sup>PRC for Health Behaviour, and FEBE, University of Newcastle Australia, Newcastle, NSW, Australia

<sup>41</sup>University of Western Australia, Perth, WA, Australia

<sup>42</sup>Queensland Brain Institute, The University of Queensland, Brisbane, QLD, Australia

- <sup>43</sup>Queensland Centre for Mental Health Research, The University of Queensland, Brisbane, QLD, Australia
- <sup>44</sup>School of Psychology, University of Newcastle, Newcastle, NSW, Australia
- <sup>45</sup>Florey Institute of Neuroscience and Mental Health, University of Melbourne, VIC, Australia
- <sup>46</sup>The University of Newcastle, Priority Research Centres for Brain & Mental Health and Grow Up Well, Newcastle, NSW, Australia
- <sup>47</sup>Hunter Medical Research Institute, Newcastle, NSW, Australia
- <sup>48</sup>Murdoch Children's Research Institute, Melbourne, VIC, Australia
- <sup>49</sup>The University of Newcastle, Priority Research Centre for Brain & Mental Health, Newcastle, NSW, Australia
- <sup>50</sup>Centre for Neuroimaging & Cognitive Genomics, School of Psychology and Department of Biochemistry, National University of Ireland Galway, Galway, Ireland
- <sup>51</sup>Neuropsychiatric Genetics Research Group, Department of Psychiatry and Trinity College Institute of Neuroscience, Trinity College, Dublin, Ireland.
- <sup>52</sup>Maryland Psychiatric Research Center, University of Maryland School of Medicine, Baltimore, MD, USA
- <sup>53</sup>Department of Psychiatry, University of Pennsylvania, Philadelphia, PA, USA
- <sup>54</sup>Department of Psychiatry, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA
- <sup>55</sup>Brain Imaging and Analysis Center, Duke University Medical Center, Durham, NC, USA
- <sup>56</sup>Department of Psychiatry, University of California San Diego, La Jolla, CA, USA
- <sup>57</sup>University of California, San Francisco, San Francisco, CA, USA
- <sup>58</sup>San Francisco VA Medical Center, San Francisco, CA, USA

<sup>59</sup>Department of Psychiatry, University of Iowa, Iowa City, IA, USA

<sup>60</sup>Department of Psychiatry & Biobehavioral Sciences, University of California Los Angeles, Los Angeles, CA, USA

<sup>61</sup>Psychiatry Research Center, Beijing Huilongguan hospital, Beijing, China

<sup>62</sup>Chongqing Three Gorges Central Hospital, Chongqing, China

<sup>63</sup>Zhumadian Psychiatry Hospital, Henan province, Zhumadian, , China

<sup>64</sup>Luoyang Fifth People's Hospital, Henan province, Luoyang, China

<sup>65</sup>Advanced Biomedical Informatics Group, LLC, Iowa City, IA, USA

<sup>66</sup>Division of Psychological and Social Medicine and Developmental Neurosciences, Faculty of Medicine, TU Dresden, Germany, Dresden, Germany

<sup>67</sup>Massachusetts General Hospital/ Harvard Medical School, Athinoula A. Martinos Center for Biomedical Imaging, Psychiatric Neuroimaging Research Program

<sup>68</sup>Neuroimaging Unit.Technological Facilities, Valdecilla Biomedical Research Institute IDIVAL, Santander, Cantabria, Spain

Dresden, Dresden, Germany

<sup>69</sup>Minneapolis VA HCS, Minneapolis, MN, USA

<sup>70</sup>Department of psychiatry, Academic Medical Center, University of Amsterdam, Amsterdam, The Netherlands

<sup>71</sup>Department of Psychiatry & Psychology, Maastricht University , Maastricht, The Netherlands

<sup>72</sup>Department of Psychiatry, Vrije Universiteit Medical Center, Amsterdam, The Netherlands

<sup>73</sup>Laboratory of Neuropsychiatry, Department of Clinical and Behavioral Neurology, IRCCS Santa Lucia Foundation, Rome, Italy

<sup>74</sup>Centro Fermi - Museo Storico della Fisica e Centro Studi e Ricerche “Enrico Fermi”, Rome, Italy

<sup>75</sup>NESMOS Department, Faculty of Medicine and Psychology, University “Sapienza” of Rome, Rome, Italy

<sup>76</sup>Department of Neurology and Psychiatry, Sapienza University of Rome, Rome, Italy

<sup>77</sup>Beth K. and Stuart C. Yudofsky Division of Neuropsychiatry, Menninger Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine, Houston, Tx USA.

<sup>78</sup>FIDMAG Germanes Hospitalaries Research Foundation, Barcelona, Spain

<sup>79</sup>CIBERSAM, Centro Investigación Biomédica en Red de Salud Mental, Barcelona, Spain

<sup>80</sup>Department of Psychiatry, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, USA

<sup>81</sup>Psychiatry Neuroimaging Laboratory, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA

<sup>82</sup>Centre for Addiction and Mental Health, Toronto, Canada

<sup>83</sup>Department of Psychosis Studies, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom

<sup>84</sup>National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust

<sup>85</sup>University of Basel Psychiatric Hospital, Basel, Switzerland

<sup>86</sup>Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL, USA



<sup>87</sup>Department of Radiology, Northwestern University Feinberg School of Medicine, Chicago, IL, USA

<sup>88</sup>Department of Basic Medical Science, Neuroscience and Sense Organs, University of Bari "Aldo Moro", Bari, Italy

<sup>89</sup>IRCCS Casa Sollievo della Sofferenza, San Giovanni Rotondo, Italy

<sup>90</sup>Division of Psychiatry, University of Edinburgh, Edinburgh, United Kingdom

<sup>91</sup>Department of Psychiatry, Seoul National University College of Medicine, Seoul, Republic of Korea

<sup>92</sup>Department of Brain & Cognitive Sciences, College of Natural Sciences, Seoul National University, Seoul, Republic of Korea

<sup>93</sup>Seoul National University Hospital, Seoul, Republic of Korea

<sup>94</sup>Yeongeon Student Support Center, Seoul National University College of Medicine, Seoul, Republic of Korea

<sup>95</sup>Centre for Neuroimaging & Cognitive Genomics (NICOG), Clinical Neuroimaging Laboratory, NCBES Galway Neuroscience Centre, College of Medicine Nursing and Health Sciences, National University of Ireland Galway, H91 TK33 Galway, Ireland.

<sup>96</sup>Mental Health Research Center, Moscow, Russia

<sup>97</sup>Children's Clinical and Research Institute of Emergency Surgery and Trauma, Moscow, Russia

<sup>98</sup>Centre for Psychiatry Research, Department of Clinical Neuroscience, Karolinska Institutet, & Stockholm Health Care Services, Stockholm County Council, Stockholm, Sweden

<sup>99</sup>Members of the Karolinska Schizophrenia Project (KaSP) are listed at the end of the manuscript as collaborators

<sup>100</sup>Laboratory of Psychiatric Neuroimaging (LIM 21), Department of Psychiatry, Faculty of Medicine, University of São Paulo, São Paulo, Brazil

<sup>101</sup>Center for Interdisciplinary Research on Applied Neurosciences (NAPNA), University of São Paulo, São Paulo, Brazil

<sup>102</sup>National Institute of Mental Health, Klecany, Czech Republic

<sup>103</sup>MR Unit, Department of Diagnostic and Interventional Radiology, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

<sup>104</sup>Centre for Cognitive Ageing and Cognitive Epidemiology, University of Edinburgh, Edinburgh, United Kingdom

<sup>105</sup>Department of Psychology, University of Edinburgh, Edinburgh, United Kingdom

<sup>106</sup>Department of Psychiatry, Psychosomatic Medicine and Psychotherapy, Goethe University Frankfurt, Frankfurt, Germany

<sup>107</sup>University of Cape Town Dept of Psychiatry, Groote Schuur Hospital (J2), Cape Town South Africa

<sup>108</sup>MRC Unit on Risk & Resilience in Mental Disorders, Department of Psychiatry, University of Cape Town, Cape Town, South Africa

<sup>109</sup>MRC Unit on Risk & Resilience in Mental Disorders, Department of Psychiatry, Stellenbosch University, Cape Town, South Africa

<sup>110</sup>Research Group in Psychiatry, Department of Psychiatry, Faculty of Medicine, Universidad de Antioquia, Medellin, Colombia

<sup>111</sup>Department of Psychology, City, University of London, London, United Kingdom

<sup>112</sup>Department of Neuroimaging, IOPPN, King's College London, London, United Kingdom

<sup>113</sup>Department of Psychiatry, Massachusetts General Hospital, Boston, MA, USA

<sup>114</sup>Emotion and Social Neuroscience Laboratory, Athinoula A. Martinos Center for Biomedical Imaging, Charlestown, MA, USA

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- Supplement 2: Table S1c. Sample information by medication group and Meta-regression results

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\*Corresponding Author:

Theo G.M. van Erp

Department of Psychiatry and Human Behavior

School of Medicine

University of California Irvine

5251 California Avenue, Suite 240

Irvine, CA 92617

voice: (949) 824-3331

fax: (949) 924-3324

email: [tvanerp@uci.edu](mailto:tvanerp@uci.edu)

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**ABSTRACT**

**Background.** The profile of cortical neuroanatomical abnormalities in schizophrenia is not fully understood, despite hundreds of published structural brain imaging studies. This study presents the first meta-analysis of cortical thickness and surface area abnormalities in schizophrenia conducted by the ENIGMA (Enhancing Neuro Imaging Genetics Through Meta Analysis) Schizophrenia Working Group.

**Method.** The study included data from 4474 individuals with schizophrenia (mean age=32.3, range: 11-78; 66% male) and 5098 healthy volunteers (mean age=32.8, range: 10-87; 53% male), assessed with standardized methods, at 39 centers worldwide.

**Results.** Compared to healthy volunteers, individuals with schizophrenia have widespread thinner cortex (left/right hemisphere: Cohen's  $d=-0.530/-0.516$ ) and smaller surface area (left/right hemisphere:  $d=-0.251/-0.254$ ), with the largest effect sizes for both in frontal and temporal lobe regions. Regional group differences in cortical thickness remained significant when statistically controlling for global cortical thickness, suggesting regional specificity. In contrast, the effects for cortical surface area appear global. Case-control, negative, cortical thickness effect sizes were 2 to 3 times larger in antipsychotic medicated relative to unmedicated individuals. Negative correlations between age and bilateral temporal pole thickness were stronger in individuals with schizophrenia than in healthy volunteers. Regional cortical thickness showed significant negative correlations with normalized medication dose, symptom severity, and duration of illness, and positive correlations with age at onset.

**Conclusions.** The findings indicate that the ENIGMA meta-analysis approach can achieve robust

findings in clinical neuroscience studies; also, medication effects should be taken into account in future genetic association studies of cortical thickness in schizophrenia.

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## INTRODUCTION

Brain structural abnormalities are widely reported in schizophrenia, but there is no published meta-analysis reporting effect sizes for cortical thickness and surface area abnormalities and their relationships to clinical features of the disease. Several hundred studies have reported on cortical thickness and surface area abnormalities in schizophrenia but it is difficult to meta-analyze published results as they lack a standard format to ease comparisons and are based on atlas (1) or vertex-wise (2) approaches using a variety of methods (3–9). To address these issues, the Schizophrenia Working Group, within the Enhancing Neuro Imaging Genetics through Meta Analysis (ENIGMA (10–12)); <http://enigma.ini.usc.edu>) consortium, brings together schizophrenia researchers from all over the world to jointly conduct large-scale imaging and imaging-genetics meta-analyses using standardized methods.

This meta-analysis focuses on regional cortical thickness and surface area rather than volume, based on evidence that they are influenced by separate sets of genes (13, 14). Cortical thickness and surface area abnormalities have been reported in individuals with chronic (1, 15–17), short/medium duration (18), first-episode (19–24), child (25, 26) and adolescent onset (27), or antipsychotic naïve schizophrenia (28–30), individuals with non-clinical psychotic symptoms (31), and individuals at clinical high risk for psychosis (32–39).

We previously reported effect sizes for deep brain structure volume abnormalities based on 15 samples worldwide, including brain imaging data from 2028 individuals with schizophrenia and 2540 healthy volunteers (40); findings replicated in an independent cohort using similar methods (41). Here we report Cohen's  $d$  effect sizes comparing regional cortical



thickness and surface area between 4474 individuals with schizophrenia and 5098 healthy volunteers, and partial correlation effect sizes with continuous clinical measures based on 39 worldwide samples.

Based on prior work, we hypothesized that individuals with schizophrenia, compared to healthy volunteers, show widespread cortical thickness and surface abnormalities, that are most prominent in frontal and temporal lobe regions (15), and that they show significant associations with age at onset or duration of illness (42), symptom severity (43–48), and antipsychotic medication use (49–51).

## **MATERIALS AND METHODS**

### *Study Samples*

Thirty-nine, worldwide, cross-sectional study samples totaling 9572 participants, including 4474 individuals with schizophrenia (SZ) and 5098 healthy volunteers (HV), contributed to the analysis via the ENIGMA Schizophrenia Working Group (Supplementary Table S1a-S1b; Figure S1). Sample-size weighted mean (range) age across samples was 32.3 (21.2-43.6) years for patients and 34.5 (21.8-43.9) years for controls. Patient and control samples were on average 65% (44-100) and 54% (36-100) male. Weighted mean age at onset and duration of illness across the samples were 23.4 (20.0-35.6) and 10.5 (0.6-20.2) years. Weighted mean PANSS (Positive and Negative Syndrome Scale (52)) total, negative, and positive scores across the samples were 68.1 (43.0-90.2), 21.9 (10.0-22.9), and 16.4 (10.6-22.6); weighted mean SANS (Scale for the Assessment of Negative Symptoms (53)) and SAPS (Scale for the Assessment of Positive

Symptoms (54)) scores were 20.5 (5.5-33.0) and 19.2 (9.0-32.3). For samples that recorded current antipsychotic type and/or dose, numbers (percentages) of patients on second-generation (atypical), first-generation (typical), both, or none, were 2236 (66%), 447 (13%), 265 (8%), and 425 (13%), respectively, and sample-size weighted mean chlorpromazine dose equivalent (CPZ), based on Woods (2005; [www.scottwilliamwoods.com/files/Equivtext.doc](http://www.scottwilliamwoods.com/files/Equivtext.doc)), was 399 (167-643). Each study sample was collected with participants' written informed consent approved by local Institutional Review Boards.

#### *Image acquisition and processing*

All sites processed T1-weighted structural brain scans using FreeSurfer (9) (<http://surfer.nmr.mgh.harvard.edu>) and extracted cortical thickness and surface area for 70 Desikan-Killiany (55) (DK) atlas regions (34 regions per hemisphere + left and right hemisphere mean thickness or total surface area; Table S3). Number of scanners, vendor, strength, sequence, acquisition parameters, and FreeSurfer versions are provided in Table S2. ENIGMA's quality assurance protocol was performed at each site prior to analysis, and included visual checks of the cortical segmentations and region-by-region removal of values for segmentations found to be incorrect (<http://enigma.usc.edu/protocols/imaging-protocols>; Table S2). Histograms of all regions' values for each site were also computed for visual inspection.

#### *Statistical meta-analyses*

Group differences for DK atlas regions within each sample were examined using univariate linear regression (R's linear model function `lm`) predicting left and right DK atlas region cortical

thickness or surface area with group (SZ, HV), sex, and age (model A). To further assess whether group differences in cortical thickness and surface area showed regional specificity, analyses were repeated including global mean cortical thickness or total cortical surface area as covariates, respectively (model B). To test for differential sex or age effects between groups, we also included models with group-by-sex (model C) or group-by-age interaction terms (model D). Significant interactions were further explored through within-group analyses. Medication effects were examined through between-group comparisons of individuals with schizophrenia on second-generation (atypical), first-generation (typical), both, or no (unmedicated) antipsychotic medications and healthy volunteers with sex and age included as covariates; only contrasts with a minimum of 5 subjects per group within site were included in these analyses to enable variance estimation. In patients, relationships were examined between regional cortical measures and several continuous variables, including age at onset, duration of illness, chlorpromazine equivalent antipsychotic medication dose, and total, positive, and negative symptom severity. These partial correlation analyses included age and sex as covariates. Analysis of multi-scanner studies (ASRB, FBIRN, MCIC, Osaka, UPENN) included binary dummy covariates for n-1 scanners. Sites conducted analyses of their sample's individual subject data using R code created within the ENIGMA collaboration. Random-effects meta-analyses of Cohen's *d* and partial correlation effect sizes for each of the DK atlas regions were performed using R's (version 3.2.2) metafor package (version 1.9-7) (56). False Discovery Rate ( $p_{FDR} < 0.05$ ) (57) was used to control for multiple comparisons. Cortical maps depict significant effect sizes ( $p_{FDR} < 0.05$ ) overlaid on (metallic gray) cortical surface models (brainder.org/research/brain-for-blender). Possible confounding effects of differences in parental socioeconomic status on group differences were

examined using subsample analyses (Supplement 1, Supplementary Results, Figures, and Tables SR3, S8a-S9b, S52a-S53b). Effects of FreeSurfer version and scanner field strength were examined using meta-regressions (Supplement 1).

## RESULTS

### *Widespread thinner cortex with regional specificity in schizophrenia*

Individuals with schizophrenia, compared to healthy individuals, showed widespread significantly thinner cortex in all DK atlas regions, except the bilateral pericalcarine region (Model A), with effect sizes between  $d=-0.536$  (right fusiform gyrus) and  $-0.077$  (left pericalcarine fissure) and marginal (least square) mean (LSM) thickness differences between  $-3.33$  (left parahippocampal gyrus) and  $-0.45$  percent (left pericalcarine fissure; Figure 1A and Table S4a). The largest negative effect sizes ( $d<-0.40$ ) were observed for: left/right hemisphere ( $d=-0.530/-0.516$ ), bilateral fusiform, temporal (inferior, middle, and superior), and left superior frontal gyri, right pars opercularis, and bilateral insula.

--- Figure 1 about here ---

In the context of widespread thinner cortex in schizophrenia, we assessed regional specificity of these cortical thickness differences. When controlling for individual differences in *global mean* cortical thickness, several regions showed significantly thinner cortex (e.g., fusiform, parahippocampal, inferior temporal gyri) while other regions showed significantly

thicker cortex (e.g., superior parietal cortex, precuneus, paracentral lobule) in individuals with schizophrenia compared to healthy volunteers (Model B; Figure 1B; Figure 2; Table S4b). These findings suggest regional specificity of thinner cortex in schizophrenia.

--- Figure 2 about here ---

*Widespread smaller cortical surface area without regional specificity in schizophrenia*

Individuals with schizophrenia, compared to healthy individuals, showed widespread significantly smaller cortical surface area in all DK atlas regions, except the bilateral isthmus cingulate region (Model A), with effect sizes between  $d=-0.254$  (mean right hemisphere) and  $-0.040$  (right isthmus cingulate) and marginal (least square) mean surface area differences between  $-3.39$  (left rostral anterior cingulate) and  $-0.55$  percent (right isthmus cingulate; Figure 3A; Table S5a). The largest effect sizes ( $d<-0.20$ ) were observed for: left ( $d=-0.251$ ) and right ( $d=-0.254$ ) hemisphere, bilateral superior frontal, fusiform, inferior and middle temporal, and right precentral gyri.

In the context of widespread smaller cortical surface area in schizophrenia, we assessed regional specificity of these cortical surface area differences. When controlling for individual differences in *total* cortical surface area, no regions showed significantly smaller surface area, while three regions showed significantly larger cortical surface area (bilateral isthmus cingulate, precuneus, and left paracentral) in individuals with schizophrenia compared to healthy volunteers (Model B; Figure 3B; Table S5b). These findings suggest that smaller cortical surface area is predominantly global in schizophrenia, with exception of the three regions noted which appear

less affected.

--- Figure 3 about here ---

#### *Group-by-sex interactions*

No significant group-by-sex interactions were detected for either cortical thickness or surface area for any of the DK atlas regions (Tables S6-S7).

#### *Group-by-age interactions*

There were significant group-by-age interactions for both left ( $p_{\text{FDR}}=0.007$ ) and right temporal pole thickness ( $p_{\text{FDR}}=0.01$ ), with schizophrenia showing stronger negative correlations with age (*left*:  $r=-0.13$ ,  $p_{\text{FDR}}=1.51\text{E-}13$ ; *right*  $r=-0.12$ ,  $p_{\text{FDR}}=1.55\text{E-}07$ ) than healthy subjects (*left*  $r=-0.05$ ,  $p_{\text{FDR}}=0.02$ ; *right*  $r=-0.04$ ,  $p_{\text{FDR}}=0.03$ ). These interactions remained significant even when controlling for global mean cortical thickness (Figure S2; Tables S8a-S8b, and S10-S11). There were no significant group-by-age interactions for cortical surface area for any of the DK atlas regions (Table S9).

#### *Partial correlations with age of onset and duration of illness*

Earlier age of onset ( $r=0.063$ ,  $p_{\text{FDR}}=0.03$ ) and longer duration of illness ( $r=-0.061$ ;  $p_{\text{FDR}}=0.04$ ) were significantly correlated with thinner right insula cortical thickness (Tables S33-S34, and Figure S3). There were no significant correlations between age of onset or duration of illness and cortical surface area for any of the DK atlas regions (Tables S43-S44).

*Effects of antipsychotic medications on cortical thickness*

Effect sizes comparing left and right hemisphere cortical thickness from individuals with schizophrenia on *no* (unmedicated; left/right  $d=-0.275/-0.278$ ), *second-generation* (left/right  $d=-0.536/-0.516$ ), *first-generation* (left/right  $d=-0.765/-0.648$ ), or *both* (left/right  $d=-0.770/-0.704$ ) antipsychotic medications to healthy volunteers were significant for all but the unmedicated group ( $p_{FDR}>0.05$ ; Figure 4; Tables S12-15).

Groupwise comparisons of left and right hemisphere thickness found nominally significant effects for all medicated vs. unmedicated groups (Figure 4, Tables S16-S18). Similarly, nominally significant effects were found for first-generation vs. second-generation, and both vs. second-generation, but not both vs. first generation medication groups (Figure 4; Tables S19-S21). No significant regional effects were observed for the last four group contrasts ( $p_{FDR}>0.05$ ; Tables S18-S21).

For detailed regional effects of antipsychotic medications on cortical thickness and surface area see Supplementary Results SR1.

--- Figure 4 about here ---

*Partial correlations with medication dose*

Higher chlorpromazine dose equivalents were significantly correlated with thinner cortex in almost all the DK atlas regions, except bilateral entorhinal and pericalcarine cortex, bilateral lingual and transverse temporal gyri, and left postcentral, cuneus, and parahippocampal gyri and



caudal anterior cingulate cortex, and right superior parietal and rostral anterior cingulate cortex, and right frontal pole (Figure S6A; Table S32). The correlations were significant for both left ( $r=-0.126$ ) and right hemisphere thickness ( $r=-0.126$ ), and were strongest (partial  $r<-0.10$ ) for left ( $r=-0.166$ ) and right superior frontal ( $r=-0.148$ ), left ( $r=-0.113$ ) and right middle temporal ( $r=-0.108$ ), left ( $r=-0.112$ ) and right superior temporal ( $r=-0.106$ ), right inferior temporal ( $r=-0.113$ ), right pars triangularis of inferior frontal ( $r=-0.113$ ), left ( $r=-0.102$ ) and right caudal middle frontal ( $r=-0.108$ ), and left supramarginal gyri ( $r=-0.103$ ).

Importantly, post-hoc analysis showed that higher chlorpromazine dose equivalents were significantly correlated with thinner cortex even when controlling for negative symptom severity (Table S41; Figure S7).

There were no detectable correlations between chlorpromazine dose equivalents and cortical surface area for any of the DK atlas regions (Table S42).

#### *Partial correlations with symptom severity scores*

Higher PANSS total and positive symptom severity scores were significantly correlated with regional thinner cortex (Figure S6B; Table S35, Figure S6D; Table S36), while higher PANSS negative symptom scores were significantly correlated with widespread thinner cortex in left ( $r=-0.085$ ) and right ( $r=-0.089$ ) hemispheres (Figure S6C; Table S37; see SR2 for details).

Neither PANSS total, positive, or negative symptom severity scores were significantly correlated with regional cortical surface area for any of the DK atlas regions (Tables S45-S47).

## **DISCUSSION**

The main findings of this study are that individuals with schizophrenia, compared to healthy volunteers, show: (1) widespread thinner cortex (left/right  $d=-0.530/-0.516$ ); (2) widespread smaller cortical surface area; about half the size of the effect observed for cortical thickness (left/right  $d=-0.251/-0.254$ ); (3) the largest effect sizes in frontal and temporal lobe regions for both measures, with regional specificity for cortical thickness but not cortical surface area (based on the analyses controlling for global thickness and surface area); (4) approximately two times larger negative cortical thickness effect size when on second-generation antipsychotic medications (left/right  $d=-0.536/-0.516$ ), and approximately three times larger cortical thickness effect size when on first-generation (left/right  $d=-0.765/-0.648$ ) or both first- and second-generation antipsychotic medications (left/right  $d=-0.770/-0.704$ ) relative to unmedicated individuals with schizophrenia (left/right  $d=-0.275/-0.278$ ), and (5) a stronger negative correlation between age and bilateral temporal pole cortical thickness (left:  $r=-0.13$  vs.  $-0.05$ , and right:  $r=-0.12$  vs.  $-0.04$ ). With regard to partial correlations with clinical variables, (6) earlier age at onset and longer duration of illness were associated with thinner insula cortex, (7) standardized medication dose (CPZ) and (8) negative symptom severity were associated with widespread thinner cortex, while (9) total and (10) positive symptom severity were associated with regional thinner cortex. Most observed correlations were small ( $r<0.2$ ). Moreover, despite the high power to detect small effects, medication use and other clinical variables were not significantly associated with cortical surface area.

These findings are consistent with the interpretation that the thinner cortex observed in individuals with schizophrenia shows regional specificity and is associated with the disease (28–

30), its severity (43–48), and with antipsychotic medication treatment (49–51), with a larger effect for first- compared to second-generation antipsychotic medications (16, 58–60). We cannot fully exclude the possibility that observed medication effects on cortical thickness are partially due to group differences in age or duration of illness (61), which also show patterns of increase across the groups. However, the fact that 1) age was statistically controlled for in the medication type analyses, 2) duration of illness, which is highly collinear with age, only showed effects, above-and-beyond age, on right insula thickness, 3) there was only a group-by-age interaction on temporal pole thickness (while medication effects were widespread), and 4) meta-regressions showed no effects of age or duration of illness on group contrast effect sizes, render such an interpretation unlikely (see Supplementary Results SR1). Further, dissociating medication effects from other potentially confounding variables requires well-powered, first-episode longitudinal studies, preferably with random assignment to first- or second-generation antipsychotics. Two longitudinal imaging studies, that randomly assigned individuals to medication treatments, found significant gray matter reductions for haloperidol but not olanzapine (58, 62); findings consistent with our meta-analysis and with reported medication effects on cortical thickness in rodents (63). None of the other potential confounding variables, including sex distribution, age at onset, medication dose, global, negative, or positive symptoms showed a pattern consistent with the observed medication effects. These variables are therefore unlikely to explain the differences in cortical thickness effect sizes across the antipsychotic medication groups on their own; though more complex interactions could exist.

In contrast to thinner cortex, smaller cortical surface area in individuals with schizophrenia appears to be a more global phenomenon associated with the disease but not with

its severity or its treatment. It is possible that more focal cortical surface area effects are obfuscated through the averaging of measurements within DK atlas regions; vertex-wise analyses may have higher power for detecting and localizing such effects.

This study found significant group-by-age interactions on cortical thickness in the bilateral temporal pole regions only, with a stronger negative correlation between age and cortical thickness in schizophrenia than in healthy volunteers. In addition, this study found that earlier age at onset and longer duration of illness were associated with thinner cortical thickness in the insula only. These findings corroborate reported longitudinal findings of lower cortical volumes at illness onset as well as progressive volume decline in the temporal pole and insula in schizophrenia (64, 65) and individuals at ultra high risk for psychosis (66). Given our results, these volume declines may reflect cortical thinning rather than cortical surface area reduction. While our findings may suggest that there are few differential effects of age on cortical thickness between individuals with schizophrenia and healthy volunteers, we must keep in mind that age effects on thickness across a large age range are non-linear (67) and that this meta-analysis combines linear age effects across multiple independent cross-sectional cohorts of various ages. Longitudinal studies are better poised to address the question of differential effects of age and duration of illness on cortical thickness in schizophrenia and some have observed steeper rates of cortical thinning in multiple regions in individuals with schizophrenia and their non-ill co-twins (61). ENIGMA Schizophrenia Working Group members are actively working on pooling longitudinal studies for a meta-analysis to further address these questions.

Taken together, these findings may suggest that cortical surface area developmental trajectories in psychosis may be predominantly influenced by early neurodevelopmental, perhaps

predominantly genetic, factors. In contrast, cortical thickness, in addition to likely being influenced by different genes (13, 14), may be more plastic and also influenced by additional environmental and neurodegenerative factors (e.g., treatment, cannabis, age) (68).

This study found significant widespread associations between standardized medication doses (chlorpromazine equivalents) and cortical thickness but not cortical surface area. This finding is consistent with and extends a prior meta-regression analysis, which reported that higher medication doses are associated with smaller gray matter volume (51). Given our results, the association with volume is likely due to cortical thickness rather than surface area. The finding is also consistent with the larger effect sizes for individuals with schizophrenia who were on antipsychotic medications compared to those who were not. An alternative interpretation may be that more severely ill patients receive higher doses of medication given the observed significant associations between symptom severity and regional cortical thickness. However, consistent with medication dose effects on cortical thickness, we found that significant associations between CPZ and cortical thickness were still observed in post-hoc partial correlation analyses that statistically controlled for negative symptom severity. In this analysis, we opted to control for negative rather than positive symptom severity as negative symptoms tend to be less influenced by medication dose than positive symptoms.

We caution that the likelihood that antipsychotic medications are associated with thinner cortex in individuals with schizophrenia should by no means be interpreted as a contraindication for their use in treating severe mental illnesses including schizophrenia. In fact, a recent study found that medication treatment was associated with thinner cortex and better behavioral performance on a cognitive control task (26% higher  $d'$ -Context score) (24). Most importantly,

antipsychotic medications tend to successfully treat severely debilitating psychotic symptoms, reduce relapse risk following a first-episode break (69), and reduce suicide risk (70). As such, they play a critical role in the treatment of psychosis.

Similar published meta-analyses in bipolar disorder (BPD) and major depressive disorder (MDD), with the same study design and analytical methods, found thinner bilateral frontal, temporal, and parietal lobe cortex in BPD with evidence for divergent effects of medication treatments (71), and thinner regional cortex in adult MDD, and smaller total and regional cortical surface area in adolescent MDD (72). Taken together, these very large-scale studies suggest both similarities and differences in cortical abnormalities observed among these three major psychiatric illnesses.

To our knowledge, this is the first meta-analysis of cortical thickness and surface area abnormalities in schizophrenia. Only one other schizophrenia study has provided a comprehensive listing of Cohen's *d* effect sizes for regional cortical thickness abnormalities comparing individuals with schizophrenia, non-ill first-degree relatives, and healthy volunteers (1).

The major strength of the study is its large sample size, which provides sufficient power to detect even small effects (e.g., symptom associations). Weaknesses include that (1) the group of unmedicated individuals with schizophrenia does not distinguish never-medicated from unmedicated at time-of-scan, leaving effect sizes for medication-naïve subjects to be determined; (2) despite the large total sample size, many regional thickness differences between medication subgroups did not survive multiple comparison correction; (3) this study does not examine possible group differences in brain lateralization, though such analyses will be reported on

separately; (4) the analysis of chlorpromazine equivalents did not dissociate first-generation and second-generation antipsychotic medications which may have dissociable effects on cortical thickness (51, 72). Finally, while this meta-analysis is unique in that it standardized image analysis methods across sites, any meta-analysis, including this one, is limited by sources of variation inherent to the analysis of retrospectively collected samples that cannot be fully controlled for. Sample differences include the use of different scanners, different assessments or processes to arrive at diagnosis, age at onset, duration of illness, medication dose and adherence, etc. Meta-analyses control for these differences by summing within-site effects across sites, providing generalized mean effect sizes. Like other meta-analyses, this meta-analysis does not control for all variance in assessments that can lower power to detect effects.

Taken together, the findings from this meta-analysis suggest that thinner cortex in schizophrenia shows regional specificity and is affected by the illness, its severity, and by treatments with antipsychotic medications, while smaller cortical surface area is mainly influenced by widespread effects of the illness possibly mainly influenced by developmental processes. In the context of ENIGMA, these findings suggest that schizophrenia genetic association studies employing cortical thickness as a quantitative trait may need to control for medication effects while those that employ cortical surface area as a quantitative trait may not need to.

## **COLLABORATORS**

Members of the Karolinska Schizophrenia Project (KaSP): Lars Farde<sup>1</sup>, Lena Flyckt<sup>1</sup>, Göran Engberg<sup>2</sup>, Sophie Erhardt<sup>2</sup>, Helena Fatouros-Bergman<sup>1</sup>, Simon Cervenka<sup>1</sup>, Lilly



Schwieler<sup>2</sup>, Fredrik Piehl<sup>3</sup>, Ingrid Agartz<sup>1,4,5</sup>, Karin Collste<sup>1</sup>, Paulina Victorsson<sup>1</sup>, Anna Malmqvist<sup>2</sup>, Mikael Hedberg<sup>2</sup>, Funda Orhan<sup>2</sup>

<sup>1</sup>Centre for Psychiatry Research, Department of Clinical Neuroscience, Karolinska Institutet, & Stockholm County Council, Stockholm, Sweden; <sup>2</sup>Department of Physiology and Pharmacology, Karolinska Institutet, Stockholm, Sweden; <sup>3</sup>Neuroimmunology Unit, Department of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden; <sup>4</sup>NORMENT, KG Jebsen Centre for Psychosis Research, Division of Mental Health and Addiction, University of Oslo, Oslo, Norway; <sup>5</sup>Department of Psychiatry Research, Diakonhjemmet Hospital, Oslo, Norway.

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#### **CONFLICTS OF INTEREST**

Dr. Van Erp has had a research contract with Otsuka Pharmaceuticals, Inc. Adrian Preda has served as a consultant for Boehringer Ingelheim. The remaining authors report no biomedical financial interests or potential conflicts of interest.

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#### **AUTHOR CONTRIBUTIONS**

Protocol design, quality testing, and meta-analysis: TGM.v.E., E.W., D.P.H., L.S., and W.J. Data collection, processing, analysis and funding: TGM.v.E., E.W., D.P.H., L.S., W.J., DC.G., GD.P., N.Y., M.F., R.H., N.O., H.Y., JR.B., VP.C., I.A., BA.M., W.C., SMC.d.Z., HE.H.P., RS.K., RA.O., NEM.v.H., OA.A., AM.D., NT.D., TP.G., CB.H., UK.H., KN.J., TV.L., I.M., LT.W., O.G., B.K., A.R., D.Z., VD.C., B.C., R.R., MJ C., VJ.C., S.C., J.R., VL.C., JM.F., MJ.G., F.H., A.J., RK.L., C.L., BJ.M., PT.M., C.P., Y.Q., PE.R., G.C., U.S., RJ.S., M.S., PA.T., CS.W., TW.W., DW.M., E.H., P.K., LM.B., RE.G., RC.G., TD.S., DH.W., A.B., GG.B., JM.F., F.M., DH.M., DS.O., SG.P., A.P., J.V., KO.L., S.M., F.Y., Y.T., S.T., Z.W., F.F., J.C., H.X., S.T., H.G., P.W., D.W., HJ.B., S.E., RPF.W., J.H., MD.K., JM.S., SR.S., L.D.H., L.K., MW.M., T.v.A., DJ.V., F.A., N.B., P.d.R., M.I., F.P., G.S., PJ.M., E.P., J.R., R.S., A.C., G.D., S.K., CD.W., EW.D., D.R., A.V., S.C., P.D., R.M., T.R.M., A.S., S.B., L.E., F.H., A.R., R.S., KIA., L.W., EG.J., S.K., IEC.S., A.B., A.B., A.D.G., E.N., AR.M., JM.S., JS.K., JY.Y., DM.C., C.M., I.L., AS.T., T.A., V.K., H.F.B., L.F., GF.B., PGPR., MH.S., MV.Z., C.H., A.S., F.S., D.T., SP.H., AM.M., HC.W., SML., C.K., V.O., M.S., FM.H., DJ.S., H.T., A.U., C.LJ., D.D., A.M., FI.F, BA.G, N.J., PM.T., JA.T. Manuscript preparation: TGM.v.E., J.A.T, and P.M.T. All authors contributed edits and approved the contents of the manuscript.

## REFERENCES

1. Goghari VM, Truong W, Spilka MJ (2015): A magnetic resonance imaging family study of cortical thickness in schizophrenia. *Am J Med Genet B Neuropsychiatr Genet.* 168: 660–668.
2. Kuperberg GR, Broome MR, McGuire PK, David AS, Eddy M, Ozawa F, *et al.* (2003): Regionally localized thinning of the cerebral cortex in schizophrenia. *Arch Gen Psychiatry.* 60: 878–888.
3. Thompson PM, Schwartz C, Toga AW (1996): High-resolution random mesh algorithms for creating a probabilistic 3D surface atlas of the human brain. *Neuroimage.* 3: 19–34.
4. Miller MI, Massie AB, Ratnanather JT, Botteron KN, Csernansky JG (2000): Bayesian construction of geometrically based cortical thickness metrics. *Neuroimage.* 12: 676–687.
5. Kabani N, Le Goualher G, MacDonald D, Evans AC (2001): Measurement of cortical thickness using an automated 3-D algorithm: a validation study. *Neuroimage.* 13: 375–380.
6. Zijdenbos AP, Forghani R, Evans AC (2002): Automatic “pipeline” analysis of 3-D MRI data for clinical trials: application to multiple sclerosis. *IEEE Trans Med Imaging.* 21: 1280–1291.
7. Lerch JP, Evans AC (2005): Cortical thickness analysis examined through power analysis and a population simulation. *Neuroimage.* 24: 163–173.
8. Ad-Dab’bagh Y, Einarson D, Lyttelton O, Muehlboeck J-S, Mok K, Ivanov O, Vincent, R, Lpage, C, Lerch, J, Fombonne, E, Evans, A (2006): The CIVET Image-Processing Environment: A Fully Automated Comprehensive Pipeline for Anatomical Neuroimaging Research. In: Corbetta M, editor. *Proceedings of the 12th Annual Meeting of the Organization for Human Brain Mapping.* Presented at the Human Brain Mapping, Florence, Italy: NeuroImage.
9. Fischl B (2012): FreeSurfer. *Neuroimage.* 62: 774–781.
10. Stein JL, Medland SE, Vasquez AA, Hibar DP, Senstad RE, Winkler AM, *et al.* (2012): Identification of common variants associated with human hippocampal and intracranial volumes. *Nat Genet.* 44: 552–561.

11. Thompson PM, Stein JL, Medland SE, Hibar DP, Vasquez AA, Renteria ME, *et al.* (2014): The ENIGMA Consortium: large-scale collaborative analyses of neuroimaging and genetic data. *Brain Imaging Behav.* 8: 153–182.
12. Thompson PM, Andreassen OA, Arias-Vasquez A, Bearden CE, Boedhoe PS, Brouwer RM, *et al.* (2017): ENIGMA and the individual: Predicting factors that affect the brain in 35 countries worldwide. *Neuroimage.* 145: 389–408.
13. Panizzon MS, Fennema-Notestine C, Eyer LT, Jernigan TL, Prom-Wormley E, Neale M, *et al.* (2009): Distinct genetic influences on cortical surface area and cortical thickness. *Cereb Cortex.* 19: 2728–2735.
14. Winkler AM, Kochunov P, Blangero J, Almasy L, Zilles K, Fox PT, *et al.* (2010): Cortical thickness or grey matter volume? The importance of selecting the phenotype for imaging genetics studies. *Neuroimage.* 53: 1135–1146.
15. Rimol LM, Hartberg CB, Nesvåg R, Fennema-Notestine C, Hagler DJ Jr, Pung CJ, *et al.* (2010): Cortical thickness and subcortical volumes in schizophrenia and bipolar disorder. *Biol Psychiatry.* 68: 41–50.
16. van Haren NEM, Schnack HG, Cahn W, van den Heuvel MP, Lepage C, Collins L, *et al.* (2011): Changes in cortical thickness during the course of illness in schizophrenia. *Arch Gen Psychiatry.* 68: 871–880.
17. Sugihara G, Oishi N, Son S, Kubota M, Takahashi H, Murai T (2017): Distinct Patterns of Cerebral Cortical Thinning in Schizophrenia: A Neuroimaging Data-Driven Approach. *Schizophr Bull.* 43: 900–906.
18. Schultz CC, Koch K, Wagner G, Roebel M, Nenadic I, Schachtzabel C, *et al.* (2010): Complex pattern of cortical thinning in schizophrenia: results from an automated surface based analysis of cortical thickness. *Psychiatry Res.* 182: 134–140.
19. Narr KL, Toga AW, Szeszko P, Thompson PM, Woods RP, Robinson D, *et al.* (2005): Cortical

- thinning in cingulate and occipital cortices in first episode schizophrenia. *Biol Psychiatry*. 58: 32–40.
20. Narr KL, Bilder RM, Toga AW, Woods RP, Rex DE, Szeszko PR, *et al.* (2005): Mapping cortical thickness and gray matter concentration in first episode schizophrenia. *Cereb Cortex*. 15: 708–719.
21. Fornito A, Yücel M, Wood SJ, Adamson C, Velakoulis D, Saling MM, *et al.* (2008): Surface-based morphometry of the anterior cingulate cortex in first episode schizophrenia. *Hum Brain Mapp*. 29: 478–489.
22. Sun D, Stuart GW, Jenkinson M, Wood SJ, McGorry PD, Velakoulis D, *et al.* (2009): Brain surface contraction mapped in first-episode schizophrenia: a longitudinal magnetic resonance imaging study. *Mol Psychiatry*. 14: 976–986.
23. Crespo-Facorro B, Roiz-Santiáñez R, Pérez-Iglesias R, Rodríguez-Sánchez JM, Mata I, Tordesillas-Gutierrez D, *et al.* (2011): Global and regional cortical thinning in first-episode psychosis patients: relationships with clinical and cognitive features. *Psychol Med*. 41: 1449–1460.
24. Lesh TA, Tanase C, Geib BR, Niendam TA, Yoon JH, Minzenberg MJ, *et al.* (2015): A multimodal analysis of antipsychotic effects on brain structure and function in first-episode schizophrenia. *JAMA Psychiatry*. 72: 226–234.
25. Baribeau DA, Anagnostou E (2013): A comparison of neuroimaging findings in childhood onset schizophrenia and autism spectrum disorder: a review of the literature. *Front Psychiatry*. 4: 175.
26. Ordóñez AE, Luscher ZI, Gogtay N (2016): Neuroimaging findings from childhood onset schizophrenia patients and their non-psychotic siblings. *Schizophr Res*. 173: 124–131.
27. Voets NL, Hough MG, Douaud G, Matthews PM, James A, Winmill L, *et al.* (2008): Evidence for abnormalities of cortical development in adolescent-onset schizophrenia. *Neuroimage*. 43: 665–675.
28. Venkatasubramanian G, Jayakumar PN, Gangadhar BN, Keshavan MS (2008): Automated MRI parcellation study of regional volume and thickness of prefrontal cortex (PFC) in antipsychotic-naïve schizophrenia. *Acta Psychiatr Scand*. 117: 420–431.
29. Rais M, Cahn W, Schnack HG, Hulshoff Pol HE, Kahn RS, van Haren NEM (2012): Brain volume

- reductions in medication-naïve patients with schizophrenia in relation to intelligence quotient. *Psychol Med.* 42: 1847–1856.
30. Liu X, Lai Y, Wang X, Hao C, Chen L, Zhou Z, *et al.* (2014): A combined DTI and structural MRI study in medicated-naïve chronic schizophrenia. *Magn Reson Imaging.* 32: 1–8.
31. van Lutterveld R, van den Heuvel MP, Diederens KJM, de Weijer AD, Begemann MJH, Brouwer RM, *et al.* (2014): Cortical thickness in individuals with non-clinical and clinical psychotic symptoms. *Brain.* 137: 2664–2669.
32. Haller S, Borgwardt SJ, Schindler C, Aston J, Radue EW, Riecher-Rössler A (2009): Can cortical thickness asymmetry analysis contribute to detection of at-risk mental state and first-episode psychosis? A pilot study. *Radiology.* 250: 212–221.
33. Sun D, Phillips L, Velakoulis D, Yung A, McGorry PD, Wood SJ, *et al.* (2009): Progressive brain structural changes mapped as psychosis develops in “at risk” individuals. *Schizophr Res.* 108: 85–92.
34. Jung WH, Kim JS, Jang JH, Choi J-S, Jung MH, Park J-Y, *et al.* (2011): Cortical thickness reduction in individuals at ultra-high-risk for psychosis. *Schizophr Bull.* 37: 839–849.
35. Shin KS, Jung WH, Kim JS, Jang JH, Hwang JY, Chung CK, Kwon JS (2012): Neuromagnetic auditory response and its relation to cortical thickness in ultra-high-risk for psychosis. *Schizophr Res.* 140: 93–98.
36. Tognin S, Pettersson-Yeo W, Valli I, Hutton C, Woolley J, Allen P, *et al.* (2013): Using structural neuroimaging to make quantitative predictions of symptom progression in individuals at ultra-high risk for psychosis. *Front Psychiatry.* 4: 187.
37. Tognin S, Riecher-Rössler A, Meisenzahl EM, Wood SJ, Hutton C, Borgwardt SJ, *et al.* (2014): Reduced parahippocampal cortical thickness in subjects at ultra-high risk for psychosis. *Psychol Med.* 44: 489–498.
38. Cannon TD, Chung Y, He G, Sun D, Jacobson A, van Erp TGM, *et al.* (2015): Progressive reduction in cortical thickness as psychosis develops: a multisite longitudinal neuroimaging study of youth at

- elevated clinical risk. *Biol Psychiatry*. 77: 147–157.
39. Buchy L, Barbato M, Makowski C, Bray S, MacMaster FP, Deighton S, Addington J (2017): Mapping structural covariance networks of facial emotion recognition in early psychosis: A pilot study. *Schizophr Res*. 189: 146–152.
40. van Erp TGM, Hibar DP, Rasmussen JM, Glahn DC, Pearlson GD, Andreassen OA, *et al.* (2016): Subcortical brain volume abnormalities in 2028 individuals with schizophrenia and 2540 healthy controls via the ENIGMA consortium. *Mol Psychiatry*. 21: 547–553.
41. Okada N, Fukunaga M, Yamashita F, Koshiyama D, Yamamori H, Ohi K, *et al.* (2016): Abnormal asymmetries in subcortical brain volume in schizophrenia. *Mol Psychiatry*. 21: 1460–1466.
42. Cahn W, Rais M, Stigter FP, van Haren NEM, Caspers E, Hulshoff Pol HE, *et al.* (2009): Psychosis and brain volume changes during the first five years of schizophrenia. *Eur Neuropsychopharmacol*. 19: 147–151.
43. Gogtay N, Weisinger B, Bakalar JL, Stidd R, Fernandez de la Vega O, Miller R, *et al.* (2012): Psychotic symptoms and gray matter deficits in clinical pediatric populations. *Schizophr Res*. 140: 149–154.
44. Oertel-Knöchel V, Knöchel C, Rotarska-Jagiela A, Reinke B, Prvulovic D, Haenschel C, *et al.* (2013): Association between psychotic symptoms and cortical thickness reduction across the schizophrenia spectrum. *Cereb Cortex*. 23: 61–70.
45. Padmanabhan JL, Tandon N, Haller CS, Mathew IT, Eack SM, Clementz BA, *et al.* (2015): Correlations between brain structure and symptom dimensions of psychosis in schizophrenia, schizoaffective, and psychotic bipolar I disorders. *Schizophr Bull*. 41: 154–162.
46. Xiao Y, Lui S, Deng W, Yao L, Zhang W, Li S, *et al.* (2013): Altered Cortical Thickness Related to Clinical Severity But Not the Untreated Disease Duration in Schizophrenia. *Schizophr Bull*. 41: 201–210.
47. Walton E, Hibar DP, van Erp TGM, Potkin SG, Roiz-Santiañez R, Crespo-Facorro B, *et al.* (2017):

- Positive symptoms associate with cortical thinning in the superior temporal gyrus via the ENIGMA Schizophrenia consortium. *Acta Psychiatr Scand.* 135: 439–447.
48. Walton E, Hibar DP, van Erp TGM, Potkin SG, Roiz-Santiañez R, Crespo-Facorro B, *et al.* (2018): Prefrontal cortical thinning links to negative symptoms in schizophrenia via the ENIGMA consortium. *Psychol Med.* 48: 82–94.
49. Navari S, Dazzan P (2009): Do antipsychotic drugs affect brain structure? A systematic and critical review of MRI findings. *Psychol Med.* 39: 1763–1777.
50. Fusar-Poli P, Smieskova R, Kempton MJ, Ho BC, Andreasen NC, Borgwardt S (2013): Progressive brain changes in schizophrenia related to antipsychotic treatment? A meta-analysis of longitudinal MRI studies. *Neurosci Biobehav Rev.* 37: 1680–1691.
51. Vita A, De Peri L, Deste G, Barlati S, Sacchetti E (2015): The Effect of Antipsychotic Treatment on Cortical Gray Matter Changes in Schizophrenia: Does the Class Matter? A Meta-analysis and Meta-regression of Longitudinal Magnetic Resonance Imaging Studies. *Biol Psychiatry.* 78: 403–412.
52. Kay SR, Fiszbein A, Opler LA (1987): The Positive and Negative Syndrome Scale (PANSS) for Schizophrenia. *Schizophr Bull.* 13: 261–276.
53. Andreasen NC (1984): *Scale for the Assessment of Negative Symptoms: SANS*. Iowa City: University of Iowa.
54. Andreasen N (1984): *The scale for the assessment of positive symptoms (SAPS)*. Iowa City: University of Iowa.
55. Desikan RS, Ségonne F, Fischl B, Quinn BT, Dickerson BC, Blacker D, *et al.* (2006): An automated labeling system for subdividing the human cerebral cortex on MRI scans into gyral based regions of interest. *Neuroimage.* 31: 968–980.
56. Viechtbauer W (2010): Conducting Meta-Analyses in R with the metafor Package. *J Stat Softw.* 36. doi: 10.18637/jss.v036.i03.
57. Benjamini Y HH (1995): Controlling the False Discovery Rate: A Practical and Powerful Approach to



- Multiple Testing. *J R Stat Soc Series B Stat Methodol.* 57: 289–300.
58. Thompson PM, Bartzokis G, Hayashi KM, Klunder AD, Lu PH, Edwards N, *et al.* (2009): Time-lapse mapping of cortical changes in schizophrenia with different treatments. *Cereb Cortex.* 19: 1107–1123.
59. Ho B-C, Andreasen NC, Ziebell S, Pierson R, Magnotta V (2011): Long-term antipsychotic treatment and brain volumes: a longitudinal study of first-episode schizophrenia. *Arch Gen Psychiatry.* 68: 128–137.
60. Ansell BRE, Dwyer DB, Wood SJ, Bora E, Brewer WJ, Proffitt TM, *et al.* (2015): Divergent effects of first-generation and second-generation antipsychotics on cortical thickness in first-episode psychosis. *Psychol Med.* 45: 515–527.
61. Hedman AM, van Haren NEM, van Baal GCM, Brouwer RM, Brans RGH, Schnack HG, *et al.* (2016): Heritability of cortical thickness changes over time in twin pairs discordant for schizophrenia. *Schizophr Res.* 173: 192–199.
62. Lieberman JA (2005): Antipsychotic Drug Effects on Brain Morphology in First-Episode Psychosis. *Arch Gen Psychiatry.* 62: 361.
63. Vernon AC, Crum WR, Lerch JP, Chege W, Natesan S, Modò M, *et al.* (2014): Reduced cortical volume and elevated astrocyte density in rats chronically treated with antipsychotic drugs-linking magnetic resonance imaging findings to cellular pathology. *Biol Psychiatry.* 75: 982–990.
64. Takahashi T, Wood SJ, Soulsby B, McGorry PD, Tanino R, Suzuki M, *et al.* (2009): Follow-up MRI study of the insular cortex in first-episode psychosis and chronic schizophrenia. *Schizophr Res.* 108: 49–56.
65. Lee S-H, Niznikiewicz M, Asami T, Otsuka T, Salisbury DF, Shenton ME, McCarley RW (2016): Initial and Progressive Gray Matter Abnormalities in Insular Gyrus and Temporal Pole in First-Episode Schizophrenia Contrasted With First-Episode Affective Psychosis. *Schizophr Bull.* 42: 790–801.

66. Takahashi T, Wood SJ, Yung AR, Phillips LJ, Soulsby B, McGorry PD, *et al.* (2009): Insular cortex gray matter changes in individuals at ultra-high-risk of developing psychosis. *Schizophr Res.* 111: 94–102.
67. Sowell ER, Peterson BS, Thompson PM, Welcome SE, Henkenius AL, Toga AW (2003): Mapping cortical change across the human life span. *Nat Neurosci.* 6: 309–315.
68. Birnbaum R, Weinberger DR (2017): Genetic insights into the neurodevelopmental origins of schizophrenia. *Nat Rev Neurosci.* 18: 727–740.
69. Chen EYH, Hui CLM, Lam MML, Chiu CPY, Law CW, Chung DWS, *et al.* (2010): Maintenance treatment with quetiapine versus discontinuation after one year of treatment in patients with remitted first episode psychosis: randomised controlled trial. *BMJ.* 341: c4024.
70. Tiihonen J, Wahlbeck K, Lönnqvist J, Klaukka T, Ioannidis JPA, Volavka J, Haukka J (2006): Effectiveness of antipsychotic treatments in a nationwide cohort of patients in community care after first hospitalisation due to schizophrenia and schizoaffective disorder: observational follow-up study. *BMJ.* 333: 224.
71. Hibar, D. P. Westlye, L. T. Doan, N. T. Jahanshad, N. Cheung, J. W. Ching, C. R. K. Versace, A. Bilderbeck, A. C. Uhlmann, A. Mwangi, B. Kramer, B. Overs, B. Hartberg, C. B. Abe, C. Dima, D. Grotegerd, D. Sprooten, E. Boen, E. Jimenez, E. Howells, F. M. (2017): Cortical abnormalities in bipolar disorder: an MRI analysis of 6503 individuals from the ENIGMA Bipolar Disorder Working Group. *Mol Psychiatry.* .
72. Schmaal, L. Hibar, D. P. Samann, P. G. Hall, G. B. Baune, B. T. Jahanshad, N. Cheung, J. W. van Erp, T. G. M. (2017): Cortical abnormalities in adults and adolescents with major depression based on brain scans from 20 cohorts worldwide in the ENIGMA Major Depressive Disorder Working Group. *Mol Psychiatry.* .

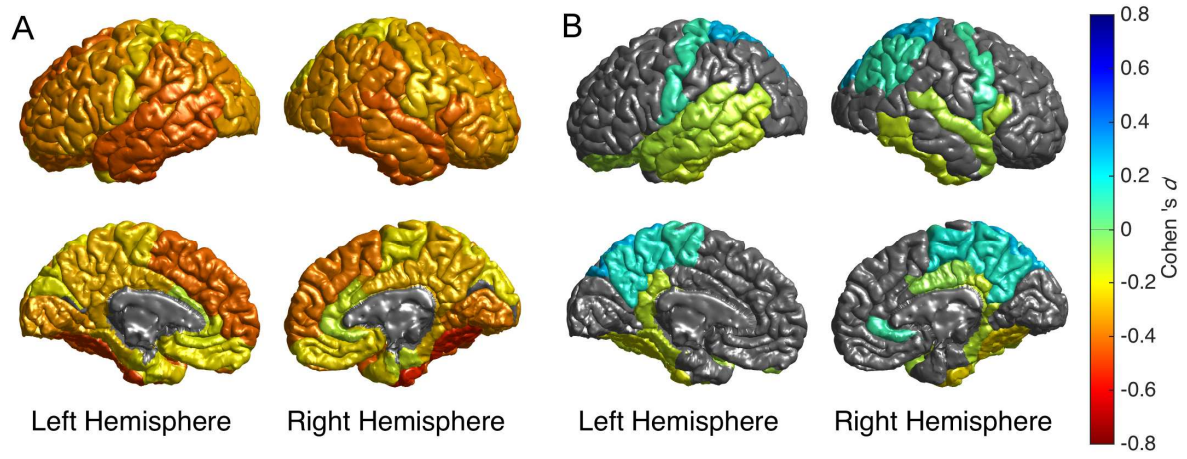
## Figure Captions

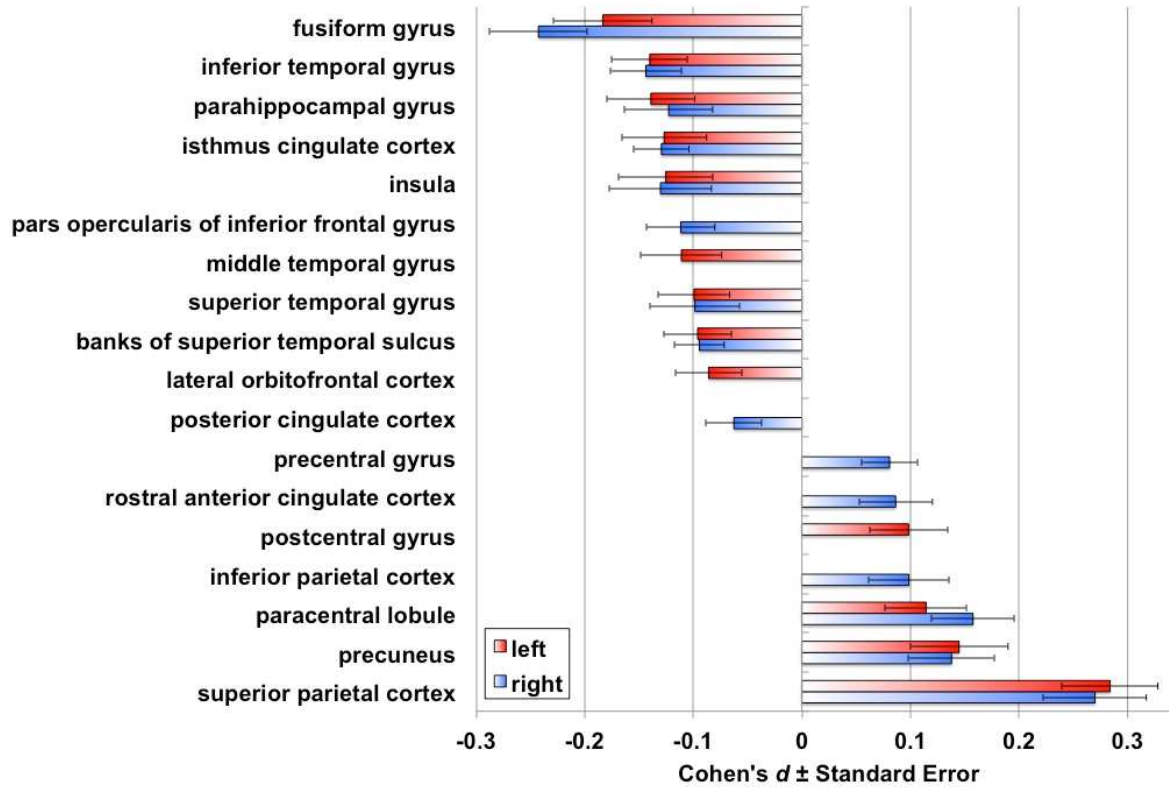
Figure 1. Cortical map of regional Cohen's  $d$  effect sizes for schizophrenia versus healthy group cortical thickness contrast statistically controlling for A) age and sex, and B) age, sex, and global cortical thickness. Only regions with  $pFDR < 0.05$  are depicted in color. In figure 1B, warm colors (yellow-red) reflect regions in which the effect of schizophrenia is more than the mean global cortical thinning, and cool colors (green-blue) reflect regions where the effect of schizophrenia is less than the mean global thinning compared to controls.

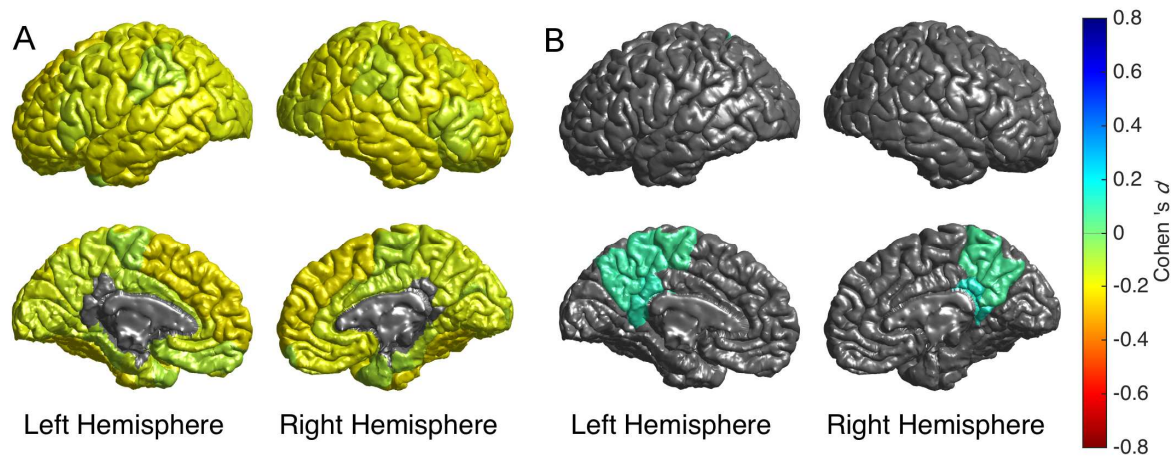
Figure 2. Cohen's  $d$  effect sizes for schizophrenia versus healthy group cortical thickness contrast statistically controlling for age, sex, and global mean cortical thickness. Only regions with  $pFDR < 0.05$  are depicted in color.

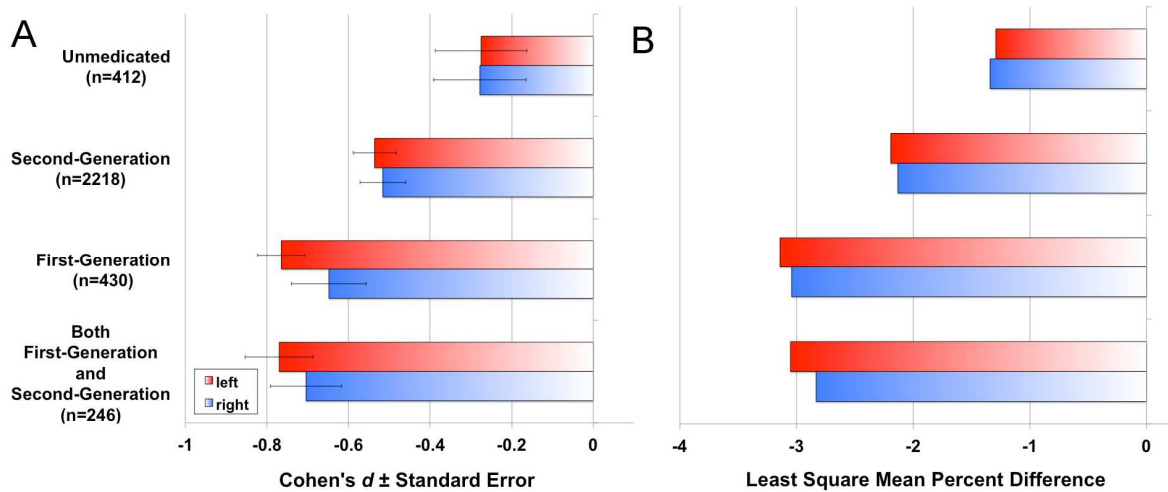
Figure 3. Cortical map of regional Cohen's  $d$  effect sizes for schizophrenia versus healthy group cortical surface area contrast statistically controlling for A) age and sex, and B) age, sex, and total cortical surface area. Only regions with  $pFDR < 0.05$  are depicted in color. In figure 3B, warm colors (yellow-red) would reflect regions in which the effect of schizophrenia is more than the mean lower surface area, and cool colors (green-blue) reflect regions where the effect of schizophrenia is less than the mean lower global surface area compared to controls.

Figure 4. A) Cohen's  $d$  effect sizes, and B) least square mean percent difference for schizophrenia versus healthy group contrasts in global cortical thickness, statistically controlling for age, and sex, by medication group and hemisphere. Nominal one-tailed  $p$ -values for left (L) and right (R) hemisphere thickness group comparisons, statistically controlling for age and sex, were: Second-Generation vs. Unmedicated [ $p(L)<0.05$ ;  $p(R)<0.06$ ]; First-Generation vs. Unmedicated [ $p(L)<0.01$ ;  $p(R)<0.002$ ]; Both First-Generation and Second-Generation vs. Unmedicated [ $p(L)<0.02$ ;  $p<0.05$ ]; First-Generation vs. Second-Generation [ $p(L)<0.03$ ;  $p(R)<0.03$ ]; Both First-Generation and Second-Generation vs. Second-Generation [ $p(L)<0.02$ ;  $p(R)<0.05$ ]; Both First-Generation and Second-Generation vs. First-Generation [ $p(L)=0.50$ ;  $p(R)=0.48$ ]; Supplementary Tables S16-S21).











## Cortical Brain Abnormalities in 4474 Individuals With Schizophrenia and 5098 Controls via the ENIGMA Consortium

### Supplement 1

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**Supplementary Table S1a.** Sample demographics

Sample	N (Total)	N (SZ)	N (HV)	M/F (SZ)	M/F (HV)	Mean Age (SZ)	Mean Age (HV)	Mean Prenatal SES (SZ)	Mean Prenatal SES (HV)	Mean Age of Onset	Mean Duration Of Illness	PANSS Total	PANSS Negative	PANSS Positive	SANS Total	SAPS Total
AMC	292	196	96	170/26	63/33	22.9	22.2			20	2.2					
ASRB	429	263	166	177/86	79/87	39.3	38.6			23.6	14.6				18.2	
CAMH	264	118	146	70/48	77/69	43.6	43.9	40	47.7	24.9	19.2	53.1	14	13.9		
CIAM	51	21	30	13/8	16/14	26.6	31			23.2	7.4	54.6	14.8	13.6		
CLING	372	49	323	36/13	132/191	25.2	32.4	14.9	17.7	24.5	7.7	49.8	12	11.3		
COBRE	142	72	70	59/13	50/20	35.7	37.2			21.5	15.5	60	14.9	15.2		
Dublin	277	55	222	39/16	95/127	29.2	42.6			23	20.2				21.6	19.4
ESO	80	40	40	20/20	20/20	29.1	29.4			28.9	0.7	63.5	16.1	14		
EdinburghEHRS	67	31	36	19/12	17/19	21.2	21.8	2.8	3.4							
EdinburghFunc	60	25	35	11/14	18/17	37.5	37.2	0.6	0.1	22.2	15.5	43	10	10.6		
EdinburghSFMH	76	35	41	23/12	23/18	38.2	37.5	3.9	4	23	14.4	56.4	14.1	13.4	27.9	
FBIRN	359	185	174	139/46	124/50	37.5	38.9	5.2	5.6	21.8	17.2	58.6	14.5	15.5	19.6	16.7
FIDMAG	283	160	123	124/36	54/69	37.5	39.6			23.3	15.4	76.5	22.9	16.7		
Frankfurt	59	29	30	20/9	13/17	35.2	38.1	13.7	14.7	35.6	10.9	67.2	16.7	16.9		
GAP	212	124	88	87/37	33/55	25.9	27.4					62.3	16.4	15.7		
Galway	129	66	63	49/17	41/22	33.7	32.9			23.5	9.7				27.4	14.8
HMS	101	46	55	32/14	28/27	35.4	28.4	12.9	13			90.2	22.1	21.1		
HUBIN	196	94	102	70/24	69/33	42	41.7			24.5	17.1				22.3	9
Huilong1	190	154	36	83/71	19/17	31.8	26.2									
Huilong2	140	90	50	47/43	28/22	24.8	24.3									
KaSP	88	56	32	34/22	15/17	27.5	30.3				1.2	74	17.1	18.6		
MCIC	312	148	164	113/35	102/62	31.4	32.9	2.8	2.7	22.8	10.2				23.3	22.8
MPRC1	227	82	145	47/35	57/88	34.7	33.6									
MPRC2	165	88	77	44/44	28/49	41.7	37.7									
NU	200	108	92	74/34	51/41	31.9	34.2	14.1	14.5	20.8	13.2				33	23.2
OLIN	870	313	557	174/139	311/246	37.6	37.7									

Sample	N (Total)	N (SZ)	N (HV)	M/F (SZ)	M/F (HV)	Mean Age (SZ)	Mean Age (HV)	Mean Prenatal SES (SZ)	Mean Prenatal SES (HV)	Mean Age of Onset	Mean Duration Of Illness	PANSS Total	PANSS Negative	PANSS Positive	SANS Total	SAPS Total
Osaka	824	204	620	109/95	315/305	34.3	35.5	4.9	5.1	24.3	11.3	81.2	19.8	18.7		
PAFIP1.5T	222	142	80	88/54	50/30	27.7	29.7	3.7	3.5	28.5	1				6.4	13.6
PAFIP3T	218	114	104	64/50	63/41	30.1	29.7	3.4	3.9	28.9	0.7				5.5	14.1
RSCZ	94	45	49	45/0	49/0	22.2	22.1	NaN	NaN	21.2	1.2	60.9	19.3	11.2		
RomeSL	289	173	116	118/55	73/43	37.5	39.2	NaN	NaN	24.3	15	87.8	21	21.1	31.7	32.3
SCORE	205	161	44	117/44	17/27	25.5	25.5	NaN	NaN	24.5	1.1				15.6	
SNUH	139	43	96	20/23	58/38	25.8	22.5	2.7	2.8	22.2	0.6	68.5	17.4	16.5		
SaoPaulo	84	15	69	9/6	45/24	27.3	24.1	NaN	NaN			89.9	21.9	22.6		
TOP	522	219	303	130/89	159/144	35.4	32	NaN	NaN	23.9	8.3	62	15.5	14.9		
UMCU	609	322	287	241/81	166/121	32.9	30.8	12.4	12.6	21.8	9	65.4	16.4	15.9		
UMCUS	190	123	67	72/51	27/40	39.7	37.2	10.7	12.7			66.6	16.7	17.4		
UNIBA	165	88	77	65/23	31/46	26.6	33.6	27.2	40.9	20.5	12.4	77.8	21.7	17.3		
UPENN	370	177	193	105/72	90/103	36.4	38.9	13.3	13.8	20.9	17.4				23.8	18.3
Total	9572	4474	5098	2957/1517	2706/2392			NaN	NaN							
Sample size- weighted mean						32.3	34.5	NaN	NaN	23.4	10.5	68.1	21.9	16.4	20.5	19.2

N=Number; SZ=Schizophrenia; HV=Healthy Volunteer; M=Male; F=Female; SES=Socioeconomic Status; PANSS=Positive and Negative Syndrome Scale; SANS=Schedule for the Assessment of Negative Symptoms; SAPS=Schedule for the Assessment of Positive Symptoms.

**Supplementary Table S1b.** Sample medication information

Sample	N Unmedicated	N Second Generation (atypical)	N First Generation (typical)	N Both (typical + atypical)	Mean CPZ
AMC	26	151	18	0	250.1
ASRB	44	198	12	9	
CAMH	19	84	7	8	288.6
CIAM	4	9	5	3	
CLING	9	35	0	5	637.8
COBRE	0	61	7	1	548.2
Dublin	0	25	1	5	358.3
ESO	3	11	9	6	
EdinburghEHRS	0	15	8	2	
EdinburghFunc	11	23	1	0	590.3
EdinburghSFMH	0	29	0	2	309.9
FBIRN	0	137	20	10	373.3
FIDMAG	1	100	7	30	634.6
Frankfurt	0	26	3	0	605.1
GAP	2	36	1	0	198.8
Galway	0	12	0	3	469.7
HMS	6	39	0	1	313
HUBIN	6	38	40	10	272.7
Huilong1	0	54	0	11	
Huilong2	0	37	0	0	
KaSP	29	25	0	2	
MCIC	8	117	10	7	533.5
MPRC1	-	-	-	-	
MPRC2	-	-	-	-	
NU	9	79	17	0	



OLIN	-	-	-	-	
Osaka	18	132	8	46	642.6
PAFIP1.5T	0	0	117	25	199.1
PAFIP3T	0	114	0	0	166.5
RSCZ	17	88	29	39	
RomeSL	0	0	0	0	385
SCORE	15	0	0	0	203.2
SNUH	121	38	2	0	
SaoPaulo	10	32	0	1	
TOP	28	158	5	18	404.4
UMCU	28	171	87	5	
UMCUS	11	50	16	2	
UNIBA	0	47	4	9	639.1
UPENN	0	65	13	5	481.9
Total	425	2236	447	265	
Sample size- weighted mean					399

For details, see Supplement 2, Table S1c (Excel file).

**Supplementary Table S2.** Sample image acquisition and image processing details

Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
AMC	1	Philips Intera 3T	TR: 8-9.8, M=9,4 (0,41). TE:3,5-4,6, M=4,26 (0,46). Slice thickness: 1/1.2, flip angle: 8degr, rows/columns: 192-288, M=255,49 (7,00). Pixel spacing: 1mm		v5.0.0	Linux centos4 x86_64	1
ASRB	5	Siemens Avanto 1.5T	High-resolution T1-weighted structural magnetic resonance imaging (sMRI) brain scans (MPRAGE) were acquired using an optimized magnetization-prepared rapid acquisition gradient echo on 1.5 T Siemens Avanto scanners (Siemens, Erlangen, Germany) across five Australian research sites (Loughland and al., 2010). Image parameters were set to 176 slices of 1mm thickness, no gap with field-of-view 250 x 250 mm <sup>2</sup> , repetition time 1980 ms, echo time 4.3 ms, data acquisition matrix 256 x 256, with a flip matrix of 15°, resulting in a voxel size of 0.98×0.98×1.0 mm <sup>3</sup>	Sagittal	v5.1.0	Mac OSX	0
CAMH	1	GE 1.5T	SPGR, TR/TE/TI=12.3/5.3/300ms, flip angle=20°, 256x256x128 matrix, FOV=240x240mm, slice thickness=1.5mm	Axial	v5.3.0	xubuntu x86_64-linux	0
CIAM	1	3T Siemens Allegra	MPRAGE (van der Kouwe et al., 2008) sequence :TR = 2530 ms, graded TE = 1.53, 3.21, 4.89, 6.57 ms, flip angle = 7°, FOV = 256 mm, slice thickness = 1.33 mm, 128 slices, voxel size 1.3x1.0x1.3, scan time 8:06. Single channel coil used	Sagittal	v5.3.0	Linux	3

Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
CLiNG	1	3T Magnetom TIM Trio	MRI scanning was performed on a 3.0-Tesla Magnetom TIM Trio (Siemens, Erlangen, Germany). A T1-weighted, 3D magnetization prepared rapid gradient echo sequence (MPRAGE) (TR/TE/TI/FA=2250 ms/3.26 ms/900 ms/9°; image matrix = 256 x 256; duration 8 min and 26 sec) was acquired generating 192 sagittal slices with a voxel size of 1 mm <sup>3</sup> .”	Sagittal	v5.3.0	Ubuntu 12.04	0
COBRE	1	3T Siemens TIM Trio	T1-weighted images were acquired with a 5-echo multi-echo MPRAGE sequence [TE (echo times) = 1.64, 3.5, 5.36, 7.22, 9.08 ms, TR (repetition time) = 2.53 s, TI (inversion time) = 1.2 s, 7° flip angle, number of excitations (NEX) = 1, slice thickness = 1 mm, FOV (field of view) = 256 mm, resolution = 256x256]	Sagittal	v5.3.0	Linux RedHat	
Dublin	1	3T Philips Intera Achieva	180 slice T1-weighted image using a TFE gradient echo pulse sequence (TR=8.4ms, TE=3.8ms, flip angle=8°, slice thickness=0.9mm, voxel size=0.9mm <sup>3</sup> , 180slices, duration=6min)	Axial	v5.3.0	Linux	0
ESO	1	3T Siemens Tim Trio	MP-RAGE 3D, 1mm thickness, acquisition matrix 256 x 256, TR=2300ms, TE=4.63ms, TI=900ms	Sagittal	v5.3.0	Linux	Only subjects without significant motion artifacts (assessed by visual inspection) were included. Apart from ENIGMA QA protocol, visual inspection of all slices and edits to the skullstrip, white matter segmentation and control points insertion for correction of signal intensity normalization were done where needed.

Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
EdinburghEHRS	1	1T Siemens	scanned with a 1 Tesla 42 SPE Siemens MRI scanner (Siemens, Erlangen,Germany). 128 contiguous coronal T1-weighted slices (thickness 1.88 mm, field-of-view 250 × 250 mm) were obtained using a Magnetisation Prepared Rapid Acquisition of Gradient Echo (MPRAGE) sequence (TR=10ms, TE=4ms, TI=200ms, relaxation time 500ms).	Coronal	v5.3.0	Linux	0 Removed. All scans were manually checked for inaccuracies by a trained rater blinded to diagnostic status. At this stage, editing procedures outlined on the freesurfer wiki ( <a href="http://freesurfer.net/fswiki/Edits">http://freesurfer.net/fswiki/Edits</a> ) were then performed on all scans to remove non-brain from brain, and white matter edits to increase the accuracy of the pial surface. Control points were added when normalization steps failed.
EdinburghFunc	1	1.5T GE Signa	A coronal gradient echo sequence with magnetization preparation and produced 128 coronal high-resolution T1-weighted images, which were used for structural image analysis (time of inversion [TI] 600 msec, echo time 3.4 msec, flip angle 15, field of view 22, slice thickness 1.7 mm, matrix 256 192).	Axial	v5.1.0	Linux	0
EdinburghSFMH	1	3T Siemens Verio	Used T1-weighted, magnetisation prepared rapid acquisition gradient echo (MP-RAGE) sequence prescribed using the AC-PC line, providing 160 sagittal slices of 1.0mm thickness, with 256 x 256mm <sup>2</sup> field of view, matrix size 256 x 256mm <sup>2</sup> . Further scan parameters – repetition time = 2300ms, echo time = 2.98ms, inversion time = 900ms and flip angle = 9degrees.	Sagittal	v5.3.0	Linux	0
FBIRN (Phase3)	7	3T Siemens Tim Trio; 3T GE	High-resolution structural imaging scans were acquired on six 3T Siemens Tim® Trio System and one 3T General Electric Discovery MR750 scanner. MP-RAGE scan parameters for the Siemens scanner	Sagittal	v5.3.0	Centos 64bit	0

Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
			were: scan plane=sagittal, TR/TE/TI=2300/2.94/1100ms, GRAPPA acceleration factor=2, flip angle=9°, resolution=256×256x160, FOV=220mm <sup>2</sup> , voxel size=0.86x0.86x1.2mm, and NEX=1. IR-SPGR scan parameters for the General Electric scanner were: scan plane=sagittal, TR/TE/TI=5.95/1.99/450ms, ASSET acceleration factor=2, a flip angle=12°, resolution=256×256x166, FOV=220mm <sup>2</sup> , voxel size=0.86x0.86x1.2mm, and NEX=1. All scans covered the entire brain.				
FIDMAG	1	1.5T GE Signa	180 axial slices; 1mm slice thickness, no gap, matrix size 512x512; 0.5x0.5x1mm <sup>3</sup> voxel resolution; TE 4ms, TR 2000ms, flip angle 15°	Axial	v5.3.0	Linux Ubuntu	
Frankfurt	1	3T Siemens Trio	176 slices, slice thickness 1mm, TR=7.92 ms, TE= 2.48 ms, voxel resolution= 1x1x1 mm, flip angle= 16°	Sagittal	v5.1.0	Linuxaxia	
GAP	1	3T GE Signa HDx	SAGITTAL ADNI MPRAGE GE, slice thickness = 1.2mm, spatial positions = 166 slices, flip angle = 8°, fov = 260mm x 260mm, TR/TE/TI = 6.988/2.848/650ms, matrix = 256mm x 256mm		v5.3.0		3 subjects were excluded because of motion artifacts, 7 subjects were excluded after QC, Pial edits conducted to remove small parts of non-brain matter that were included in the brainmask in 37 subjects.
Galway	1	1.5 Tesla Siemens Magnetom Symphony (Erlangen. Germany)	A volumetric T1-weighted magnetization-prepared rapid acquisition of gradient echo (MPRAGE) sequence was acquired with the imaging parameters: Repetition time (TR): 1140ms, Echo time (TE): 4.38ms, flip	Axial	v5.1.0	Linux	0

Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
			angle 15; matrix size 256 x 256; an in-plane pixel resolution of 0.9mm x 0.9mm and slice thickness 0.9mm				
HMS	1	1.5 T Magnetom Sonata	MRI scanning was performed on a 1.5-Tesla Magnetom Sonata (Siemens, Erlangen, Germany). A T1-weighted, magnetization prepared rapid gradient echo sequence (MPRAGE) (TR/TE/TI/FA=1900 ms/4.0 ms/700 ms/15°; image matrix = 256 x 256) was acquired generating 176 consecutive sagittal slices with a voxel size of 1 mm <sup>3</sup> . ~5 min	Sagittal	v 5.1.0	centos6 x86_64	0
HUBIN	1	1.5 Tesla General Electronics Signa	T1-weighted images, using a three-dimensional spoiled gradient recalled (SPGR) pulse sequence, were acquired with the following parameters; 1.5 mm coronal slices, no gap, 35° flip angle, repetition time (TR) = 24 ms, echo time (TE) = 6.0 ms, number of excitations (NEX) = 2, field of view (FOV) = 24 cm, acquisition matrix = 256 × 192. T2-weighted images were acquired with the following parameters; 2.0 mm coronal slices, no gap, TR = 6,000 ms, TE = 84 ms, NEX = 2, FOV = 24 cm, acquisition matrix = 256 × 192.	Coronal	v5.3.0	RedHat	0
Huilong1	1	3T Siemens Verio	T1-weighted, 3D MPRAGE, 1x1x1mm, TE/TR/TI=.9/2300/900ms, flip angle=9 degrees.	Sagittal	v5.3.0	Linux	
Huilong2	1	3T GE Signa HDxt	T1-weighted, 3D BRAVO, 1x1x1mm, TE/TR/TI=2.5/6.8/1100ms, flip angle=7 degrees.	Sagittal	v5.3.0	Linux	

Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
KaSP	1	3T GE	3D IR prep fast SPGR, TR=7.904ms, TE=3.06ms, TI = 450ms, flip angle = 12, 146 slices, voxel size = 0.934 x 0.934 x 1.2 mm <sup>3</sup> , matrix = 256 x 256	Sagittal	v5.3.0	Linux Hat Enterprise 6.5	
MCIC	3	1.5, 3T Siemens and GE	T1 scans: TR = 2530 ms for 3 T, TR = 12 ms for 1.5 T; TE = 3.79 ms for 3 T, TE = 4.76 ms for 1.5 T; FA = 7 for 3 T, FA = 20 for 1.5 T; TI = 1100 for 3 T; Bandwidth = 181 for 3 T, Bandwidth = 110 for 1.5 T; 0.625×0.625 mm voxel size; slice thickness 1.5 mm; FOV 256×256×128 cm matrix; FOV = 16 cm (could be increased to 18 cm when needed for full brain coverage).	Coronal	v4.0.1	Linux of various flavors	5 subjects failed automated segmentation procedure due to excessive motion artifacts 2 participants' MRI data failed the manual inspection
MPRC1	1	3T Siemens Allegro	T1-weighted, 3D MPRAGE, 1x1x1mm, TE/TR/TI=4.3/2500/1000ms, flip angle=8 degrees.	Sagittal	v5.3.0	Linux	
MPRC2	1	3T Siemens Trio	T1-weighted, 3D MPRAGE, 1x1x1mm, TE/TR/TI=2.9/2300/900ms, flip angle=9 degrees.	Sagittal	v5.3.0	Linux	
NU	1	1.5T Vision	1) 3D turbo-FLASH: TR=20 ms, TE=5.4 ms, flip=30°, ACQ=1, 256x256 matrix, 1x1 mm in-plane resolution, 180 slices, slice thickness 1 mm, 13:30 min scan time and 2) 3D MPRAGE (2-4 repeats): TR=9.7 ms, TE=4 ms, flip=10°, ACQ=1, 256x256 matrix, 1x1 mm in-plane resolution, 128 slices, slice thickness 1.25 mm, 5:36 min scan time each	Axial	v5.3.0	centos6 x86_64	
OLIN	1	3T Alegra	T1-weighted, 3D magnetization-prepared rapid gradient-echo	Axial	v5.1.0		

Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
Osaka	2	1.5T GE Signa Excite, 3T GE Signa HDxt	(MPRAGE) sequence (TR/TE/TI=2200/4.13/766 ms, flip angle=13°, voxel size [isotropic]=0.8mm, image size=240 x 320 x 208 voxels), with axial slices parallel to the AC-PC line. 3D-IR-FSPGR, TR/TE/TI=12.6/4.2/400ms, flip angle=15°, 256x256x124 matrix, FOV=240x240mm, slice thickness=1.4mm, Nex=1, No Asset, QD Head coil; 3D-IR-FSPGR, TR/TE/TI=7.2/2.9/400ms, flip angle=11°, 256x256x172 matrix, FOV=240x240mm, slice thickness=1.0mm, Nex=1, No Asset, 8ch Brain coil	Sagittal	v5.3.0	SUSE Linux Enterprise Server 10; Red Hat Enterprise Linux 6	
PAFIP1.5T	1	GE 1.5T	Three-dimensional T1-weighted images, using a spoiled grass (SPGR) sequence acquired in the coronal plane with: echo time (TE)=5 ms, repetition time (TR)=24 ms, numbers of excitations (NEX)=2, rotation angle=45°, field of view (FOV)=26×19.5 cm, slice thickness=1.5mm and a matrix of 256×192.	Coronal	v5.0.0	Ubuntu 11,04 (x86_64)	1 subject was excluded because motion artifacts resulted in very poor segmentation
PAFIP3T	1						



Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
RSCZ	1	3T Philips Achieva	A turbo field echo sequence covering the whole brain. TR = 8,200 ms, TE = 3.7 ms, TI = 1,020 ms, flip angle = 8, SENSE factor = 1.5, FOV = 240 mm, voxel size of 0.83 × 0.83 mm with a slice thickness of 1 mm, no gap.	Sagittal	v5.3.0	Centos 6.6	
RomeSL	1	3T Siemens Allegra	T1-weighted, 3D MDEFT, 1x1x1mm, TE/TR =2.4/7.92 ms, flip angle=15	Sagittal	6.0dev	linux	
SCORE	1		MPRAGE: acquisition matrix: 256×256×176, isotropic spatial resolution: 1x1x1mm <sup>3</sup> , TI=1000ms, TR=2s, TE=3.4 ms, flip angle: 8° and bandwidth of 200 Hz/pixel	Sagittal	6.0dev		
SNUH	1	3T Siemens Trio	high-resolution T1-weighted, three-dimensional Magnetization Prepared Rapid Gradient Echo (TR = 670ms; TE=1.89ms; FOV=250mm; FA=9°; voxel size=1x1x1mm <sup>3</sup> )	Sagittal	v5.3.0	OSX 10.9	
SaoPaolo	1	1.5T GE Signa	T1-SPGR (fast spoiled gradient recall sequence) with 124 contiguous slices, voxel size 0.8660.8661.5 mm, echo time 5.2ms, repetition time 21.7ms, flip angle=20, field of view=22, matrix 256x256x192	Axial	v5.3.0	OSX	The skull-stripping was performed using a automated method known as Multi-Atlas Skull-Stripping (MASS version 1.0), followed by manual corrections. This step was done separately from the FreeSurfer pipeline (automatic reconstruction). No subject was removed due to Q&A.

Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
TOP	1	1.5T Siemens Magnetom Sonata	Two sagittal T1-weighted magnetization prepared rapid gradient echo (MPRAGE) volumes were acquired with the Siemens <code>tfl3d1_ns</code> pulse sequence (TE = 3.93 ms, TR = 2730 ms, TI = 1000 ms, flip angle = 7°; FOV = 24 cm, voxel size= 1.33 x 0.94 x 1 mm <sup>3</sup> , number of partitions = 160)	Sagittal	v4.5.0	Linux Centos or Ubuntu	0
UMCU	1	Philips 1.5T Inera and Achieva	T1-weighted three-dimensional fast-field echo (3D-FFE) scans with 160–180 contiguous coronal slices [256 3 256 matrix, echo time (TE)=4.6 ms, repetition time (TR)=30 ms, flip angle=30 degrees, 1x1x1.2 mm <sup>3</sup> voxels, field of view [FOV] = 256 mm/ 70%]	Coronal	v5.1.0	Linux-centos4_x86_64-stable-pub	0
UMCUS	1	3T Philips Achieva	T1-weighted 3D FFE, TR/TE 9.86/4.6ms, 0.875x0.875x1 voxels, flip angle 8, FOV 224x160x168, 160 slices	Axial	v5.3.0	Ubuntu 10.04, Kernel Linux 2.6.32-25-generic, GNOME 2.30.2	
UNIBA	1	3T GE	T1-weighted 3D FFE, TR/TE 9.86/4.6ms, 0.875x0.875x1 voxels, flip angle 8, FOV 224x160x168, 160 slices	Axial	v5.3.0	Ubuntu 10.04, Kernel Linux 2.6.32-25-generic, GNOME 2.30.2	

Sample	Number Of Scanners	Scanner Vendor & Type	Imaging Protocols	Slice Orientation	FreeSurfer Version	Operating System	Number of subjects removed from analysis due to QC failure?
UPENN	2	Siemens 3T	MPRAGE, TR=1810 ms, TE= 3.51 ms, TI=1100 ms, flip angle 9, FOV= 240 x 180 mm, matrix= 256 × 192, resolution = 0.9 x 0.9 mm, slices = 160, slice/skip thickness = 1 mm/0 mm	Axial	v5.3.0	Linux Red Hat Enterprise 5	0

**Supplementary Table S3.** Absolute means (SD) and absolute percent difference (SZ vs. HV)

	Cortical Thickness						Cortical Surface Area							
	Weighted Mean	SZ Pooled SD	N	Weighted Mean	HV Pooled SD	N	Percent Difference	Weighted Mean	SZ Pooled SD	N	Weighted Mean	HV Pooled SD	N	Percent Difference
Left banks of superior temporal sulcus	2.408	0.003	4350	2.458	0.003	5010	-2.76	1032.2	2.7	4348	1047.6	2.5	5003	-1.83
Left caudal anterior cingulate cortex	2.626	0.004	4430	2.665	0.004	5061	-1.47	642	2.1	4427	656.3	2	5058	-1.93
Left caudal middle frontal gyrus	2.485	0.003	4417	2.54	0.002	5061	-2.16	2306.2	6	4413	2345.4	5.6	5057	-1.62
Left cuneus	1.808	0.002	4361	1.839	0.002	5020	-1.66	1448.5	3.4	4360	1475	3.1	5020	-1.56
Left entorhinal cortex	3.234	0.005	4311	3.269	0.005	4950	-1.89	408.8	1.3	4309	415.7	1.2	4946	-1.69
Left fusiform gyrus	2.591	0.003	4375	2.644	0.002	5020	-3.02	3233.5	6.9	4375	3300.3	6.2	5015	-1.99
Left inferior parietal cortex	2.39	0.002	4315	2.433	0.002	4993	-2.36	4613.3	10.4	4317	4692.4	9.4	4988	-1.68
Left inferior temporal gyrus	2.677	0.003	4351	2.727	0.003	5013	-2.71	3284	8	4347	3347.6	7.1	5012	-2.06
Left isthmus cingulate cortex	2.449	0.003	4428	2.506	0.003	5063	-2.77	1011.7	2.8	4426	1014	2.6	5059	0.51
Left lateral occipital cortex	2.124	0.002	4376	2.156	0.002	5034	-2.07	4807.6	10.1	4375	4852.8	8.9	5028	-1.04
Left lateral orbitofrontal cortex	2.621	0.003	4431	2.672	0.002	5064	-2.48	2586.6	5	4433	2623.3	4.4	5058	-1.34
Left lingual gyrus	1.954	0.002	4427	2.001	0.002	5056	-2.54	3001.9	6.8	4422	3049.8	6.2	5054	-1.43
Left medial orbitofrontal cortex	2.457	0.003	4425	2.506	0.003	5048	-1.44	1849.3	4.1	4423	1850.1	3.7	5048	-0.68
Left middle temporal gyrus	2.788	0.003	4312	2.847	0.003	4990	-2.56	3055.3	6.8	4306	3111.1	6.1	4985	-1.64
Left parahippocampal gyrus	2.604	0.005	4410	2.666	0.005	5047	-3.49	704.4	1.6	4403	713.9	1.6	5043	-0.97
Left paracentral lobule	2.302	0.003	4428	2.35	0.002	5059	-1.95	1348.3	2.9	4423	1353.4	2.7	5057	-0.6
Left pars opercularis of inferior frontal gyrus	2.529	0.003	4395	2.582	0.002	5048	-2.34	1650.5	4.1	4393	1681.4	3.9	5045	-1.49
Left pars orbitalis of inferior frontal gyrus	2.693	0.004	4399	2.745	0.003	5040	-2.8	626.7	1.4	4396	634.2	1.2	5037	-1.64
Left pars triangularis of inferior frontal gyrus	2.44	0.003	4379	2.485	0.003	5032	-2.41	1279.4	3.1	4378	1294.9	2.9	5029	-1.17
Left pericalcarine cortex	1.595	0.002	4435	1.605	0.002	5062	-0.6	1343	3.6	4432	1361.4	3.4	5060	-1.38
Left postcentral gyrus	2.019	0.002	4419	2.055	0.002	5049	-1.88	4181.9	8	4416	4232.4	7.3	5043	-1.18
Left posterior cingulate cortex	2.506	0.003	4431	2.549	0.002	5065	-2.06	1172.5	2.9	4429	1186.8	2.6	5060	-0.86
Left precentral gyrus	2.446	0.002	4415	2.511	0.002	5060	-2.12	4852.2	8.8	4413	4881.8	8	5057	-0.77
Left precuneus	2.301	0.002	4408	2.339	0.002	5048	-2.01	3793.6	7.7	4408	3830.3	6.9	5048	-0.75

	Cortical Thickness							Cortical Surface Area						
	Weighted Mean	SZ Pooled SD	N	Weighted Mean	HV Pooled SD	N	Percent Difference	Weighted Mean	SZ Pooled SD	N	Weighted Mean	HV Pooled SD	N	Percent Difference
Left rostral anterior cingulate cortex	2.835	0.004	4423	2.876	0.003	5055	-1.46	824.5	2.6	4424	841.4	2.4	5051	-1.98
Left rostral middle frontal gyrus	2.367	0.002	4383	2.406	0.002	5044	-2.05	5673.1	12.6	4379	5750.2	11.3	5044	-1.29
Left superior frontal gyrus	2.703	0.003	4423	2.768	0.002	5059	-2.35	7158.8	13.5	4420	7246	12.2	5056	-1.38
Left superior parietal cortex	2.132	0.002	4361	2.157	0.002	5016	-1.43	5394.1	10.5	4354	5487.6	9.8	5015	-1.46
Left superior temporal gyrus	2.708	0.003	4295	2.772	0.003	4984	-2.52	3734.7	7.3	4296	3780.8	6.5	4982	-1.17
Left supramarginal gyrus	2.472	0.002	4292	2.528	0.002	4971	-2.4	3901.9	9.3	4291	3923.7	8.4	4969	-0.61
Left frontal pole	2.801	0.005	4437	2.86	0.004	5061	-2.34	208.4	0.5	4432	210.7	0.5	5062	-1.23
Left temporal pole	3.576	0.005	4394	3.608	0.005	5028	-2.03	482.3	1	4390	483.8	0.9	5025	-0.31
Left transverse temporal gyrus	2.29	0.004	4435	2.359	0.003	5061	-2.73	459.3	1.2	4430	466.8	1.1	5053	-1.42
Left insula	3.002	0.003	4431	3.058	0.002	5058	-2.14	2201	3.9	4423	2201.4	3.6	5050	-0.24
Right banks of superior temporal sulcus	2.496	0.003	4382	2.546	0.003	5023	-2.71	944.2	2.3	4380	958.4	2.1	5018	-1.59
Right caudal anterior cingulate cortex	2.547	0.004	4427	2.584	0.003	5058	-1.71	760.2	2.4	4426	785	2.3	5054	-2.39
Right caudal middle frontal gyrus	2.474	0.003	4405	2.522	0.002	5042	-2.05	2131.7	6	4399	2166.2	5.5	5037	-1.7
Right cuneus	1.827	0.002	4386	1.862	0.002	5030	-1.77	1514.2	3.4	4387	1538.3	3.1	5028	-1.31
Right entorhinal cortex	3.382	0.006	4217	3.414	0.006	4904	-1.48	350.7	1.3	4213	350.9	1.2	4900	-0.56
Right fusiform gyrus	2.596	0.003	4347	2.66	0.002	5017	-3.15	3144.2	6.9	4348	3207	6.1	5014	-1.87
Right inferior parietal cortex	2.411	0.002	4306	2.453	0.002	4983	-2.24	5455.2	12	4304	5534	10.8	4980	-1.49
Right inferior temporal gyrus	2.701	0.003	4345	2.753	0.003	5000	-2.57	3132.3	7.4	4342	3184	6.6	5000	-2
Right isthmus cingulate cortex	2.403	0.003	4414	2.453	0.003	5044	-2.79	948.6	2.5	4412	952.2	2.3	5043	0.75
Right lateral occipital cortex	2.169	0.002	4361	2.204	0.002	5019	-2.03	4674.4	10.1	4357	4719.6	9	5014	-0.94
Right lateral orbitofrontal cortex	2.594	0.003	4401	2.638	0.003	5041	-2.28	2564.8	5.1	4400	2591.7	4.7	5040	-0.95
Right lingual gyrus	1.996	0.002	4426	2.05	0.002	5057	-2.66	3018.8	6.4	4419	3070.3	5.9	5055	-1.35
Right medial orbitofrontal cortex	2.431	0.003	4388	2.482	0.003	5027	-2.04	1801.2	3.5	4386	1820.8	3.2	5023	-1.25
Right middle temporal gyrus	2.825	0.003	4327	2.865	0.002	4995	-2.18	3366.7	7.3	4325	3431.8	6.5	4991	-1.77
Right parahippocampal gyrus	2.583	0.004	4385	2.641	0.004	5041	-3.12	676.8	1.7	4379	686.8	1.5	5035	-1.04
Right paracentral lobule	2.318	0.002	4425	2.364	0.002	5052	-1.62	1533.3	3.5	4421	1541.8	3.2	5050	-0.83

	Cortical Thickness						Cortical Surface Area							
	SZ			HV			Percent Difference	SZ			HV			
	Weighted Mean	Pooled SD	N	Weighted Mean	Pooled SD	N		Weighted Mean	Pooled SD	N	Weighted Mean	Pooled SD	N	Percent Difference
Right pars opercularis of inferior frontal gyrus	2.531	0.003	4372	2.59	0.003	5017	-2.75	1385.3	3.7	4369	1410.6	3.4	5011	-1.54
Right pars orbitalis of inferior frontal gyrus	2.675	0.003	4401	2.728	0.003	5031	-2.78	776.2	1.7	4400	784.6	1.6	5029	-1.34
Right pars triangularis of inferior frontal gyrus	2.449	0.003	4373	2.494	0.003	5013	-2.4	1489	3.9	4368	1513.6	3.6	5008	-1.31
Right pericalcarine cortex	1.602	0.002	4427	1.615	0.002	5057	-0.78	1483.5	4	4422	1498.5	3.5	5055	-0.83
Right postcentral gyrus	1.993	0.002	4408	2.031	0.002	5040	-2.01	4016.8	7.6	4405	4064.6	7.2	5041	-1.03
Right posterior cingulate cortex	2.481	0.003	4428	2.519	0.002	5057	-2.08	1183.7	2.9	4425	1208.9	2.7	5052	-1.09
Right precentral gyrus	2.419	0.002	4404	2.478	0.002	5041	-2.03	4892.6	9	4400	4930.5	8.2	5037	-1.04
Right precuneus	2.313	0.002	4398	2.355	0.002	5043	-2.02	3968.7	8.3	4396	4005.2	7.4	5042	-0.77
Right rostral anterior cingulate cortex	2.833	0.004	4397	2.846	0.003	5027	-0.98	669.8	2.2	4394	689.1	2	5025	-2.07
Right rostral middle frontal gyrus	2.341	0.002	4372	2.373	0.002	5017	-1.93	5877.5	12.9	4373	5950.4	11.8	5015	-1.22
Right superior frontal gyrus	2.683	0.003	4408	2.741	0.002	5045	-2.25	6956	13.5	4404	7041.8	12.5	5041	-1.48
Right superior parietal cortex	2.123	0.002	4382	2.152	0.002	5021	-1.6	5396.5	10.3	4379	5480.1	9.5	5018	-1.15
Right superior temporal gyrus	2.738	0.003	4327	2.8	0.003	4997	-2.56	3555.1	6.6	4329	3608.8	5.8	4993	-1.32
Right supramarginal gyrus	2.478	0.002	4297	2.534	0.002	4975	-2.41	3680.9	8.5	4294	3723.5	7.8	4971	-0.96
Right frontal pole	2.763	0.005	4431	2.821	0.004	5056	-2.59	282.9	0.7	4428	284.6	0.7	5053	-0.7
Right temporal pole	3.683	0.006	4294	3.738	0.005	4960	-1.99	422.6	0.9	4295	424.5	0.9	4958	-0.59
Right transverse temporal gyrus	2.328	0.004	4430	2.399	0.003	5059	-2.96	342	0.9	4425	349.8	0.8	5055	-1.52
Right insula	2.977	0.003	4427	3.035	0.002	5051	-2.31	2256.6	4.4	4424	2255.2	4.1	5050	-0.21
Left hemisphere mean / total*	2.427	0.002	4443	2.475	0.002	5084	-2.26	84328.6	135.1	4441	85361.2	122.5	5081	-1.26
Right hemisphere mean / total*	2.426	0.002	4442	2.472	0.002	5081	-2.24	84695.5	134.8	4440	85754.7	123.8	5077	-1.23

\*mean thickness / total surface area

**Supplementary Table S4a.** Cortical thickness differences between schizophrenia (SZ) and healthy volunteer (HV) groups (Model A)

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left banks of superior temporal sulcus	-0.352	0.040	[-0.429 - -0.274]	-2.6	5.960E-19	2.607E-18	5002	4343
Left caudal anterior cingulate cortex	-0.119	0.036	[-0.19 - -0.049]	-1.02	8.970E-04	9.234E-04	5053	4423
Left caudal middle frontal gyrus	-0.363	0.055	[-0.471 - -0.255]	-1.89	3.954E-11	6.436E-11	5053	4410
Left cuneus	-0.203	0.045	[-0.291 - -0.116]	-1.45	4.922E-06	5.469E-06	5012	4354
Left entorhinal cortex	-0.203	0.039	[-0.28 - -0.126]	-2.02	2.501E-07	3.018E-07	4942	4304
Left fusiform gyrus	-0.491	0.045	[-0.579 - -0.403]	-2.9	6.875E-28	1.604E-26	5012	4368
Left inferior parietal cortex	-0.362	0.047	[-0.454 - -0.269]	-2.03	1.912E-14	4.615E-14	4985	4308
Left inferior temporal gyrus	-0.449	0.048	[-0.543 - -0.356]	-2.64	4.921E-21	2.870E-20	5005	4344
Left isthmus cingulate cortex	-0.309	0.050	[-0.407 - -0.211]	-2.52	5.980E-10	8.051E-10	5056	4421
Left lateral occipital cortex	-0.331	0.052	[-0.432 - -0.229]	-1.89	1.793E-10	2.561E-10	5026	4369
Left lateral orbitofrontal cortex	-0.398	0.045	[-0.485 - -0.31]	-2.36	5.311E-19	2.478E-18	5056	4424
Left lingual gyrus	-0.349	0.046	[-0.44 - -0.258]	-2.45	4.718E-14	1.065E-13	5048	4420
Left medial orbitofrontal cortex	-0.231	0.048	[-0.324 - -0.138]	-1.44	1.236E-06	1.396E-06	5040	4418
Left middle temporal gyrus	-0.444	0.054	[-0.549 - -0.339]	-2.44	1.381E-16	4.395E-16	4982	4305
Left parahippocampal gyrus	-0.277	0.042	[-0.36 - -0.194]	-3.33	5.806E-11	9.031E-11	5039	4403
Left paracentral lobule	-0.253	0.040	[-0.332 - -0.174]	-1.62	3.259E-10	4.563E-10	5051	4421
Left pars opercularis of inferior frontal gyrus	-0.375	0.045	[-0.464 - -0.286]	-2.26	1.213E-16	4.043E-16	5041	4388
Left pars orbitalis of inferior frontal gyrus	-0.319	0.047	[-0.411 - -0.226]	-2.54	1.458E-11	2.618E-11	5032	4392
Left pars triangularis of inferior frontal gyrus	-0.341	0.046	[-0.43 - -0.251]	-2.17	8.638E-14	1.890E-13	5024	4372
Left pericalcarine cortex	-0.077	0.050	[-0.174 - 0.021]	-0.45	1.238E-01	1.238E-01	5054	4428
Left postcentral gyrus	-0.261	0.042	[-0.344 - -0.179]	-1.53	5.180E-10	7.109E-10	5041	4412
Left posterior cingulate cortex	-0.298	0.031	[-0.359 - -0.237]	-1.82	6.756E-22	4.729E-21	5057	4424
Left precentral gyrus	-0.343	0.044	[-0.43 - -0.257]	-1.89	8.680E-15	2.250E-14	5052	4408
Left precuneus	-0.301	0.046	[-0.391 - -0.211]	-1.83	5.659E-11	9.002E-11	5040	4401
Left rostral anterior cingulate cortex	-0.182	0.040	[-0.261 - -0.103]	-1.27	6.864E-06	7.508E-06	5047	4416
Left rostral middle frontal gyrus	-0.362	0.056	[-0.471 - -0.253]	-1.84	7.040E-11	1.071E-10	5036	4376

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left superior frontal gyrus	-0.425	0.058	[-0.538 - -0.311]	-2.04	2.269E-13	4.812E-13	5051	4416
Left superior parietal cortex	-0.209	0.042	[-0.29 - -0.128]	-1.12	4.806E-07	5.607E-07	5008	4354
Left superior temporal gyrus	-0.440	0.045	[-0.529 - -0.352]	-2.44	1.365E-22	1.282E-21	4976	4288
Left supramarginal gyrus	-0.395	0.050	[-0.493 - -0.298]	-2.09	1.696E-15	4.851E-15	4964	4285
Left frontal pole	-0.214	0.037	[-0.286 - -0.143]	-2.16	4.590E-09	5.950E-09	5053	4430
Left temporal pole	-0.246	0.037	[-0.317 - -0.174]	-2.01	1.883E-11	3.216E-11	5020	4387
Left transverse temporal gyrus	-0.253	0.038	[-0.327 - -0.178]	-2.24	2.726E-11	4.544E-11	5053	4428
Left insula	-0.408	0.044	[-0.494 - -0.322]	-2.11	1.949E-20	1.049E-19	5050	4424
Right banks of superior temporal sulcus	-0.355	0.037	[-0.428 - -0.282]	-2.61	2.476E-21	1.576E-20	5015	4375
Right caudal anterior cingulate cortex	-0.152	0.036	[-0.223 - -0.081]	-1.28	2.474E-05	2.664E-05	5050	4420
Right caudal middle frontal gyrus	-0.317	0.037	[-0.39 - -0.243]	-1.8	1.939E-17	6.787E-17	5034	4398
Right cuneus	-0.226	0.040	[-0.303 - -0.148]	-1.49	1.214E-08	1.517E-08	5022	4379
Right entorhinal cortex	-0.150	0.040	[-0.228 - -0.072]	-1.46	1.600E-04	1.697E-04	4896	4210
Right fusiform gyrus	-0.536	0.043	[-0.62 - -0.452]	-3.04	7.453E-36	5.217E-34	5009	4340
Right inferior parietal cortex	-0.348	0.046	[-0.437 - -0.258]	-1.94	2.820E-14	6.581E-14	4975	4299
Right inferior temporal gyrus	-0.439	0.043	[-0.522 - -0.355]	-2.5	6.270E-25	1.097E-23	4992	4338
Right isthmus cingulate cortex	-0.308	0.035	[-0.376 - -0.239]	-2.54	1.157E-18	4.764E-18	5036	4407
Right lateral occipital cortex	-0.342	0.056	[-0.452 - -0.231]	-1.89	1.470E-09	1.941E-09	5011	4354
Right lateral orbitofrontal cortex	-0.358	0.052	[-0.46 - -0.256]	-2.17	6.522E-12	1.201E-11	5033	4394
Right lingual gyrus	-0.386	0.049	[-0.482 - -0.291]	-2.5	2.238E-15	6.025E-15	5049	4419
Right medial orbitofrontal cortex	-0.244	0.038	[-0.319 - -0.17]	-1.87	1.440E-10	2.099E-10	5019	4381
Right middle temporal gyrus	-0.379	0.048	[-0.472 - -0.286]	-2.11	1.732E-15	4.851E-15	4987	4320
Right parahippocampal gyrus	-0.285	0.040	[-0.363 - -0.207]	-2.88	1.036E-12	2.072E-12	5033	4378
Right paracentral lobule	-0.216	0.042	[-0.299 - -0.134]	-1.36	2.652E-07	3.147E-07	5044	4418
Right pars opercularis of inferior frontal gyrus	-0.424	0.043	[-0.509 - -0.339]	-2.67	1.465E-22	1.282E-21	5009	4365
Right pars orbitalis of inferior frontal gyrus	-0.339	0.042	[-0.421 - -0.257]	-2.5	6.126E-16	1.865E-15	5023	4394
Right pars triangularis of inferior frontal gyrus	-0.373	0.055	[-0.481 - -0.264]	-2.19	1.753E-11	3.067E-11	5005	4366
Right pericalcarine cortex	-0.086	0.048	[-0.18 - 0.008]	-0.56	7.371E-02	7.478E-02	5049	4420



	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Right postcentral gyrus	-0.281	0.039	[-0.358 - -0.204]	-1.72	1.013E-12	2.072E-12	5032	4401
Right posterior cingulate cortex	-0.310	0.028	[-0.365 - -0.255]	-1.89	3.407E-28	1.193E-26	5049	4421
Right precentral gyrus	-0.317	0.041	[-0.397 - -0.237]	-1.78	9.227E-15	2.307E-14	5033	4397
Right precuneus	-0.304	0.043	[-0.388 - -0.22]	-1.81	1.276E-12	2.482E-12	5035	4391
Right rostral anterior cingulate cortex	-0.120	0.034	[-0.186 - -0.054]	-0.86	3.695E-04	3.861E-04	5019	4390
Right rostral middle frontal gyrus	-0.313	0.057	[-0.424 - -0.202]	-1.7	3.382E-08	4.154E-08	5009	4365
Right superior frontal gyrus	-0.397	0.056	[-0.507 - -0.286]	-1.93	2.109E-12	3.991E-12	5037	4401
Right superior parietal cortex	-0.219	0.044	[-0.306 - -0.132]	-1.23	7.663E-07	8.793E-07	5013	4375
Right superior temporal gyrus	-0.438	0.045	[-0.526 - -0.351]	-2.51	7.729E-23	9.017E-22	4989	4320
Right supramarginal gyrus	-0.386	0.044	[-0.473 - -0.299]	-2.14	3.613E-18	1.331E-17	4967	4290
Right frontal pole	-0.207	0.023	[-0.251 - -0.162]	-2.21	7.078E-20	3.539E-19	5048	4424
Right temporal pole	-0.236	0.041	[-0.317 - -0.155]	-1.94	1.115E-08	1.420E-08	4952	4287
Right transverse temporal gyrus	-0.262	0.040	[-0.341 - -0.183]	-2.56	8.869E-11	1.321E-10	5051	4423
Right insula	-0.406	0.046	[-0.497 - -0.315]	-2.25	2.534E-18	9.855E-18	5043	4420
Left hemisphere	-0.530	0.055	[-0.637 - -0.423]	-2.05	3.156E-22	2.454E-21	5076	4436
Right hemisphere	-0.516	0.052	[-0.618 - -0.414]	-2.03	3.470E-23	4.858E-22	5073	4435

**Supplementary Table S4b.** Cortical thickness differences between schizophrenia (SZ) and healthy volunteer (HV) groups controlling for global mean cortical thickness (Model B)

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left banks of superior temporal sulcus	-0.096	0.031	[-0.157 - -0.035]	-0.64	2.137E-03	8.841E-03	5000	4343
Left caudal anterior cingulate cortex	0.042	0.035	[-0.027 - 0.111]	0.53	2.307E-01	3.736E-01	5051	4423
Left caudal middle frontal gyrus	0.004	0.047	[-0.088 - 0.097]	0.21	9.292E-01	9.431E-01	5051	4410
Left cuneus	0.056	0.050	[-0.043 - 0.154]	0.49	2.668E-01	4.123E-01	5010	4354
Left entorhinal cortex	-0.057	0.035	[-0.126 - 0.012]	-0.42	1.064E-01	2.067E-01	4940	4304
Left fusiform gyrus	-0.183	0.045	[-0.272 - -0.095]	-0.95	5.094E-05	4.330E-04	5010	4368
Left inferior parietal cortex	0.053	0.035	[-0.015 - 0.122]	0.14	1.262E-01	2.270E-01	4983	4308
Left inferior temporal gyrus	-0.140	0.035	[-0.209 - -0.072]	-0.66	6.110E-05	4.616E-04	5003	4344
Left isthmus cingulate cortex	-0.127	0.039	[-0.204 - -0.05]	-1.01	1.191E-03	6.228E-03	5054	4421
Left lateral occipital cortex	0.006	0.041	[-0.074 - 0.087]	0.09	8.753E-01	9.249E-01	5024	4369
Left lateral orbitofrontal cortex	-0.086	0.031	[-0.147 - -0.025]	-0.42	5.555E-03	1.642E-02	5054	4424
Left lingual gyrus	-0.070	0.049	[-0.165 - 0.025]	-0.64	1.498E-01	2.611E-01	5046	4420
Left medial orbitofrontal cortex	0.011	0.036	[-0.059 - 0.082]	0.18	7.531E-01	8.396E-01	5038	4418
Left middle temporal gyrus	-0.111	0.037	[-0.184 - -0.038]	-0.44	2.755E-03	9.369E-03	4980	4305
Left parahippocampal gyrus	-0.139	0.040	[-0.218 - -0.06]	-1.73	5.872E-04	3.327E-03	5037	4403
Left paracentral lobule	0.114	0.037	[0.041 - 0.188]	0.61	2.289E-03	8.841E-03	5049	4421
Left pars opercularis of inferior frontal gyrus	-0.029	0.031	[-0.09 - 0.031]	-0.19	3.432E-01	4.763E-01	5039	4388
Left pars orbitalis of inferior frontal gyrus	-0.045	0.038	[-0.119 - 0.029]	-0.34	2.300E-01	3.736E-01	5030	4392
Left pars triangularis of inferior frontal gyrus	-0.012	0.032	[-0.075 - 0.052]	-0.06	7.198E-01	8.296E-01	5022	4372
Left pericalcarine cortex	0.106	0.054	[0 - 0.213]	1.02	5.079E-02	1.151E-01	5052	4428
Left postcentral gyrus	0.098	0.036	[0.028 - 0.169]	0.48	6.076E-03	1.721E-02	5039	4412
Left posterior cingulate cortex	-0.052	0.038	[-0.126 - 0.023]	-0.21	1.753E-01	2.980E-01	5055	4424
Left precentral gyrus	0.064	0.034	[-0.002 - 0.131]	0.27	5.783E-02	1.268E-01	5050	4408
Left precuneus	0.145	0.045	[0.056 - 0.233]	0.45	1.321E-03	6.415E-03	5039	4401
Left rostral anterior cingulate cortex	0.026	0.038	[-0.048 - 0.1]	0.42	4.883E-01	6.266E-01	5045	4416

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left rostral middle frontal gyrus	0.016	0.050	[-0.081 - 0.113]	0.23	7.491E-01	8.396E-01	5034	4376
Left superior frontal gyrus	-0.018	0.045	[-0.107 - 0.071]	0.12	6.907E-01	8.205E-01	5049	4416
Left superior parietal cortex	0.284	0.044	[0.197 - 0.37]	1.14	1.154E-10	7.849E-09	5007	4354
Left superior temporal gyrus	-0.099	0.033	[-0.164 - -0.035]	-0.39	2.470E-03	8.841E-03	4974	4288
Left supramarginal gyrus	0.024	0.041	[-0.055 - 0.104]	0.17	5.475E-01	6.895E-01	4963	4285
Left frontal pole	-0.014	0.026	[-0.065 - 0.036]	-0.13	5.784E-01	7.151E-01	5051	4430
Left temporal pole	-0.037	0.033	[-0.102 - 0.027]	-0.16	2.535E-01	4.009E-01	5018	4387
Left transverse temporal gyrus	0.005	0.041	[-0.075 - 0.085]	0.18	8.977E-01	9.249E-01	5051	4428
Left insula	-0.125	0.044	[-0.211 - -0.04]	-0.58	4.027E-03	1.304E-02	5048	4424
Right banks of superior temporal sulcus	-0.094	0.023	[-0.139 - -0.05]	-0.6	3.540E-05	3.742E-04	5013	4375
Right caudal anterior cingulate cortex	0.009	0.037	[-0.063 - 0.08]	0.19	8.153E-01	8.800E-01	5048	4420
Right caudal middle frontal gyrus	0.052	0.034	[-0.015 - 0.12]	0.33	1.268E-01	2.270E-01	5032	4398
Right cuneus	0.028	0.040	[-0.051 - 0.107]	0.4	4.881E-01	6.266E-01	5020	4379
Right entorhinal cortex	-0.011	0.040	[-0.089 - 0.067]	0.11	7.788E-01	8.542E-01	4894	4210
Right fusiform gyrus	-0.243	0.045	[-0.33 - -0.155]	-1.12	5.875E-08	1.332E-06	5007	4340
Right inferior parietal cortex	0.099	0.037	[0.026 - 0.171]	0.27	7.651E-03	2.081E-02	4973	4299
Right inferior temporal gyrus	-0.144	0.033	[-0.208 - -0.079]	-0.58	1.316E-05	1.789E-04	4990	4338
Right isthmus cingulate cortex	-0.129	0.025	[-0.179 - -0.08]	-1.06	3.327E-07	5.656E-06	5034	4407
Right lateral occipital cortex	0.016	0.041	[-0.065 - 0.097]	0.17	6.999E-01	8.205E-01	5009	4354
Right lateral orbitofrontal cortex	-0.042	0.042	[-0.124 - 0.041]	-0.24	3.236E-01	4.682E-01	5031	4394
Right lingual gyrus	-0.109	0.052	[-0.21 - -0.008]	-0.68	3.405E-02	7.985E-02	5047	4419
Right medial orbitofrontal cortex	-0.002	0.032	[-0.065 - 0.061]	-0.1	9.530E-01	9.530E-01	5017	4381
Right middle temporal gyrus	-0.031	0.032	[-0.093 - 0.032]	-0.12	3.344E-01	4.738E-01	4985	4320
Right parahippocampal gyrus	-0.123	0.040	[-0.202 - -0.043]	-1.21	2.409E-03	8.841E-03	5031	4378
Right paracentral lobule	0.158	0.038	[0.083 - 0.233]	0.81	3.852E-05	3.742E-04	5042	4418
Right pars opercularis of inferior frontal gyrus	-0.112	0.031	[-0.173 - -0.05]	-0.63	3.695E-04	2.513E-03	5007	4365
Right pars orbitalis of inferior frontal gyrus	-0.051	0.029	[-0.107 - 0.005]	-0.27	7.673E-02	1.630E-01	5021	4394
Right pars triangularis of inferior frontal gyrus	-0.040	0.040	[-0.12 - 0.039]	-0.1	3.169E-01	4.682E-01	5003	4366

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Right pericalcarine cortex	0.088	0.054	[-0.018 - 0.195]	0.88	1.044E-01	2.067E-01	5047	4420
Right postcentral gyrus	0.049	0.032	[-0.014 - 0.111]	0.25	1.268E-01	2.270E-01	5030	4401
Right posterior cingulate cortex	-0.063	0.025	[-0.112 - -0.013]	-0.31	1.376E-02	3.465E-02	5047	4421
Right precentral gyrus	0.081	0.026	[0.03 - 0.131]	0.37	1.714E-03	7.771E-03	5031	4397
Right precuneus	0.138	0.040	[0.06 - 0.215]	0.46	4.931E-04	3.048E-03	5033	4391
Right rostral anterior cingulate cortex	0.086	0.034	[0.02 - 0.153]	0.8	1.075E-02	2.813E-02	5017	4390
Right rostral middle frontal gyrus	0.076	0.045	[-0.012 - 0.164]	0.35	9.028E-02	1.860E-01	5007	4365
Right superior frontal gyrus	0.023	0.047	[-0.069 - 0.116]	0.22	6.206E-01	7.535E-01	5035	4401
Right superior parietal cortex	0.270	0.047	[0.177 - 0.363]	1.07	1.149E-08	3.908E-07	5011	4375
Right superior temporal gyrus	-0.099	0.041	[-0.179 - -0.018]	-0.43	1.683E-02	4.088E-02	4987	4320
Right supramarginal gyrus	0.023	0.033	[-0.041 - 0.086]	0.09	4.857E-01	6.266E-01	4965	4290
Right frontal pole	-0.018	0.022	[-0.06 - 0.025]	-0.23	4.070E-01	5.536E-01	5046	4424
Right temporal pole	-0.036	0.035	[-0.104 - 0.032]	-0.14	2.961E-01	4.475E-01	4950	4287
Right transverse temporal gyrus	-0.006	0.040	[-0.084 - 0.072]	-0.16	8.885E-01	9.249E-01	5049	4423
Right insula	-0.130	0.047	[-0.222 - -0.038]	-0.68	5.456E-03	1.642E-02	5041	4420

**Supplementary Table S5a.** Cortical surface area differences between schizophrenia (SZ) and healthy volunteer (HV) groups (Model A)

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left banks of superior temporal sulcus	-0.178	0.030	[-0.236 - -0.12]	-2.83	1.694E-09	1.131E-08	4995	4341
Left caudal anterior cingulate cortex	-0.128	0.036	[-0.199 - -0.057]	-2.75	4.137E-04	5.081E-04	5050	4420
Left caudal middle frontal gyrus	-0.159	0.034	[-0.226 - -0.093]	-2.57	2.700E-06	5.297E-06	5049	4406
Left cuneus	-0.170	0.034	[-0.237 - -0.103]	-2.5	6.153E-07	1.485E-06	5012	4353
Left entorhinal cortex	-0.149	0.028	[-0.204 - -0.094]	-2.83	1.115E-07	3.716E-07	4938	4302
Left fusiform gyrus	-0.216	0.031	[-0.277 - -0.156]	-2.91	2.593E-12	1.815E-10	5007	4368
Left inferior parietal cortex	-0.185	0.036	[-0.256 - -0.115]	-2.69	2.640E-07	7.391E-07	4980	4310
Left inferior temporal gyrus	-0.207	0.033	[-0.271 - -0.142]	-3.1	3.669E-10	6.420E-09	5004	4340
Left isthmus cingulate cortex	-0.066	0.039	[-0.142 - 0.009]	-1	8.575E-02	8.700E-02	5051	4419
Left lateral occipital cortex	-0.170	0.036	[-0.239 - -0.1]	-2.21	1.932E-06	4.097E-06	5020	4368
Left lateral orbitofrontal cortex	-0.179	0.043	[-0.263 - -0.095]	-2.16	2.767E-05	4.210E-05	5050	4426
Left lingual gyrus	-0.148	0.037	[-0.22 - -0.076]	-2.28	5.487E-05	7.839E-05	5046	4415
Left medial orbitofrontal cortex	-0.106	0.048	[-0.2 - -0.013]	-1.86	2.615E-02	2.692E-02	5040	4416
Left middle temporal gyrus	-0.200	0.038	[-0.275 - -0.125]	-2.61	1.673E-07	4.879E-07	4977	4299
Left parahippocampal gyrus	-0.110	0.028	[-0.166 - -0.055]	-1.6	9.577E-05	1.314E-04	5035	4396
Left paracentral lobule	-0.087	0.031	[-0.148 - -0.025]	-1.23	5.803E-03	6.155E-03	5049	4416
Left pars opercularis of inferior frontal gyrus	-0.151	0.033	[-0.215 - -0.086]	-2.47	5.033E-06	9.033E-06	5037	4386
Left pars orbitalis of inferior frontal gyrus	-0.192	0.040	[-0.271 - -0.113]	-2.63	2.091E-06	4.305E-06	5029	4390
Left pars triangularis of inferior frontal gyrus	-0.137	0.034	[-0.203 - -0.07]	-2.22	5.379E-05	7.839E-05	5021	4371
Left pericalcarine cortex	-0.133	0.042	[-0.215 - -0.051]	-2.22	1.462E-03	1.650E-03	5053	4425
Left postcentral gyrus	-0.191	0.034	[-0.258 - -0.123]	-2.2	3.032E-08	1.327E-07	5035	4409
Left posterior cingulate cortex	-0.117	0.036	[-0.188 - -0.045]	-1.89	1.314E-03	1.507E-03	5052	4422
Left precentral gyrus	-0.175	0.040	[-0.253 - -0.097]	-1.88	1.161E-05	1.983E-05	5049	4406
Left precuneus	-0.139	0.036	[-0.209 - -0.069]	-1.81	1.038E-04	1.397E-04	5040	4401
Left rostral anterior cingulate cortex	-0.159	0.039	[-0.235 - -0.084]	-3.39	3.607E-05	5.372E-05	5043	4417
Left rostral middle frontal gyrus	-0.196	0.037	[-0.269 - -0.124]	-2.49	9.946E-08	3.481E-07	5036	4372

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left superior frontal gyrus	-0.222	0.037	[-0.295 - -0.149]	-2.49	2.265E-09	1.220E-08	5048	4413
Left superior parietal cortex	-0.190	0.032	[-0.252 - -0.128]	-2.28	1.777E-09	1.131E-08	5007	4347
Left superior temporal gyrus	-0.196	0.032	[-0.258 - -0.133]	-2.26	8.159E-10	9.151E-09	4974	4289
Left supramarginal gyrus	-0.120	0.034	[-0.186 - -0.054]	-1.88	3.504E-04	4.459E-04	4961	4284
Left frontal pole	-0.099	0.037	[-0.171 - -0.027]	-2	7.052E-03	7.368E-03	5054	4425
Left temporal pole	-0.096	0.022	[-0.14 - -0.052]	-1.21	1.771E-05	2.817E-05	5017	4383
Left transverse temporal gyrus	-0.151	0.025	[-0.199 - -0.102]	-2.51	1.046E-09	9.151E-09	5045	4423
Left insula	-0.122	0.042	[-0.203 - -0.04]	-1.27	3.470E-03	3.816E-03	5043	4416
Right banks of superior temporal sulcus	-0.173	0.032	[-0.235 - -0.111]	-2.6	4.263E-08	1.756E-07	5010	4373
Right caudal anterior cingulate cortex	-0.156	0.026	[-0.208 - -0.105]	-3.2	2.199E-09	1.220E-08	5046	4419
Right caudal middle frontal gyrus	-0.163	0.035	[-0.232 - -0.094]	-2.71	3.647E-06	6.719E-06	5029	4392
Right cuneus	-0.155	0.037	[-0.227 - -0.083]	-2.18	2.354E-05	3.662E-05	5020	4380
Right entorhinal cortex	-0.098	0.030	[-0.158 - -0.039]	-1.92	1.170E-03	1.365E-03	4892	4206
Right fusiform gyrus	-0.220	0.036	[-0.291 - -0.149]	-2.91	1.475E-09	1.131E-08	5006	4341
Right inferior parietal cortex	-0.192	0.030	[-0.252 - -0.133]	-2.64	2.486E-10	5.802E-09	4972	4297
Right inferior temporal gyrus	-0.206	0.042	[-0.288 - -0.124]	-3.05	8.365E-07	1.952E-06	4992	4335
Right isthmus cingulate cortex	-0.040	0.033	[-0.105 - 0.025]	-0.55	2.296E-01	2.296E-01	5035	4405
Right lateral occipital cortex	-0.158	0.036	[-0.229 - -0.088]	-2.06	1.116E-05	1.953E-05	5006	4350
Right lateral orbitofrontal cortex	-0.150	0.038	[-0.225 - -0.076]	-1.87	8.216E-05	1.150E-04	5032	4393
Right lingual gyrus	-0.168	0.033	[-0.232 - -0.103]	-2.22	3.094E-07	8.330E-07	5047	4412
Right medial orbitofrontal cortex	-0.182	0.042	[-0.265 - -0.099]	-2.26	1.637E-05	2.665E-05	5015	4379
Right middle temporal gyrus	-0.211	0.044	[-0.297 - -0.126]	-2.79	1.199E-06	2.623E-06	4983	4318
Right parahippocampal gyrus	-0.132	0.035	[-0.201 - -0.063]	-2.04	1.894E-04	2.455E-04	5027	4372
Right paracentral lobule	-0.117	0.031	[-0.178 - -0.057]	-1.66	1.309E-04	1.729E-04	5042	4414
Right pars opercularis of inferior frontal gyrus	-0.146	0.027	[-0.198 - -0.093]	-2.32	5.487E-08	2.029E-07	5003	4362
Right pars orbitalis of inferior frontal gyrus	-0.175	0.033	[-0.24 - -0.109]	-2.46	1.668E-07	4.879E-07	5021	4393
Right pars triangularis of inferior frontal gyrus	-0.135	0.029	[-0.192 - -0.078]	-2.35	3.047E-06	5.764E-06	5000	4361
Right pericalcarine cortex	-0.107	0.037	[-0.179 - -0.035]	-1.6	3.488E-03	3.816E-03	5047	4415

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Right postcentral gyrus	-0.178	0.031	[-0.239 - -0.116]	-2.04	1.475E-08	7.376E-08	5033	4398
Right posterior cingulate cortex	-0.125	0.038	[-0.2 - -0.05]	-2.1	1.071E-03	1.270E-03	5044	4418
Right precentral gyrus	-0.206	0.038	[-0.281 - -0.132]	-2.21	5.506E-08	2.029E-07	5029	4393
Right precuneus	-0.154	0.028	[-0.208 - -0.1]	-1.95	2.649E-08	1.236E-07	5034	4389
Right rostral anterior cingulate cortex	-0.156	0.032	[-0.219 - -0.093]	-3.23	1.128E-06	2.548E-06	5017	4387
Right rostral middle frontal gyrus	-0.191	0.041	[-0.271 - -0.111]	-2.47	2.724E-06	5.297E-06	5007	4366
Right superior frontal gyrus	-0.222	0.044	[-0.307 - -0.137]	-2.52	3.275E-07	8.491E-07	5033	4397
Right superior parietal cortex	-0.170	0.032	[-0.233 - -0.107]	-2.05	1.369E-07	4.356E-07	5010	4372
Right superior temporal gyrus	-0.195	0.038	[-0.271 - -0.12]	-2.2	3.707E-07	9.267E-07	4985	4322
Right supramarginal gyrus	-0.142	0.032	[-0.205 - -0.078]	-2.04	1.215E-05	2.025E-05	4963	4287
Right frontal pole	-0.092	0.028	[-0.147 - -0.038]	-1.71	8.649E-04	1.044E-03	5045	4421
Right temporal pole	-0.103	0.029	[-0.16 - -0.046]	-1.25	3.878E-04	4.847E-04	4950	4288
Right transverse temporal gyrus	-0.168	0.027	[-0.221 - -0.115]	-2.68	6.439E-10	9.014E-09	5047	4418
Right insula	-0.113	0.039	[-0.19 - -0.036]	-1.44	3.968E-03	4.273E-03	5042	4417
Left hemisphere	-0.251	0.041	[-0.331 - -0.17]	-2.19	9.509E-10	9.151E-09	5073	4434
Right hemisphere	-0.254	0.040	[-0.332 - -0.176]	-1.76	1.416E-10	4.955E-09	5069	4433



**Supplementary Table S5b.** Cortical surface area differences between schizophrenia (SZ) and healthy volunteer (HV) groups controlling for total cortical surface area (Model B)

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left banks of superior temporal sulcus	-0.044	0.022	[-0.087 - -0.001]	-0.66	4.388E-02	2.984E-01	4993	4341
Left caudal anterior cingulate cortex	-0.004	0.030	[-0.063 - 0.055]	-0.08	8.904E-01	9.457E-01	5048	4420
Left caudal middle frontal gyrus	-0.003	0.022	[-0.045 - 0.04]	0.03	9.083E-01	9.457E-01	5047	4406
Left cuneus	-0.042	0.037	[-0.115 - 0.032]	-0.46	2.665E-01	6.884E-01	5011	4353
Left entorhinal cortex	-0.041	0.022	[-0.084 - 0.002]	-0.61	6.420E-02	3.948E-01	4936	4302
Left fusiform gyrus	-0.045	0.032	[-0.109 - 0.018]	-0.54	1.619E-01	6.117E-01	5005	4368
Left inferior parietal cortex	-0.021	0.025	[-0.07 - 0.029]	-0.31	4.146E-01	7.619E-01	4978	4310
Left inferior temporal gyrus	-0.040	0.024	[-0.088 - 0.007]	-0.47	9.571E-02	4.068E-01	5002	4340
Left isthmus cingulate cortex	0.110	0.030	[0.051 - 0.169]	1.74	2.485E-04	8.448E-03	5049	4419
Left lateral occipital cortex	-0.012	0.022	[-0.055 - 0.031]	-0.13	5.780E-01	8.606E-01	5019	4368
Left lateral orbitofrontal cortex	0.008	0.030	[-0.051 - 0.067]	0.12	7.905E-01	9.457E-01	5048	4426
Left lingual gyrus	0.000	0.040	[-0.077 - 0.078]	-0.12	9.927E-01	9.927E-01	5045	4415
Left medial orbitofrontal cortex	0.069	0.040	[-0.01 - 0.147]	0.49	8.628E-02	3.948E-01	5038	4416
Left middle temporal gyrus	-0.022	0.030	[-0.082 - 0.038]	-0.14	4.726E-01	7.625E-01	4976	4299
Left parahippocampal gyrus	0.016	0.032	[-0.046 - 0.079]	0.32	6.075E-01	8.606E-01	5033	4396
Left paracentral lobule	0.066	0.023	[0.022 - 0.111]	0.75	3.235E-03	4.747E-02	5047	4416
Left pars opercularis of inferior frontal gyrus	-0.025	0.026	[-0.077 - 0.027]	-0.29	3.442E-01	6.884E-01	5035	4386
Left pars orbitalis of inferior frontal gyrus	-0.055	0.022	[-0.098 - -0.012]	-0.58	1.164E-02	1.131E-01	5028	4390
Left pars triangularis of inferior frontal gyrus	-0.026	0.027	[-0.079 - 0.027]	-0.34	3.346E-01	6.884E-01	5019	4371
Left pericalcarine cortex	-0.011	0.050	[-0.109 - 0.086]	0.02	8.186E-01	9.457E-01	5052	4425
Left postcentral gyrus	-0.002	0.022	[-0.045 - 0.041]	-0.02	9.281E-01	9.457E-01	5033	4409
Left posterior cingulate cortex	0.027	0.028	[-0.027 - 0.081]	0.29	3.293E-01	6.884E-01	5050	4422
Left precentral gyrus	0.009	0.022	[-0.033 - 0.052]	0.09	6.650E-01	8.867E-01	5048	4406
Left precuneus	0.084	0.027	[0.03 - 0.138]	0.64	2.196E-03	4.747E-02	5039	4401
Left rostral anterior cingulate cortex	0.005	0.027	[-0.049 - 0.059]	-0.03	8.517E-01	9.457E-01	5041	4417



	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left rostral middle frontal gyrus	0.015	0.022	[-0.027 - 0.058]	0.18	4.782E-01	7.625E-01	5034	4372
Left superior frontal gyrus	-0.028	0.022	[-0.071 - 0.014]	-0.18	1.938E-01	6.676E-01	5046	4413
Left superior parietal cortex	-0.015	0.029	[-0.071 - 0.041]	-0.07	6.036E-01	8.606E-01	5005	4347
Left superior temporal gyrus	-0.005	0.022	[-0.048 - 0.038]	-0.05	8.098E-01	9.457E-01	4972	4289
Left supramarginal gyrus	0.062	0.022	[0.019 - 0.105]	0.67	4.811E-03	5.452E-02	4959	4284
Left frontal pole	-0.021	0.031	[-0.081 - 0.039]	-0.54	4.866E-01	7.625E-01	5052	4425
Left temporal pole	0.006	0.022	[-0.037 - 0.049]	0.07	7.793E-01	9.457E-01	5016	4383
Left transverse temporal gyrus	-0.019	0.022	[-0.062 - 0.023]	-0.29	3.729E-01	7.244E-01	5043	4423
Left insula	0.075	0.035	[0.007 - 0.143]	0.66	3.097E-02	2.632E-01	5041	4416
Right banks of superior temporal sulcus	-0.029	0.026	[-0.081 - 0.023]	-0.44	2.701E-01	6.884E-01	5008	4373
Right caudal anterior cingulate cortex	-0.034	0.027	[-0.087 - 0.018]	-0.7	1.992E-01	6.676E-01	5044	4419
Right caudal middle frontal gyrus	-0.020	0.029	[-0.077 - 0.036]	-0.04	4.846E-01	7.625E-01	5028	4392
Right cuneus	-0.005	0.029	[-0.063 - 0.052]	0	8.605E-01	9.457E-01	5018	4380
Right entorhinal cortex	-0.015	0.031	[-0.076 - 0.046]	0.01	6.232E-01	8.649E-01	4890	4206
Right fusiform gyrus	-0.057	0.032	[-0.12 - 0.005]	-0.54	7.348E-02	3.948E-01	5004	4341
Right inferior parietal cortex	-0.030	0.025	[-0.079 - 0.02]	-0.39	2.377E-01	6.884E-01	4970	4297
Right inferior temporal gyrus	-0.034	0.031	[-0.094 - 0.027]	-0.4	2.721E-01	6.884E-01	4990	4335
Right isthmus cingulate cortex	0.140	0.022	[0.097 - 0.183]	1.97	1.228E-10	8.348E-09	5033	4405
Right lateral occipital cortex	-0.004	0.022	[-0.047 - 0.039]	0.03	8.500E-01	9.457E-01	5005	4350
Right lateral orbitofrontal cortex	0.040	0.032	[-0.023 - 0.104]	0.37	2.141E-01	6.676E-01	5030	4393
Right lingual gyrus	-0.012	0.036	[-0.082 - 0.058]	-0.08	7.343E-01	9.422E-01	5045	4412
Right medial orbitofrontal cortex	-0.003	0.030	[-0.062 - 0.057]	-0.01	9.318E-01	9.457E-01	5013	4379
Right middle temporal gyrus	-0.023	0.033	[-0.089 - 0.043]	-0.23	4.934E-01	7.625E-01	4981	4318
Right parahippocampal gyrus	0.005	0.034	[-0.061 - 0.071]	0.08	8.814E-01	9.457E-01	5026	4372
Right paracentral lobule	0.028	0.026	[-0.024 - 0.079]	0.4	2.897E-01	6.884E-01	5040	4414
Right pars opercularis of inferior frontal gyrus	-0.018	0.024	[-0.065 - 0.029]	-0.15	4.534E-01	7.625E-01	5002	4362
Right pars orbitalis of inferior frontal gyrus	-0.038	0.022	[-0.081 - 0.004]	-0.41	7.854E-02	3.948E-01	5019	4393
Right pars triangularis of inferior frontal gyrus	-0.037	0.022	[-0.08 - 0.005]	-0.55	8.708E-02	3.948E-01	4998	4361

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Right pericalcarine cortex	0.017	0.039	[-0.059 - 0.093]	0.6	6.642E-01	8.867E-01	5046	4415
Right postcentral gyrus	0.023	0.023	[-0.022 - 0.068]	0.18	3.104E-01	6.884E-01	5031	4398
Right posterior cingulate cortex	0.033	0.033	[-0.033 - 0.098]	0.36	3.249E-01	6.884E-01	5042	4418
Right precentral gyrus	-0.027	0.028	[-0.081 - 0.027]	-0.21	3.240E-01	6.884E-01	5027	4393
Right precuneus	0.065	0.022	[0.021 - 0.108]	0.47	3.491E-03	4.747E-02	5032	4389
Right rostral anterior cingulate cortex	-0.022	0.030	[-0.081 - 0.036]	-0.4	4.578E-01	7.625E-01	5015	4387
Right rostral middle frontal gyrus	0.012	0.022	[-0.031 - 0.055]	0.13	5.844E-01	8.606E-01	5005	4366
Right superior frontal gyrus	-0.030	0.030	[-0.09 - 0.029]	-0.13	3.160E-01	6.884E-01	5031	4397
Right superior parietal cortex	0.011	0.030	[-0.048 - 0.069]	0.04	7.184E-01	9.395E-01	5009	4372
Right superior temporal gyrus	0.005	0.024	[-0.042 - 0.052]	0.06	8.260E-01	9.457E-01	4983	4322
Right supramarginal gyrus	0.037	0.030	[-0.022 - 0.095]	0.39	2.160E-01	6.676E-01	4961	4287
Right frontal pole	-0.004	0.022	[-0.047 - 0.04]	-0.19	8.685E-01	9.457E-01	5043	4421
Right temporal pole	-0.023	0.028	[-0.078 - 0.032]	-0.09	4.063E-01	7.619E-01	4948	4288
Right transverse temporal gyrus	-0.038	0.025	[-0.088 - 0.011]	-0.42	1.256E-01	5.024E-01	5045	4418
Right insula	0.065	0.032	[0.003 - 0.127]	0.58	3.898E-02	2.945E-01	5040	4417

**Supplementary Table S6.** Cortical thickness group (SZ/HV) by sex interaction (Model C)

	Cohen's d Group By Sex Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left banks of superior temporal sulcus	-0.001	0.031	[-0.062 - 0.06]	9.780E-01	9.933E-01	4956	4304
Left caudal anterior cingulate cortex	-0.001	0.022	[-0.043 - 0.042]	9.709E-01	9.933E-01	5004	4379
Left caudal middle frontal gyrus	0.025	0.022	[-0.017 - 0.068]	2.454E-01	9.933E-01	5004	4365
Left cuneus	-0.035	0.030	[-0.095 - 0.025]	2.488E-01	9.933E-01	4963	4309
Left entorhinal cortex	-0.041	0.027	[-0.094 - 0.012]	1.320E-01	8.701E-01	4903	4272
Left fusiform gyrus	-0.041	0.022	[-0.084 - 0.002]	6.237E-02	8.701E-01	4963	4323
Left inferior parietal cortex	0.017	0.030	[-0.042 - 0.077]	5.689E-01	9.933E-01	4936	4263
Left inferior temporal gyrus	-0.019	0.031	[-0.079 - 0.042]	5.477E-01	9.933E-01	4956	4299
Left isthmus cingulate cortex	-0.021	0.022	[-0.064 - 0.021]	3.255E-01	9.933E-01	5007	4376
Left lateral occipital cortex	-0.013	0.022	[-0.056 - 0.03]	5.565E-01	9.933E-01	4977	4324
Left lateral orbitofrontal cortex	0.018	0.022	[-0.026 - 0.062]	4.213E-01	9.933E-01	5007	4379
Left lingual gyrus	-0.014	0.034	[-0.081 - 0.052]	6.720E-01	9.933E-01	4999	4375
Left medial orbitofrontal cortex	-0.001	0.022	[-0.043 - 0.042]	9.768E-01	9.933E-01	4991	4373
Left middle temporal gyrus	-0.005	0.029	[-0.062 - 0.052]	8.623E-01	9.933E-01	4934	4263
Left parahippocampal gyrus	0.001	0.022	[-0.042 - 0.044]	9.738E-01	9.933E-01	4990	4358
Left paracentral lobule	-0.005	0.029	[-0.062 - 0.052]	8.537E-01	9.933E-01	5002	4376
Left pars opercularis of inferior frontal gyrus	-0.011	0.028	[-0.066 - 0.044]	7.055E-01	9.933E-01	4992	4343
Left pars orbitalis of inferior frontal gyrus	0.009	0.022	[-0.034 - 0.052]	6.830E-01	9.933E-01	4983	4347
Left pars triangularis of inferior frontal gyrus	0.033	0.022	[-0.01 - 0.075]	1.366E-01	8.701E-01	4975	4327
Left pericalcarine cortex	-0.028	0.022	[-0.072 - 0.016]	2.080E-01	9.933E-01	5005	4383
Left postcentral gyrus	0.000	0.036	[-0.071 - 0.07]	9.933E-01	9.933E-01	4992	4368
Left posterior cingulate cortex	0.018	0.022	[-0.025 - 0.061]	4.126E-01	9.933E-01	5008	4379
Left precentral gyrus	0.023	0.022	[-0.02 - 0.065]	2.989E-01	9.933E-01	5003	4363
Left precuneus	0.012	0.022	[-0.03 - 0.055]	5.725E-01	9.933E-01	4991	4356
Left rostral anterior cingulate cortex	0.020	0.022	[-0.023 - 0.062]	3.674E-01	9.933E-01	4998	4371
Left rostral middle frontal gyrus	0.015	0.026	[-0.036 - 0.067]	5.600E-01	9.933E-01	4987	4331

	Cohen's d Group By Sex Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left superior frontal gyrus	-0.007	0.024	[-0.053 - 0.039]	7.730E-01	9.933E-01	5002	4371
Left superior parietal cortex	-0.019	0.022	[-0.062 - 0.024]	3.814E-01	9.933E-01	4959	4310
Left superior temporal gyrus	-0.002	0.033	[-0.068 - 0.063]	9.426E-01	9.933E-01	4927	4245
Left supramarginal gyrus	-0.011	0.038	[-0.086 - 0.064]	7.774E-01	9.933E-01	4915	4241
Left frontal pole	0.025	0.022	[-0.018 - 0.067]	2.569E-01	9.933E-01	5004	4385
Left temporal pole	-0.068	0.040	[-0.147 - 0.012]	9.452E-02	8.701E-01	4971	4342
Left transverse temporal gyrus	-0.012	0.022	[-0.054 - 0.031]	5.886E-01	9.933E-01	5004	4383
Left insula	-0.025	0.022	[-0.068 - 0.017]	2.425E-01	9.933E-01	5001	4379
Right banks of superior temporal sulcus	-0.011	0.031	[-0.072 - 0.051]	7.358E-01	9.933E-01	4967	4330
Right caudal anterior cingulate cortex	-0.014	0.022	[-0.056 - 0.029]	5.300E-01	9.933E-01	5001	4375
Right caudal middle frontal gyrus	0.003	0.028	[-0.052 - 0.058]	9.145E-01	9.933E-01	4985	4353
Right cuneus	-0.036	0.022	[-0.079 - 0.007]	9.632E-02	8.701E-01	4973	4334
Right entorhinal cortex	-0.051	0.031	[-0.112 - 0.01]	1.042E-01	8.701E-01	4863	4187
Right fusiform gyrus	-0.041	0.024	[-0.089 - 0.007]	9.262E-02	8.701E-01	4960	4297
Right inferior parietal cortex	0.000	0.022	[-0.044 - 0.043]	9.846E-01	9.933E-01	4926	4254
Right inferior temporal gyrus	-0.012	0.031	[-0.072 - 0.048]	6.878E-01	9.933E-01	4943	4293
Right isthmus cingulate cortex	-0.015	0.022	[-0.058 - 0.028]	5.014E-01	9.933E-01	4987	4362
Right lateral occipital cortex	-0.005	0.022	[-0.048 - 0.038]	8.047E-01	9.933E-01	4962	4309
Right lateral orbitofrontal cortex	0.006	0.022	[-0.037 - 0.049]	7.885E-01	9.933E-01	4984	4349
Right lingual gyrus	0.002	0.029	[-0.055 - 0.06]	9.336E-01	9.933E-01	5000	4374
Right medial orbitofrontal cortex	-0.006	0.022	[-0.049 - 0.037]	7.965E-01	9.933E-01	4970	4336
Right middle temporal gyrus	-0.008	0.033	[-0.072 - 0.056]	8.054E-01	9.933E-01	4938	4275
Right parahippocampal gyrus	-0.010	0.023	[-0.054 - 0.035]	6.697E-01	9.933E-01	4984	4334
Right paracentral lobule	-0.007	0.027	[-0.06 - 0.045]	7.792E-01	9.933E-01	4995	4373
Right pars opercularis of inferior frontal gyrus	0.036	0.022	[-0.007 - 0.079]	9.671E-02	8.701E-01	4960	4320
Right pars orbitalis of inferior frontal gyrus	-0.001	0.028	[-0.055 - 0.053]	9.717E-01	9.933E-01	4974	4349
Right pars triangularis of inferior frontal gyrus	0.017	0.025	[-0.033 - 0.066]	5.046E-01	9.933E-01	4956	4321
Right pericalcarine cortex	-0.053	0.022	[-0.096 - -0.011]	1.450E-02	8.701E-01	5001	4375

	Cohen's d Group By Sex Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Right postcentral gyrus	-0.003	0.035	[-0.072 - 0.066]	9.361E-01	9.933E-01	4983	4356
Right posterior cingulate cortex	-0.014	0.022	[-0.056 - 0.029]	5.302E-01	9.933E-01	5000	4376
Right precentral gyrus	0.014	0.022	[-0.029 - 0.057]	5.212E-01	9.933E-01	4984	4352
Right precuneus	0.033	0.022	[-0.01 - 0.075]	1.367E-01	8.701E-01	4986	4346
Right rostral anterior cingulate cortex	0.023	0.022	[-0.02 - 0.066]	2.869E-01	9.933E-01	4970	4345
Right rostral middle frontal gyrus	0.035	0.022	[-0.008 - 0.078]	1.066E-01	8.701E-01	4960	4320
Right superior frontal gyrus	0.012	0.023	[-0.033 - 0.057]	5.976E-01	9.933E-01	4988	4356
Right superior parietal cortex	-0.010	0.029	[-0.067 - 0.047]	7.299E-01	9.933E-01	4964	4330
Right superior temporal gyrus	-0.008	0.032	[-0.071 - 0.056]	8.149E-01	9.933E-01	4941	4275
Right supramarginal gyrus	0.006	0.022	[-0.037 - 0.049]	7.776E-01	9.933E-01	4918	4245
Right frontal pole	0.012	0.030	[-0.047 - 0.07]	6.951E-01	9.933E-01	4999	4379
Right temporal pole	-0.032	0.023	[-0.077 - 0.014]	1.726E-01	9.933E-01	4903	4242
Right transverse temporal gyrus	-0.032	0.026	[-0.084 - 0.019]	2.144E-01	9.933E-01	5002	4378
Right insula	0.013	0.023	[-0.031 - 0.057]	5.620E-01	9.933E-01	4994	4375
Left hemisphere	-0.006	0.025	[-0.055 - 0.043]	8.160E-01	9.933E-01	5027	4391
Right hemisphere	-0.004	0.024	[-0.052 - 0.043]	8.518E-01	9.933E-01	5024	4390

**Supplementary Table S7.** Cortical surface area group (SZ/HV) by sex interaction (Model C)

	Cohen's d Group By Sex Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left banks of superior temporal sulcus	0.021	0.024	[-0.027 - 0.068]	3.929E-01	9.637E-01	4949	4302
Left caudal anterior cingulate cortex	0.024	0.022	[-0.019 - 0.067]	2.713E-01	9.637E-01	5001	4376
Left caudal middle frontal gyrus	0.008	0.027	[-0.046 - 0.061]	7.827E-01	9.637E-01	5000	4361
Left cuneus	0.004	0.028	[-0.051 - 0.058]	8.951E-01	9.637E-01	4963	4308
Left entorhinal cortex	0.007	0.033	[-0.058 - 0.071]	8.403E-01	9.637E-01	4899	4270
Left fusiform gyrus	-0.006	0.035	[-0.074 - 0.063]	8.716E-01	9.637E-01	4958	4323
Left inferior parietal cortex	0.012	0.030	[-0.047 - 0.072]	6.853E-01	9.637E-01	4931	4265
Left inferior temporal gyrus	-0.026	0.037	[-0.098 - 0.047]	4.883E-01	9.637E-01	4955	4295
Left isthmus cingulate cortex	0.006	0.022	[-0.036 - 0.049]	7.695E-01	9.637E-01	5002	4374
Left lateral occipital cortex	0.010	0.032	[-0.052 - 0.071]	7.609E-01	9.637E-01	4971	4323
Left lateral orbitofrontal cortex	0.012	0.028	[-0.043 - 0.067]	6.628E-01	9.637E-01	5001	4381
Left lingual gyrus	-0.037	0.033	[-0.102 - 0.029]	2.717E-01	9.637E-01	4997	4370
Left medial orbitofrontal cortex	-0.007	0.031	[-0.067 - 0.054]	8.338E-01	9.637E-01	4991	4371
Left middle temporal gyrus	-0.013	0.033	[-0.078 - 0.051]	6.796E-01	9.637E-01	4929	4257
Left parahippocampal gyrus	0.023	0.031	[-0.038 - 0.084]	4.654E-01	9.637E-01	4986	4351
Left paracentral lobule	0.031	0.033	[-0.033 - 0.095]	3.464E-01	9.637E-01	5000	4371
Left pars opercularis of inferior frontal gyrus	0.025	0.022	[-0.018 - 0.068]	2.488E-01	9.637E-01	4988	4341
Left pars orbitalis of inferior frontal gyrus	-0.006	0.034	[-0.073 - 0.062]	8.681E-01	9.637E-01	4980	4345
Left pars triangularis of inferior frontal gyrus	0.012	0.022	[-0.031 - 0.055]	5.887E-01	9.637E-01	4972	4326
Left pericalcarine cortex	0.027	0.024	[-0.02 - 0.075]	2.599E-01	9.637E-01	5004	4380
Left postcentral gyrus	-0.004	0.026	[-0.054 - 0.047]	8.781E-01	9.637E-01	4986	4365
Left posterior cingulate cortex	-0.005	0.025	[-0.054 - 0.043]	8.279E-01	9.637E-01	5003	4377
Left precentral gyrus	0.030	0.029	[-0.026 - 0.087]	2.882E-01	9.637E-01	5000	4361
Left precuneus	-0.012	0.032	[-0.075 - 0.051]	7.046E-01	9.637E-01	4991	4356
Left rostral anterior cingulate cortex	0.026	0.022	[-0.017 - 0.069]	2.288E-01	9.637E-01	4994	4372
Left rostral middle frontal gyrus	0.007	0.028	[-0.047 - 0.061]	7.987E-01	9.637E-01	4987	4327

	Cohen's d Group By Sex Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left superior frontal gyrus	0.003	0.037	[-0.07 - 0.077]	9.305E-01	9.637E-01	4999	4368
Left superior parietal cortex	0.016	0.026	[-0.036 - 0.068]	5.468E-01	9.637E-01	4958	4303
Left superior temporal gyrus	-0.007	0.027	[-0.061 - 0.047]	7.920E-01	9.637E-01	4925	4246
Left supramarginal gyrus	-0.024	0.029	[-0.081 - 0.032]	4.033E-01	9.637E-01	4912	4240
Left frontal pole	0.008	0.023	[-0.037 - 0.053]	7.323E-01	9.637E-01	5005	4380
Left temporal pole	-0.040	0.032	[-0.103 - 0.023]	2.176E-01	9.637E-01	4968	4338
Left transverse temporal gyrus	0.006	0.022	[-0.036 - 0.049]	7.690E-01	9.637E-01	4996	4378
Left insula	0.000	0.024	[-0.047 - 0.046]	9.892E-01	9.892E-01	4994	4371
Right banks of superior temporal sulcus	-0.014	0.033	[-0.08 - 0.051]	6.658E-01	9.637E-01	4962	4328
Right caudal anterior cingulate cortex	0.046	0.022	[0.003 - 0.09]	3.607E-02	9.637E-01	4997	4374
Right caudal middle frontal gyrus	0.008	0.029	[-0.048 - 0.064]	7.746E-01	9.637E-01	4980	4347
Right cuneus	0.029	0.022	[-0.014 - 0.072]	1.828E-01	9.637E-01	4971	4335
Right entorhinal cortex	0.004	0.026	[-0.047 - 0.055]	8.724E-01	9.637E-01	4859	4183
Right fusiform gyrus	-0.033	0.035	[-0.101 - 0.036]	3.501E-01	9.637E-01	4957	4296
Right inferior parietal cortex	0.002	0.029	[-0.054 - 0.059]	9.357E-01	9.637E-01	4923	4252
Right inferior temporal gyrus	-0.010	0.024	[-0.057 - 0.038]	6.929E-01	9.637E-01	4943	4290
Right isthmus cingulate cortex	0.023	0.023	[-0.022 - 0.068]	3.094E-01	9.637E-01	4986	4360
Right lateral occipital cortex	0.026	0.029	[-0.03 - 0.082]	3.618E-01	9.637E-01	4957	4305
Right lateral orbitofrontal cortex	0.003	0.034	[-0.064 - 0.069]	9.362E-01	9.637E-01	4983	4348
Right lingual gyrus	0.009	0.024	[-0.037 - 0.056]	6.911E-01	9.637E-01	4998	4367
Right medial orbitofrontal cortex	0.016	0.032	[-0.047 - 0.078]	6.221E-01	9.637E-01	4966	4334
Right middle temporal gyrus	-0.021	0.037	[-0.093 - 0.052]	5.767E-01	9.637E-01	4934	4273
Right parahippocampal gyrus	0.039	0.028	[-0.015 - 0.093]	1.525E-01	9.637E-01	4978	4328
Right paracentral lobule	0.030	0.033	[-0.035 - 0.096]	3.664E-01	9.637E-01	4993	4369
Right pars opercularis of inferior frontal gyrus	-0.003	0.022	[-0.047 - 0.041]	8.810E-01	9.637E-01	4954	4317
Right pars orbitalis of inferior frontal gyrus	0.046	0.028	[-0.009 - 0.101]	1.015E-01	9.637E-01	4972	4348
Right pars triangularis of inferior frontal gyrus	0.045	0.023	[0 - 0.09]	4.849E-02	9.637E-01	4951	4316
Right pericalcarine cortex	0.030	0.022	[-0.013 - 0.072]	1.757E-01	9.637E-01	4999	4370

	Cohen's d Group By Sex Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Right postcentral gyrus	0.012	0.028	[-0.043 - 0.067]	6.773E-01	9.637E-01	4984	4353
Right posterior cingulate cortex	0.003	0.026	[-0.047 - 0.054]	8.928E-01	9.637E-01	4995	4373
Right precentral gyrus	0.032	0.023	[-0.014 - 0.078]	1.694E-01	9.637E-01	4980	4348
Right precuneus	-0.007	0.022	[-0.05 - 0.036]	7.415E-01	9.637E-01	4985	4344
Right rostral anterior cingulate cortex	0.007	0.026	[-0.043 - 0.057]	7.809E-01	9.637E-01	4968	4342
Right rostral middle frontal gyrus	-0.002	0.033	[-0.067 - 0.063]	9.552E-01	9.690E-01	4958	4321
Right superior frontal gyrus	0.014	0.027	[-0.039 - 0.067]	6.077E-01	9.637E-01	4984	4352
Right superior parietal cortex	0.007	0.022	[-0.036 - 0.05]	7.607E-01	9.637E-01	4961	4327
Right superior temporal gyrus	-0.004	0.029	[-0.061 - 0.054]	9.035E-01	9.637E-01	4937	4277
Right supramarginal gyrus	-0.017	0.032	[-0.078 - 0.045]	5.954E-01	9.637E-01	4914	4242
Right frontal pole	-0.024	0.028	[-0.079 - 0.03]	3.824E-01	9.637E-01	4996	4376
Right temporal pole	-0.005	0.027	[-0.057 - 0.047]	8.509E-01	9.637E-01	4901	4243
Right transverse temporal gyrus	0.005	0.022	[-0.037 - 0.048]	8.089E-01	9.637E-01	4998	4373
Right insula	0.003	0.022	[-0.039 - 0.046]	8.735E-01	9.637E-01	4993	4372
Left hemisphere	0.007	0.034	[-0.06 - 0.074]	8.424E-01	9.637E-01	5024	4389
Right hemisphere	0.016	0.031	[-0.044 - 0.076]	5.998E-01	9.637E-01	5020	4388



**Supplementary Table S8a.** Cortical thickness group (SZ/HV) by age interaction (Model D)

	Cohen's d Group By Age Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left banks of superior temporal sulcus	-0.029	0.025	[-0.078 - 0.021]	2.580E-01	9.733E-01	5002	4343
Left caudal anterior cingulate cortex	-0.021	0.030	[-0.08 - 0.039]	4.967E-01	9.737E-01	5053	4423
Left caudal middle frontal gyrus	0.011	0.041	[-0.07 - 0.091]	7.904E-01	9.737E-01	5053	4410
Left cuneus	0.007	0.026	[-0.044 - 0.058]	7.844E-01	9.737E-01	5012	4354
Left entorhinal cortex	0.006	0.022	[-0.037 - 0.049]	7.781E-01	9.737E-01	4942	4304
Left fusiform gyrus	-0.034	0.034	[-0.1 - 0.033]	3.223E-01	9.733E-01	5012	4368
Left inferior parietal cortex	-0.005	0.040	[-0.083 - 0.073]	8.988E-01	9.737E-01	4985	4308
Left inferior temporal gyrus	-0.035	0.037	[-0.107 - 0.038]	3.476E-01	9.733E-01	5005	4344
Left isthmus cingulate cortex	-0.046	0.028	[-0.1 - 0.008]	9.678E-02	8.212E-01	5056	4421
Left lateral occipital cortex	-0.003	0.035	[-0.071 - 0.066]	9.402E-01	9.737E-01	5026	4369
Left lateral orbitofrontal cortex	-0.015	0.026	[-0.067 - 0.036]	5.550E-01	9.737E-01	5056	4424
Left lingual gyrus	-0.023	0.022	[-0.066 - 0.019]	2.841E-01	9.733E-01	5048	4420
Left medial orbitofrontal cortex	-0.005	0.030	[-0.063 - 0.053]	8.680E-01	9.737E-01	5040	4418
Left middle temporal gyrus	-0.034	0.029	[-0.091 - 0.023]	2.371E-01	9.733E-01	4982	4305
Left parahippocampal gyrus	-0.043	0.022	[-0.087 - 0]	4.800E-02	6.647E-01	5039	4403
Left paracentral lobule	0.007	0.028	[-0.048 - 0.062]	8.123E-01	9.737E-01	5051	4421
Left pars opercularis of inferior frontal gyrus	0.023	0.032	[-0.04 - 0.085]	4.806E-01	9.737E-01	5041	4388
Left pars orbitalis of inferior frontal gyrus	0.017	0.032	[-0.045 - 0.08]	5.861E-01	9.737E-01	5032	4392
Left pars triangularis of inferior frontal gyrus	0.002	0.029	[-0.056 - 0.059]	9.574E-01	9.737E-01	5024	4372
Left pericalcarine cortex	0.004	0.029	[-0.054 - 0.062]	8.887E-01	9.737E-01	5054	4428
Left postcentral gyrus	0.026	0.029	[-0.031 - 0.083]	3.779E-01	9.737E-01	5041	4412
Left posterior cingulate cortex	-0.033	0.023	[-0.078 - 0.011]	1.397E-01	8.212E-01	5057	4424
Left precentral gyrus	0.009	0.030	[-0.049 - 0.067]	7.522E-01	9.737E-01	5052	4408
Left precuneus	-0.021	0.041	[-0.103 - 0.06]	6.033E-01	9.737E-01	5040	4401
Left rostral anterior cingulate cortex	-0.033	0.022	[-0.075 - 0.01]	1.328E-01	8.212E-01	5047	4416
Left rostral middle frontal gyrus	0.021	0.034	[-0.046 - 0.087]	5.372E-01	9.737E-01	5036	4376

	Cohen's d Group By Age Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left superior frontal gyrus	-0.009	0.040	[-0.088 - 0.07]	8.262E-01	9.737E-01	5051	4416
Left superior parietal cortex	0.018	0.040	[-0.061 - 0.097]	6.571E-01	9.737E-01	5008	4354
Left superior temporal gyrus	-0.034	0.030	[-0.094 - 0.025]	2.536E-01	9.733E-01	4976	4288
Left supramarginal gyrus	-0.009	0.046	[-0.098 - 0.08]	8.435E-01	9.737E-01	4964	4285
Left frontal pole	-0.032	0.022	[-0.074 - 0.011]	1.408E-01	8.212E-01	5053	4430
Left temporal pole	-0.085	0.022	[-0.128 - -0.042]	9.618E-05	6.733E-03	5020	4387
Left transverse temporal gyrus	-0.002	0.025	[-0.05 - 0.046]	9.440E-01	9.737E-01	5053	4428
Left insula	-0.030	0.029	[-0.086 - 0.027]	3.069E-01	9.733E-01	5050	4424
Right banks of superior temporal sulcus	-0.003	0.031	[-0.064 - 0.059]	9.305E-01	9.737E-01	5015	4375
Right caudal anterior cingulate cortex	-0.005	0.028	[-0.06 - 0.049]	8.475E-01	9.737E-01	5050	4420
Right caudal middle frontal gyrus	-0.025	0.030	[-0.083 - 0.034]	4.055E-01	9.737E-01	5034	4398
Right cuneus	0.015	0.033	[-0.05 - 0.081]	6.525E-01	9.737E-01	5022	4379
Right entorhinal cortex	-0.014	0.022	[-0.058 - 0.029]	5.161E-01	9.737E-01	4896	4210
Right fusiform gyrus	-0.013	0.026	[-0.063 - 0.038]	6.237E-01	9.737E-01	5009	4340
Right inferior parietal cortex	-0.025	0.042	[-0.106 - 0.056]	5.472E-01	9.737E-01	4975	4299
Right inferior temporal gyrus	-0.029	0.031	[-0.089 - 0.031]	3.457E-01	9.733E-01	4992	4338
Right isthmus cingulate cortex	-0.040	0.026	[-0.091 - 0.01]	1.186E-01	8.212E-01	5036	4407
Right lateral occipital cortex	0.018	0.031	[-0.042 - 0.078]	5.594E-01	9.737E-01	5011	4354
Right lateral orbitofrontal cortex	0.010	0.027	[-0.042 - 0.062]	7.069E-01	9.737E-01	5033	4394
Right lingual gyrus	-0.013	0.027	[-0.067 - 0.04]	6.232E-01	9.737E-01	5049	4419
Right medial orbitofrontal cortex	-0.001	0.034	[-0.068 - 0.065]	9.670E-01	9.737E-01	5019	4381
Right middle temporal gyrus	-0.044	0.033	[-0.107 - 0.02]	1.794E-01	9.662E-01	4987	4320
Right parahippocampal gyrus	-0.050	0.022	[-0.093 - -0.008]	2.032E-02	4.742E-01	5033	4378
Right paracentral lobule	0.009	0.030	[-0.051 - 0.069]	7.651E-01	9.737E-01	5044	4418
Right pars opercularis of inferior frontal gyrus	-0.001	0.032	[-0.063 - 0.061]	9.737E-01	9.737E-01	5009	4365
Right pars orbitalis of inferior frontal gyrus	0.032	0.025	[-0.018 - 0.082]	2.045E-01	9.733E-01	5023	4394
Right pars triangularis of inferior frontal gyrus	0.048	0.025	[-0.001 - 0.097]	5.698E-02	6.647E-01	5005	4366
Right pericalcarine cortex	-0.013	0.026	[-0.064 - 0.038]	6.194E-01	9.737E-01	5049	4420

	Cohen's d Group By Age Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Right postcentral gyrus	-0.004	0.034	[-0.071 - 0.063]	9.126E-01	9.737E-01	5032	4401
Right posterior cingulate cortex	-0.040	0.027	[-0.093 - 0.012]	1.335E-01	8.212E-01	5049	4421
Right precentral gyrus	-0.008	0.033	[-0.072 - 0.057]	8.164E-01	9.737E-01	5033	4397
Right precuneus	0.002	0.042	[-0.08 - 0.083]	9.650E-01	9.737E-01	5035	4391
Right rostral anterior cingulate cortex	-0.026	0.034	[-0.092 - 0.039]	4.343E-01	9.737E-01	5019	4390
Right rostral middle frontal gyrus	0.035	0.036	[-0.035 - 0.106]	3.242E-01	9.733E-01	5009	4365
Right superior frontal gyrus	-0.014	0.039	[-0.09 - 0.061]	7.093E-01	9.737E-01	5037	4401
Right superior parietal cortex	-0.007	0.042	[-0.09 - 0.076]	8.749E-01	9.737E-01	5013	4375
Right superior temporal gyrus	-0.026	0.032	[-0.089 - 0.037]	4.154E-01	9.737E-01	4989	4320
Right supramarginal gyrus	-0.035	0.036	[-0.105 - 0.036]	3.353E-01	9.733E-01	4967	4290
Right frontal pole	-0.025	0.024	[-0.073 - 0.023]	3.046E-01	9.733E-01	5048	4424
Right temporal pole	-0.094	0.026	[-0.145 - -0.043]	3.428E-04	1.200E-02	4952	4287
Right transverse temporal gyrus	0.017	0.023	[-0.028 - 0.062]	4.511E-01	9.737E-01	5051	4423
Right insula	-0.051	0.026	[-0.101 - 0]	4.865E-02	6.647E-01	5043	4420
Left hemisphere	-0.016	0.042	[-0.097 - 0.066]	7.024E-01	9.737E-01	5076	4436
Right hemisphere	-0.018	0.042	[-0.1 - 0.064]	6.610E-01	9.737E-01	5073	4435

**Supplementary Table S8b.** Cortical thickness group (SZ/HV) by age interaction controlling for global mean cortical thickness

	Cohen's d Group By Age Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left banks of superior temporal sulcus	-0.022	0.022	[-0.065 - 0.02]	3.04E-01	6.55E-01	5000	4343
Left caudal anterior cingulate cortex	-0.020	0.033	[-0.085 - 0.044]	5.40E-01	7.97E-01	5051	4423
Left caudal middle frontal gyrus	0.031	0.030	[-0.028 - 0.089]	3.04E-01	6.55E-01	5051	4410
Left cuneus	0.024	0.022	[-0.018 - 0.067]	2.65E-01	6.55E-01	5010	4354
Left entorhinal cortex	0.015	0.023	[-0.029 - 0.059]	5.05E-01	7.63E-01	4940	4304
Left fusiform gyrus	-0.029	0.022	[-0.073 - 0.014]	1.86E-01	5.90E-01	5010	4368
Left inferior parietal cortex	0.011	0.022	[-0.032 - 0.054]	6.07E-01	8.09E-01	4983	4308
Left inferior temporal gyrus	-0.020	0.023	[-0.065 - 0.024]	3.75E-01	6.78E-01	5003	4344
Left isthmus cingulate cortex	-0.054	0.022	[-0.096 - -0.011]	1.31E-02	1.27E-01	5054	4421
Left lateral occipital cortex	0.003	0.026	[-0.047 - 0.053]	9.10E-01	9.35E-01	5024	4369
Left lateral orbitofrontal cortex	-0.008	0.029	[-0.065 - 0.049]	7.86E-01	8.76E-01	5054	4424
Left lingual gyrus	-0.021	0.022	[-0.063 - 0.022]	3.42E-01	6.65E-01	5046	4420
Left medial orbitofrontal cortex	-0.009	0.023	[-0.055 - 0.036]	6.95E-01	8.15E-01	5038	4418
Left middle temporal gyrus	-0.028	0.023	[-0.073 - 0.017]	2.17E-01	5.90E-01	4980	4305
Left parahippocampal gyrus	-0.045	0.027	[-0.098 - 0.009]	1.03E-01	4.11E-01	5037	4403
Left paracentral lobule	0.021	0.022	[-0.021 - 0.064]	3.32E-01	6.63E-01	5049	4421
Left pars opercularis of inferior frontal gyrus	0.041	0.030	[-0.017 - 0.099]	1.65E-01	5.62E-01	5039	4388
Left pars orbitalis of inferior frontal gyrus	0.030	0.030	[-0.029 - 0.089]	3.18E-01	6.55E-01	5030	4392
Left pars triangularis of inferior frontal gyrus	0.019	0.022	[-0.024 - 0.062]	3.82E-01	6.78E-01	5022	4372
Left pericalcarine cortex	0.013	0.022	[-0.03 - 0.055]	5.63E-01	7.97E-01	5052	4428
Left postcentral gyrus	0.053	0.024	[0.006 - 0.101]	2.68E-02	2.03E-01	5039	4412
Left posterior cingulate cortex	-0.034	0.022	[-0.077 - 0.008]	1.15E-01	4.33E-01	5055	4424
Left precentral gyrus	0.027	0.022	[-0.015 - 0.07]	2.08E-01	5.90E-01	5050	4408
Left precuneus	0.002	0.025	[-0.048 - 0.052]	9.35E-01	9.35E-01	5039	4401
Left rostral anterior cingulate cortex	-0.036	0.022	[-0.078 - 0.007]	9.83E-02	4.11E-01	5045	4416
Left rostral middle frontal gyrus	0.046	0.023	[0 - 0.092]	5.13E-02	3.17E-01	5034	4376

	Cohen's d Group By Age Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left superior frontal gyrus	0.010	0.026	[-0.041 - 0.062]	6.89E-01	8.15E-01	5049	4416
Left superior parietal cortex	0.056	0.022	[0.014 - 0.099]	9.92E-03	1.12E-01	5007	4354
Left superior temporal gyrus	-0.024	0.023	[-0.069 - 0.02]	2.82E-01	6.55E-01	4974	4288
Left supramarginal gyrus	-0.003	0.041	[-0.084 - 0.077]	9.35E-01	9.35E-01	4963	4285
Left frontal pole	-0.027	0.022	[-0.07 - 0.015]	2.06E-01	5.90E-01	5051	4430
Left temporal pole	-0.084	0.022	[-0.127 - -0.041]	1.13E-04	7.66E-03	5018	4387
Left transverse temporal gyrus	0.009	0.022	[-0.033 - 0.051]	6.77E-01	8.15E-01	5051	4428
Left insula	-0.036	0.022	[-0.078 - 0.007]	9.87E-02	4.11E-01	5048	4424
Right banks of superior temporal sulcus	0.009	0.028	[-0.046 - 0.064]	7.58E-01	8.60E-01	5013	4375
Right caudal anterior cingulate cortex	-0.003	0.022	[-0.046 - 0.039]	8.80E-01	9.23E-01	5048	4420
Right caudal middle frontal gyrus	-0.020	0.029	[-0.077 - 0.037]	4.98E-01	7.63E-01	5032	4398
Right cuneus	0.034	0.022	[-0.01 - 0.077]	1.29E-01	4.61E-01	5020	4379
Right entorhinal cortex	-0.010	0.022	[-0.054 - 0.033]	6.44E-01	8.11E-01	4894	4210
Right fusiform gyrus	-0.010	0.022	[-0.053 - 0.032]	6.32E-01	8.11E-01	5007	4340
Right inferior parietal cortex	-0.020	0.024	[-0.067 - 0.027]	4.11E-01	6.78E-01	4973	4299
Right inferior temporal gyrus	-0.017	0.022	[-0.06 - 0.025]	4.24E-01	6.78E-01	4990	4338
Right isthmus cingulate cortex	-0.044	0.022	[-0.087 - -0.001]	4.27E-02	2.91E-01	5034	4407
Right lateral occipital cortex	0.028	0.022	[-0.015 - 0.071]	1.96E-01	5.90E-01	5009	4354
Right lateral orbitofrontal cortex	0.018	0.022	[-0.024 - 0.061]	4.02E-01	6.78E-01	5031	4394
Right lingual gyrus	-0.009	0.022	[-0.052 - 0.033]	6.71E-01	8.15E-01	5047	4419
Right medial orbitofrontal cortex	0.004	0.026	[-0.047 - 0.054]	8.82E-01	9.23E-01	5017	4381
Right middle temporal gyrus	-0.042	0.025	[-0.09 - 0.006]	8.89E-02	4.11E-01	4985	4320
Right parahippocampal gyrus	-0.052	0.022	[-0.095 - -0.01]	1.65E-02	1.40E-01	5031	4378
Right paracentral lobule	0.025	0.022	[-0.018 - 0.067]	2.57E-01	6.55E-01	5042	4418
Right pars opercularis of inferior frontal gyrus	0.017	0.022	[-0.025 - 0.06]	4.29E-01	6.78E-01	5007	4365
Right pars orbitalis of inferior frontal gyrus	0.047	0.026	[-0.004 - 0.097]	6.98E-02	3.95E-01	5021	4394
Right pars triangularis of inferior frontal gyrus	0.066	0.022	[0.023 - 0.108]	2.68E-03	4.55E-02	5003	4366
Right pericalcarine cortex	-0.010	0.022	[-0.053 - 0.032]	6.30E-01	8.11E-01	5047	4420

	Cohen's d Group By Age Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Right postcentral gyrus	0.013	0.024	[-0.034 - 0.059]	5.95E-01	8.09E-01	5030	4401
Right posterior cingulate cortex	-0.038	0.022	[-0.08 - 0.005]	8.09E-02	4.11E-01	5047	4421
Right precentral gyrus	0.004	0.022	[-0.039 - 0.047]	8.52E-01	9.22E-01	5031	4397
Right precuneus	0.015	0.026	[-0.037 - 0.067]	5.74E-01	7.97E-01	5033	4391
Right rostral anterior cingulate cortex	-0.025	0.029	[-0.081 - 0.032]	3.91E-01	6.78E-01	5017	4390
Right rostral middle frontal gyrus	0.068	0.022	[0.025 - 0.111]	1.85E-03	4.19E-02	5007	4365
Right superior frontal gyrus	-0.008	0.022	[-0.05 - 0.035]	7.23E-01	8.33E-01	5035	4401
Right superior parietal cortex	0.005	0.027	[-0.049 - 0.059]	8.54E-01	9.22E-01	5011	4375
Right superior temporal gyrus	-0.019	0.033	[-0.082 - 0.045]	5.66E-01	7.97E-01	4987	4320
Right supramarginal gyrus	-0.031	0.029	[-0.088 - 0.025]	2.76E-01	6.55E-01	4965	4290
Right frontal pole	-0.022	0.022	[-0.064 - 0.021]	3.12E-01	6.55E-01	5046	4424
Right temporal pole	-0.094	0.027	[-0.146 - -0.042]	4.06E-04	1.38E-02	4950	4287
Right transverse temporal gyrus	0.022	0.026	[-0.029 - 0.073]	3.98E-01	6.78E-01	5049	4423
Right insula	-0.057	0.022	[-0.099 - -0.014]	9.02E-03	1.12E-01	5041	4420
Left hemisphere	-0.005	0.023	[-0.051 - 0.04]	8.25E-01	1.00E+00	4969	4306
Right hemisphere	-0.014	0.027	[-0.066 - 0.039]	6.14E-01	1.00E+00	5039	4412

**Supplementary Table S9.** Cortical surface area group (SZ/HV) by age interaction (Model D)

	Cohen's d Group By Age Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left banks of superior temporal sulcus	0.011	0.031	[-0.05 - 0.071]	7.299E-01	9.850E-01	4995	4341
Left caudal anterior cingulate cortex	-0.013	0.022	[-0.056 - 0.029]	5.372E-01	9.850E-01	5050	4420
Left caudal middle frontal gyrus	0.019	0.027	[-0.035 - 0.073]	4.819E-01	9.850E-01	5049	4406
Left cuneus	-0.046	0.030	[-0.106 - 0.013]	1.243E-01	9.850E-01	5012	4353
Left entorhinal cortex	-0.021	0.022	[-0.064 - 0.022]	3.385E-01	9.850E-01	4938	4302
Left fusiform gyrus	-0.009	0.025	[-0.058 - 0.04]	7.167E-01	9.850E-01	5007	4368
Left inferior parietal cortex	0.021	0.032	[-0.043 - 0.084]	5.254E-01	9.850E-01	4980	4310
Left inferior temporal gyrus	-0.015	0.036	[-0.085 - 0.055]	6.707E-01	9.850E-01	5004	4340
Left isthmus cingulate cortex	0.058	0.027	[0.006 - 0.111]	3.008E-02	6.303E-01	5051	4419
Left lateral occipital cortex	0.031	0.025	[-0.018 - 0.079]	2.184E-01	9.850E-01	5020	4368
Left lateral orbitofrontal cortex	0.005	0.032	[-0.057 - 0.066]	8.858E-01	9.850E-01	5050	4426
Left lingual gyrus	-0.018	0.022	[-0.061 - 0.024]	3.968E-01	9.850E-01	5046	4415
Left medial orbitofrontal cortex	0.065	0.030	[0.006 - 0.125]	3.197E-02	6.303E-01	5040	4416
Left middle temporal gyrus	-0.015	0.037	[-0.088 - 0.059]	6.972E-01	9.850E-01	4977	4299
Left parahippocampal gyrus	-0.018	0.033	[-0.082 - 0.047]	5.884E-01	9.850E-01	5035	4396
Left paracentral lobule	0.024	0.025	[-0.024 - 0.072]	3.316E-01	9.850E-01	5049	4416
Left pars opercularis of inferior frontal gyrus	0.009	0.027	[-0.044 - 0.061]	7.478E-01	9.850E-01	5037	4386
Left pars orbitalis of inferior frontal gyrus	-0.016	0.027	[-0.069 - 0.037]	5.536E-01	9.850E-01	5029	4390
Left pars triangularis of inferior frontal gyrus	-0.005	0.029	[-0.062 - 0.051]	8.500E-01	9.850E-01	5021	4371
Left pericalcarine cortex	-0.015	0.022	[-0.058 - 0.027]	4.832E-01	9.850E-01	5053	4425
Left postcentral gyrus	0.013	0.032	[-0.05 - 0.075]	6.899E-01	9.850E-01	5035	4409
Left posterior cingulate cortex	0.029	0.041	[-0.052 - 0.11]	4.795E-01	9.850E-01	5052	4422
Left precentral gyrus	0.011	0.032	[-0.052 - 0.075]	7.240E-01	9.850E-01	5049	4406
Left precuneus	0.001	0.022	[-0.041 - 0.044]	9.506E-01	9.850E-01	5040	4401
Left rostral anterior cingulate cortex	0.016	0.029	[-0.041 - 0.073]	5.738E-01	9.850E-01	5043	4417
Left rostral middle frontal gyrus	-0.005	0.034	[-0.071 - 0.062]	8.924E-01	9.850E-01	5036	4372



	Cohen's d Group By Age Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Left superior frontal gyrus	0.039	0.028	[-0.016 - 0.094]	1.637E-01	9.850E-01	5048	4413
Left superior parietal cortex	-0.017	0.032	[-0.079 - 0.045]	5.956E-01	9.850E-01	5007	4347
Left superior temporal gyrus	0.027	0.030	[-0.031 - 0.085]	3.572E-01	9.850E-01	4974	4289
Left supramarginal gyrus	-0.004	0.028	[-0.059 - 0.052]	8.944E-01	9.850E-01	4961	4284
Left frontal pole	-0.009	0.033	[-0.074 - 0.056]	7.906E-01	9.850E-01	5054	4425
Left temporal pole	0.003	0.025	[-0.047 - 0.052]	9.192E-01	9.850E-01	5017	4383
Left transverse temporal gyrus	0.025	0.027	[-0.027 - 0.077]	3.467E-01	9.850E-01	5045	4423
Left insula	0.062	0.026	[0.01 - 0.114]	1.864E-02	6.303E-01	5043	4416
Right banks of superior temporal sulcus	0.046	0.022	[0.003 - 0.088]	3.602E-02	6.303E-01	5010	4373
Right caudal anterior cingulate cortex	0.017	0.022	[-0.025 - 0.06]	4.227E-01	9.850E-01	5046	4419
Right caudal middle frontal gyrus	0.002	0.030	[-0.057 - 0.061]	9.541E-01	9.850E-01	5029	4392
Right cuneus	0.004	0.025	[-0.046 - 0.053]	8.880E-01	9.850E-01	5020	4380
Right entorhinal cortex	-0.027	0.022	[-0.07 - 0.017]	2.251E-01	9.850E-01	4892	4206
Right fusiform gyrus	-0.025	0.035	[-0.092 - 0.043]	4.727E-01	9.850E-01	5006	4341
Right inferior parietal cortex	0.020	0.036	[-0.052 - 0.091]	5.914E-01	9.850E-01	4972	4297
Right inferior temporal gyrus	0.005	0.025	[-0.045 - 0.055]	8.548E-01	9.850E-01	4992	4335
Right isthmus cingulate cortex	0.026	0.031	[-0.034 - 0.086]	3.954E-01	9.850E-01	5035	4405
Right lateral occipital cortex	0.005	0.029	[-0.052 - 0.061]	8.756E-01	9.850E-01	5006	4350
Right lateral orbitofrontal cortex	0.026	0.030	[-0.032 - 0.083]	3.860E-01	9.850E-01	5032	4393
Right lingual gyrus	0.019	0.025	[-0.03 - 0.068]	4.455E-01	9.850E-01	5047	4412
Right medial orbitofrontal cortex	0.027	0.032	[-0.037 - 0.09]	4.102E-01	9.850E-01	5015	4379
Right middle temporal gyrus	0.017	0.029	[-0.041 - 0.074]	5.646E-01	9.850E-01	4983	4318
Right parahippocampal gyrus	-0.002	0.030	[-0.062 - 0.057]	9.424E-01	9.850E-01	5027	4372
Right paracentral lobule	0.031	0.031	[-0.03 - 0.092]	3.207E-01	9.850E-01	5042	4414
Right pars opercularis of inferior frontal gyrus	-0.010	0.033	[-0.075 - 0.054]	7.536E-01	9.850E-01	5003	4362
Right pars orbitalis of inferior frontal gyrus	-0.004	0.022	[-0.046 - 0.039]	8.715E-01	9.850E-01	5021	4393
Right pars triangularis of inferior frontal gyrus	0.005	0.022	[-0.038 - 0.048]	8.101E-01	9.850E-01	5000	4361
Right pericalcarine cortex	0.003	0.023	[-0.042 - 0.048]	9.044E-01	9.850E-01	5047	4415



	Cohen's d Group By Age Interaction	Std. Err.	95% CI	p-value	FDR p-value	N Controls	N Patients
Right postcentral gyrus	-0.010	0.030	[-0.068 - 0.048]	7.365E-01	9.850E-01	5033	4398
Right posterior cingulate cortex	0.000	0.022	[-0.042 - 0.043]	9.850E-01	9.850E-01	5044	4418
Right precentral gyrus	0.020	0.033	[-0.044 - 0.085]	5.356E-01	9.850E-01	5029	4393
Right precuneus	0.006	0.028	[-0.049 - 0.06]	8.437E-01	9.850E-01	5034	4389
Right rostral anterior cingulate cortex	0.020	0.022	[-0.023 - 0.063]	3.552E-01	9.850E-01	5017	4387
Right rostral middle frontal gyrus	-0.006	0.028	[-0.06 - 0.048]	8.281E-01	9.850E-01	5007	4366
Right superior frontal gyrus	0.035	0.029	[-0.021 - 0.092]	2.160E-01	9.850E-01	5033	4397
Right superior parietal cortex	-0.001	0.034	[-0.067 - 0.065]	9.704E-01	9.850E-01	5010	4372
Right superior temporal gyrus	-0.001	0.034	[-0.067 - 0.065]	9.841E-01	9.850E-01	4985	4322
Right supramarginal gyrus	0.002	0.028	[-0.053 - 0.057]	9.516E-01	9.850E-01	4963	4287
Right frontal pole	0.020	0.023	[-0.024 - 0.065]	3.663E-01	9.850E-01	5045	4421
Right temporal pole	0.028	0.030	[-0.03 - 0.086]	3.397E-01	9.850E-01	4950	4288
Right transverse temporal gyrus	-0.021	0.023	[-0.066 - 0.024]	3.582E-01	9.850E-01	5047	4418
Right insula	0.042	0.028	[-0.013 - 0.097]	1.337E-01	9.850E-01	5042	4417
Left hemisphere	0.015	0.033	[-0.05 - 0.08]	6.515E-01	9.850E-01	5073	4434
Right hemisphere	0.019	0.034	[-0.048 - 0.085]	5.851E-01	9.850E-01	5069	4433

**Supplementary Table S10.** Partial correlation between cortical thickness and age for schizophrenia group

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.285	0.022	[-0.327 - -0.242]	3.566E-39	7.565E-39	4343
Left caudal anterior cingulate cortex	-0.143	0.028	[-0.198 - -0.089]	2.996E-07	3.085E-07	4423
Left caudal middle frontal gyrus	-0.320	0.025	[-0.369 - -0.272]	1.851E-38	3.810E-38	4410
Left cuneus	-0.197	0.014	[-0.225 - -0.169]	2.771E-42	6.689E-42	4354
Left entorhinal cortex	-0.021	0.020	[-0.06 - 0.017]	2.761E-01	2.761E-01	4304
Left fusiform gyrus	-0.267	0.027	[-0.319 - -0.215]	1.315E-23	1.770E-23	4368
Left inferior parietal cortex	-0.306	0.029	[-0.362 - -0.25]	2.011E-26	2.873E-26	4308
Left inferior temporal gyrus	-0.237	0.027	[-0.29 - -0.184]	2.200E-18	2.610E-18	4344
Left isthmus cingulate cortex	-0.291	0.019	[-0.33 - -0.253]	1.285E-50	5.995E-50	4421
Left lateral occipital cortex	-0.140	0.025	[-0.189 - -0.09]	3.596E-08	3.813E-08	4369
Left lateral orbitofrontal cortex	-0.329	0.027	[-0.381 - -0.277]	3.091E-35	5.549E-35	4424
Left lingual gyrus	-0.289	0.020	[-0.329 - -0.25]	3.560E-46	1.187E-45	4420
Left medial orbitofrontal cortex	-0.264	0.018	[-0.3 - -0.228]	5.316E-47	1.861E-46	4418
Left middle temporal gyrus	-0.324	0.026	[-0.375 - -0.272]	6.535E-35	1.144E-34	4305
Left parahippocampal gyrus	-0.170	0.023	[-0.214 - -0.126]	5.827E-14	6.579E-14	4403
Left paracentral lobule	-0.248	0.020	[-0.287 - -0.208]	1.070E-34	1.827E-34	4421
Left pars opercularis of inferior frontal gyrus	-0.385	0.022	[-0.428 - -0.341]	4.842E-67	5.648E-66	4388
Left pars orbitalis of inferior frontal gyrus	-0.283	0.019	[-0.321 - -0.245]	3.010E-48	1.171E-47	4392
Left pars triangularis of inferior frontal gyrus	-0.381	0.016	[-0.413 - -0.348]	8.064E-118	5.645E-116	4372
Left pericalcarine cortex	-0.177	0.018	[-0.212 - -0.142]	2.194E-23	2.898E-23	4428
Left postcentral gyrus	-0.228	0.020	[-0.268 - -0.188]	2.531E-29	3.692E-29	4412
Left posterior cingulate cortex	-0.365	0.019	[-0.402 - -0.327]	2.606E-82	9.120E-81	4424
Left precentral gyrus	-0.308	0.019	[-0.344 - -0.271]	1.893E-61	1.473E-60	4408
Left precuneus	-0.329	0.024	[-0.377 - -0.282]	2.715E-42	6.689E-42	4401
Left rostral anterior cingulate cortex	-0.285	0.020	[-0.325 - -0.245]	9.128E-45	2.366E-44	4416
Left rostral middle frontal gyrus	-0.326	0.023	[-0.371 - -0.281]	8.492E-46	2.378E-45	4376
Left superior frontal gyrus	-0.405	0.027	[-0.458 - -0.353]	1.452E-52	7.819E-52	4416

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.225	0.025	[-0.275 - -0.175]	9.724E-19	1.174E-18	4354
Left superior temporal gyrus	-0.336	0.023	[-0.38 - -0.291]	1.121E-48	4.617E-48	4288
Left supramarginal gyrus	-0.340	0.028	[-0.395 - -0.286]	2.791E-34	4.543E-34	4285
Left frontal pole	-0.193	0.021	[-0.235 - -0.152]	1.513E-19	1.891E-19	4430
Left temporal pole	-0.131	0.018	[-0.165 - -0.096]	1.357E-13	1.508E-13	4387
Left transverse temporal gyrus	-0.268	0.019	[-0.305 - -0.23]	8.768E-45	2.361E-44	4428
Left insula	-0.333	0.025	[-0.382 - -0.284]	1.457E-40	3.187E-40	4424
Right banks of superior temporal sulcus	-0.300	0.021	[-0.341 - -0.259]	7.792E-46	2.273E-45	4375
Right caudal anterior cingulate cortex	-0.176	0.025	[-0.225 - -0.128]	1.090E-12	1.193E-12	4420
Right caudal middle frontal gyrus	-0.320	0.019	[-0.356 - -0.283]	1.787E-66	1.787E-65	4398
Right cuneus	-0.213	0.024	[-0.261 - -0.166]	2.411E-18	2.813E-18	4379
Right entorhinal cortex	-0.025	0.021	[-0.066 - 0.016]	2.259E-01	2.292E-01	4210
Right fusiform gyrus	-0.262	0.021	[-0.304 - -0.221]	1.211E-34	2.019E-34	4340
Right inferior parietal cortex	-0.326	0.027	[-0.379 - -0.273]	9.947E-34	1.582E-33	4299
Right inferior temporal gyrus	-0.236	0.025	[-0.285 - -0.186]	1.059E-20	1.348E-20	4338
Right isthmus cingulate cortex	-0.303	0.018	[-0.339 - -0.268]	1.398E-62	1.223E-61	4407
Right lateral occipital cortex	-0.134	0.023	[-0.179 - -0.09]	3.057E-09	3.292E-09	4354
Right lateral orbitofrontal cortex	-0.329	0.023	[-0.373 - -0.284]	2.805E-47	1.033E-46	4394
Right lingual gyrus	-0.264	0.026	[-0.314 - -0.213]	1.597E-24	2.236E-24	4419
Right medial orbitofrontal cortex	-0.250	0.021	[-0.292 - -0.209]	4.773E-32	7.425E-32	4381
Right middle temporal gyrus	-0.326	0.025	[-0.375 - -0.276]	2.156E-38	4.312E-38	4320
Right parahippocampal gyrus	-0.175	0.015	[-0.204 - -0.145]	7.967E-31	1.212E-30	4378
Right paracentral lobule	-0.263	0.015	[-0.291 - -0.234]	2.289E-72	5.341E-71	4418
Right pars opercularis of inferior frontal gyrus	-0.372	0.026	[-0.423 - -0.321]	7.222E-46	2.198E-45	4365
Right pars orbitalis of inferior frontal gyrus	-0.286	0.021	[-0.327 - -0.244]	6.585E-41	1.487E-40	4394
Right pars triangularis of inferior frontal gyrus	-0.383	0.021	[-0.425 - -0.341]	7.345E-72	1.285E-70	4366
Right pericalcarine cortex	-0.165	0.021	[-0.207 - -0.124]	8.595E-15	9.863E-15	4420
Right postcentral gyrus	-0.226	0.024	[-0.273 - -0.179]	5.114E-21	6.630E-21	4401
Right posterior cingulate cortex	-0.354	0.020	[-0.394 - -0.315]	1.976E-69	2.767E-68	4421

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.309	0.022	[-0.351 - -0.266]	4.208E-46	1.339E-45	4397
Right precuneus	-0.328	0.026	[-0.379 - -0.276]	1.770E-35	3.261E-35	4391
Right rostral anterior cingulate cortex	-0.227	0.022	[-0.271 - -0.183]	4.495E-24	6.169E-24	4390
Right rostral middle frontal gyrus	-0.315	0.025	[-0.364 - -0.266]	5.508E-36	1.042E-35	4365
Right superior frontal gyrus	-0.398	0.026	[-0.448 - -0.347]	5.313E-54	3.381E-53	4401
Right superior parietal cortex	-0.245	0.028	[-0.299 - -0.191]	5.929E-19	7.281E-19	4375
Right superior temporal gyrus	-0.352	0.024	[-0.399 - -0.306]	1.421E-49	6.218E-49	4320
Right supramarginal gyrus	-0.359	0.027	[-0.412 - -0.307]	1.683E-41	3.926E-41	4290
Right frontal pole	-0.194	0.015	[-0.223 - -0.164]	4.152E-38	8.074E-38	4424
Right temporal pole	-0.117	0.022	[-0.161 - -0.074]	1.486E-07	1.552E-07	4287
Right transverse temporal gyrus	-0.247	0.022	[-0.29 - -0.205]	3.149E-30	4.689E-30	4423
Right insula	-0.346	0.022	[-0.39 - -0.302]	9.159E-54	5.343E-53	4420
Left hemisphere	-0.411	0.025	[-0.46 - -0.362]	9.395E-60	6.577E-59	4436
Right hemisphere	-0.411	0.027	[-0.464 - -0.358]	6.351E-52	3.175E-51	4435

**Supplementary Table S11.** Partial correlations of cortical thickness with age for healthy group

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.276	0.026	[-0.327 - -0.225]	2.304E-26	4.136E-26	5002
Left caudal anterior cingulate cortex	-0.139	0.022	[-0.181 - -0.096]	1.938E-10	2.188E-10	5053
Left caudal middle frontal gyrus	-0.358	0.026	[-0.41 - -0.306]	7.845E-42	4.992E-41	5053
Left cuneus	-0.213	0.028	[-0.267 - -0.159]	1.261E-14	1.522E-14	5012
Left entorhinal cortex	-0.030	0.017	[-0.065 - 0.004]	8.027E-02	8.143E-02	4942
Left fusiform gyrus	-0.273	0.026	[-0.324 - -0.222]	1.127E-25	1.878E-25	5012
Left inferior parietal cortex	-0.325	0.028	[-0.38 - -0.271]	1.958E-31	4.421E-31	4985
Left inferior temporal gyrus	-0.237	0.030	[-0.297 - -0.178]	6.683E-15	8.207E-15	5005
Left isthmus cingulate cortex	-0.281	0.021	[-0.322 - -0.239]	5.791E-40	2.895E-39	5056
Left lateral occipital cortex	-0.161	0.029	[-0.219 - -0.104]	4.144E-08	4.533E-08	5026
Left lateral orbitofrontal cortex	-0.346	0.024	[-0.394 - -0.299]	6.847E-47	6.847E-46	5056
Left lingual gyrus	-0.276	0.025	[-0.326 - -0.227]	1.944E-27	3.677E-27	5048
Left medial orbitofrontal cortex	-0.267	0.020	[-0.306 - -0.227]	2.440E-39	1.139E-38	5040
Left middle temporal gyrus	-0.322	0.029	[-0.379 - -0.266]	5.090E-29	1.080E-28	4982
Left parahippocampal gyrus	-0.125	0.028	[-0.181 - -0.069]	1.031E-05	1.094E-05	5039
Left paracentral lobule	-0.272	0.022	[-0.315 - -0.23]	3.400E-36	1.082E-35	5051
Left pars opercularis of inferior frontal gyrus	-0.427	0.030	[-0.487 - -0.367]	1.012E-44	8.858E-44	5041
Left pars orbitalis of inferior frontal gyrus	-0.314	0.028	[-0.369 - -0.258]	7.626E-29	1.570E-28	5032
Left pars triangularis of inferior frontal gyrus	-0.382	0.029	[-0.439 - -0.326]	3.117E-40	1.818E-39	5024
Left pericalcarine cortex	-0.185	0.027	[-0.237 - -0.132]	5.092E-12	6.042E-12	5054
Left postcentral gyrus	-0.270	0.026	[-0.321 - -0.22]	8.587E-26	1.466E-25	5041
Left posterior cingulate cortex	-0.361	0.025	[-0.409 - -0.312]	1.400E-48	1.633E-47	5057
Left precentral gyrus	-0.333	0.027	[-0.386 - -0.28]	3.927E-35	1.195E-34	5052
Left precuneus	-0.340	0.028	[-0.395 - -0.285]	5.068E-34	1.419E-33	5040
Left rostral anterior cingulate cortex	-0.266	0.013	[-0.292 - -0.241]	5.053E-93	3.537E-91	5047
Left rostral middle frontal gyrus	-0.356	0.027	[-0.409 - -0.304]	3.860E-40	2.079E-39	5036
Left superior frontal gyrus	-0.420	0.031	[-0.48 - -0.36]	5.853E-43	4.097E-42	5051

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.274	0.028	[-0.329 - -0.219]	1.074E-22	1.566E-22	5008
Left superior temporal gyrus	-0.313	0.035	[-0.382 - -0.245]	1.904E-19	2.563E-19	4976
Left supramarginal gyrus	-0.363	0.034	[-0.43 - -0.296]	2.278E-26	4.136E-26	4964
Left frontal pole	-0.168	0.019	[-0.205 - -0.13]	3.190E-18	4.135E-18	5053
Left temporal pole	-0.047	0.020	[-0.087 - -0.008]	1.980E-02	2.068E-02	5020
Left transverse temporal gyrus	-0.267	0.028	[-0.322 - -0.212]	1.569E-21	2.241E-21	5053
Left insula	-0.347	0.027	[-0.399 - -0.295]	5.918E-39	2.589E-38	5050
Right banks of superior temporal sulcus	-0.320	0.026	[-0.371 - -0.269]	1.741E-34	5.078E-34	5015
Right caudal anterior cingulate cortex	-0.184	0.020	[-0.223 - -0.145]	1.581E-20	2.170E-20	5050
Right caudal middle frontal gyrus	-0.314	0.026	[-0.366 - -0.262]	1.635E-32	4.087E-32	5034
Right cuneus	-0.231	0.029	[-0.287 - -0.174]	1.129E-15	1.411E-15	5022
Right entorhinal cortex	-0.019	0.016	[-0.05 - 0.012]	2.233E-01	2.233E-01	4896
Right fusiform gyrus	-0.269	0.027	[-0.321 - -0.217]	4.937E-24	7.513E-24	5009
Right inferior parietal cortex	-0.329	0.031	[-0.39 - -0.268]	3.423E-26	5.990E-26	4975
Right inferior temporal gyrus	-0.227	0.028	[-0.281 - -0.173]	2.232E-16	2.840E-16	4992
Right isthmus cingulate cortex	-0.284	0.025	[-0.332 - -0.235]	2.314E-30	5.062E-30	5036
Right lateral occipital cortex	-0.179	0.027	[-0.232 - -0.126]	3.634E-11	4.170E-11	5011
Right lateral orbitofrontal cortex	-0.349	0.028	[-0.403 - -0.295]	2.193E-36	7.675E-36	5033
Right lingual gyrus	-0.272	0.027	[-0.325 - -0.219]	3.344E-24	5.202E-24	5049
Right medial orbitofrontal cortex	-0.263	0.026	[-0.314 - -0.212]	5.713E-24	8.509E-24	5019
Right middle temporal gyrus	-0.327	0.030	[-0.385 - -0.268]	1.617E-27	3.145E-27	4987
Right parahippocampal gyrus	-0.128	0.027	[-0.18 - -0.076]	1.474E-06	1.587E-06	5033
Right paracentral lobule	-0.270	0.026	[-0.321 - -0.218]	1.156E-24	1.839E-24	5044
Right pars opercularis of inferior frontal gyrus	-0.388	0.030	[-0.447 - -0.329]	2.699E-38	1.050E-37	5009
Right pars orbitalis of inferior frontal gyrus	-0.330	0.021	[-0.372 - -0.288]	1.022E-53	2.385E-52	5023
Right pars triangularis of inferior frontal gyrus	-0.439	0.024	[-0.486 - -0.392]	9.040E-75	3.164E-73	5005
Right pericalcarine cortex	-0.160	0.027	[-0.213 - -0.106]	4.922E-09	5.469E-09	5049
Right postcentral gyrus	-0.249	0.026	[-0.301 - -0.197]	4.313E-21	6.038E-21	5032
Right posterior cingulate cortex	-0.325	0.031	[-0.387 - -0.264]	4.170E-25	6.789E-25	5049

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.323	0.030	[-0.381 - -0.265]	1.251E-27	2.503E-27	5033
Right precuneus	-0.350	0.029	[-0.407 - -0.293]	1.910E-33	4.952E-33	5035
Right rostral anterior cingulate cortex	-0.208	0.030	[-0.267 - -0.148]	6.848E-12	7.989E-12	5019
Right rostral middle frontal gyrus	-0.354	0.024	[-0.401 - -0.307]	1.489E-49	2.085E-48	5009
Right superior frontal gyrus	-0.414	0.027	[-0.467 - -0.361]	7.919E-53	1.386E-51	5037
Right superior parietal cortex	-0.257	0.029	[-0.313 - -0.201]	2.041E-19	2.696E-19	5013
Right superior temporal gyrus	-0.356	0.029	[-0.413 - -0.298]	1.075E-33	2.894E-33	4989
Right supramarginal gyrus	-0.362	0.028	[-0.417 - -0.307]	6.757E-38	2.489E-37	4967
Right frontal pole	-0.185	0.015	[-0.214 - -0.156]	2.971E-36	9.903E-36	5048
Right temporal pole	-0.044	0.020	[-0.084 - -0.004]	3.128E-02	3.220E-02	4952
Right transverse temporal gyrus	-0.275	0.023	[-0.32 - -0.229]	6.787E-32	1.592E-31	5051
Right insula	-0.316	0.027	[-0.368 - -0.263]	6.824E-32	1.592E-31	5043
Left hemisphere	-0.434	0.033	[-0.5 - -0.369]	8.134E-39	3.349E-38	5076
Right hemisphere	-0.435	0.031	[-0.497 - -0.374]	3.438E-44	2.674E-43	5073

**Supplementary Table S12.** Cortical thickness differences between unmedicated schizophrenia (SZ) and healthy volunteer (HV) groups

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients Unmedicated
Left banks of superior temporal sulcus	-0.180	0.061	[-0.3 - -0.06]	-1.36	3.233E-03	2.224E-02	2766	403
Left caudal anterior cingulate cortex	-0.013	0.060	[-0.131 - 0.105]	-0.38	8.293E-01	8.413E-01	2808	412
Left caudal middle frontal gyrus	-0.092	0.097	[-0.282 - 0.097]	-0.71	3.391E-01	3.956E-01	2804	408
Left cuneus	-0.102	0.081	[-0.261 - 0.057]	-0.89	2.088E-01	2.923E-01	2767	399
Left entorhinal cortex	-0.133	0.107	[-0.343 - 0.078]	-0.96	2.174E-01	2.984E-01	2739	393
Left fusiform gyrus	-0.335	0.097	[-0.525 - -0.144]	-1.94	5.667E-04	6.435E-03	2766	399
Left inferior parietal cortex	-0.152	0.108	[-0.363 - 0.059]	-1.35	1.575E-01	2.397E-01	2738	398
Left inferior temporal gyrus	-0.292	0.105	[-0.497 - -0.086]	-2.09	5.351E-03	2.676E-02	2760	401
Left isthmus cingulate cortex	-0.149	0.089	[-0.323 - 0.026]	-1.09	9.486E-02	1.760E-01	2807	412
Left lateral occipital cortex	-0.197	0.115	[-0.422 - 0.028]	-1.5	8.633E-02	1.679E-01	2779	405
Left lateral orbitofrontal cortex	-0.248	0.116	[-0.475 - -0.02]	-1.76	3.280E-02	9.185E-02	2808	412
Left lingual gyrus	-0.223	0.100	[-0.419 - -0.026]	-1.74	2.668E-02	8.119E-02	2800	411
Left medial orbitofrontal cortex	-0.124	0.144	[-0.407 - 0.159]	-0.92	3.904E-01	4.480E-01	2797	411
Left middle temporal gyrus	-0.267	0.098	[-0.459 - -0.075]	-1.66	6.408E-03	2.991E-02	2735	398
Left parahippocampal gyrus	-0.194	0.066	[-0.324 - -0.064]	-1.56	3.510E-03	2.224E-02	2792	406
Left paracentral lobule	-0.041	0.070	[-0.178 - 0.097]	-0.25	5.629E-01	5.860E-01	2804	411
Left pars opercularis of inferior frontal gyrus	-0.141	0.104	[-0.345 - 0.063]	-1.52	1.764E-01	2.569E-01	2792	405
Left pars orbitalis of inferior frontal gyrus	-0.276	0.127	[-0.524 - -0.028]	-2.35	2.919E-02	8.513E-02	2789	406
Left pars triangularis of inferior frontal gyrus	-0.178	0.101	[-0.375 - 0.019]	-1.59	7.697E-02	1.609E-01	2779	401
Left pericalcarine cortex	-0.058	0.102	[-0.259 - 0.143]	0.15	5.693E-01	5.860E-01	2809	412
Left postcentral gyrus	-0.136	0.086	[-0.305 - 0.033]	-0.86	1.137E-01	1.941E-01	2795	410
Left posterior cingulate cortex	-0.201	0.090	[-0.377 - -0.024]	-0.97	2.588E-02	8.119E-02	2808	411
Left precentral gyrus	-0.149	0.099	[-0.343 - 0.045]	-1.04	1.320E-01	2.065E-01	2802	410
Left precuneus	-0.179	0.108	[-0.392 - 0.033]	-1.18	9.806E-02	1.760E-01	2792	407
Left rostral anterior cingulate cortex	-0.099	0.064	[-0.225 - 0.028]	-0.7	1.254E-01	2.065E-01	2801	410
Left rostral middle frontal gyrus	-0.215	0.123	[-0.456 - 0.027]	-1.58	8.118E-02	1.624E-01	2790	404



	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients Unmedicated
Left superior frontal gyrus	-0.155	0.102	[-0.355 - 0.045]	-1.14	1.279E-01	2.065E-01	2803	408
Left superior parietal cortex	-0.068	0.100	[-0.263 - 0.127]	-0.61	4.955E-01	5.336E-01	2762	399
Left superior temporal gyrus	-0.193	0.085	[-0.359 - -0.026]	-1.18	2.355E-02	8.119E-02	2749	394
Left supramarginal gyrus	-0.131	0.087	[-0.302 - 0.04]	-1.21	1.327E-01	2.065E-01	2735	390
Left frontal pole	-0.190	0.092	[-0.371 - -0.01]	-2.5	3.877E-02	9.692E-02	2809	412
Left temporal pole	-0.156	0.075	[-0.303 - -0.01]	-1.07	3.638E-02	9.692E-02	2779	406
Left transverse temporal gyrus	-0.112	0.060	[-0.23 - 0.006]	-1.42	6.309E-02	1.425E-01	2808	412
Left insula	-0.272	0.078	[-0.424 - -0.12]	-1.11	4.527E-04	6.435E-03	2805	412
Right banks of superior temporal sulcus	-0.164	0.079	[-0.319 - -0.009]	-1.43	3.766E-02	9.692E-02	2785	404
Right caudal anterior cingulate cortex	-0.050	0.065	[-0.178 - 0.078]	-0.69	4.407E-01	4.875E-01	2808	412
Right caudal middle frontal gyrus	-0.063	0.061	[-0.182 - 0.056]	-0.64	2.958E-01	3.583E-01	2791	406
Right cuneus	-0.121	0.090	[-0.297 - 0.056]	-0.94	1.799E-01	2.569E-01	2782	402
Right entorhinal cortex	-0.102	0.091	[-0.28 - 0.076]	-1.09	2.602E-01	3.373E-01	2699	388
Right fusiform gyrus	-0.332	0.098	[-0.524 - -0.14]	-1.64	7.116E-04	6.435E-03	2767	406
Right inferior parietal cortex	-0.189	0.101	[-0.387 - 0.009]	-1.38	6.110E-02	1.425E-01	2734	390
Right inferior temporal gyrus	-0.314	0.093	[-0.497 - -0.132]	-2.06	7.354E-04	6.435E-03	2756	401
Right isthmus cingulate cortex	-0.203	0.112	[-0.423 - 0.016]	-1.65	6.883E-02	1.506E-01	2800	410
Right lateral occipital cortex	-0.150	0.125	[-0.395 - 0.095]	-1.25	2.294E-01	3.088E-01	2770	402
Right lateral orbitofrontal cortex	-0.103	0.124	[-0.346 - 0.14]	-1.1	4.058E-01	4.582E-01	2791	403
Right lingual gyrus	-0.220	0.125	[-0.464 - 0.025]	-1.84	7.817E-02	1.609E-01	2806	412
Right medial orbitofrontal cortex	-0.107	0.094	[-0.292 - 0.077]	-1.34	2.552E-01	3.371E-01	2776	399
Right middle temporal gyrus	-0.194	0.117	[-0.424 - 0.036]	-1.2	9.787E-02	1.760E-01	2743	396
Right parahippocampal gyrus	-0.175	0.073	[-0.318 - -0.032]	-1.34	1.642E-02	6.387E-02	2789	407
Right paracentral lobule	-0.054	0.082	[-0.216 - 0.107]	-0.39	5.114E-01	5.423E-01	2804	412
Right pars opercularis of inferior frontal gyrus	-0.243	0.061	[-0.362 - -0.123]	-1.84	7.035E-05	4.925E-03	2769	404
Right pars orbitalis of inferior frontal gyrus	-0.234	0.082	[-0.394 - -0.074]	-2.21	4.131E-03	2.224E-02	2783	410
Right pars triangularis of inferior frontal gyrus	-0.155	0.096	[-0.344 - 0.033]	-1.52	1.058E-01	1.851E-01	2763	404
Right pericalcarine cortex	0.004	0.107	[-0.206 - 0.213]	0.14	9.713E-01	9.713E-01	2808	411

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients Unmedicated
Right postcentral gyrus	-0.216	0.069	[-0.352 - -0.08]	-1.28	1.802E-03	1.401E-02	2795	410
Right posterior cingulate cortex	-0.148	0.067	[-0.279 - -0.018]	-1.18	2.607E-02	8.119E-02	2807	412
Right precentral gyrus	-0.167	0.087	[-0.337 - 0.003]	-1.15	5.472E-02	1.321E-01	2792	408
Right precuneus	-0.099	0.090	[-0.275 - 0.078]	-0.99	2.727E-01	3.471E-01	2796	407
Right rostral anterior cingulate cortex	-0.058	0.077	[-0.208 - 0.092]	0.16	4.457E-01	4.875E-01	2781	402
Right rostral middle frontal gyrus	-0.121	0.122	[-0.36 - 0.118]	-1.27	3.222E-01	3.823E-01	2768	404
Right superior frontal gyrus	-0.117	0.109	[-0.332 - 0.097]	-1.1	2.829E-01	3.536E-01	2793	405
Right superior parietal cortex	-0.084	0.081	[-0.242 - 0.074]	-0.73	2.969E-01	3.583E-01	2775	401
Right superior temporal gyrus	-0.367	0.097	[-0.558 - -0.177]	-2	1.541E-04	5.393E-03	2763	402
Right supramarginal gyrus	-0.225	0.078	[-0.378 - -0.072]	-1.61	4.001E-03	2.224E-02	2736	392
Right frontal pole	-0.083	0.060	[-0.201 - 0.035]	-1.32	1.686E-01	2.511E-01	2807	412
Right temporal pole	-0.195	0.084	[-0.359 - -0.03]	-1.79	2.035E-02	7.496E-02	2717	394
Right transverse temporal gyrus	-0.208	0.060	[-0.326 - -0.09]	-2.28	5.629E-04	6.435E-03	2810	412
Right insula	-0.337	0.094	[-0.52 - -0.153]	-1.62	3.295E-04	6.435E-03	2803	410
Left hemisphere	-0.275	0.114	[-0.498 - -0.052]	-1.29	1.561E-02	6.387E-02	2809	412
Right hemisphere	-0.278	0.112	[-0.497 - -0.059]	-1.34	1.289E-02	5.640E-02	2810	412

**Supplementary Table S13.** Cortical thickness differences between individuals with schizophrenia (SZ) on second-generation antipsychotic medications and healthy volunteers (HV)

	Cohen's d	Std. Err.	95% CI	% Difference LS Means	p-value	FDR p-value	N Controls	N Second Generation
Left banks of superior temporal sulcus	-0.352	0.047	[-0.444 - -0.26]	-2.65	5.946E-14	2.191E-13	4052	2161
Left caudal anterior cingulate cortex	-0.105	0.046	[-0.195 - -0.016]	-1.04	2.151E-02	2.182E-02	4090	2214
Left caudal middle frontal gyrus	-0.381	0.065	[-0.509 - -0.253]	-2.03	5.589E-09	9.543E-09	4090	2202
Left cuneus	-0.254	0.052	[-0.355 - -0.153]	-1.93	8.291E-07	1.055E-06	4052	2159
Left entorhinal cortex	-0.204	0.040	[-0.282 - -0.126]	-2.27	3.240E-07	4.200E-07	4004	2139
Left fusiform gyrus	-0.485	0.054	[-0.59 - -0.38]	-2.82	1.340E-19	1.563E-18	4050	2173
Left inferior parietal cortex	-0.368	0.050	[-0.467 - -0.27]	-2.07	2.452E-13	8.582E-13	4022	2120
Left inferior temporal gyrus	-0.405	0.048	[-0.5 - -0.311]	-2.49	4.626E-17	2.313E-16	4044	2148
Left isthmus cingulate cortex	-0.340	0.059	[-0.455 - -0.224]	-2.77	7.862E-09	1.251E-08	4093	2210
Left lateral occipital cortex	-0.328	0.058	[-0.442 - -0.214]	-2.09	1.539E-08	2.199E-08	4063	2172
Left lateral orbitofrontal cortex	-0.434	0.049	[-0.53 - -0.337]	-2.75	9.953E-19	9.210E-18	4093	2212
Left lingual gyrus	-0.390	0.055	[-0.498 - -0.282]	-2.84	1.382E-12	3.721E-12	4086	2208
Left medial orbitofrontal cortex	-0.248	0.056	[-0.357 - -0.139]	-1.66	8.099E-06	9.449E-06	4078	2208
Left middle temporal gyrus	-0.428	0.055	[-0.535 - -0.321]	-2.49	5.841E-15	2.272E-14	4020	2115
Left parahippocampal gyrus	-0.289	0.051	[-0.389 - -0.189]	-3.59	1.663E-08	2.329E-08	4076	2198
Left paracentral lobule	-0.270	0.049	[-0.365 - -0.174]	-1.66	3.081E-08	4.148E-08	4088	2210
Left pars opercularis of inferior frontal gyrus	-0.343	0.059	[-0.459 - -0.227]	-2.14	7.022E-09	1.143E-08	4079	2187
Left pars orbitalis of inferior frontal gyrus	-0.320	0.049	[-0.416 - -0.224]	-2.61	7.275E-11	1.591E-10	4071	2190
Left pars triangularis of inferior frontal gyrus	-0.348	0.048	[-0.442 - -0.254]	-2.3	3.937E-13	1.253E-12	4061	2175
Left pericalcarine cortex	-0.122	0.057	[-0.234 - -0.011]	-1.07	3.164E-02	3.164E-02	4093	2214
Left postcentral gyrus	-0.249	0.052	[-0.351 - -0.147]	-1.6	1.676E-06	2.095E-06	4079	2205
Left posterior cingulate cortex	-0.327	0.039	[-0.403 - -0.25]	-2	4.091E-17	2.203E-16	4094	2211
Left precentral gyrus	-0.352	0.056	[-0.462 - -0.242]	-1.95	3.333E-10	6.305E-10	4090	2201
Left precuneus	-0.281	0.049	[-0.378 - -0.184]	-1.82	1.294E-08	1.927E-08	4078	2193
Left rostral anterior cingulate cortex	-0.216	0.054	[-0.321 - -0.111]	-1.66	5.761E-05	6.401E-05	4084	2206

	Cohen's d	Std. Err.	95% CI	% Difference LS Means	p-value	FDR p-value	N Controls	N Second Generation
Left rostral middle frontal gyrus	-0.364	0.064	[-0.489 - -0.239]	-1.99	1.132E-08	1.761E-08	4075	2180
Left superior frontal gyrus	-0.449	0.069	[-0.584 - -0.313]	-2.28	8.191E-11	1.737E-10	4088	2207
Left superior parietal cortex	-0.189	0.045	[-0.276 - -0.101]	-1.07	2.420E-05	2.777E-05	4046	2161
Left superior temporal gyrus	-0.458	0.041	[-0.539 - -0.377]	-2.79	1.166E-28	8.162E-27	4015	2121
Left supramarginal gyrus	-0.395	0.055	[-0.503 - -0.288]	-2.17	5.181E-13	1.479E-12	4001	2115
Left frontal pole	-0.214	0.037	[-0.287 - -0.142]	-2.28	6.793E-09	1.132E-08	4090	2215
Left temporal pole	-0.266	0.044	[-0.353 - -0.179]	-2.29	1.821E-09	3.269E-09	4057	2185
Left transverse temporal gyrus	-0.284	0.044	[-0.371 - -0.197]	-2.6	1.772E-10	3.649E-10	4090	2217
Left insula	-0.443	0.052	[-0.544 - -0.341]	-2.29	1.201E-17	7.641E-17	4092	2212
Right banks of superior temporal sulcus	-0.340	0.053	[-0.445 - -0.236]	-2.63	1.892E-10	3.785E-10	4069	2185
Right caudal anterior cingulate cortex	-0.117	0.043	[-0.2 - -0.033]	-1.15	6.209E-03	6.585E-03	4094	2213
Right caudal middle frontal gyrus	-0.302	0.044	[-0.389 - -0.215]	-1.81	1.141E-11	2.853E-11	4078	2197
Right cuneus	-0.260	0.056	[-0.371 - -0.15]	-1.94	3.858E-06	4.577E-06	4068	2182
Right entorhinal cortex	-0.167	0.049	[-0.262 - -0.071]	-1.7	6.070E-04	6.537E-04	3975	2067
Right fusiform gyrus	-0.552	0.052	[-0.654 - -0.45]	-3.2	1.940E-26	6.789E-25	4053	2145
Right inferior parietal cortex	-0.336	0.053	[-0.44 - -0.232]	-1.92	2.216E-10	4.310E-10	4019	2119
Right inferior temporal gyrus	-0.426	0.048	[-0.52 - -0.331]	-2.57	1.184E-18	9.210E-18	4038	2155
Right isthmus cingulate cortex	-0.334	0.038	[-0.408 - -0.26]	-2.77	1.077E-18	9.210E-18	4082	2203
Right lateral occipital cortex	-0.342	0.066	[-0.47 - -0.213]	-2.07	1.870E-07	2.469E-07	4055	2164
Right lateral orbitofrontal cortex	-0.350	0.052	[-0.451 - -0.248]	-2.24	1.491E-11	3.598E-11	4077	2195
Right lingual gyrus	-0.432	0.053	[-0.536 - -0.327]	-2.96	4.357E-16	2.033E-15	4093	2212
Right medial orbitofrontal cortex	-0.248	0.034	[-0.315 - -0.181]	-1.96	3.660E-13	1.220E-12	4063	2186
Right middle temporal gyrus	-0.377	0.054	[-0.484 - -0.27]	-2.21	4.446E-12	1.153E-11	4031	2136
Right parahippocampal gyrus	-0.333	0.046	[-0.423 - -0.243]	-3.46	4.368E-13	1.329E-12	4077	2181
Right paracentral lobule	-0.231	0.050	[-0.328 - -0.133]	-1.41	3.463E-06	4.180E-06	4089	2208
Right pars opercularis of inferior frontal gyrus	-0.422	0.052	[-0.523 - -0.32]	-2.76	4.899E-16	2.143E-15	4053	2171
Right pars orbitalis of inferior frontal gyrus	-0.356	0.042	[-0.438 - -0.274]	-2.79	2.270E-17	1.324E-16	4069	2187
Right pars triangularis of inferior frontal gyrus	-0.356	0.063	[-0.479 - -0.233]	-2.12	1.399E-08	2.040E-08	4049	2168

	Cohen's d	Std. Err.	95% CI	% Difference LS Means	p-value	FDR p-value	N Controls	N Second Generation
Right pericalcarine cortex	-0.139	0.051	[-0.239 - -0.039]	-1.04	6.413E-03	6.700E-03	4095	2213
Right postcentral gyrus	-0.267	0.048	[-0.36 - -0.173]	-1.79	2.217E-08	3.043E-08	4079	2197
Right posterior cingulate cortex	-0.296	0.031	[-0.357 - -0.234]	-1.85	3.463E-21	4.848E-20	4093	2212
Right precentral gyrus	-0.311	0.053	[-0.415 - -0.207]	-1.74	5.050E-09	8.837E-09	4077	2196
Right precuneus	-0.304	0.049	[-0.401 - -0.208]	-1.81	6.663E-10	1.227E-09	4081	2187
Right rostral anterior cingulate cortex	-0.102	0.043	[-0.187 - -0.017]	-0.87	1.829E-02	1.883E-02	4063	2191
Right rostral middle frontal gyrus	-0.320	0.056	[-0.429 - -0.21]	-1.81	1.193E-08	1.816E-08	4054	2171
Right superior frontal gyrus	-0.409	0.061	[-0.529 - -0.289]	-2.09	2.025E-11	4.725E-11	4082	2201
Right superior parietal cortex	-0.198	0.052	[-0.3 - -0.096]	-1.16	1.395E-04	1.526E-04	4059	2178
Right superior temporal gyrus	-0.438	0.051	[-0.537 - -0.339]	-2.69	4.547E-18	3.183E-17	4037	2140
Right supramarginal gyrus	-0.384	0.053	[-0.488 - -0.28]	-2.21	5.284E-13	1.479E-12	4014	2111
Right frontal pole	-0.226	0.034	[-0.293 - -0.159]	-2.43	3.389E-11	7.653E-11	4092	2217
Right temporal pole	-0.237	0.056	[-0.347 - -0.127]	-1.94	2.498E-05	2.820E-05	3996	2104
Right transverse temporal gyrus	-0.241	0.051	[-0.341 - -0.14]	-2.54	2.800E-06	3.439E-06	4095	2215
Right insula	-0.415	0.051	[-0.516 - -0.315]	-2.29	5.601E-16	2.306E-15	4091	2214
Left hemisphere	-0.536	0.056	[-0.645 - -0.427]	-2.19	6.789E-22	1.188E-20	4098	2218
Right hemisphere	-0.516	0.053	[-0.62 - -0.412]	-2.13	3.017E-22	7.040E-21	4099	2218

**Supplementary Table S14.** Cortical thickness differences between individuals with schizophrenia (SZ) on first-generation antipsychotic medications and healthy volunteers (HV)

	Cohen's d	Std. Err.	95% CI	% Difference LS Means	p-value	FDR p-value	N Controls	N First Generation
Left banks of superior temporal sulcus	-0.408	0.058	[-0.521 - -0.295]	-4.06	1.780E-12	8.305E-12	2845	427
Left caudal anterior cingulate cortex	-0.193	0.097	[-0.383 - -0.003]	-0.48	4.622E-02	4.758E-02	2881	428
Left caudal middle frontal gyrus	-0.517	0.089	[-0.692 - -0.343]	-3.65	6.568E-09	1.393E-08	2880	430
Left cuneus	-0.311	0.078	[-0.463 - -0.159]	-2.19	6.137E-05	7.811E-05	2840	426
Left entorhinal cortex	-0.296	0.091	[-0.474 - -0.119]	-2.54	1.066E-03	1.244E-03	2815	428
Left fusiform gyrus	-0.575	0.100	[-0.771 - -0.379]	-3.69	8.896E-09	1.779E-08	2841	427
Left inferior parietal cortex	-0.529	0.085	[-0.696 - -0.361]	-3.1	5.611E-10	1.403E-09	2813	423
Left inferior temporal gyrus	-0.685	0.086	[-0.853 - -0.517]	-4.19	1.215E-15	1.063E-14	2833	427
Left isthmus cingulate cortex	-0.431	0.124	[-0.673 - -0.188]	-3.25	5.008E-04	5.941E-04	2882	428
Left lateral occipital cortex	-0.577	0.143	[-0.856 - -0.297]	-3.36	5.272E-05	6.963E-05	2854	425
Left lateral orbitofrontal cortex	-0.489	0.067	[-0.621 - -0.358]	-3.31	2.809E-13	1.464E-12	2883	429
Left lingual gyrus	-0.480	0.081	[-0.637 - -0.322]	-3.11	2.618E-09	6.108E-09	2875	429
Left medial orbitofrontal cortex	-0.230	0.093	[-0.413 - -0.047]	-1.84	1.362E-02	1.514E-02	2870	428
Left middle temporal gyrus	-0.695	0.125	[-0.941 - -0.45]	-3.78	2.848E-08	5.246E-08	2810	426
Left parahippocampal gyrus	-0.298	0.058	[-0.411 - -0.185]	-3.78	2.332E-07	3.797E-07	2865	428
Left paracentral lobule	-0.444	0.085	[-0.61 - -0.277]	-2.92	1.863E-07	3.180E-07	2879	429
Left pars opercularis of inferior frontal gyrus	-0.473	0.058	[-0.586 - -0.359]	-2.88	3.389E-16	3.389E-15	2868	428
Left pars orbitalis of inferior frontal gyrus	-0.426	0.058	[-0.54 - -0.313]	-4.09	1.553E-13	9.061E-13	2859	429
Left pars triangularis of inferior frontal gyrus	-0.467	0.070	[-0.604 - -0.33]	-3.73	2.579E-11	8.206E-11	2852	428
Left pericalcarine cortex	-0.238	0.104	[-0.443 - -0.034]	-1.34	2.222E-02	2.370E-02	2883	430
Left postcentral gyrus	-0.483	0.097	[-0.674 - -0.292]	-2.49	7.072E-07	1.076E-06	2869	428
Left posterior cingulate cortex	-0.320	0.057	[-0.432 - -0.207]	-2.56	2.603E-08	4.924E-08	2884	430
Left precentral gyrus	-0.394	0.058	[-0.507 - -0.281]	-2.99	8.420E-12	2.985E-11	2879	428
Left precuneus	-0.439	0.058	[-0.552 - -0.325]	-2.92	3.155E-14	2.208E-13	2868	429
Left rostral anterior cingulate cortex	-0.153	0.080	[-0.309 - 0.004]	-0.71	5.572E-02	5.653E-02	2875	428

	Cohen's d	Std. Err.	95% CI	% Difference LS Means	p-value	FDR p-value	N Controls	N First Generation
Left rostral middle frontal gyrus	-0.533	0.088	[-0.705 - -0.361]	-3.01	1.306E-09	3.153E-09	2863	428
Left superior frontal gyrus	-0.617	0.070	[-0.755 - -0.479]	-3.77	2.088E-18	7.307E-17	2880	430
Left superior parietal cortex	-0.405	0.100	[-0.601 - -0.208]	-2.22	5.528E-05	7.166E-05	2836	427
Left superior temporal gyrus	-0.641	0.092	[-0.821 - -0.461]	-3.49	3.285E-12	1.437E-11	2824	424
Left supramarginal gyrus	-0.588	0.112	[-0.807 - -0.369]	-3.27	1.481E-07	2.592E-07	2808	422
Left frontal pole	-0.244	0.057	[-0.356 - -0.132]	-2.97	2.101E-05	2.941E-05	2882	430
Left temporal pole	-0.303	0.095	[-0.488 - -0.117]	-2	1.402E-03	1.609E-03	2849	429
Left transverse temporal gyrus	-0.311	0.080	[-0.468 - -0.153]	-3.74	1.096E-04	1.370E-04	2880	430
Left insula	-0.595	0.106	[-0.801 - -0.388]	-3.18	1.773E-08	3.448E-08	2882	429
Right banks of superior temporal sulcus	-0.405	0.064	[-0.531 - -0.279]	-3.05	2.899E-10	7.516E-10	2865	427
Right caudal anterior cingulate cortex	-0.204	0.093	[-0.387 - -0.021]	-1.59	2.857E-02	2.985E-02	2884	430
Right caudal middle frontal gyrus	-0.407	0.061	[-0.527 - -0.287]	-2.88	2.788E-11	8.484E-11	2867	427
Right cuneus	-0.347	0.080	[-0.503 - -0.19]	-2.79	1.405E-05	2.007E-05	2855	428
Right entorhinal cortex	-0.138	0.074	[-0.283 - 0.008]	-1.2	6.350E-02	6.350E-02	2778	423
Right fusiform gyrus	-0.621	0.083	[-0.784 - -0.458]	-3.86	7.798E-14	4.963E-13	2843	426
Right inferior parietal cortex	-0.478	0.083	[-0.64 - -0.315]	-2.87	8.200E-09	1.688E-08	2809	424
Right inferior temporal gyrus	-0.464	0.058	[-0.578 - -0.35]	-3.31	1.701E-15	1.323E-14	2827	423
Right isthmus cingulate cortex	-0.377	0.058	[-0.49 - -0.264]	-3.75	6.006E-11	1.682E-10	2871	429
Right lateral occipital cortex	-0.595	0.142	[-0.874 - -0.316]	-3.88	2.872E-05	3.866E-05	2845	423
Right lateral orbitofrontal cortex	-0.388	0.066	[-0.518 - -0.258]	-2.59	5.057E-09	1.106E-08	2868	429
Right lingual gyrus	-0.524	0.101	[-0.721 - -0.326]	-3.54	2.074E-07	3.457E-07	2883	427
Right medial orbitofrontal cortex	-0.252	0.082	[-0.414 - -0.091]	-1.97	2.217E-03	2.503E-03	2852	428
Right middle temporal gyrus	-0.440	0.074	[-0.586 - -0.295]	-2.59	2.945E-09	6.651E-09	2820	424
Right parahippocampal gyrus	-0.299	0.059	[-0.414 - -0.184]	-3.71	3.374E-07	5.248E-07	2866	426
Right paracentral lobule	-0.296	0.058	[-0.409 - -0.183]	-2.48	2.649E-07	4.215E-07	2878	429
Right pars opercularis of inferior frontal gyrus	-0.484	0.058	[-0.598 - -0.371]	-3.34	6.942E-17	1.048E-15	2842	426
Right pars orbitalis of inferior frontal gyrus	-0.370	0.067	[-0.501 - -0.238]	-3.12	3.489E-08	6.262E-08	2856	428
Right pars triangularis of inferior frontal gyrus	-0.542	0.078	[-0.694 - -0.389]	-3.64	3.512E-12	1.446E-11	2838	426



	Cohen's d	Std. Err.	95% CI	% Difference LS Means	p-value	FDR p-value	N Controls	N First Generation
Right pericalcarine cortex	-0.255	0.104	[-0.459 - -0.051]	-1.7	1.430E-02	1.564E-02	2884	428
Right postcentral gyrus	-0.448	0.067	[-0.579 - -0.316]	-2.68	2.415E-11	8.051E-11	2868	430
Right posterior cingulate cortex	-0.411	0.092	[-0.591 - -0.231]	-2.17	7.840E-06	1.143E-05	2884	430
Right precentral gyrus	-0.398	0.058	[-0.511 - -0.285]	-2.69	5.447E-12	2.118E-11	2866	428
Right precuneus	-0.472	0.058	[-0.585 - -0.358]	-3.34	3.259E-16	3.389E-15	2869	429
Right rostral anterior cingulate cortex	-0.143	0.063	[-0.265 - -0.02]	-0.62	2.235E-02	2.370E-02	2853	429
Right rostral middle frontal gyrus	-0.448	0.068	[-0.582 - -0.314]	-2.7	5.727E-11	1.670E-10	2843	427
Right superior frontal gyrus	-0.621	0.085	[-0.787 - -0.454]	-3.64	2.927E-13	1.464E-12	2871	428
Right superior parietal cortex	-0.428	0.114	[-0.652 - -0.205]	-2.56	1.754E-04	2.117E-04	2847	430
Right superior temporal gyrus	-0.473	0.069	[-0.608 - -0.337]	-3	8.530E-12	2.985E-11	2839	423
Right supramarginal gyrus	-0.487	0.058	[-0.602 - -0.373]	-3.1	6.118E-17	1.048E-15	2811	425
Right frontal pole	-0.258	0.057	[-0.371 - -0.146]	-3.55	6.867E-06	1.023E-05	2881	429
Right temporal pole	-0.269	0.071	[-0.409 - -0.129]	-2.14	1.597E-04	1.961E-04	2786	422
Right transverse temporal gyrus	-0.389	0.093	[-0.57 - -0.208]	-3.69	2.636E-05	3.618E-05	2884	429
Right insula	-0.547	0.086	[-0.715 - -0.378]	-3.04	2.104E-10	5.664E-10	2881	429
Left hemisphere	-0.765	0.092	[-0.945 - -0.585]	-3.14	7.489E-17	1.048E-15	2887	430
Right hemisphere	-0.648	0.058	[-0.762 - -0.534]	-3.04	6.660E-29	4.662E-27	2888	430



**Supplementary Table S15.** Cortical thickness differences between individuals with schizophrenia (SZ) on both first-generation and second-generation antipsychotic medications and healthy volunteers (HV)

	Cohen's d	Std. Err.	95% CI	% Difference LS Means	p-value	FDR p-value	N Control s	N First and Second Generatio n
Left banks of superior temporal sulcus	-0.431	0.077	[-0.582 - -0.28]	-3.38	2.223E-08	5.558E-08	3108	244
Left caudal anterior cingulate cortex	-0.252	0.102	[-0.452 - -0.051]	-2.08	1.384E-02	1.553E-02	3141	246
Left caudal middle frontal gyrus	-0.559	0.069	[-0.695 - -0.424]	-3.43	6.588E-16	1.537E-14	3141	245
Left cuneus	-0.283	0.072	[-0.424 - -0.142]	-2.7	8.397E-05	1.153E-04	3101	243
Left entorhinal cortex	-0.292	0.098	[-0.483 - -0.101]	-2.85	2.734E-03	3.299E-03	3077	244
Left fusiform gyrus	-0.683	0.106	[-0.892 - -0.474]	-3.9	1.428E-10	6.249E-10	3102	244
Left inferior parietal cortex	-0.471	0.070	[-0.609 - -0.334]	-2.41	1.591E-11	7.953E-11	3075	240
Left inferior temporal gyrus	-0.586	0.094	[-0.771 - -0.401]	-3.41	5.490E-10	2.135E-09	3094	243
Left isthmus cingulate cortex	-0.495	0.069	[-0.63 - -0.359]	-3.61	7.838E-13	6.096E-12	3143	246
Left lateral occipital cortex	-0.439	0.096	[-0.627 - -0.251]	-2.53	4.974E-06	7.913E-06	3114	242
Left lateral orbitofrontal cortex	-0.552	0.102	[-0.751 - -0.352]	-3.39	5.951E-08	1.344E-07	3144	246
Left lingual gyrus	-0.442	0.103	[-0.645 - -0.24]	-3.06	1.911E-05	2.761E-05	3135	246
Left medial orbitofrontal cortex	-0.244	0.099	[-0.439 - -0.05]	-1.84	1.398E-02	1.553E-02	3130	245
Left middle temporal gyrus	-0.662	0.133	[-0.923 - -0.4]	-3.92	6.840E-07	1.294E-06	3073	244
Left parahippocampal gyrus	-0.352	0.120	[-0.586 - -0.117]	-4.31	3.287E-03	3.900E-03	3126	245
Left paracentral lobule	-0.305	0.069	[-0.441 - -0.169]	-1.69	1.054E-05	1.603E-05	3139	245
Left pars opercularis of inferior frontal gyrus	-0.575	0.085	[-0.742 - -0.408]	-3.29	1.509E-11	7.953E-11	3128	246
Left pars orbitalis of inferior frontal gyrus	-0.438	0.120	[-0.673 - -0.203]	-4.08	2.551E-04	3.307E-04	3120	241
Left pars triangularis of inferior frontal gyrus	-0.477	0.069	[-0.613 - -0.341]	-3.55	6.146E-12	3.911E-11	3115	243
Left pericalcarine cortex	-0.076	0.126	[-0.323 - 0.17]	-1.14	5.442E-01	5.521E-01	3142	245
Left postcentral gyrus	-0.415	0.069	[-0.551 - -0.28]	-2.3	1.996E-09	6.700E-09	3130	245
Left posterior cingulate cortex	-0.388	0.069	[-0.523 - -0.253]	-2.8	1.822E-08	4.905E-08	3145	246
Left precentral gyrus	-0.565	0.078	[-0.719 - -0.412]	-3.04	5.453E-13	4.771E-12	3140	246
Left precuneus	-0.468	0.078	[-0.621 - -0.315]	-2.6	2.010E-09	6.700E-09	3129	245

	Cohen's d	Std. Err.	95% CI	% Difference LS Means	p-value	FDR p-value	N Control s	N First and Second Generatio n
Left rostral anterior cingulate cortex	-0.198	0.096	[-0.386 - -0.011]	-2.57	3.840E-02	4.072E-02	3138	245
Left rostral middle frontal gyrus	-0.602	0.131	[-0.86 - -0.345]	-3.54	4.442E-06	7.231E-06	3125	241
Left superior frontal gyrus	-0.666	0.121	[-0.903 - -0.429]	-3.84	3.706E-08	8.944E-08	3140	245
Left superior parietal cortex	-0.259	0.069	[-0.395 - -0.124]	-1.38	1.784E-04	2.356E-04	3097	244
Left superior temporal gyrus	-0.587	0.117	[-0.816 - -0.357]	-3.47	5.417E-07	1.053E-06	3085	238
Left supramarginal gyrus	-0.518	0.070	[-0.655 - -0.38]	-2.78	1.684E-13	2.064E-12	3070	239
Left frontal pole	-0.294	0.069	[-0.429 - -0.159]	-2.79	1.933E-05	2.761E-05	3143	246
Left temporal pole	-0.273	0.126	[-0.52 - -0.026]	-2.82	3.020E-02	3.253E-02	3112	245
Left transverse temporal gyrus	-0.323	0.069	[-0.458 - -0.188]	-2.66	2.802E-06	4.670E-06	3140	245
Left insula	-0.495	0.103	[-0.696 - -0.293]	-2.57	1.574E-06	2.825E-06	3143	246
Right banks of superior temporal sulcus	-0.415	0.079	[-0.57 - -0.26]	-3.49	1.521E-07	3.227E-07	3127	245
Right caudal anterior cingulate cortex	-0.203	0.079	[-0.357 - -0.049]	-1.51	9.771E-03	1.140E-02	3145	244
Right caudal middle frontal gyrus	-0.442	0.069	[-0.578 - -0.307]	-2.75	1.520E-10	6.258E-10	3128	245
Right cuneus	-0.182	0.107	[-0.391 - 0.027]	-1.51	8.781E-02	9.175E-02	3116	246
Right entorhinal cortex	-0.265	0.117	[-0.494 - -0.037]	-2.46	2.303E-02	2.519E-02	3039	242
Right fusiform gyrus	-0.694	0.094	[-0.879 - -0.509]	-3.53	1.769E-13	2.064E-12	3104	244
Right inferior parietal cortex	-0.499	0.089	[-0.674 - -0.324]	-2.99	2.201E-08	5.558E-08	3070	244
Right inferior temporal gyrus	-0.557	0.073	[-0.7 - -0.414]	-3.43	2.644E-14	4.627E-13	3088	241
Right isthmus cingulate cortex	-0.466	0.069	[-0.602 - -0.331]	-3.76	1.326E-11	7.735E-11	3133	246
Right lateral occipital cortex	-0.417	0.167	[-0.744 - -0.09]	-3.01	1.254E-02	1.439E-02	3106	244
Right lateral orbitofrontal cortex	-0.505	0.069	[-0.641 - -0.37]	-3.15	2.638E-13	2.638E-12	3129	245
Right lingual gyrus	-0.423	0.089	[-0.597 - -0.249]	-2.78	1.943E-06	3.400E-06	3144	246
Right medial orbitofrontal cortex	-0.294	0.078	[-0.446 - -0.141]	-2.43	1.678E-04	2.259E-04	3113	245
Right middle temporal gyrus	-0.555	0.109	[-0.769 - -0.341]	-3.29	3.529E-07	7.057E-07	3081	242
Right parahippocampal gyrus	-0.442	0.086	[-0.61 - -0.274]	-4.38	2.683E-07	5.524E-07	3127	245
Right paracentral lobule	-0.325	0.094	[-0.508 - -0.141]	-1.89	5.245E-04	6.675E-04	3139	246

	Cohen's d	Std. Err.	95% CI	% Difference LS Means	p-value	FDR p-value	N Control s	N First and Second Generatio n
Right pars opercularis of inferior frontal gyrus	-0.533	0.091	[-0.712 - -0.354]	-3.59	5.380E-09	1.637E-08	3103	243
Right pars orbitalis of inferior frontal gyrus	-0.341	0.077	[-0.492 - -0.189]	-3.08	1.045E-05	1.603E-05	3117	246
Right pars triangularis of inferior frontal gyrus	-0.500	0.106	[-0.708 - -0.293]	-3.76	2.152E-06	3.674E-06	3099	245
Right pericalcarine cortex	-0.045	0.111	[-0.263 - 0.173]	-0.55	6.871E-01	6.871E-01	3144	246
Right postcentral gyrus	-0.434	0.088	[-0.606 - -0.262]	-2.16	7.788E-07	1.435E-06	3129	245
Right posterior cingulate cortex	-0.404	0.069	[-0.539 - -0.269]	-2.43	4.368E-09	1.390E-08	3145	246
Right precentral gyrus	-0.486	0.069	[-0.623 - -0.35]	-2.84	2.594E-12	1.816E-11	3127	243
Right precuneus	-0.405	0.077	[-0.556 - -0.254]	-2.12	1.498E-07	3.227E-07	3131	246
Right rostral anterior cingulate cortex	-0.068	0.073	[-0.212 - 0.075]	-0.23	3.497E-01	3.600E-01	3115	246
Right rostral middle frontal gyrus	-0.380	0.121	[-0.617 - -0.143]	-2.61	1.689E-03	2.111E-03	3104	243
Right superior frontal gyrus	-0.659	0.110	[-0.874 - -0.444]	-3.68	1.933E-09	6.700E-09	3132	244
Right superior parietal cortex	-0.284	0.069	[-0.42 - -0.148]	-1.69	4.076E-05	5.706E-05	3108	245
Right superior temporal gyrus	-0.549	0.097	[-0.739 - -0.358]	-3.34	1.583E-08	4.433E-08	3100	243
Right supramarginal gyrus	-0.531	0.097	[-0.721 - -0.341]	-2.5	4.525E-08	1.056E-07	3072	244
Right frontal pole	-0.300	0.069	[-0.434 - -0.165]	-3.31	1.359E-05	2.024E-05	3142	245
Right temporal pole	-0.344	0.112	[-0.563 - -0.125]	-3.13	2.062E-03	2.532E-03	3047	244
Right transverse temporal gyrus	-0.391	0.069	[-0.526 - -0.256]	-3.75	1.366E-08	3.983E-08	3145	246
Right insula	-0.444	0.069	[-0.579 - -0.309]	-2.43	1.237E-10	5.774E-10	3142	246
Left hemisphere	-0.770	0.087	[-0.941 - -0.599]	-3.05	1.066E-18	7.460E-17	3148	246
Right hemisphere	-0.704	0.083	[-0.867 - -0.542]	-2.83	2.190E-17	7.666E-16	3149	246

**Supplementary Table S16.** Cortical thickness differences between individuals with schizophrenia (SZ) on second-generation antipsychotic medications and individuals with SZ who are unmedicated

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N Second Generation
Left banks of superior temporal sulcus	-0.126	0.064	[-0.252 - 0.001]	-0.97	5.106E-02	1.892E-01	388	1400
Left caudal anterior cingulate cortex	-0.055	0.063	[-0.179 - 0.07]	-0.44	3.893E-01	4.699E-01	397	1448
Left caudal middle frontal gyrus	-0.142	0.073	[-0.285 - 0.001]	-0.97	5.136E-02	1.892E-01	393	1437
Left cuneus	-0.062	0.065	[-0.189 - 0.064]	-0.58	3.354E-01	4.348E-01	384	1394
Left entorhinal cortex	-0.046	0.065	[-0.174 - 0.082]	-0.53	4.816E-01	5.351E-01	379	1386
Left fusiform gyrus	-0.147	0.065	[-0.274 - -0.02]	-0.71	2.313E-02	1.334E-01	384	1410
Left inferior parietal cortex	-0.130	0.085	[-0.297 - 0.037]	-0.84	1.259E-01	2.854E-01	383	1355
Left inferior temporal gyrus	-0.093	0.065	[-0.22 - 0.034]	-0.49	1.502E-01	3.005E-01	386	1382
Left isthmus cingulate cortex	-0.156	0.067	[-0.288 - -0.024]	-1.45	2.017E-02	1.287E-01	397	1441
Left lateral occipital cortex	-0.068	0.069	[-0.204 - 0.068]	-0.35	3.271E-01	4.348E-01	390	1404
Left lateral orbitofrontal cortex	-0.194	0.078	[-0.347 - -0.041]	-0.99	1.319E-02	1.158E-01	397	1445
Left lingual gyrus	-0.131	0.064	[-0.255 - -0.006]	-0.93	3.978E-02	1.740E-01	396	1440
Left medial orbitofrontal cortex	-0.136	0.123	[-0.377 - 0.105]	-0.74	2.685E-01	3.836E-01	396	1438
Left middle temporal gyrus	-0.123	0.065	[-0.251 - 0.004]	-0.6	5.798E-02	1.951E-01	383	1348
Left parahippocampal gyrus	-0.121	0.064	[-0.247 - 0.004]	-1.13	5.854E-02	1.951E-01	391	1429
Left paracentral lobule	-0.078	0.063	[-0.203 - 0.046]	-0.81	2.167E-01	3.370E-01	396	1444
Left pars opercularis of inferior frontal gyrus	-0.113	0.089	[-0.288 - 0.062]	-0.81	2.057E-01	3.273E-01	390	1419
Left pars orbitalis of inferior frontal gyrus	-0.014	0.065	[-0.141 - 0.113]	-0.1	8.322E-01	8.442E-01	391	1421
Left pars triangularis of inferior frontal gyrus	-0.149	0.092	[-0.329 - 0.031]	-0.69	1.058E-01	2.666E-01	386	1405
Left pericalcarine cortex	-0.021	0.065	[-0.148 - 0.105]	-0.37	7.417E-01	7.635E-01	397	1446
Left postcentral gyrus	-0.057	0.093	[-0.24 - 0.126]	-0.3	5.394E-01	5.809E-01	395	1437
Left posterior cingulate cortex	-0.118	0.069	[-0.254 - 0.017]	-0.89	8.703E-02	2.538E-01	396	1445
Left precentral gyrus	-0.066	0.074	[-0.21 - 0.079]	-0.54	3.727E-01	4.577E-01	395	1435
Left precuneus	-0.084	0.064	[-0.209 - 0.041]	-0.51	1.885E-01	3.273E-01	392	1428
Left rostral anterior cingulate cortex	-0.085	0.064	[-0.21 - 0.04]	-0.61	1.821E-01	3.273E-01	395	1439

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N Second Generation
Left rostral middle frontal gyrus	-0.129	0.091	[-0.308 - 0.05]	-0.59	1.569E-01	3.050E-01	389	1412
Left superior frontal gyrus	-0.193	0.064	[-0.319 - -0.068]	-0.79	2.455E-03	4.059E-02	393	1439
Left superior parietal cortex	-0.083	0.065	[-0.21 - 0.044]	-0.43	2.022E-01	3.273E-01	384	1393
Left superior temporal gyrus	-0.209	0.065	[-0.337 - -0.081]	-1.27	1.415E-03	3.302E-02	379	1363
Left supramarginal gyrus	-0.139	0.066	[-0.268 - -0.011]	-0.86	3.402E-02	1.610E-01	375	1360
Left frontal pole	-0.049	0.063	[-0.173 - 0.075]	-0.26	4.375E-01	5.020E-01	397	1448
Left temporal pole	-0.061	0.064	[-0.186 - 0.065]	-0.3	3.422E-01	4.355E-01	391	1422
Left transverse temporal gyrus	-0.102	0.063	[-0.227 - 0.022]	-0.93	1.066E-01	2.666E-01	397	1448
Left insula	-0.142	0.063	[-0.267 - -0.018]	-0.63	2.478E-02	1.334E-01	397	1447
Right banks of superior temporal sulcus	-0.113	0.064	[-0.238 - 0.013]	-1.06	7.843E-02	2.495E-01	390	1418
Right caudal anterior cingulate cortex	-0.042	0.063	[-0.167 - 0.082]	-0.26	5.043E-01	5.515E-01	397	1446
Right caudal middle frontal gyrus	-0.159	0.064	[-0.284 - -0.033]	-0.88	1.324E-02	1.158E-01	391	1428
Right cuneus	-0.070	0.064	[-0.196 - 0.057]	-0.41	2.792E-01	3.909E-01	387	1418
Right entorhinal cortex	-0.064	0.066	[-0.193 - 0.066]	-0.15	3.347E-01	4.348E-01	376	1310
Right fusiform gyrus	-0.219	0.067	[-0.349 - -0.089]	-1.17	9.981E-04	3.302E-02	391	1376
Right inferior parietal cortex	-0.097	0.066	[-0.226 - 0.032]	-0.61	1.404E-01	2.978E-01	375	1356
Right inferior temporal gyrus	-0.095	0.065	[-0.222 - 0.031]	-0.37	1.394E-01	2.978E-01	386	1390
Right isthmus cingulate cortex	-0.138	0.109	[-0.352 - 0.075]	-1	2.042E-01	3.273E-01	395	1436
Right lateral occipital cortex	-0.099	0.085	[-0.265 - 0.067]	-0.74	2.423E-01	3.571E-01	387	1396
Right lateral orbitofrontal cortex	-0.233	0.067	[-0.364 - -0.102]	-1.03	4.940E-04	3.302E-02	388	1430
Right lingual gyrus	-0.105	0.063	[-0.229 - 0.02]	-0.69	9.844E-02	2.650E-01	397	1442
Right medial orbitofrontal cortex	-0.106	0.083	[-0.269 - 0.056]	-0.35	2.008E-01	3.273E-01	384	1419
Right middle temporal gyrus	-0.093	0.078	[-0.246 - 0.059]	-0.47	2.303E-01	3.505E-01	381	1369
Right parahippocampal gyrus	-0.158	0.075	[-0.304 - -0.012]	-1.53	3.449E-02	1.610E-01	392	1411
Right paracentral lobule	-0.003	0.063	[-0.127 - 0.121]	-0.35	9.638E-01	9.638E-01	397	1441
Right pars opercularis of inferior frontal gyrus	-0.127	0.064	[-0.253 - -0.001]	-0.7	4.766E-02	1.892E-01	389	1401
Right pars orbitalis of inferior frontal gyrus	-0.105	0.064	[-0.23 - 0.019]	-0.5	9.813E-02	2.650E-01	395	1420
Right pars triangularis of inferior frontal gyrus	-0.192	0.064	[-0.318 - -0.066]	-1.05	2.899E-03	4.059E-02	389	1399

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N Second Generation
Right pericalcarine cortex	-0.084	0.066	[-0.213 - 0.045]	-0.61	2.007E-01	3.273E-01	396	1446
Right postcentral gyrus	-0.046	0.064	[-0.171 - 0.079]	-0.44	4.703E-01	5.310E-01	395	1432
Right posterior cingulate cortex	-0.078	0.084	[-0.242 - 0.087]	-0.2	3.550E-01	4.437E-01	397	1444
Right precentral gyrus	-0.033	0.074	[-0.179 - 0.113]	-0.28	6.563E-01	6.857E-01	393	1428
Right precuneus	-0.098	0.064	[-0.223 - 0.028]	-0.63	1.264E-01	2.854E-01	392	1421
Right rostral anterior cingulate cortex	-0.067	0.064	[-0.193 - 0.059]	-0.39	2.980E-01	4.090E-01	387	1423
Right rostral middle frontal gyrus	-0.165	0.106	[-0.373 - 0.044]	-0.51	1.222E-01	2.854E-01	389	1403
Right superior frontal gyrus	-0.189	0.081	[-0.348 - -0.029]	-0.64	2.022E-02	1.287E-01	390	1432
Right superior parietal cortex	-0.054	0.065	[-0.18 - 0.073]	-0.53	4.034E-01	4.786E-01	386	1410
Right superior temporal gyrus	-0.093	0.065	[-0.22 - 0.034]	-0.58	1.495E-01	3.005E-01	387	1381
Right supramarginal gyrus	-0.083	0.066	[-0.212 - 0.045]	-0.51	2.051E-01	3.273E-01	377	1350
Right frontal pole	-0.110	0.063	[-0.234 - 0.014]	-0.98	8.328E-02	2.535E-01	397	1448
Right temporal pole	-0.035	0.065	[-0.163 - 0.094]	-0.1	5.965E-01	6.326E-01	379	1338
Right transverse temporal gyrus	0.051	0.063	[-0.073 - 0.176]	0	4.181E-01	4.878E-01	397	1448
Right insula	-0.074	0.064	[-0.199 - 0.051]	-0.38	2.449E-01	3.571E-01	395	1445
Left hemisphere	-0.169	0.063	[-0.294 - -0.045]	-0.73	7.569E-03	8.831E-02	397	1448
Right hemisphere	-0.152	0.063	[-0.276 - -0.027]	-0.61	1.673E-02	1.287E-01	397	1448

**Supplementary Table S17.** Cortical thickness differences between individuals with schizophrenia (SZ) on first-generation antipsychotic medications and individuals with SZ who are unmedicated

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N First Generation
Left banks of superior temporal sulcus	-0.295	0.199	[-0.684 - 0.095]	-1.83	1.382E-01	2.899E-01	204	242
Left caudal anterior cingulate cortex	-0.022	0.107	[-0.231 - 0.188]	-0.66	8.400E-01	8.909E-01	213	245
Left caudal middle frontal gyrus	-0.280	0.171	[-0.616 - 0.056]	-2.23	1.021E-01	2.464E-01	209	245
Left cuneus	-0.024	0.109	[-0.238 - 0.189]	-0.66	8.220E-01	8.909E-01	200	242
Left entorhinal cortex	-0.086	0.108	[-0.298 - 0.125]	0.29	4.246E-01	5.390E-01	195	245
Left fusiform gyrus	-0.214	0.150	[-0.509 - 0.08]	-1.12	1.541E-01	3.081E-01	200	242
Left inferior parietal cortex	-0.351	0.162	[-0.668 - -0.035]	-1.86	2.970E-02	1.094E-01	199	239
Left inferior temporal gyrus	-0.292	0.109	[-0.505 - -0.078]	-1.9	7.442E-03	6.494E-02	202	242
Left isthmus cingulate cortex	-0.039	0.131	[-0.295 - 0.217]	-0.45	7.661E-01	8.650E-01	213	243
Left lateral occipital cortex	-0.364	0.229	[-0.813 - 0.085]	-1.25	1.125E-01	2.625E-01	206	242
Left lateral orbitofrontal cortex	-0.221	0.143	[-0.501 - 0.06]	-0.55	1.230E-01	2.778E-01	213	245
Left lingual gyrus	-0.181	0.138	[-0.451 - 0.089]	-1.4	1.880E-01	3.518E-01	212	244
Left medial orbitofrontal cortex	-0.125	0.213	[-0.543 - 0.293]	0.02	5.570E-01	6.608E-01	212	245
Left middle temporal gyrus	-0.279	0.168	[-0.608 - 0.05]	-1.95	9.606E-02	2.402E-01	199	241
Left parahippocampal gyrus	-0.086	0.108	[-0.298 - 0.126]	0.02	4.251E-01	5.390E-01	207	243
Left paracentral lobule	-0.418	0.108	[-0.63 - -0.206]	-3.61	1.129E-04	7.900E-03	212	245
Left pars opercularis of inferior frontal gyrus	-0.175	0.116	[-0.401 - 0.052]	-1.07	1.318E-01	2.883E-01	206	243
Left pars orbitalis of inferior frontal gyrus	-0.101	0.141	[-0.378 - 0.176]	-0.57	4.742E-01	5.823E-01	207	244
Left pars triangularis of inferior frontal gyrus	-0.262	0.108	[-0.474 - -0.049]	-1.59	1.565E-02	7.824E-02	202	244
Left pericalcarine cortex	-0.029	0.185	[-0.392 - 0.333]	-0.64	8.743E-01	9.104E-01	213	245
Left postcentral gyrus	-0.243	0.127	[-0.493 - 0.006]	-1.96	5.564E-02	1.648E-01	211	243
Left posterior cingulate cortex	-0.148	0.112	[-0.367 - 0.072]	-1.25	1.874E-01	3.518E-01	212	245
Left precentral gyrus	-0.137	0.136	[-0.404 - 0.129]	-1.81	3.123E-01	4.752E-01	211	243
Left precuneus	-0.196	0.133	[-0.457 - 0.065]	-1.28	1.408E-01	2.899E-01	208	244
Left rostral anterior cingulate cortex	-0.060	0.113	[-0.282 - 0.162]	-1.03	5.968E-01	6.963E-01	211	244



	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N First Generation
Left rostral middle frontal gyrus	-0.264	0.139	[-0.536 - 0.007]	-1.18	5.649E-02	1.648E-01	205	244
Left superior frontal gyrus	-0.401	0.123	[-0.642 - -0.159]	-2.01	1.165E-03	4.078E-02	209	245
Left superior parietal cortex	-0.254	0.127	[-0.502 - -0.005]	-1.92	4.566E-02	1.522E-01	200	242
Left superior temporal gyrus	-0.271	0.110	[-0.487 - -0.054]	-1.58	1.419E-02	7.824E-02	195	239
Left supramarginal gyrus	-0.257	0.137	[-0.525 - 0.011]	-1.43	6.012E-02	1.683E-01	191	237
Left frontal pole	-0.096	0.107	[-0.306 - 0.113]	-0.72	3.689E-01	5.125E-01	213	245
Left temporal pole	-0.042	0.199	[-0.433 - 0.348]	0.36	8.311E-01	8.909E-01	207	245
Left transverse temporal gyrus	-0.108	0.137	[-0.376 - 0.161]	-1.55	4.312E-01	5.390E-01	213	245
Left insula	-0.182	0.163	[-0.501 - 0.136]	-0.7	2.622E-01	4.104E-01	213	244
Right banks of superior temporal sulcus	-0.243	0.109	[-0.457 - -0.03]	-1.4	2.527E-02	1.040E-01	206	242
Right caudal anterior cingulate cortex	-0.138	0.107	[-0.347 - 0.072]	-1.33	1.987E-01	3.536E-01	213	245
Right caudal middle frontal gyrus	-0.313	0.109	[-0.527 - -0.1]	-2.11	4.045E-03	5.663E-02	207	242
Right cuneus	-0.187	0.167	[-0.515 - 0.141]	-0.42	2.638E-01	4.104E-01	203	245
Right entorhinal cortex	-0.098	0.110	[-0.313 - 0.117]	0.66	3.729E-01	5.125E-01	192	238
Right fusiform gyrus	-0.338	0.131	[-0.596 - -0.081]	-1.76	9.879E-03	6.494E-02	207	242
Right inferior parietal cortex	-0.290	0.110	[-0.507 - -0.074]	-1.66	8.578E-03	6.494E-02	191	239
Right inferior temporal gyrus	-0.187	0.110	[-0.402 - 0.027]	-0.99	8.693E-02	2.254E-01	202	239
Right isthmus cingulate cortex	-0.087	0.132	[-0.346 - 0.173]	-0.44	5.127E-01	6.187E-01	211	244
Right lateral occipital cortex	-0.439	0.171	[-0.773 - -0.104]	-2.22	1.021E-02	6.494E-02	203	240
Right lateral orbitofrontal cortex	-0.312	0.108	[-0.523 - -0.1]	-1.38	3.923E-03	5.663E-02	204	244
Right lingual gyrus	-0.221	0.169	[-0.553 - 0.11]	-1.49	1.910E-01	3.518E-01	213	244
Right medial orbitofrontal cortex	-0.116	0.125	[-0.362 - 0.13]	-0.34	3.546E-01	5.125E-01	200	243
Right middle temporal gyrus	-0.217	0.120	[-0.453 - 0.019]	-1.25	7.173E-02	1.931E-01	197	240
Right parahippocampal gyrus	-0.096	0.111	[-0.314 - 0.121]	-0.39	3.866E-01	5.204E-01	208	241
Right paracentral lobule	-0.236	0.107	[-0.446 - -0.027]	-2.7	2.726E-02	1.060E-01	213	245
Right pars opercularis of inferior frontal gyrus	-0.096	0.108	[-0.308 - 0.116]	-0.81	3.734E-01	5.125E-01	205	242
Right pars orbitalis of inferior frontal gyrus	-0.136	0.108	[-0.347 - 0.075]	-0.34	2.071E-01	3.536E-01	211	243
Right pars triangularis of inferior frontal gyrus	-0.264	0.109	[-0.477 - -0.051]	-1.58	1.528E-02	7.824E-02	205	241



	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N First Generation
Right pericalcarine cortex	-0.150	0.119	[-0.383 - 0.083]	-0.93	2.059E-01	3.536E-01	212	245
Right postcentral gyrus	-0.217	0.107	[-0.427 - -0.006]	-1.95	4.357E-02	1.522E-01	211	245
Right posterior cingulate cortex	-0.132	0.143	[-0.413 - 0.148]	-1.4	3.543E-01	5.125E-01	213	245
Right precentral gyrus	-0.039	0.163	[-0.359 - 0.281]	-1.39	8.104E-01	8.909E-01	209	243
Right precuneus	-0.304	0.108	[-0.515 - -0.092]	-1.99	4.948E-03	5.773E-02	208	244
Right rostral anterior cingulate cortex	-0.040	0.108	[-0.252 - 0.171]	-0.6	7.076E-01	8.120E-01	203	244
Right rostral middle frontal gyrus	-0.184	0.148	[-0.475 - 0.107]	-0.41	2.145E-01	3.575E-01	205	242
Right superior frontal gyrus	-0.392	0.145	[-0.676 - -0.109]	-1.63	6.662E-03	6.494E-02	206	243
Right superior parietal cortex	-0.351	0.148	[-0.641 - -0.062]	-2.21	1.746E-02	8.149E-02	202	245
Right superior temporal gyrus	0.012	0.109	[-0.202 - 0.227]	0.09	9.104E-01	9.104E-01	203	239
Right supramarginal gyrus	-0.147	0.121	[-0.384 - 0.09]	-1.1	2.255E-01	3.671E-01	193	240
Right frontal pole	-0.210	0.107	[-0.42 - 0]	-1.61	5.044E-02	1.605E-01	213	245
Right temporal pole	-0.014	0.119	[-0.246 - 0.219]	0.32	9.085E-01	9.104E-01	195	239
Right transverse temporal gyrus	-0.013	0.107	[-0.223 - 0.197]	-0.83	9.016E-01	9.104E-01	213	244
Right insula	-0.087	0.107	[-0.297 - 0.123]	-0.27	4.161E-01	5.390E-01	211	244
Left hemisphere	-0.338	0.150	[-0.633 - -0.044]	-1.45	2.425E-02	1.040E-01	213	245
Right hemisphere	-0.317	0.108	[-0.528 - -0.106]	-1.37	3.219E-03	5.663E-02	213	245

**Supplementary Table S18.** Cortical thickness differences between individuals with schizophrenia (SZ) on both first-generation and second-generation antipsychotic medications individuals with SZ who are unmedicated

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p- value	N Unmedicate d	N First And Second Generatio n
Left banks of superior temporal sulcus	-0.342	0.185	[-0.705 - 0.02]	-2.7	6.41E-02	2.11E-01	167	145
Left caudal anterior cingulate cortex	-0.152	0.126	[-0.399 - 0.094]	-2.11	2.26E-01	3.95E-01	176	147
Left caudal middle frontal gyrus	-0.315	0.197	[-0.7 - 0.07]	-1.96	1.09E-01	2.38E-01	172	146
Left cuneus	-0.040	0.150	[-0.333 - 0.254]	-1.52	7.90E-01	8.47E-01	163	146
Left entorhinal cortex	-0.355	0.253	[-0.851 - 0.141]	-1.81	1.61E-01	3.04E-01	158	145
Left fusiform gyrus	-0.347	0.195	[-0.728 - 0.035]	-1.85	7.52E-02	2.19E-01	163	146
Left inferior parietal cortex	-0.133	0.131	[-0.389 - 0.123]	-1.38	3.08E-01	4.59E-01	162	142
Left inferior temporal gyrus	-0.261	0.128	[-0.513 - - 0.009]	-0.8	4.21E-02	2.11E-01	165	144
Left isthmus cingulate cortex	-0.221	0.132	[-0.48 - 0.039]	-1.32	9.52E-02	2.26E-01	176	147
Left lateral occipital cortex	-0.022	0.128	[-0.273 - 0.23]	-1.19	8.65E-01	8.78E-01	169	144
Left lateral orbitofrontal cortex	-0.301	0.153	[-0.601 - - 0.002]	-0.81	4.86E-02	2.11E-01	176	147
Left lingual gyrus	0.082	0.211	[-0.332 - 0.496]	-1.37	6.98E-01	8.01E-01	175	147
Left medial orbitofrontal cortex	-0.240	0.223	[-0.676 - 0.196]	-0.1	2.81E-01	4.37E-01	175	146
Left middle temporal gyrus	-0.409	0.243	[-0.885 - 0.067]	-2.59	9.20E-02	2.26E-01	162	145
Left parahippocampal gyrus	-0.417	0.241	[-0.888 - 0.055]	-1.51	8.36E-02	2.26E-01	170	146
Left paracentral lobule	-0.151	0.127	[-0.4 - 0.098]	-1.52	2.34E-01	3.99E-01	175	146
Left pars opercularis of inferior frontal gyrus	-0.313	0.148	[-0.603 - - 0.024]	-0.58	3.40E-02	1.97E-01	169	147
Left pars orbitalis of inferior frontal gyrus	-0.227	0.247	[-0.711 - 0.257]	-1.31	3.58E-01	5.01E-01	170	143
Left pars triangularis of inferior frontal gyrus	-0.287	0.128	[-0.538 - - 0.035]	-1.31	2.54E-02	1.97E-01	165	145
Left pericalcarine cortex	0.006	0.163	[-0.314 - 0.325]	-2.21	9.73E-01	9.73E-01	176	147
Left postcentral gyrus	-0.054	0.221	[-0.488 - 0.38]	-0.91	8.07E-01	8.47E-01	174	146

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p- value	N Unmedicate d	N First And Second Generatio n
Left posterior cingulate cortex	-0.281	0.134	[-0.545 - - 0.018]	-1.67	3.65E-02	1.97E-01	175	147
Left precentral gyrus	-0.277	0.127	[-0.525 - - 0.029]	-2.09	2.85E-02	1.97E-01	174	147
Left precuneus	-0.126	0.172	[-0.463 - 0.211]	-1.44	4.64E-01	5.79E-01	171	146
Left rostral anterior cingulate cortex	-0.224	0.158	[-0.535 - 0.086]	-3.21	1.56E-01	3.04E-01	174	146
Left rostral middle frontal gyrus	-0.426	0.200	[-0.818 - - 0.033]	-0.06	3.36E-02	1.97E-01	168	143
Left superior frontal gyrus	-0.386	0.142	[-0.664 - - 0.107]	-0.86	6.62E-03	1.55E-01	172	146
Left superior parietal cortex	-0.051	0.128	[-0.302 - 0.2]	-0.7	6.89E-01	8.01E-01	163	145
Left superior temporal gyrus	-0.386	0.133	[-0.646 - - 0.126]	-2.72	3.66E-03	1.55E-01	158	141
Left supramarginal gyrus	-0.268	0.171	[-0.603 - 0.067]	-0.6	1.17E-01	2.42E-01	154	140
Left frontal pole	-0.051	0.164	[-0.373 - 0.271]	0.29	7.58E-01	8.42E-01	176	147
Left temporal pole	-0.268	0.148	[-0.558 - 0.021]	-2.03	6.92E-02	2.11E-01	170	146
Left transverse temporal gyrus	-0.038	0.151	[-0.334 - 0.258]	-0.55	8.01E-01	8.47E-01	176	146
Left insula	-0.267	0.127	[-0.515 - - 0.018]	-0.95	3.57E-02	1.97E-01	176	147
Right banks of superior temporal sulcus	-0.280	0.199	[-0.67 - 0.109]	-0.99	1.59E-01	3.04E-01	169	147
Right caudal anterior cingulate cortex	-0.137	0.126	[-0.383 - 0.11]	0.44	2.77E-01	4.37E-01	176	147
Right caudal middle frontal gyrus	-0.425	0.186	[-0.79 - -0.06]	-1.8	2.26E-02	1.97E-01	170	146
Right cuneus	0.176	0.153	[-0.124 - 0.476]	0.65	2.51E-01	4.19E-01	166	147
Right entorhinal cortex	-0.178	0.180	[-0.531 - 0.175]	-1.21	3.22E-01	4.70E-01	155	144
Right fusiform gyrus	-0.325	0.197	[-0.712 - 0.062]	-1.99	9.94E-02	2.26E-01	170	145
Right inferior parietal cortex	-0.261	0.135	[-0.526 - 0.004]	-2.21	5.33E-02	2.11E-01	154	145
Right inferior temporal gyrus	-0.214	0.137	[-0.483 - 0.054]	-1.49	1.17E-01	2.42E-01	165	142
Right isthmus cingulate cortex	-0.297	0.148	[-0.588 - - 0.006]	-2.13	4.57E-02	2.11E-01	174	147

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p- value	N Unmedicate d	N First And Second Generatio n
Right lateral occipital cortex	-0.205	0.186	[-0.569 - 0.158]	-2.67	2.68E-01	4.37E-01	166	145
Right lateral orbitofrontal cortex	-0.543	0.193	[-0.92 - -0.165]	-1.17	4.81E-03	1.55E-01	167	146
Right lingual gyrus	-0.035	0.157	[-0.342 - 0.272]	-0.41	8.23E-01	8.47E-01	176	147
Right medial orbitofrontal cortex	-0.317	0.127	[-0.566 - - 0.067]	-1.24	1.30E-02	1.97E-01	163	146
Right middle temporal gyrus	-0.272	0.201	[-0.666 - 0.123]	-2.28	1.78E-01	3.26E-01	160	143
Right parahippocampal gyrus	-0.424	0.224	[-0.864 - 0.016]	-3.65	5.88E-02	2.11E-01	171	146
Right paracentral lobule	-0.102	0.183	[-0.46 - 0.257]	-1.39	5.79E-01	6.86E-01	176	147
Right pars opercularis of inferior frontal gyrus	-0.297	0.163	[-0.617 - 0.022]	-0.8	6.83E-02	2.11E-01	168	144
Right pars orbitalis of inferior frontal gyrus	-0.130	0.126	[-0.377 - 0.117]	-0.71	3.03E-01	4.59E-01	174	147
Right pars triangularis of inferior frontal gyrus	-0.283	0.172	[-0.619 - 0.054]	-2.09	1.00E-01	2.26E-01	168	146
Right pericalcarine cortex	0.111	0.126	[-0.136 - 0.359]	-0.17	3.79E-01	5.20E-01	175	147
Right postcentral gyrus	0.074	0.226	[-0.369 - 0.517]	-0.99	7.44E-01	8.40E-01	174	146
Right posterior cingulate cortex	-0.123	0.126	[-0.37 - 0.124]	-0.92	3.31E-01	4.72E-01	176	147
Right precentral gyrus	-0.212	0.159	[-0.523 - 0.099]	-1.28	1.82E-01	3.26E-01	172	144
Right precuneus	-0.150	0.200	[-0.542 - 0.242]	-0.92	4.54E-01	5.77E-01	171	147
Right rostral anterior cingulate cortex	-0.230	0.127	[-0.479 - 0.018]	0.12	6.90E-02	2.11E-01	166	147
Right rostral middle frontal gyrus	-0.323	0.173	[-0.662 - 0.015]	-0.44	6.12E-02	2.11E-01	168	146
Right superior frontal gyrus	-0.429	0.200	[-0.822 - - 0.037]	-0.65	3.20E-02	1.97E-01	169	145
Right superior parietal cortex	-0.098	0.127	[-0.346 - 0.15]	-0.94	4.37E-01	5.77E-01	165	147
Right superior temporal gyrus	-0.165	0.254	[-0.662 - 0.332]	-1.33	5.15E-01	6.32E-01	166	144
Right supramarginal gyrus	-0.108	0.177	[-0.455 - 0.238]	-0.34	5.40E-01	6.51E-01	156	145
Right frontal pole	-0.348	0.210	[-0.759 - 0.064]	-1.72	9.75E-02	2.26E-01	176	147
Right temporal pole	-0.096	0.128	[-0.347 - 0.154]	-0.65	4.50E-01	5.77E-01	158	145
Right transverse temporal gyrus	-0.030	0.126	[-0.277 - 0.217]	-1.9	8.13E-01	8.47E-01	176	147

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p- value	N Unmedicate d	N First And Second Generatio n
Right insula	-0.124	0.160	[-0.438 - 0.19]	-0.9	4.40E-01	5.77E-01	174	147
Left hemisphere	-0.328	0.153	[-0.629 - - 0.028]	-1.38	3.21E-02	1.97E-01	176	147
Right hemisphere	-0.303	0.180	[-0.656 - 0.049]	-1.1	9.17E-02	2.26E-01	176	147

**Supplementary Table S19.** Cortical thickness differences between individuals with schizophrenia (SZ) on first- and second-generation antipsychotic medications

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p- value	N Second Generatio n	N First Generatio n
Left banks of superior temporal sulcus	-0.073	0.066	[-0.203 - 0.057]	-0.88	2.718E-01	5.183E-01	1597	310
Left caudal anterior cingulate cortex	-0.138	0.099	[-0.332 - 0.056]	-0.85	1.641E-01	4.102E-01	1648	313
Left caudal middle frontal gyrus	-0.123	0.066	[-0.252 - 0.006]	-1.16	6.164E-02	2.229E-01	1636	313
Left cuneus	0.047	0.066	[-0.084 - 0.177]	-0.04	4.820E-01	7.335E-01	1595	309
Left entorhinal cortex	-0.083	0.096	[-0.272 - 0.106]	-0.33	3.871E-01	6.635E-01	1585	313
Left fusiform gyrus	-0.039	0.066	[-0.169 - 0.091]	-0.63	5.567E-01	7.444E-01	1608	310
Left inferior parietal cortex	-0.169	0.082	[-0.329 - - 0.008]	-1.09	3.938E-02	2.120E-01	1553	307
Left inferior temporal gyrus	-0.148	0.066	[-0.279 - - 0.018]	-1.14	2.536E-02	2.026E-01	1581	310
Left isthmus cingulate cortex	-0.008	0.066	[-0.138 - 0.122]	-0.57	9.025E-01	9.290E-01	1642	311
Left lateral occipital cortex	-0.125	0.096	[-0.314 - 0.064]	-1	1.941E-01	4.528E-01	1604	309
Left lateral orbitofrontal cortex	-0.006	0.070	[-0.144 - 0.132]	-0.41	9.337E-01	9.472E-01	1645	313
Left lingual gyrus	0.018	0.066	[-0.112 - 0.147]	0	7.883E-01	8.927E-01	1640	312
Left medial orbitofrontal cortex	0.041	0.076	[-0.107 - 0.19]	0.05	5.849E-01	7.444E-01	1640	313
Left middle temporal gyrus	-0.146	0.067	[-0.277 - - 0.016]	-1.23	2.777E-02	2.026E-01	1547	309
Left parahippocampal gyrus	-0.023	0.066	[-0.152 - 0.107]	-0.45	7.332E-01	8.698E-01	1630	311
Left paracentral lobule	-0.120	0.112	[-0.34 - 0.101]	-1.33	2.876E-01	5.183E-01	1643	313
Left pars opercularis of inferior frontal gyrus	-0.041	0.066	[-0.171 - 0.089]	-0.24	5.377E-01	7.444E-01	1620	311
Left pars orbitalis of inferior frontal gyrus	-0.115	0.070	[-0.252 - 0.021]	-1.16	9.839E-02	2.837E-01	1623	312
Left pars triangularis of inferior frontal gyrus	-0.138	0.066	[-0.267 - - 0.008]	-1.15	3.719E-02	2.120E-01	1607	312
Left pericalcarine cortex	0.071	0.066	[-0.058 - 0.2]	0.2	2.817E-01	5.183E-01	1646	313
Left postcentral gyrus	-0.140	0.066	[-0.27 - -0.01]	-0.87	3.425E-02	2.120E-01	1638	311
Left posterior cingulate cortex	-0.070	0.066	[-0.199 - 0.059]	-0.39	2.888E-01	5.183E-01	1644	313

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p- value	N Second Generatio n	N First Generatio n
Left precentral gyrus	-0.065	0.079	[-0.22 - 0.09]	-0.67	4.101E-01	6.635E-01	1634	311
Left precuneus	-0.145	0.066	[-0.275 - - 0.016]	-1.16	2.755E-02	2.026E-01	1628	312
Left rostral anterior cingulate cortex	-0.006	0.088	[-0.177 - 0.166]	-0.07	9.475E-01	9.475E-01	1639	312
Left rostral middle frontal gyrus	-0.116	0.066	[-0.246 - 0.013]	-0.97	7.830E-02	2.491E-01	1614	312
Left superior frontal gyrus	-0.195	0.066	[-0.324 - - 0.066]	-1.51	3.101E-03	1.085E-01	1639	313
Left superior parietal cortex	-0.146	0.076	[-0.295 - 0.003]	-0.93	5.532E-02	2.229E-01	1594	310
Left superior temporal gyrus	-0.124	0.067	[-0.255 - 0.007]	-0.89	6.368E-02	2.229E-01	1562	307
Left supramarginal gyrus	-0.135	0.067	[-0.266 - - 0.003]	-0.91	4.464E-02	2.229E-01	1557	305
Left frontal pole	-0.043	0.066	[-0.172 - 0.086]	-0.62	5.139E-01	7.444E-01	1648	313
Left temporal pole	0.070	0.066	[-0.059 - 0.2]	0.76	2.866E-01	5.183E-01	1620	313
Left transverse temporal gyrus	-0.035	0.084	[-0.199 - 0.129]	-1.11	6.756E-01	8.195E-01	1649	313
Left insula	-0.058	0.073	[-0.201 - 0.085]	-0.53	4.265E-01	6.635E-01	1646	312
Right banks of superior temporal sulcus	-0.033	0.119	[-0.266 - 0.201]	-0.58	7.844E-01	8.927E-01	1620	310
Right caudal anterior cingulate cortex	-0.095	0.066	[-0.224 - 0.034]	-0.62	1.499E-01	3.885E-01	1646	313
Right caudal middle frontal gyrus	-0.149	0.066	[-0.279 - - 0.019]	-0.77	2.481E-02	2.026E-01	1629	310
Right cuneus	-0.012	0.094	[-0.197 - 0.172]	-0.52	8.970E-01	9.290E-01	1617	313
Right entorhinal cortex	0.072	0.067	[-0.059 - 0.203]	0.42	2.838E-01	5.183E-01	1511	306
Right fusiform gyrus	-0.019	0.077	[-0.17 - 0.132]	-0.5	8.035E-01	8.927E-01	1578	310
Right inferior parietal cortex	-0.115	0.067	[-0.246 - 0.015]	-0.74	8.386E-02	2.552E-01	1552	307
Right inferior temporal gyrus	-0.041	0.073	[-0.183 - 0.102]	-0.57	5.768E-01	7.444E-01	1587	306
Right isthmus cingulate cortex	-0.038	0.066	[-0.168 - 0.091]	-0.63	5.650E-01	7.444E-01	1636	312
Right lateral occipital cortex	-0.167	0.102	[-0.367 - 0.033]	-1.36	1.013E-01	2.837E-01	1596	306
Right lateral orbitofrontal cortex	-0.027	0.103	[-0.229 - 0.175]	-0.37	7.939E-01	8.927E-01	1627	312
Right lingual gyrus	-0.020	0.100	[-0.217 - 0.176]	-0.51	8.395E-01	9.182E-01	1644	310

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p- value	N Second Generatio n	N First Generatio n
Right medial orbitofrontal cortex	0.030	0.066	[-0.1 - 0.16]	0.13	6.519E-01	8.149E-01	1618	311
Right middle temporal gyrus	-0.043	0.067	[-0.174 - 0.088]	-0.52	5.207E-01	7.444E-01	1569	307
Right parahippocampal gyrus	0.071	0.066	[-0.06 - 0.201]	0.32	2.882E-01	5.183E-01	1613	309
Right paracentral lobule	-0.157	0.066	[-0.286 - - 0.028]	-1.24	1.731E-02	2.026E-01	1640	313
Right pars opercularis of inferior frontal gyrus	-0.027	0.066	[-0.157 - 0.103]	-0.21	6.790E-01	8.195E-01	1603	310
Right pars orbitalis of inferior frontal gyrus	-0.094	0.147	[-0.381 - 0.194]	-0.77	5.240E-01	7.444E-01	1620	311
Right pars triangularis of inferior frontal gyrus	-0.126	0.066	[-0.257 - 0.004]	-1	5.707E-02	2.229E-01	1600	309
Right pericalcarine cortex	-0.038	0.066	[-0.167 - 0.092]	-0.54	5.661E-01	7.444E-01	1645	311
Right postcentral gyrus	-0.144	0.066	[-0.273 - - 0.015]	-1.05	2.894E-02	2.026E-01	1631	313
Right posterior cingulate cortex	-0.121	0.066	[-0.25 - 0.009]	-0.6	6.749E-02	2.250E-01	1644	313
Right precentral gyrus	-0.088	0.078	[-0.242 - 0.066]	-0.71	2.623E-01	5.183E-01	1629	311
Right precuneus	-0.167	0.066	[-0.297 - - 0.038]	-1.43	1.129E-02	2.026E-01	1620	312
Right rostral anterior cingulate cortex	0.010	0.071	[-0.128 - 0.149]	0.33	8.824E-01	9.290E-01	1624	312
Right rostral middle frontal gyrus	-0.054	0.066	[-0.184 - 0.076]	-0.62	4.171E-01	6.635E-01	1603	310
Right superior frontal gyrus	-0.199	0.066	[-0.329 - - 0.069]	-1.49	2.644E-03	1.085E-01	1633	311
Right superior parietal cortex	-0.152	0.066	[-0.281 - - 0.022]	-1.1	2.158E-02	2.026E-01	1610	313
Right superior temporal gyrus	-0.010	0.067	[-0.14 - 0.121]	-0.2	8.853E-01	9.290E-01	1580	307
Right supramarginal gyrus	-0.089	0.067	[-0.219 - 0.042]	-0.87	1.841E-01	4.443E-01	1551	308
Right frontal pole	-0.053	0.066	[-0.182 - 0.076]	-0.97	4.199E-01	6.635E-01	1649	313
Right temporal pole	0.088	0.072	[-0.053 - 0.229]	0.43	2.197E-01	4.960E-01	1538	307
Right transverse temporal gyrus	-0.097	0.066	[-0.226 - 0.033]	-0.78	1.433E-01	3.859E-01	1648	312
Right insula	-0.054	0.066	[-0.183 - 0.075]	-0.6	4.128E-01	6.635E-01	1646	312
Left hemisphere	-0.129	0.066	[-0.258 - 0.001]	-0.79	5.100E-02	2.229E-01	1650	313



	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p- value	N Second Generatio n	N First Generatio n
Right hemisphere	-0.123	0.066	[-0.252 - 0.006]	-0.78	6.254E-02	2.229E-01	1650	313

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**Supplementary Table S20.** Cortical thickness differences between individuals with schizophrenia (SZ) on both first-generation and second-generation antipsychotic medications and individuals with SZ on second-generation antipsychotic medications

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Second Generation	N First and Second Generation
Left banks of superior temporal sulcus	-0.030	0.077	[-0.181 - 0.122]	-0.65	7.005E-01	8.652E-01	1241	212
Left caudal anterior cingulate cortex	-0.137	0.077	[-0.289 - 0.014]	-1.59	7.540E-02	4.786E-01	1244	212
Left caudal middle frontal gyrus	-0.106	0.077	[-0.257 - 0.045]	-0.48	1.694E-01	5.930E-01	1243	212
Left cuneus	-0.039	0.137	[-0.308 - 0.231]	-0.71	7.779E-01	8.731E-01	1244	211
Left entorhinal cortex	-0.092	0.094	[-0.277 - 0.092]	-0.33	3.255E-01	6.840E-01	1244	211
Left fusiform gyrus	-0.196	0.118	[-0.427 - 0.035]	-1.28	9.571E-02	4.786E-01	1242	211
Left inferior parietal cortex	-0.092	0.077	[-0.244 - 0.06]	-0.2	2.348E-01	6.064E-01	1241	211
Left inferior temporal gyrus	-0.119	0.104	[-0.322 - 0.084]	-0.67	2.512E-01	6.064E-01	1244	211
Left isthmus cingulate cortex	-0.116	0.077	[-0.268 - 0.035]	-0.69	1.333E-01	5.930E-01	1245	212
Left lateral occipital cortex	-0.027	0.077	[-0.178 - 0.125]	-0.26	7.292E-01	8.652E-01	1244	211
Left lateral orbitofrontal cortex	-0.033	0.106	[-0.241 - 0.174]	-0.29	7.534E-01	8.731E-01	1244	212
Left lingual gyrus	0.049	0.135	[-0.216 - 0.314]	-0.06	7.183E-01	8.652E-01	1243	212
Left medial orbitofrontal cortex	-0.078	0.077	[-0.23 - 0.073]	-0.24	3.096E-01	6.824E-01	1246	212
Left middle temporal gyrus	-0.249	0.084	[-0.412 - -0.085]	-1.06	2.926E-03	1.728E-01	1245	212
Left parahippocampal gyrus	-0.021	0.130	[-0.276 - 0.234]	-1.2	8.716E-01	9.106E-01	1245	211
Left paracentral lobule	-0.003	0.077	[-0.154 - 0.148]	0.16	9.667E-01	9.807E-01	1242	212
Left pars opercularis of inferior frontal gyrus	-0.218	0.077	[-0.369 - -0.066]	-0.56	4.937E-03	1.728E-01	1245	212
Left pars orbitalis of inferior frontal gyrus	-0.099	0.077	[-0.251 - 0.053]	-1.01	2.006E-01	6.064E-01	1245	211
Left pars triangularis of inferior frontal gyrus	-0.112	0.077	[-0.264 - 0.039]	-0.32	1.472E-01	5.930E-01	1246	212
Left pericalcarine cortex	0.070	0.107	[-0.14 - 0.28]	0.79	5.141E-01	8.178E-01	1244	211
Left postcentral gyrus	-0.022	0.077	[-0.174 - 0.129]	-0.05	7.716E-01	8.731E-01	1243	212
Left posterior cingulate cortex	-0.102	0.077	[-0.254 - 0.049]	-0.74	1.859E-01	6.064E-01	1243	212
Left precentral gyrus	-0.149	0.077	[-0.3 - 0.002]	-0.75	5.374E-02	4.702E-01	1243	212
Left precuneus	-0.155	0.077	[-0.306 - -0.003]	-0.38	4.499E-02	4.499E-01	1242	212

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Second Generation	N First and Second Generation
Left rostral anterior cingulate cortex	-0.057	0.081	[-0.217 - 0.102]	-0.72	4.804E-01	8.178E-01	1244	212
Left rostral middle frontal gyrus	-0.158	0.078	[-0.311 - -0.006]	-0.9	4.144E-02	4.499E-01	1245	210
Left superior frontal gyrus	-0.141	0.078	[-0.293 - 0.011]	-0.55	6.848E-02	4.786E-01	1244	211
Left superior parietal cortex	-0.034	0.077	[-0.185 - 0.117]	-0.19	6.588E-01	8.652E-01	1244	212
Left superior temporal gyrus	-0.091	0.077	[-0.243 - 0.06]	-0.62	2.378E-01	6.064E-01	1243	211
Left supramarginal gyrus	-0.099	0.077	[-0.25 - 0.052]	-0.43	1.982E-01	6.064E-01	1241	212
Left frontal pole	0.031	0.077	[-0.12 - 0.183]	0.21	6.843E-01	8.652E-01	1244	212
Left temporal pole	0.035	0.129	[-0.218 - 0.288]	-1.19	7.858E-01	8.731E-01	1242	211
Left transverse temporal gyrus	-0.044	0.077	[-0.195 - 0.108]	0.09	5.724E-01	8.390E-01	1245	212
Left insula	-0.059	0.113	[-0.281 - 0.162]	-0.38	6.012E-01	8.416E-01	1242	212
Right banks of superior temporal sulcus	-0.111	0.077	[-0.262 - 0.041]	-0.21	1.534E-01	5.930E-01	1246	211
Right caudal anterior cingulate cortex	-0.045	0.077	[-0.197 - 0.107]	-0.02	5.637E-01	8.390E-01	1244	211
Right caudal middle frontal gyrus	-0.090	0.077	[-0.242 - 0.062]	-0.04	2.454E-01	6.064E-01	1245	211
Right cuneus	0.011	0.092	[-0.17 - 0.191]	0.66	9.075E-01	9.342E-01	1245	212
Right entorhinal cortex	-0.065	0.116	[-0.291 - 0.162]	-0.01	5.753E-01	8.390E-01	1244	212
Right fusiform gyrus	-0.041	0.111	[-0.258 - 0.177]	-0.23	7.144E-01	8.652E-01	1246	211
Right inferior parietal cortex	-0.071	0.085	[-0.239 - 0.096]	-0.12	4.024E-01	7.637E-01	1240	212
Right inferior temporal gyrus	-0.211	0.085	[-0.377 - -0.045]	-0.85	1.275E-02	2.975E-01	1241	211
Right isthmus cingulate cortex	-0.136	0.077	[-0.287 - 0.016]	-1.44	7.931E-02	4.786E-01	1243	212
Right lateral occipital cortex	0.000	0.109	[-0.213 - 0.213]	-0.13	9.989E-01	9.989E-01	1244	212
Right lateral orbitofrontal cortex	-0.135	0.077	[-0.287 - 0.017]	-0.15	8.226E-02	4.786E-01	1241	211
Right lingual gyrus	0.013	0.077	[-0.139 - 0.164]	0.04	8.692E-01	9.106E-01	1245	212
Right medial orbitofrontal cortex	-0.019	0.077	[-0.17 - 0.132]	-0.5	8.069E-01	8.826E-01	1243	212
Right middle temporal gyrus	-0.141	0.115	[-0.366 - 0.084]	-0.62	2.187E-01	6.064E-01	1245	212
Right parahippocampal gyrus	-0.093	0.096	[-0.281 - 0.095]	-1.39	3.322E-01	6.840E-01	1245	212
Right paracentral lobule	-0.056	0.077	[-0.207 - 0.095]	0	4.655E-01	8.146E-01	1243	212
Right pars opercularis of inferior frontal gyrus	-0.095	0.077	[-0.247 - 0.057]	-0.78	2.192E-01	6.064E-01	1246	212

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Second Generation	N First and Second Generation
Right pars orbitalis of inferior frontal gyrus	0.042	0.077	[-0.11 - 0.193]	0.68	5.894E-01	8.416E-01	1244	212
Right pars triangularis of inferior frontal gyrus	-0.082	0.108	[-0.294 - 0.13]	-0.85	4.486E-01	8.051E-01	1245	212
Right pericalcarine cortex	0.105	0.104	[-0.099 - 0.309]	0.96	3.119E-01	6.824E-01	1243	212
Right postcentral gyrus	-0.039	0.077	[-0.19 - 0.113]	0.29	6.176E-01	8.477E-01	1243	212
Right posterior cingulate cortex	-0.113	0.077	[-0.265 - 0.038]	-0.73	1.420E-01	5.930E-01	1244	212
Right precentral gyrus	-0.107	0.077	[-0.258 - 0.045]	-0.59	1.673E-01	5.930E-01	1245	212
Right precuneus	-0.063	0.077	[-0.214 - 0.088]	0.19	4.152E-01	7.648E-01	1243	212
Right rostral anterior cingulate cortex	0.076	0.121	[-0.161 - 0.312]	0.12	5.314E-01	8.266E-01	1246	212
Right rostral middle frontal gyrus	-0.051	0.078	[-0.203 - 0.101]	0.11	5.123E-01	8.178E-01	1244	210
Right superior frontal gyrus	-0.176	0.078	[-0.328 - -0.024]	-0.69	2.301E-02	4.027E-01	1245	211
Right superior parietal cortex	-0.015	0.077	[-0.166 - 0.137]	-0.01	8.503E-01	9.106E-01	1245	211
Right superior temporal gyrus	-0.065	0.077	[-0.216 - 0.087]	-0.31	4.037E-01	7.637E-01	1244	211
Right supramarginal gyrus	-0.037	0.086	[-0.206 - 0.132]	0.21	6.674E-01	8.652E-01	1245	212
Right frontal pole	-0.029	0.077	[-0.18 - 0.123]	-0.34	7.121E-01	8.652E-01	1245	211
Right temporal pole	-0.095	0.112	[-0.315 - 0.125]	-1.22	3.967E-01	7.637E-01	1243	212
Right transverse temporal gyrus	-0.072	0.108	[-0.285 - 0.141]	-0.73	5.068E-01	8.178E-01	1244	212
Right insula	-0.083	0.077	[-0.235 - 0.068]	-0.13	2.817E-01	6.572E-01	1245	212
Left hemisphere	-0.165	0.077	[-0.317 - -0.014]	-0.49	3.244E-02	4.499E-01	1246	212
Right hemisphere	-0.129	0.077	[-0.28 - 0.022]	-0.22	9.487E-02	4.786E-01	1246	212

**Supplementary Table S21.** Cortical thickness differences between individuals with schizophrenia (SZ) on both first-generation and second-generation antipsychotic medications and individuals with SZ on first-generation antipsychotic medications

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N First Generation	N First and Second Generation
Left banks of superior temporal sulcus	-0.035	0.164	[-0.357 - 0.287]	-0.38	8.330E-01	9.633E-01	358	216
Left caudal anterior cingulate cortex	-0.032	0.104	[-0.236 - 0.172]	-1.45	7.551E-01	9.633E-01	359	218
Left caudal middle frontal gyrus	0.050	0.104	[-0.154 - 0.254]	0.24	6.328E-01	9.633E-01	361	217
Left cuneus	-0.058	0.105	[-0.264 - 0.148]	-0.79	5.784E-01	9.633E-01	357	216
Left entorhinal cortex	-0.113	0.132	[-0.372 - 0.145]	-0.05	3.890E-01	9.633E-01	359	216
Left fusiform gyrus	-0.137	0.188	[-0.505 - 0.231]	-0.87	4.658E-01	9.633E-01	358	217
Left inferior parietal cortex	0.064	0.120	[-0.171 - 0.299]	0.27	5.945E-01	9.633E-01	354	213
Left inferior temporal gyrus	0.208	0.183	[-0.152 - 0.568]	0.1	2.568E-01	9.633E-01	358	215
Left isthmus cingulate cortex	0.023	0.216	[-0.401 - 0.446]	-1	9.170E-01	9.834E-01	359	218
Left lateral occipital cortex	0.042	0.220	[-0.389 - 0.474]	-0.4	8.471E-01	9.633E-01	357	215
Left lateral orbitofrontal cortex	0.073	0.194	[-0.306 - 0.453]	-0.85	7.054E-01	9.633E-01	360	218
Left lingual gyrus	0.050	0.198	[-0.339 - 0.439]	-0.65	8.009E-01	9.633E-01	360	218
Left medial orbitofrontal cortex	0.031	0.157	[-0.277 - 0.34]	-0.89	8.423E-01	9.633E-01	359	217
Left middle temporal gyrus	-0.036	0.129	[-0.289 - 0.218]	-0.62	7.823E-01	9.633E-01	357	216
Left parahippocampal gyrus	0.059	0.149	[-0.233 - 0.35]	0.38	6.936E-01	9.633E-01	359	217
Left paracentral lobule	0.199	0.163	[-0.12 - 0.518]	0.66	2.221E-01	9.633E-01	360	217
Left pars opercularis of inferior frontal gyrus	-0.088	0.121	[-0.326 - 0.149]	-0.42	4.666E-01	9.633E-01	359	218
Left pars orbitalis of inferior frontal gyrus	0.092	0.105	[-0.114 - 0.298]	0.64	3.806E-01	9.633E-01	360	214
Left pars triangularis of inferior frontal gyrus	0.088	0.105	[-0.118 - 0.293]	0.34	4.042E-01	9.633E-01	359	215
Left pericalcarine cortex	0.046	0.160	[-0.269 - 0.36]	0.19	7.766E-01	9.633E-01	361	218
Left postcentral gyrus	0.186	0.150	[-0.107 - 0.479]	0.55	2.142E-01	9.633E-01	359	217
Left posterior cingulate cortex	-0.024	0.145	[-0.308 - 0.261]	-1.28	8.712E-01	9.633E-01	361	218
Left precentral gyrus	-0.071	0.124	[-0.315 - 0.172]	-0.19	5.663E-01	9.633E-01	359	218
Left precuneus	0.039	0.138	[-0.232 - 0.31]	-0.2	7.759E-01	9.633E-01	360	217

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N First Generation	N First and Second Generation
Left rostral anterior cingulate cortex	-0.141	0.156	[-0.448 - 0.165]	-2.45	3.665E-01	9.633E-01	359	217
Left rostral middle frontal gyrus	0.024	0.106	[-0.183 - 0.231]	-0.19	8.210E-01	9.633E-01	359	213
Left superior frontal gyrus	0.101	0.104	[-0.104 - 0.306]	0.34	3.333E-01	9.633E-01	361	217
Left superior parietal cortex	0.164	0.156	[-0.142 - 0.47]	0.69	2.930E-01	9.633E-01	358	216
Left superior temporal gyrus	0.005	0.177	[-0.342 - 0.353]	-0.38	9.753E-01	9.926E-01	355	211
Left supramarginal gyrus	-0.048	0.107	[-0.258 - 0.162]	0.01	6.558E-01	9.633E-01	349	209
Left frontal pole	0.076	0.104	[-0.128 - 0.279]	0.23	4.666E-01	9.633E-01	361	218
Left temporal pole	-0.075	0.160	[-0.388 - 0.238]	-1.84	6.383E-01	9.633E-01	360	217
Left transverse temporal gyrus	0.001	0.145	[-0.282 - 0.285]	-1.13	9.926E-01	9.926E-01	361	217
Left insula	0.084	0.134	[-0.178 - 0.346]	0.05	5.295E-01	9.633E-01	360	218
Right banks of superior temporal sulcus	-0.019	0.105	[-0.224 - 0.186]	0.19	8.559E-01	9.633E-01	358	217
Right caudal anterior cingulate cortex	0.043	0.105	[-0.162 - 0.249]	-0.26	6.803E-01	9.633E-01	361	216
Right caudal middle frontal gyrus	0.135	0.106	[-0.072 - 0.342]	1.29	2.021E-01	9.633E-01	358	217
Right cuneus	0.107	0.104	[-0.097 - 0.311]	1.03	3.043E-01	9.633E-01	359	218
Right entorhinal cortex	-0.088	0.106	[-0.296 - 0.12]	-0.5	4.067E-01	9.633E-01	354	214
Right fusiform gyrus	-0.098	0.132	[-0.357 - 0.161]	-0.64	4.563E-01	9.633E-01	357	216
Right inferior parietal cortex	0.106	0.106	[-0.102 - 0.314]	0.64	3.172E-01	9.633E-01	355	216
Right inferior temporal gyrus	-0.057	0.208	[-0.466 - 0.351]	-0.85	7.831E-01	9.633E-01	355	213
Right isthmus cingulate cortex	-0.046	0.126	[-0.292 - 0.201]	-0.76	7.160E-01	9.633E-01	360	218
Right lateral occipital cortex	0.193	0.199	[-0.198 - 0.583]	0.89	3.337E-01	9.633E-01	356	216
Right lateral orbitofrontal cortex	-0.086	0.175	[-0.428 - 0.256]	-0.49	6.226E-01	9.633E-01	360	217
Right lingual gyrus	-0.021	0.140	[-0.295 - 0.253]	-0.26	8.807E-01	9.633E-01	360	218
Right medial orbitofrontal cortex	-0.121	0.108	[-0.333 - 0.091]	-0.73	2.624E-01	9.633E-01	359	217
Right middle temporal gyrus	-0.068	0.106	[-0.275 - 0.139]	-0.67	5.173E-01	9.633E-01	356	214
Right parahippocampal gyrus	-0.199	0.105	[-0.405 - 0.007]	-1.35	5.798E-02	9.633E-01	357	217
Right paracentral lobule	0.089	0.127	[-0.159 - 0.337]	0.43	4.829E-01	9.633E-01	360	218
Right pars opercularis of inferior frontal gyrus	-0.030	0.115	[-0.256 - 0.196]	-0.44	7.947E-01	9.633E-01	357	215

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N First Generation	N First and Second Generation
Right pars orbitalis of inferior frontal gyrus	-0.031	0.104	[-0.235 - 0.173]	-0.3	7.663E-01	9.633E-01	359	218
Right pars triangularis of inferior frontal gyrus	-0.028	0.112	[-0.247 - 0.191]	0.07	7.994E-01	9.633E-01	357	217
Right pericalcarine cortex	0.042	0.207	[-0.364 - 0.448]	0.21	8.388E-01	9.633E-01	361	218
Right postcentral gyrus	0.131	0.126	[-0.116 - 0.378]	1.42	2.996E-01	9.633E-01	361	217
Right posterior cingulate cortex	-0.010	0.105	[-0.215 - 0.196]	-0.72	9.272E-01	9.834E-01	361	218
Right precentral gyrus	-0.089	0.105	[-0.294 - 0.117]	-0.63	3.972E-01	9.633E-01	359	215
Right precuneus	0.169	0.124	[-0.074 - 0.412]	0.99	1.722E-01	9.633E-01	360	218
Right rostral anterior cingulate cortex	0.014	0.195	[-0.368 - 0.396]	-1.11	9.422E-01	9.844E-01	360	218
Right rostral middle frontal gyrus	0.037	0.105	[-0.169 - 0.243]	0.2	7.261E-01	9.633E-01	358	215
Right superior frontal gyrus	0.088	0.104	[-0.117 - 0.293]	0.39	4.007E-01	9.633E-01	359	216
Right superior parietal cortex	0.275	0.174	[-0.065 - 0.615]	0.88	1.127E-01	9.633E-01	361	217
Right superior temporal gyrus	-0.019	0.105	[-0.225 - 0.188]	-0.22	8.581E-01	9.633E-01	354	215
Right supramarginal gyrus	0.079	0.105	[-0.128 - 0.285]	0.58	4.554E-01	9.633E-01	356	216
Right frontal pole	0.019	0.104	[-0.186 - 0.223]	-0.47	8.563E-01	9.633E-01	360	217
Right temporal pole	-0.117	0.161	[-0.433 - 0.198]	-0.79	4.657E-01	9.633E-01	353	216
Right transverse temporal gyrus	-0.022	0.112	[-0.241 - 0.197]	0.26	8.451E-01	9.633E-01	360	218
Right insula	0.067	0.117	[-0.162 - 0.296]	0.13	5.687E-01	9.633E-01	360	218
Left hemisphere	0.003	0.129	[-0.25 - 0.256]	-0.25	9.820E-01	9.926E-01	361	218
Right hemisphere	0.039	0.105	[-0.167 - 0.246]	0.15	7.084E-01	9.633E-01	361	218

**Supplementary Table S22.** Cortical surface area differences between unmedicated schizophrenia (SZ) and healthy volunteer (HV) groups

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Unmedicated
Left banks of superior temporal sulcus	-0.204	0.061	[-0.324 - -0.085]	-2.71	8.242E-04	5.771E-03	2765	403
Left caudal anterior cingulate cortex	-0.149	0.060	[-0.267 - -0.031]	-4.14	1.320E-02	4.236E-02	2807	412
Left caudal middle frontal gyrus	-0.200	0.061	[-0.319 - -0.082]	-2.28	9.515E-04	6.055E-03	2803	407
Left cuneus	-0.171	0.084	[-0.335 - -0.007]	-2.52	4.056E-02	7.472E-02	2767	399
Left entorhinal cortex	-0.176	0.062	[-0.297 - -0.055]	-4.26	4.462E-03	2.231E-02	2739	393
Left fusiform gyrus	-0.205	0.085	[-0.371 - -0.039]	-2.97	1.532E-02	4.468E-02	2765	399
Left inferior parietal cortex	-0.155	0.092	[-0.336 - 0.025]	-2.64	9.135E-02	1.238E-01	2738	398
Left inferior temporal gyrus	-0.211	0.081	[-0.369 - -0.053]	-3.43	9.001E-03	3.938E-02	2760	401
Left isthmus cingulate cortex	-0.131	0.079	[-0.286 - 0.023]	-2.03	9.576E-02	1.263E-01	2807	412
Left lateral occipital cortex	-0.225	0.076	[-0.374 - -0.075]	-2.77	3.227E-03	1.738E-02	2779	405
Left lateral orbitofrontal cortex	-0.165	0.072	[-0.306 - -0.024]	-2.06	2.196E-02	5.300E-02	2808	412
Left lingual gyrus	-0.101	0.072	[-0.241 - 0.04]	-1.77	1.599E-01	1.930E-01	2800	411
Left medial orbitofrontal cortex	-0.100	0.060	[-0.218 - 0.018]	-0.99	9.741E-02	1.263E-01	2797	411
Left middle temporal gyrus	-0.230	0.066	[-0.359 - -0.102]	-3.38	4.517E-04	5.501E-03	2735	398
Left parahippocampal gyrus	-0.120	0.061	[-0.239 - -0.001]	-1.91	4.881E-02	8.333E-02	2792	405
Left paracentral lobule	-0.061	0.060	[-0.179 - 0.057]	-0.27	3.096E-01	3.513E-01	2804	411
Left pars opercularis of inferior frontal gyrus	-0.108	0.061	[-0.227 - 0.011]	-1.85	7.637E-02	1.137E-01	2792	405
Left pars orbitalis of inferior frontal gyrus	-0.092	0.069	[-0.227 - 0.042]	-2.41	1.780E-01	2.112E-01	2789	406
Left pars triangularis of inferior frontal gyrus	-0.128	0.068	[-0.26 - 0.005]	-1.73	5.880E-02	9.355E-02	2779	401
Left pericalcarine cortex	-0.057	0.089	[-0.232 - 0.119]	-0.98	5.267E-01	5.503E-01	2809	412
Left postcentral gyrus	-0.169	0.081	[-0.328 - -0.009]	-1.97	3.782E-02	7.155E-02	2795	409
Left posterior cingulate cortex	-0.131	0.060	[-0.249 - -0.013]	-2.62	2.956E-02	5.913E-02	2807	412
Left precentral gyrus	-0.162	0.064	[-0.288 - -0.035]	-2.25	1.217E-02	4.236E-02	2804	410
Left precuneus	-0.188	0.080	[-0.345 - -0.03]	-2.22	1.958E-02	5.167E-02	2794	407
Left rostral anterior cingulate cortex	-0.233	0.094	[-0.417 - -0.049]	-3.92	1.304E-02	4.236E-02	2801	410
Left rostral middle frontal gyrus	-0.169	0.075	[-0.317 - -0.021]	-1.73	2.487E-02	5.439E-02	2789	404
Left superior frontal gyrus	-0.157	0.061	[-0.275 - -0.038]	-1.82	9.621E-03	3.962E-02	2803	408



	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Unmedicated
Left superior parietal cortex	-0.162	0.091	[-0.341 - 0.017]	-2.2	7.630E-02	1.137E-01	2762	398
Left superior temporal gyrus	-0.194	0.062	[-0.315 - -0.073]	-2.17	1.708E-03	9.961E-03	2749	394
Left supramarginal gyrus	-0.053	0.070	[-0.191 - 0.085]	-1.11	4.535E-01	4.884E-01	2736	390
Left frontal pole	-0.010	0.096	[-0.199 - 0.179]	-1.59	9.196E-01	9.196E-01	2809	412
Left temporal pole	-0.157	0.081	[-0.316 - 0.001]	-1.39	5.167E-02	8.420E-02	2777	406
Left transverse temporal gyrus	-0.131	0.060	[-0.249 - -0.013]	-1.91	2.936E-02	5.913E-02	2807	412
Left insula	-0.092	0.060	[-0.21 - 0.026]	-0.97	1.254E-01	1.567E-01	2804	412
Right banks of superior temporal sulcus	-0.186	0.088	[-0.359 - -0.013]	-3.13	3.537E-02	6.878E-02	2785	404
Right caudal anterior cingulate cortex	-0.275	0.060	[-0.393 - -0.156]	-5.48	5.279E-06	3.695E-04	2808	412
Right caudal middle frontal gyrus	-0.147	0.101	[-0.345 - 0.052]	-2.01	1.474E-01	1.810E-01	2791	406
Right cuneus	-0.145	0.086	[-0.313 - 0.024]	-1.81	9.193E-02	1.238E-01	2782	402
Right entorhinal cortex	-0.056	0.063	[-0.179 - 0.067]	-0.45	3.731E-01	4.145E-01	2698	386
Right fusiform gyrus	-0.183	0.080	[-0.34 - -0.027]	-2.34	2.175E-02	5.300E-02	2768	406
Right inferior parietal cortex	-0.172	0.069	[-0.307 - -0.036]	-2	1.296E-02	4.236E-02	2735	390
Right inferior temporal gyrus	-0.298	0.081	[-0.458 - -0.139]	-4.65	2.514E-04	5.068E-03	2756	401
Right isthmus cingulate cortex	-0.050	0.070	[-0.187 - 0.088]	-0.96	4.809E-01	5.100E-01	2800	410
Right lateral occipital cortex	-0.205	0.090	[-0.383 - -0.028]	-2.41	2.330E-02	5.357E-02	2770	402
Right lateral orbitofrontal cortex	-0.177	0.078	[-0.33 - -0.024]	-1.54	2.373E-02	5.357E-02	2791	403
Right lingual gyrus	-0.160	0.073	[-0.303 - -0.018]	-1.78	2.726E-02	5.783E-02	2806	412
Right medial orbitofrontal cortex	-0.213	0.091	[-0.391 - -0.035]	-2.97	1.908E-02	5.167E-02	2776	399
Right middle temporal gyrus	-0.282	0.082	[-0.443 - -0.121]	-4.06	5.967E-04	5.771E-03	2743	396
Right parahippocampal gyrus	-0.111	0.061	[-0.23 - 0.008]	-1.63	6.673E-02	1.038E-01	2788	407
Right paracentral lobule	-0.079	0.060	[-0.197 - 0.039]	-1.09	1.878E-01	2.191E-01	2805	412
Right pars opercularis of inferior frontal gyrus	-0.221	0.061	[-0.341 - -0.102]	-3.73	2.896E-04	5.068E-03	2769	404
Right pars orbitalis of inferior frontal gyrus	-0.173	0.085	[-0.34 - -0.006]	-2.37	4.193E-02	7.525E-02	2783	410
Right pars triangularis of inferior frontal gyrus	-0.121	0.061	[-0.241 - -0.001]	-1.16	4.769E-02	8.333E-02	2762	403
Right pericalcarine cortex	-0.038	0.096	[-0.226 - 0.149]	-0.39	6.901E-01	7.001E-01	2808	411
Right postcentral gyrus	-0.105	0.060	[-0.223 - 0.014]	-1.91	8.306E-02	1.193E-01	2797	410
Right posterior cingulate cortex	-0.126	0.073	[-0.269 - 0.017]	-1.97	8.350E-02	1.193E-01	2806	412

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Unmedicated
Right precentral gyrus	-0.212	0.061	[-0.331 - -0.093]	-2.26	4.715E-04	5.501E-03	2793	408
Right precuneus	-0.203	0.082	[-0.364 - -0.042]	-2.82	1.331E-02	4.236E-02	2796	407
Right rostral anterior cingulate cortex	-0.224	0.066	[-0.353 - -0.095]	-4.51	6.927E-04	5.771E-03	2781	400
Right rostral middle frontal gyrus	-0.146	0.063	[-0.269 - -0.023]	-1.63	1.993E-02	5.167E-02	2767	406
Right superior frontal gyrus	-0.148	0.061	[-0.267 - -0.029]	-1.81	1.502E-02	4.468E-02	2793	405
Right superior parietal cortex	-0.136	0.088	[-0.31 - 0.037]	-1.81	1.234E-01	1.567E-01	2775	401
Right superior temporal gyrus	-0.186	0.067	[-0.316 - -0.055]	-2.18	5.363E-03	2.503E-02	2763	402
Right supramarginal gyrus	-0.063	0.062	[-0.186 - 0.059]	-1.41	3.112E-01	3.513E-01	2735	392
Right frontal pole	-0.106	0.062	[-0.229 - 0.016]	-2.11	8.738E-02	1.223E-01	2807	412
Right temporal pole	-0.033	0.062	[-0.154 - 0.089]	-0.46	5.987E-01	6.163E-01	2719	393
Right transverse temporal gyrus	-0.053	0.060	[-0.171 - 0.065]	-0.47	3.813E-01	4.170E-01	2809	412
Right insula	-0.118	0.060	[-0.236 - 0.001]	-1.53	5.173E-02	8.420E-02	2805	409
Left hemisphere	-0.246	0.074	[-0.39 - -0.102]	-0.6	8.244E-04	5.771E-03	2810	412
Right hemisphere	-0.250	0.068	[-0.383 - -0.117]	-1.68	2.276E-04	5.068E-03	2810	412

**Supplementary Table S23.** Cortical surface area differences between individuals with schizophrenia (SZ) on second-generation antipsychotic medication and healthy volunteers (HV)

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Second Generation
Left banks of superior temporal sulcus	-0.196	0.045	[-0.284 - -0.109]	-3.19	1.034E-05	5.566E-05	4047	2158
Left caudal anterior cingulate cortex	-0.118	0.042	[-0.201 - -0.034]	-2.43	5.587E-03	6.628E-03	4087	2210
Left caudal middle frontal gyrus	-0.152	0.045	[-0.241 - -0.064]	-2.35	7.362E-04	1.310E-03	4086	2201
Left cuneus	-0.166	0.037	[-0.239 - -0.093]	-2.22	7.911E-06	4.615E-05	4049	2158
Left entorhinal cortex	-0.164	0.043	[-0.248 - -0.079]	-2.96	1.571E-04	3.923E-04	4000	2137
Left fusiform gyrus	-0.232	0.044	[-0.318 - -0.145]	-2.98	1.541E-07	2.571E-06	4044	2171
Left inferior parietal cortex	-0.193	0.048	[-0.287 - -0.099]	-2.71	5.649E-05	1.797E-04	4018	2120
Left inferior temporal gyrus	-0.220	0.051	[-0.319 - -0.12]	-3.07	1.536E-05	7.168E-05	4041	2144
Left isthmus cingulate cortex	-0.097	0.043	[-0.182 - -0.012]	-1.37	2.586E-02	2.828E-02	4088	2208
Left lateral occipital cortex	-0.154	0.048	[-0.249 - -0.059]	-1.96	1.447E-03	2.067E-03	4058	2169
Left lateral orbitofrontal cortex	-0.202	0.073	[-0.346 - -0.059]	-2.3	5.585E-03	6.628E-03	4088	2212
Left lingual gyrus	-0.145	0.045	[-0.234 - -0.056]	-1.98	1.398E-03	2.039E-03	4083	2205
Left medial orbitofrontal cortex	-0.122	0.059	[-0.238 - -0.006]	-1.96	3.960E-02	4.076E-02	4078	2205
Left middle temporal gyrus	-0.214	0.052	[-0.316 - -0.111]	-2.55	4.409E-05	1.470E-04	4015	2112
Left parahippocampal gyrus	-0.105	0.038	[-0.179 - -0.03]	-1.47	6.054E-03	7.063E-03	4073	2194
Left paracentral lobule	-0.098	0.045	[-0.187 - -0.009]	-1.51	3.033E-02	3.216E-02	4086	2207
Left pars opercularis of inferior frontal gyrus	-0.160	0.042	[-0.243 - -0.077]	-2.51	1.625E-04	3.923E-04	4075	2186
Left pars orbitalis of inferior frontal gyrus	-0.210	0.065	[-0.338 - -0.083]	-2.79	1.226E-03	1.826E-03	4067	2189
Left pars triangularis of inferior frontal gyrus	-0.140	0.038	[-0.215 - -0.065]	-2.28	2.528E-04	5.708E-04	4059	2172
Left pericalcarine cortex	-0.139	0.042	[-0.221 - -0.057]	-2.15	8.375E-04	1.430E-03	4091	2211
Left postcentral gyrus	-0.196	0.051	[-0.295 - -0.096]	-2.19	1.133E-04	2.938E-04	4073	2203
Left posterior cingulate cortex	-0.116	0.051	[-0.216 - -0.016]	-1.91	2.248E-02	2.498E-02	4090	2209
Left precentral gyrus	-0.195	0.050	[-0.293 - -0.097]	-2.04	9.801E-05	2.744E-04	4087	2199
Left precuneus	-0.153	0.054	[-0.26 - -0.047]	-1.89	4.749E-03	5.833E-03	4078	2195
Left rostral anterior cingulate cortex	-0.167	0.048	[-0.262 - -0.072]	-3.48	5.336E-04	1.010E-03	4081	2206

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Second Generation
Left rostral middle frontal gyrus	-0.220	0.045	[-0.308 - -0.133]	-2.7	7.892E-07	6.906E-06	4073	2178
Left superior frontal gyrus	-0.238	0.058	[-0.351 - -0.125]	-2.68	3.806E-05	1.369E-04	4085	2205
Left superior parietal cortex	-0.224	0.039	[-0.301 - -0.146]	-2.59	1.469E-08	3.427E-07	4045	2157
Left superior temporal gyrus	-0.191	0.044	[-0.277 - -0.104]	-2.04	1.709E-05	7.328E-05	4013	2120
Left supramarginal gyrus	-0.143	0.046	[-0.233 - -0.053]	-2.07	1.833E-03	2.516E-03	3999	2116
Left frontal pole	-0.127	0.039	[-0.203 - -0.052]	-1.87	9.729E-04	1.533E-03	4091	2212
Left temporal pole	-0.102	0.039	[-0.178 - -0.026]	-1.09	8.524E-03	9.624E-03	4054	2184
Left transverse temporal gyrus	-0.134	0.038	[-0.209 - -0.059]	-2.22	4.705E-04	9.149E-04	4082	2213
Left insula	-0.108	0.049	[-0.205 - -0.012]	-1.01	2.727E-02	2.936E-02	4087	2209
Right banks of superior temporal sulcus	-0.211	0.045	[-0.298 - -0.123]	-3.13	2.379E-06	1.665E-05	4065	2183
Right caudal anterior cingulate cortex	-0.137	0.040	[-0.215 - -0.059]	-2.85	6.030E-04	1.111E-03	4091	2212
Right caudal middle frontal gyrus	-0.200	0.038	[-0.276 - -0.125]	-3.02	1.836E-07	2.571E-06	4073	2193
Right cuneus	-0.177	0.049	[-0.273 - -0.081]	-2.32	3.047E-04	6.463E-04	4064	2183
Right entorhinal cortex	-0.126	0.041	[-0.206 - -0.046]	-2.35	2.048E-03	2.757E-03	3971	2065
Right fusiform gyrus	-0.246	0.049	[-0.342 - -0.15]	-3.02	4.811E-07	4.811E-06	4050	2144
Right inferior parietal cortex	-0.222	0.043	[-0.307 - -0.137]	-2.94	2.867E-07	3.345E-06	4016	2118
Right inferior temporal gyrus	-0.217	0.055	[-0.324 - -0.11]	-3.07	7.260E-05	2.210E-04	4036	2153
Right isthmus cingulate cortex	-0.069	0.044	[-0.155 - 0.017]	-0.87	1.156E-01	1.156E-01	4080	2202
Right lateral occipital cortex	-0.160	0.053	[-0.264 - -0.056]	-1.9	2.668E-03	3.459E-03	4051	2161
Right lateral orbitofrontal cortex	-0.164	0.055	[-0.271 - -0.057]	-1.8	2.610E-03	3.447E-03	4076	2194
Right lingual gyrus	-0.171	0.042	[-0.253 - -0.09]	-2.12	3.910E-05	1.369E-04	4091	2209
Right medial orbitofrontal cortex	-0.178	0.054	[-0.283 - -0.072]	-2.21	9.337E-04	1.533E-03	4059	2185
Right middle temporal gyrus	-0.206	0.057	[-0.317 - -0.095]	-2.6	2.710E-04	5.928E-04	4027	2135
Right parahippocampal gyrus	-0.098	0.050	[-0.196 - 0]	-1.58	5.109E-02	5.183E-02	4072	2178
Right paracentral lobule	-0.131	0.046	[-0.222 - -0.041]	-2.09	4.539E-03	5.674E-03	4087	2205
Right pars opercularis of inferior frontal gyrus	-0.143	0.044	[-0.229 - -0.057]	-2.42	1.064E-03	1.619E-03	4048	2168
Right pars orbitalis of inferior frontal gyrus	-0.178	0.054	[-0.283 - -0.072]	-2.57	9.857E-04	1.533E-03	4066	2185
Right pars triangularis of inferior frontal gyrus	-0.145	0.041	[-0.225 - -0.064]	-2.73	4.357E-04	8.714E-04	4044	2163

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Second Generation
Right pericalcarine cortex	-0.133	0.039	[-0.21 - -0.056]	-1.7	7.488E-04	1.310E-03	4092	2210
Right postcentral gyrus	-0.205	0.034	[-0.271 - -0.139]	-2.25	1.154E-09	4.039E-08	4079	2194
Right posterior cingulate cortex	-0.130	0.049	[-0.226 - -0.034]	-2.22	8.014E-03	9.196E-03	4089	2210
Right precentral gyrus	-0.212	0.049	[-0.308 - -0.115]	-2.3	1.780E-05	7.328E-05	4074	2194
Right precuneus	-0.159	0.041	[-0.24 - -0.079]	-2.05	1.078E-04	2.901E-04	4079	2186
Right rostral anterior cingulate cortex	-0.126	0.042	[-0.209 - -0.043]	-2.84	2.966E-03	3.775E-03	4061	2191
Right rostral middle frontal gyrus	-0.210	0.057	[-0.321 - -0.098]	-2.65	2.235E-04	5.215E-04	4051	2170
Right superior frontal gyrus	-0.250	0.058	[-0.363 - -0.137]	-2.87	1.363E-05	6.817E-05	4078	2198
Right superior parietal cortex	-0.184	0.052	[-0.285 - -0.082]	-2.07	4.051E-04	8.340E-04	4054	2178
Right superior temporal gyrus	-0.222	0.057	[-0.333 - -0.11]	-2.38	9.478E-05	2.744E-04	4032	2139
Right supramarginal gyrus	-0.183	0.043	[-0.267 - -0.098]	-2.48	2.455E-05	9.546E-05	4010	2109
Right frontal pole	-0.102	0.032	[-0.165 - -0.039]	-1.62	1.553E-03	2.174E-03	4089	2214
Right temporal pole	-0.127	0.038	[-0.202 - -0.051]	-1.53	9.662E-04	1.533E-03	3994	2105
Right transverse temporal gyrus	-0.210	0.028	[-0.264 - -0.155]	-3.23	4.310E-14	3.017E-12	4091	2211
Right insula	-0.120	0.056	[-0.229 - -0.011]	-1.55	3.134E-02	3.275E-02	4089	2211
Left hemisphere	-0.268	0.058	[-0.382 - -0.154]	-2.54	4.059E-06	2.583E-05	4095	2216
Right hemisphere	-0.277	0.058	[-0.39 - -0.163]	-1.69	1.692E-06	1.316E-05	4095	2216

**Supplementary Table S24.** Cortical surface area differences between individuals with schizophrenia (SZ) on first-generation antipsychotic medication and healthy volunteers (HV)

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Second Generation
Left banks of superior temporal sulcus	-0.091	0.094	[-0.276 - 0.094]	-2.38	3.374E-01	3.871E-01	2838	426
Left caudal anterior cingulate cortex	-0.286	0.080	[-0.443 - -0.13]	-6.92	3.407E-04	2.385E-03	2876	427
Left caudal middle frontal gyrus	-0.185	0.095	[-0.372 - 0.002]	-2.83	5.202E-02	8.276E-02	2875	429
Left cuneus	-0.242	0.058	[-0.355 - -0.128]	-3.16	2.933E-05	4.106E-04	2839	425
Left entorhinal cortex	-0.132	0.064	[-0.257 - -0.007]	-3.5	3.790E-02	7.169E-02	2812	427
Left fusiform gyrus	-0.229	0.058	[-0.342 - -0.116]	-4.57	7.063E-05	8.241E-04	2837	427
Left inferior parietal cortex	-0.199	0.134	[-0.461 - 0.063]	-4.1	1.370E-01	1.844E-01	2808	423
Left inferior temporal gyrus	-0.216	0.107	[-0.426 - -0.006]	-4.68	4.415E-02	7.700E-02	2831	426
Left isthmus cingulate cortex	-0.060	0.135	[-0.325 - 0.205]	-1.19	6.595E-01	6.789E-01	2878	428
Left lateral occipital cortex	-0.293	0.067	[-0.425 - -0.162]	-3.67	1.189E-05	2.775E-04	2848	424
Left lateral orbitofrontal cortex	-0.257	0.139	[-0.53 - 0.016]	-3.34	6.458E-02	9.618E-02	2878	429
Left lingual gyrus	-0.247	0.058	[-0.36 - -0.134]	-3.25	1.786E-05	3.126E-04	2872	428
Left medial orbitofrontal cortex	-0.110	0.133	[-0.37 - 0.151]	-2.21	4.094E-01	4.477E-01	2867	429
Left middle temporal gyrus	-0.158	0.130	[-0.413 - 0.098]	-2.66	2.271E-01	2.839E-01	2806	424
Left parahippocampal gyrus	-0.148	0.059	[-0.263 - -0.033]	-2.76	1.179E-02	3.665E-02	2860	426
Left paracentral lobule	-0.190	0.093	[-0.372 - -0.008]	-2.29	4.118E-02	7.437E-02	2875	428
Left pars opercularis of inferior frontal gyrus	-0.296	0.092	[-0.477 - -0.115]	-5.56	1.340E-03	6.702E-03	2863	425
Left pars orbitalis of inferior frontal gyrus	-0.232	0.093	[-0.415 - -0.05]	-3.59	1.267E-02	3.695E-02	2857	428
Left pars triangularis of inferior frontal gyrus	-0.205	0.097	[-0.396 - -0.014]	-3.6	3.514E-02	6.870E-02	2848	428
Left pericalcarine cortex	-0.144	0.057	[-0.257 - -0.032]	-1.89	1.204E-02	3.665E-02	2880	429
Left postcentral gyrus	-0.229	0.091	[-0.406 - -0.051]	-2.91	1.160E-02	3.665E-02	2864	427
Left posterior cingulate cortex	-0.190	0.122	[-0.429 - 0.049]	-2.99	1.192E-01	1.636E-01	2878	428
Left precentral gyrus	-0.283	0.105	[-0.489 - -0.077]	-2.91	6.960E-03	2.707E-02	2876	426
Left precuneus	-0.160	0.121	[-0.398 - 0.078]	-3.42	1.871E-01	2.381E-01	2866	427
Left rostral anterior cingulate cortex	-0.240	0.137	[-0.509 - 0.029]	-5.01	7.983E-02	1.136E-01	2871	428

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Second Generation
Left rostral middle frontal gyrus	-0.286	0.101	[-0.485 - -0.088]	-3.39	4.699E-03	1.935E-02	2861	428
Left superior frontal gyrus	-0.199	0.100	[-0.395 - -0.003]	-2.64	4.652E-02	7.753E-02	2876	429
Left superior parietal cortex	-0.295	0.090	[-0.472 - -0.119]	-3.31	1.015E-03	5.921E-03	2833	424
Left superior temporal gyrus	-0.192	0.102	[-0.393 - 0.008]	-3.09	6.042E-02	9.195E-02	2820	423
Left supramarginal gyrus	-0.109	0.094	[-0.292 - 0.075]	-3.29	2.460E-01	2.933E-01	2804	421
Left frontal pole	-0.059	0.126	[-0.306 - 0.187]	-2.43	6.372E-01	6.657E-01	2879	428
Left temporal pole	-0.062	0.057	[-0.174 - 0.051]	-0.82	2.826E-01	3.297E-01	2845	426
Left transverse temporal gyrus	-0.217	0.092	[-0.397 - -0.037]	-4.7	1.838E-02	4.765E-02	2873	428
Left insula	-0.142	0.122	[-0.382 - 0.098]	-2.11	2.472E-01	2.933E-01	2874	424
Right banks of superior temporal sulcus	-0.044	0.090	[-0.22 - 0.133]	-1.39	6.293E-01	6.657E-01	2860	425
Right caudal anterior cingulate cortex	-0.140	0.058	[-0.253 - -0.026]	-3.44	1.608E-02	4.358E-02	2879	427
Right caudal middle frontal gyrus	-0.236	0.116	[-0.464 - -0.009]	-4.22	4.143E-02	7.437E-02	2863	425
Right cuneus	-0.290	0.057	[-0.402 - -0.177]	-4.9	4.609E-07	3.078E-05	2853	429
Right entorhinal cortex	-0.058	0.067	[-0.189 - 0.074]	-2.02	3.882E-01	4.383E-01	2773	421
Right fusiform gyrus	-0.288	0.087	[-0.458 - -0.118]	-5.3	9.068E-04	5.771E-03	2839	426
Right inferior parietal cortex	-0.169	0.084	[-0.335 - -0.004]	-2.69	4.510E-02	7.700E-02	2806	422
Right inferior temporal gyrus	-0.280	0.130	[-0.535 - -0.025]	-5.12	3.140E-02	6.563E-02	2825	422
Right isthmus cingulate cortex	-0.048	0.126	[-0.295 - 0.199]	-1.22	7.038E-01	7.140E-01	2869	427
Right lateral occipital cortex	-0.213	0.058	[-0.327 - -0.099]	-3.52	2.522E-04	1.961E-03	2839	421
Right lateral orbitofrontal cortex	-0.294	0.102	[-0.494 - -0.095]	-4.21	3.823E-03	1.784E-02	2864	428
Right lingual gyrus	-0.220	0.058	[-0.333 - -0.107]	-3.07	1.363E-04	1.192E-03	2879	422
Right medial orbitofrontal cortex	-0.237	0.121	[-0.473 - 0]	-2.67	4.957E-02	8.070E-02	2848	426
Right middle temporal gyrus	-0.170	0.127	[-0.419 - 0.078]	-2.99	1.790E-01	2.320E-01	2816	422
Right parahippocampal gyrus	-0.222	0.058	[-0.336 - -0.109]	-3.78	1.161E-04	1.161E-03	2860	425
Right paracentral lobule	-0.179	0.078	[-0.333 - -0.026]	-3.03	2.205E-02	5.321E-02	2875	428
Right pars opercularis of inferior frontal gyrus	-0.129	0.059	[-0.245 - -0.013]	-3.14	2.966E-02	6.488E-02	2837	425
Right pars orbitalis of inferior frontal gyrus	-0.246	0.096	[-0.434 - -0.058]	-4.57	1.042E-02	3.665E-02	2853	428
Right pars triangularis of inferior frontal gyrus	-0.180	0.086	[-0.348 - -0.012]	-3.67	3.533E-02	6.870E-02	2832	426



	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Second Generation
Right pericalcarine cortex	-0.126	0.058	[-0.239 - -0.013]	-2.34	2.837E-02	6.406E-02	2881	425
Right postcentral gyrus	-0.198	0.113	[-0.42 - 0.024]	-2.61	8.114E-02	1.136E-01	2868	429
Right posterior cingulate cortex	-0.240	0.125	[-0.486 - 0.006]	-4.5	5.566E-02	8.658E-02	2878	429
Right precentral gyrus	-0.340	0.106	[-0.548 - -0.133]	-3.96	1.307E-03	6.702E-03	2861	426
Right precuneus	-0.180	0.124	[-0.423 - 0.063]	-3.32	1.467E-01	1.938E-01	2867	427
Right rostral anterior cingulate cortex	-0.208	0.090	[-0.386 - -0.031]	-5.87	2.124E-02	5.310E-02	2849	428
Right rostral middle frontal gyrus	-0.267	0.111	[-0.485 - -0.049]	-3.47	1.619E-02	4.358E-02	2839	426
Right superior frontal gyrus	-0.248	0.110	[-0.464 - -0.032]	-3.13	2.446E-02	5.708E-02	2867	427
Right superior parietal cortex	-0.283	0.058	[-0.396 - -0.17]	-3.41	8.794E-07	3.078E-05	2845	428
Right superior temporal gyrus	-0.229	0.107	[-0.437 - -0.02]	-2.87	3.188E-02	6.563E-02	2834	424
Right supramarginal gyrus	-0.192	0.110	[-0.407 - 0.023]	-3.25	8.037E-02	1.136E-01	2806	423
Right frontal pole	-0.046	0.057	[-0.158 - 0.066]	-1.11	4.216E-01	4.540E-01	2877	428
Right temporal pole	-0.030	0.113	[-0.251 - 0.191]	-0.26	7.908E-01	7.908E-01	2784	423
Right transverse temporal gyrus	-0.091	0.109	[-0.304 - 0.122]	-2.18	4.031E-01	4.477E-01	2879	427
Right insula	-0.169	0.141	[-0.445 - 0.108]	-3.3	2.315E-01	2.842E-01	2879	429
Left hemisphere	-0.321	0.126	[-0.568 - -0.074]	-3.25	1.081E-02	3.665E-02	2884	429
Right hemisphere	-0.341	0.120	[-0.576 - -0.105]	-2.87	4.528E-03	1.935E-02	2884	429



**Supplementary Table S25.** Cortical surface area differences between individuals with schizophrenia (SZ) on both first-generation and second-generation antipsychotic medication and healthy volunteers (HV)

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N First And Second Generation
Left banks of superior temporal sulcus	-0.148	0.069	[-0.284 - -0.013]	-2.01	3.211E-02	1.212E-01	3106	243
Left caudal anterior cingulate cortex	-0.094	0.103	[-0.296 - 0.109]	0.29	3.644E-01	4.881E-01	3142	246
Left caudal middle frontal gyrus	-0.174	0.082	[-0.334 - -0.014]	-3.4	3.289E-02	1.212E-01	3141	244
Left cuneus	-0.170	0.082	[-0.331 - -0.01]	-2.14	3.741E-02	1.246E-01	3105	243
Left entorhinal cortex	-0.109	0.075	[-0.256 - 0.037]	-0.95	1.431E-01	2.636E-01	3077	244
Left fusiform gyrus	-0.223	0.082	[-0.383 - -0.062]	-2.74	6.564E-03	8.947E-02	3102	245
Left inferior parietal cortex	-0.319	0.108	[-0.53 - -0.107]	-3.08	3.165E-03	5.538E-02	3074	241
Left inferior temporal gyrus	-0.076	0.100	[-0.271 - 0.12]	-0.39	4.488E-01	5.443E-01	3097	243
Left isthmus cingulate cortex	0.029	0.106	[-0.18 - 0.237]	1.59	7.854E-01	8.458E-01	3143	244
Left lateral occipital cortex	-0.196	0.090	[-0.373 - -0.019]	-2.61	2.955E-02	1.212E-01	3114	243
Left lateral orbitofrontal cortex	-0.052	0.109	[-0.265 - 0.161]	-0.52	6.323E-01	7.256E-01	3143	246
Left lingual gyrus	-0.223	0.085	[-0.389 - -0.058]	-2.89	8.219E-03	8.947E-02	3138	244
Left medial orbitofrontal cortex	-0.065	0.119	[-0.299 - 0.169]	-0.66	5.883E-01	6.863E-01	3133	245
Left middle temporal gyrus	-0.220	0.085	[-0.387 - -0.053]	-2.44	9.932E-03	8.947E-02	3072	244
Left parahippocampal gyrus	-0.141	0.069	[-0.276 - -0.006]	-2.18	4.094E-02	1.246E-01	3126	244
Left paracentral lobule	0.016	0.116	[-0.21 - 0.243]	0.76	8.885E-01	9.146E-01	3141	244
Left pars opercularis of inferior frontal gyrus	-0.159	0.134	[-0.42 - 0.103]	-3.16	2.353E-01	3.527E-01	3129	246
Left pars orbitalis of inferior frontal gyrus	-0.095	0.105	[-0.3 - 0.11]	-1.19	3.659E-01	4.881E-01	3122	241
Left pars triangularis of inferior frontal gyrus	-0.188	0.094	[-0.371 - -0.005]	-1.97	4.451E-02	1.298E-01	3113	244
Left pericalcarine cortex	-0.151	0.088	[-0.324 - 0.021]	-2.49	8.527E-02	1.756E-01	3146	245
Left postcentral gyrus	-0.169	0.090	[-0.344 - 0.007]	-0.87	5.954E-02	1.544E-01	3130	245
Left posterior cingulate cortex	-0.092	0.115	[-0.317 - 0.133]	-0.77	4.228E-01	5.298E-01	3144	246
Left precentral gyrus	-0.091	0.096	[-0.278 - 0.097]	-0.42	3.430E-01	4.801E-01	3143	246
Left precuneus	-0.023	0.093	[-0.204 - 0.159]	0.32	8.073E-01	8.562E-01	3132	244

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N First And Second Generation
Left rostral anterior cingulate cortex	-0.116	0.098	[-0.307 - 0.075]	-1.87	2.348E-01	3.527E-01	3137	245
Left rostral middle frontal gyrus	-0.165	0.091	[-0.344 - 0.014]	-0.54	7.148E-02	1.564E-01	3127	239
Left superior frontal gyrus	-0.244	0.102	[-0.444 - -0.044]	-2.68	1.695E-02	1.029E-01	3142	244
Left superior parietal cortex	0.019	0.132	[-0.24 - 0.277]	-0.3	8.882E-01	9.146E-01	3099	244
Left superior temporal gyrus	-0.278	0.092	[-0.457 - -0.098]	-2.26	2.437E-03	5.538E-02	3086	240
Left supramarginal gyrus	-0.060	0.108	[-0.271 - 0.151]	-0.35	5.792E-01	6.863E-01	3071	238
Left frontal pole	-0.182	0.079	[-0.338 - -0.027]	-2.52	2.153E-02	1.159E-01	3145	245
Left temporal pole	-0.160	0.087	[-0.33 - 0.01]	-2.34	6.577E-02	1.564E-01	3111	244
Left transverse temporal gyrus	-0.109	0.071	[-0.248 - 0.03]	-1	1.243E-01	2.465E-01	3139	245
Left insula	-0.093	0.116	[-0.321 - 0.134]	-0.46	4.204E-01	5.298E-01	3141	246
Right banks of superior temporal sulcus	-0.082	0.109	[-0.296 - 0.132]	-1.1	4.510E-01	5.443E-01	3127	245
Right caudal anterior cingulate cortex	0.029	0.103	[-0.172 - 0.23]	0.9	7.781E-01	8.458E-01	3145	246
Right caudal middle frontal gyrus	-0.177	0.080	[-0.334 - -0.02]	-3.44	2.689E-02	1.212E-01	3129	244
Right cuneus	-0.175	0.088	[-0.347 - -0.002]	-1.95	4.699E-02	1.316E-01	3119	246
Right entorhinal cortex	-0.123	0.101	[-0.321 - 0.076]	-0.88	2.263E-01	3.527E-01	3039	243
Right fusiform gyrus	-0.272	0.106	[-0.48 - -0.064]	-3.15	1.023E-02	8.947E-02	3106	243
Right inferior parietal cortex	-0.268	0.112	[-0.487 - -0.049]	-3.23	1.636E-02	1.029E-01	3071	244
Right inferior temporal gyrus	-0.174	0.081	[-0.332 - -0.016]	-1.56	3.076E-02	1.212E-01	3091	241
Right isthmus cingulate cortex	0.102	0.090	[-0.073 - 0.278]	1.61	2.538E-01	3.701E-01	3134	245
Right lateral occipital cortex	-0.166	0.069	[-0.301 - -0.031]	-1.95	1.625E-02	1.029E-01	3106	244
Right lateral orbitofrontal cortex	0.003	0.086	[-0.166 - 0.172]	0.35	9.740E-01	9.740E-01	3130	245
Right lingual gyrus	-0.158	0.115	[-0.384 - 0.067]	-2.22	1.688E-01	2.883E-01	3145	246
Right medial orbitofrontal cortex	-0.151	0.099	[-0.346 - 0.043]	-1.71	1.268E-01	2.465E-01	3114	245
Right middle temporal gyrus	-0.234	0.069	[-0.37 - -0.098]	-1.86	7.278E-04	2.547E-02	3081	242
Right parahippocampal gyrus	-0.149	0.073	[-0.291 - -0.006]	-2.08	4.091E-02	1.246E-01	3126	244
Right paracentral lobule	-0.124	0.126	[-0.371 - 0.124]	-0.85	3.277E-01	4.682E-01	3141	245
Right pars opercularis of inferior frontal gyrus	-0.117	0.146	[-0.402 - 0.169]	-1.87	4.238E-01	5.298E-01	3102	243

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N First And Second Generation
Right pars orbitalis of inferior frontal gyrus	-0.125	0.069	[-0.26 - 0.01]	-0.8	6.938E-02	1.564E-01	3119	246
Right pars triangularis of inferior frontal gyrus	-0.264	0.069	[-0.4 - -0.129]	-2.97	1.286E-04	8.999E-03	3099	245
Right pericalcarine cortex	-0.145	0.102	[-0.345 - 0.055]	-2.15	1.551E-01	2.784E-01	3147	246
Right postcentral gyrus	-0.095	0.105	[-0.301 - 0.112]	-1.04	3.695E-01	4.881E-01	3134	245
Right posterior cingulate cortex	-0.042	0.124	[-0.285 - 0.202]	0.39	7.362E-01	8.180E-01	3143	246
Right precentral gyrus	-0.162	0.110	[-0.378 - 0.054]	-0.69	1.412E-01	2.636E-01	3127	242
Right precuneus	-0.009	0.087	[-0.179 - 0.161]	0.87	9.211E-01	9.344E-01	3133	246
Right rostral anterior cingulate cortex	-0.106	0.086	[-0.275 - 0.062]	-1.42	2.156E-01	3.517E-01	3116	246
Right rostral middle frontal gyrus	-0.239	0.101	[-0.436 - -0.042]	-1.43	1.763E-02	1.029E-01	3105	243
Right superior frontal gyrus	-0.223	0.123	[-0.465 - 0.019]	-2.24	7.097E-02	1.564E-01	3133	243
Right superior parietal cortex	-0.082	0.069	[-0.217 - 0.054]	-0.24	2.368E-01	3.527E-01	3111	244
Right superior temporal gyrus	-0.214	0.099	[-0.408 - -0.02]	-1.2	3.040E-02	1.212E-01	3102	243
Right supramarginal gyrus	-0.033	0.083	[-0.197 - 0.13]	-0.07	6.908E-01	7.799E-01	3071	244
Right frontal pole	-0.171	0.122	[-0.409 - 0.067]	-3.76	1.596E-01	2.792E-01	3143	245
Right temporal pole	-0.112	0.091	[-0.29 - 0.065]	-0.56	2.160E-01	3.517E-01	3049	244
Right transverse temporal gyrus	-0.186	0.099	[-0.38 - 0.007]	-1.82	5.885E-02	1.544E-01	3145	246
Right insula	-0.200	0.113	[-0.422 - 0.023]	-1.3	7.851E-02	1.665E-01	3145	246
Left hemisphere	-0.205	0.110	[-0.421 - 0.011]	-2.21	6.229E-02	1.557E-01	3150	246
Right hemisphere	-0.227	0.109	[-0.44 - -0.013]	-1.98	3.732E-02	1.246E-01	3150	246

**Supplementary Table S26.** Cortical surface area differences between individuals with schizophrenia (SZ) on second-generation antipsychotic medication and individuals with SZ who are unmedicated

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N Second Generation
Left banks of superior temporal sulcus	-0.126	0.064	[-0.252 - 0.001]	-0.97	5.106E-02	1.892E-01	388	1400
Left caudal anterior cingulate cortex	-0.055	0.063	[-0.179 - 0.07]	-0.44	3.893E-01	4.699E-01	397	1448
Left caudal middle frontal gyrus	-0.142	0.073	[-0.285 - 0.001]	-0.97	5.136E-02	1.892E-01	393	1437
Left cuneus	-0.062	0.065	[-0.189 - 0.064]	-0.58	3.354E-01	4.348E-01	384	1394
Left entorhinal cortex	-0.046	0.065	[-0.174 - 0.082]	-0.53	4.816E-01	5.351E-01	379	1386
Left fusiform gyrus	-0.147	0.065	[-0.274 - -0.02]	-0.71	2.313E-02	1.334E-01	384	1410
Left inferior parietal cortex	-0.130	0.085	[-0.297 - 0.037]	-0.84	1.259E-01	2.854E-01	383	1355
Left inferior temporal gyrus	-0.093	0.065	[-0.22 - 0.034]	-0.49	1.502E-01	3.005E-01	386	1382
Left isthmus cingulate cortex	-0.156	0.067	[-0.288 - -0.024]	-1.45	2.017E-02	1.287E-01	397	1441
Left lateral occipital cortex	-0.068	0.069	[-0.204 - 0.068]	-0.35	3.271E-01	4.348E-01	390	1404
Left lateral orbitofrontal cortex	-0.194	0.078	[-0.347 - -0.041]	-0.99	1.319E-02	1.158E-01	397	1445
Left lingual gyrus	-0.131	0.064	[-0.255 - -0.006]	-0.93	3.978E-02	1.740E-01	396	1440
Left medial orbitofrontal cortex	-0.136	0.123	[-0.377 - 0.105]	-0.74	2.685E-01	3.836E-01	396	1438
Left middle temporal gyrus	-0.123	0.065	[-0.251 - 0.004]	-0.6	5.798E-02	1.951E-01	383	1348
Left parahippocampal gyrus	-0.121	0.064	[-0.247 - 0.004]	-1.13	5.854E-02	1.951E-01	391	1429
Left paracentral lobule	-0.078	0.063	[-0.203 - 0.046]	-0.81	2.167E-01	3.370E-01	396	1444
Left pars opercularis of inferior frontal gyrus	-0.113	0.089	[-0.288 - 0.062]	-0.81	2.057E-01	3.273E-01	390	1419
Left pars orbitalis of inferior frontal gyrus	-0.014	0.065	[-0.141 - 0.113]	-0.1	8.322E-01	8.442E-01	391	1421
Left pars triangularis of inferior frontal gyrus	-0.149	0.092	[-0.329 - 0.031]	-0.69	1.058E-01	2.666E-01	386	1405
Left pericalcarine cortex	-0.021	0.065	[-0.148 - 0.105]	-0.37	7.417E-01	7.635E-01	397	1446
Left postcentral gyrus	-0.057	0.093	[-0.24 - 0.126]	-0.3	5.394E-01	5.809E-01	395	1437
Left posterior cingulate cortex	-0.118	0.069	[-0.254 - 0.017]	-0.89	8.703E-02	2.538E-01	396	1445
Left precentral gyrus	-0.066	0.074	[-0.21 - 0.079]	-0.54	3.727E-01	4.577E-01	395	1435
Left precuneus	-0.084	0.064	[-0.209 - 0.041]	-0.51	1.885E-01	3.273E-01	392	1428
Left rostral anterior cingulate cortex	-0.085	0.064	[-0.21 - 0.04]	-0.61	1.821E-01	3.273E-01	395	1439

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N Second Generation
Left rostral middle frontal gyrus	-0.129	0.091	[-0.308 - 0.05]	-0.59	1.569E-01	3.050E-01	389	1412
Left superior frontal gyrus	-0.193	0.064	[-0.319 - -0.068]	-0.79	2.455E-03	4.059E-02	393	1439
Left superior parietal cortex	-0.083	0.065	[-0.21 - 0.044]	-0.43	2.022E-01	3.273E-01	384	1393
Left superior temporal gyrus	-0.209	0.065	[-0.337 - -0.081]	-1.27	1.415E-03	3.302E-02	379	1363
Left supramarginal gyrus	-0.139	0.066	[-0.268 - -0.011]	-0.86	3.402E-02	1.610E-01	375	1360
Left frontal pole	-0.049	0.063	[-0.173 - 0.075]	-0.26	4.375E-01	5.020E-01	397	1448
Left temporal pole	-0.061	0.064	[-0.186 - 0.065]	-0.3	3.422E-01	4.355E-01	391	1422
Left transverse temporal gyrus	-0.102	0.063	[-0.227 - 0.022]	-0.93	1.066E-01	2.666E-01	397	1448
Left insula	-0.142	0.063	[-0.267 - -0.018]	-0.63	2.478E-02	1.334E-01	397	1447
Right banks of superior temporal sulcus	-0.113	0.064	[-0.238 - 0.013]	-1.06	7.843E-02	2.495E-01	390	1418
Right caudal anterior cingulate cortex	-0.042	0.063	[-0.167 - 0.082]	-0.26	5.043E-01	5.515E-01	397	1446
Right caudal middle frontal gyrus	-0.159	0.064	[-0.284 - -0.033]	-0.88	1.324E-02	1.158E-01	391	1428
Right cuneus	-0.070	0.064	[-0.196 - 0.057]	-0.41	2.792E-01	3.909E-01	387	1418
Right entorhinal cortex	-0.064	0.066	[-0.193 - 0.066]	-0.15	3.347E-01	4.348E-01	376	1310
Right fusiform gyrus	-0.219	0.067	[-0.349 - -0.089]	-1.17	9.981E-04	3.302E-02	391	1376
Right inferior parietal cortex	-0.097	0.066	[-0.226 - 0.032]	-0.61	1.404E-01	2.978E-01	375	1356
Right inferior temporal gyrus	-0.095	0.065	[-0.222 - 0.031]	-0.37	1.394E-01	2.978E-01	386	1390
Right isthmus cingulate cortex	-0.138	0.109	[-0.352 - 0.075]	-1	2.042E-01	3.273E-01	395	1436
Right lateral occipital cortex	-0.099	0.085	[-0.265 - 0.067]	-0.74	2.423E-01	3.571E-01	387	1396
Right lateral orbitofrontal cortex	-0.233	0.067	[-0.364 - -0.102]	-1.03	4.940E-04	3.302E-02	388	1430
Right lingual gyrus	-0.105	0.063	[-0.229 - 0.02]	-0.69	9.844E-02	2.650E-01	397	1442
Right medial orbitofrontal cortex	-0.106	0.083	[-0.269 - 0.056]	-0.35	2.008E-01	3.273E-01	384	1419
Right middle temporal gyrus	-0.093	0.078	[-0.246 - 0.059]	-0.47	2.303E-01	3.505E-01	381	1369
Right parahippocampal gyrus	-0.158	0.075	[-0.304 - -0.012]	-1.53	3.449E-02	1.610E-01	392	1411
Right paracentral lobule	-0.003	0.063	[-0.127 - 0.121]	-0.35	9.638E-01	9.638E-01	397	1441
Right pars opercularis of inferior frontal gyrus	-0.127	0.064	[-0.253 - -0.001]	-0.7	4.766E-02	1.892E-01	389	1401
Right pars orbitalis of inferior frontal gyrus	-0.105	0.064	[-0.23 - 0.019]	-0.5	9.813E-02	2.650E-01	395	1420
Right pars triangularis of inferior frontal gyrus	-0.192	0.064	[-0.318 - -0.066]	-1.05	2.899E-03	4.059E-02	389	1399

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N Second Generation
Right pericalcarine cortex	-0.084	0.066	[-0.213 - 0.045]	-0.61	2.007E-01	3.273E-01	396	1446
Right postcentral gyrus	-0.046	0.064	[-0.171 - 0.079]	-0.44	4.703E-01	5.310E-01	395	1432
Right posterior cingulate cortex	-0.078	0.084	[-0.242 - 0.087]	-0.2	3.550E-01	4.437E-01	397	1444
Right precentral gyrus	-0.033	0.074	[-0.179 - 0.113]	-0.28	6.563E-01	6.857E-01	393	1428
Right precuneus	-0.098	0.064	[-0.223 - 0.028]	-0.63	1.264E-01	2.854E-01	392	1421
Right rostral anterior cingulate cortex	-0.067	0.064	[-0.193 - 0.059]	-0.39	2.980E-01	4.090E-01	387	1423
Right rostral middle frontal gyrus	-0.165	0.106	[-0.373 - 0.044]	-0.51	1.222E-01	2.854E-01	389	1403
Right superior frontal gyrus	-0.189	0.081	[-0.348 - -0.029]	-0.64	2.022E-02	1.287E-01	390	1432
Right superior parietal cortex	-0.054	0.065	[-0.18 - 0.073]	-0.53	4.034E-01	4.786E-01	386	1410
Right superior temporal gyrus	-0.093	0.065	[-0.22 - 0.034]	-0.58	1.495E-01	3.005E-01	387	1381
Right supramarginal gyrus	-0.083	0.066	[-0.212 - 0.045]	-0.51	2.051E-01	3.273E-01	377	1350
Right frontal pole	-0.110	0.063	[-0.234 - 0.014]	-0.98	8.328E-02	2.535E-01	397	1448
Right temporal pole	-0.035	0.065	[-0.163 - 0.094]	-0.1	5.965E-01	6.326E-01	379	1338
Right transverse temporal gyrus	0.051	0.063	[-0.073 - 0.176]	0	4.181E-01	4.878E-01	397	1448
Right insula	-0.074	0.064	[-0.199 - 0.051]	-0.38	2.449E-01	3.571E-01	395	1445
Left hemisphere	-0.169	0.063	[-0.294 - -0.045]	-0.73	7.569E-03	8.831E-02	397	1448
Right hemisphere	-0.152	0.063	[-0.276 - -0.027]	-0.61	1.673E-02	1.287E-01	397	1448

**Supplementary Table S27.** Cortical surface area differences between individuals with schizophrenia (SZ) on first-generation antipsychotic medication and individuals with SZ who are not on medication

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N First Generation
Left banks of superior temporal sulcus	-0.295	0.199	[-0.684 - 0.095]	-1.83	1.382E-01	2.899E-01	204	242
Left caudal anterior cingulate cortex	-0.022	0.107	[-0.231 - 0.188]	-0.66	8.400E-01	8.909E-01	213	245
Left caudal middle frontal gyrus	-0.280	0.171	[-0.616 - 0.056]	-2.23	1.021E-01	2.464E-01	209	245
Left cuneus	-0.024	0.109	[-0.238 - 0.189]	-0.66	8.220E-01	8.909E-01	200	242
Left entorhinal cortex	-0.086	0.108	[-0.298 - 0.125]	0.29	4.246E-01	5.390E-01	195	245
Left fusiform gyrus	-0.214	0.150	[-0.509 - 0.08]	-1.12	1.541E-01	3.081E-01	200	242
Left inferior parietal cortex	-0.351	0.162	[-0.668 - -0.035]	-1.86	2.970E-02	1.094E-01	199	239
Left inferior temporal gyrus	-0.292	0.109	[-0.505 - -0.078]	-1.9	7.442E-03	6.494E-02	202	242
Left isthmus cingulate cortex	-0.039	0.131	[-0.295 - 0.217]	-0.45	7.661E-01	8.650E-01	213	243
Left lateral occipital cortex	-0.364	0.229	[-0.813 - 0.085]	-1.25	1.125E-01	2.625E-01	206	242
Left lateral orbitofrontal cortex	-0.221	0.143	[-0.501 - 0.06]	-0.55	1.230E-01	2.778E-01	213	245
Left lingual gyrus	-0.181	0.138	[-0.451 - 0.089]	-1.4	1.880E-01	3.518E-01	212	244
Left medial orbitofrontal cortex	-0.125	0.213	[-0.543 - 0.293]	0.02	5.570E-01	6.608E-01	212	245
Left middle temporal gyrus	-0.279	0.168	[-0.608 - 0.05]	-1.95	9.606E-02	2.402E-01	199	241
Left parahippocampal gyrus	-0.086	0.108	[-0.298 - 0.126]	0.02	4.251E-01	5.390E-01	207	243
Left paracentral lobule	-0.418	0.108	[-0.63 - -0.206]	-3.61	1.129E-04	7.900E-03	212	245
Left pars opercularis of inferior frontal gyrus	-0.175	0.116	[-0.401 - 0.052]	-1.07	1.318E-01	2.883E-01	206	243
Left pars orbitalis of inferior frontal gyrus	-0.101	0.141	[-0.378 - 0.176]	-0.57	4.742E-01	5.823E-01	207	244
Left pars triangularis of inferior frontal gyrus	-0.262	0.108	[-0.474 - -0.049]	-1.59	1.565E-02	7.824E-02	202	244
Left pericalcarine cortex	-0.029	0.185	[-0.392 - 0.333]	-0.64	8.743E-01	9.104E-01	213	245
Left postcentral gyrus	-0.243	0.127	[-0.493 - 0.006]	-1.96	5.564E-02	1.648E-01	211	243
Left posterior cingulate cortex	-0.148	0.112	[-0.367 - 0.072]	-1.25	1.874E-01	3.518E-01	212	245
Left precentral gyrus	-0.137	0.136	[-0.404 - 0.129]	-1.81	3.123E-01	4.752E-01	211	243
Left precuneus	-0.196	0.133	[-0.457 - 0.065]	-1.28	1.408E-01	2.899E-01	208	244
Left rostral anterior cingulate cortex	-0.060	0.113	[-0.282 - 0.162]	-1.03	5.968E-01	6.963E-01	211	244



	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N First Generation
Left rostral middle frontal gyrus	-0.264	0.139	[-0.536 - 0.007]	-1.18	5.649E-02	1.648E-01	205	244
Left superior frontal gyrus	-0.401	0.123	[-0.642 - -0.159]	-2.01	1.165E-03	4.078E-02	209	245
Left superior parietal cortex	-0.254	0.127	[-0.502 - -0.005]	-1.92	4.566E-02	1.522E-01	200	242
Left superior temporal gyrus	-0.271	0.110	[-0.487 - -0.054]	-1.58	1.419E-02	7.824E-02	195	239
Left supramarginal gyrus	-0.257	0.137	[-0.525 - 0.011]	-1.43	6.012E-02	1.683E-01	191	237
Left frontal pole	-0.096	0.107	[-0.306 - 0.113]	-0.72	3.689E-01	5.125E-01	213	245
Left temporal pole	-0.042	0.199	[-0.433 - 0.348]	0.36	8.311E-01	8.909E-01	207	245
Left transverse temporal gyrus	-0.108	0.137	[-0.376 - 0.161]	-1.55	4.312E-01	5.390E-01	213	245
Left insula	-0.182	0.163	[-0.501 - 0.136]	-0.7	2.622E-01	4.104E-01	213	244
Right banks of superior temporal sulcus	-0.243	0.109	[-0.457 - -0.03]	-1.4	2.527E-02	1.040E-01	206	242
Right caudal anterior cingulate cortex	-0.138	0.107	[-0.347 - 0.072]	-1.33	1.987E-01	3.536E-01	213	245
Right caudal middle frontal gyrus	-0.313	0.109	[-0.527 - -0.1]	-2.11	4.045E-03	5.663E-02	207	242
Right cuneus	-0.187	0.167	[-0.515 - 0.141]	-0.42	2.638E-01	4.104E-01	203	245
Right entorhinal cortex	-0.098	0.110	[-0.313 - 0.117]	0.66	3.729E-01	5.125E-01	192	238
Right fusiform gyrus	-0.338	0.131	[-0.596 - -0.081]	-1.76	9.879E-03	6.494E-02	207	242
Right inferior parietal cortex	-0.290	0.110	[-0.507 - -0.074]	-1.66	8.578E-03	6.494E-02	191	239
Right inferior temporal gyrus	-0.187	0.110	[-0.402 - 0.027]	-0.99	8.693E-02	2.254E-01	202	239
Right isthmus cingulate cortex	-0.087	0.132	[-0.346 - 0.173]	-0.44	5.127E-01	6.187E-01	211	244
Right lateral occipital cortex	-0.439	0.171	[-0.773 - -0.104]	-2.22	1.021E-02	6.494E-02	203	240
Right lateral orbitofrontal cortex	-0.312	0.108	[-0.523 - -0.1]	-1.38	3.923E-03	5.663E-02	204	244
Right lingual gyrus	-0.221	0.169	[-0.553 - 0.11]	-1.49	1.910E-01	3.518E-01	213	244
Right medial orbitofrontal cortex	-0.116	0.125	[-0.362 - 0.13]	-0.34	3.546E-01	5.125E-01	200	243
Right middle temporal gyrus	-0.217	0.120	[-0.453 - 0.019]	-1.25	7.173E-02	1.931E-01	197	240
Right parahippocampal gyrus	-0.096	0.111	[-0.314 - 0.121]	-0.39	3.866E-01	5.204E-01	208	241
Right paracentral lobule	-0.236	0.107	[-0.446 - -0.027]	-2.7	2.726E-02	1.060E-01	213	245
Right pars opercularis of inferior frontal gyrus	-0.096	0.108	[-0.308 - 0.116]	-0.81	3.734E-01	5.125E-01	205	242
Right pars orbitalis of inferior frontal gyrus	-0.136	0.108	[-0.347 - 0.075]	-0.34	2.071E-01	3.536E-01	211	243
Right pars triangularis of inferior frontal gyrus	-0.264	0.109	[-0.477 - -0.051]	-1.58	1.528E-02	7.824E-02	205	241



	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N First Generation
Right pericalcarine cortex	-0.150	0.119	[-0.383 - 0.083]	-0.93	2.059E-01	3.536E-01	212	245
Right postcentral gyrus	-0.217	0.107	[-0.427 - -0.006]	-1.95	4.357E-02	1.522E-01	211	245
Right posterior cingulate cortex	-0.132	0.143	[-0.413 - 0.148]	-1.4	3.543E-01	5.125E-01	213	245
Right precentral gyrus	-0.039	0.163	[-0.359 - 0.281]	-1.39	8.104E-01	8.909E-01	209	243
Right precuneus	-0.304	0.108	[-0.515 - -0.092]	-1.99	4.948E-03	5.773E-02	208	244
Right rostral anterior cingulate cortex	-0.040	0.108	[-0.252 - 0.171]	-0.6	7.076E-01	8.120E-01	203	244
Right rostral middle frontal gyrus	-0.184	0.148	[-0.475 - 0.107]	-0.41	2.145E-01	3.575E-01	205	242
Right superior frontal gyrus	-0.392	0.145	[-0.676 - -0.109]	-1.63	6.662E-03	6.494E-02	206	243
Right superior parietal cortex	-0.351	0.148	[-0.641 - -0.062]	-2.21	1.746E-02	8.149E-02	202	245
Right superior temporal gyrus	0.012	0.109	[-0.202 - 0.227]	0.09	9.104E-01	9.104E-01	203	239
Right supramarginal gyrus	-0.147	0.121	[-0.384 - 0.09]	-1.1	2.255E-01	3.671E-01	193	240
Right frontal pole	-0.210	0.107	[-0.42 - 0]	-1.61	5.044E-02	1.605E-01	213	245
Right temporal pole	-0.014	0.119	[-0.246 - 0.219]	0.32	9.085E-01	9.104E-01	195	239
Right transverse temporal gyrus	-0.013	0.107	[-0.223 - 0.197]	-0.83	9.016E-01	9.104E-01	213	244
Right insula	-0.087	0.107	[-0.297 - 0.123]	-0.27	4.161E-01	5.390E-01	211	244
Left hemisphere	-0.338	0.150	[-0.633 - -0.044]	-1.45	2.425E-02	1.040E-01	213	245
Right hemisphere	-0.317	0.108	[-0.528 - -0.106]	-1.37	3.219E-03	5.663E-02	213	245

**Supplementary Table S28.** Cortical surface area differences between individuals with schizophrenia (SZ) on both first- and second-generation antipsychotic medication and individuals with SZ who are not on medication

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N First And Second Generation
Left banks of superior temporal sulcus	-0.342	0.185	[-0.705 - 0.02]	-2.7	6.407E-02	2.106E-01	167	145
Left caudal anterior cingulate cortex	-0.152	0.126	[-0.399 - 0.094]	-2.11	2.255E-01	3.947E-01	176	147
Left caudal middle frontal gyrus	-0.315	0.197	[-0.7 - 0.07]	-1.96	1.090E-01	2.384E-01	172	146
Left cuneus	-0.040	0.150	[-0.333 - 0.254]	-1.52	7.901E-01	8.471E-01	163	146
Left entorhinal cortex	-0.355	0.253	[-0.851 - 0.141]	-1.81	1.605E-01	3.037E-01	158	145
Left fusiform gyrus	-0.347	0.195	[-0.728 - 0.035]	-1.85	7.518E-02	2.193E-01	163	146
Left inferior parietal cortex	-0.133	0.131	[-0.389 - 0.123]	-1.38	3.084E-01	4.593E-01	162	142
Left inferior temporal gyrus	-0.261	0.128	[-0.513 - -0.009]	-0.8	4.213E-02	2.106E-01	165	144
Left isthmus cingulate cortex	-0.221	0.132	[-0.48 - 0.039]	-1.32	9.519E-02	2.258E-01	176	147
Left lateral occipital cortex	-0.022	0.128	[-0.273 - 0.23]	-1.19	8.650E-01	8.775E-01	169	144
Left lateral orbitofrontal cortex	-0.301	0.153	[-0.601 - -0.002]	-0.81	4.857E-02	2.106E-01	176	147
Left lingual gyrus	0.082	0.211	[-0.332 - 0.496]	-1.37	6.983E-01	8.013E-01	175	147
Left medial orbitofrontal cortex	-0.240	0.223	[-0.676 - 0.196]	-0.1	2.812E-01	4.374E-01	175	146
Left middle temporal gyrus	-0.409	0.243	[-0.885 - 0.067]	-2.59	9.202E-02	2.258E-01	162	145
Left parahippocampal gyrus	-0.417	0.241	[-0.888 - 0.055]	-1.51	8.358E-02	2.258E-01	170	146
Left paracentral lobule	-0.151	0.127	[-0.4 - 0.098]	-1.52	2.339E-01	3.993E-01	175	146
Left pars opercularis of inferior frontal gyrus	-0.313	0.148	[-0.603 - -0.024]	-0.58	3.404E-02	1.965E-01	169	147
Left pars orbitalis of inferior frontal gyrus	-0.227	0.247	[-0.711 - 0.257]	-1.31	3.577E-01	5.008E-01	170	143
Left pars triangularis of inferior frontal gyrus	-0.287	0.128	[-0.538 - -0.035]	-1.31	2.541E-02	1.965E-01	165	145
Left pericalcarine cortex	0.006	0.163	[-0.314 - 0.325]	-2.21	9.728E-01	9.728E-01	176	147
Left postcentral gyrus	-0.054	0.221	[-0.488 - 0.38]	-0.91	8.069E-01	8.471E-01	174	146
Left posterior cingulate cortex	-0.281	0.134	[-0.545 - -0.018]	-1.67	3.649E-02	1.965E-01	175	147
Left precentral gyrus	-0.277	0.127	[-0.525 - -0.029]	-2.09	2.853E-02	1.965E-01	174	147
Left precuneus	-0.126	0.172	[-0.463 - 0.211]	-1.44	4.635E-01	5.794E-01	171	146

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N First And Second Generation
Left rostral anterior cingulate cortex	-0.224	0.158	[-0.535 - 0.086]	-3.21	1.561E-01	3.037E-01	174	146
Left rostral middle frontal gyrus	-0.426	0.200	[-0.818 - -0.033]	-0.06	3.357E-02	1.965E-01	168	143
Left superior frontal gyrus	-0.386	0.142	[-0.664 - -0.107]	-0.86	6.624E-03	1.546E-01	172	146
Left superior parietal cortex	-0.051	0.128	[-0.302 - 0.2]	-0.7	6.892E-01	8.013E-01	163	145
Left superior temporal gyrus	-0.386	0.133	[-0.646 - -0.126]	-2.72	3.662E-03	1.546E-01	158	141
Left supramarginal gyrus	-0.268	0.171	[-0.603 - 0.067]	-0.6	1.175E-01	2.419E-01	154	140
Left frontal pole	-0.051	0.164	[-0.373 - 0.271]	0.29	7.579E-01	8.422E-01	176	147
Left temporal pole	-0.268	0.148	[-0.558 - 0.021]	-2.03	6.920E-02	2.106E-01	170	146
Left transverse temporal gyrus	-0.038	0.151	[-0.334 - 0.258]	-0.55	8.006E-01	8.471E-01	176	146
Left insula	-0.267	0.127	[-0.515 - -0.018]	-0.95	3.572E-02	1.965E-01	176	147
Right banks of superior temporal sulcus	-0.280	0.199	[-0.67 - 0.109]	-0.99	1.585E-01	3.037E-01	169	147
Right caudal anterior cingulate cortex	-0.137	0.126	[-0.383 - 0.11]	0.44	2.769E-01	4.374E-01	176	147
Right caudal middle frontal gyrus	-0.425	0.186	[-0.79 - -0.06]	-1.8	2.256E-02	1.965E-01	170	146
Right cuneus	0.176	0.153	[-0.124 - 0.476]	0.65	2.512E-01	4.186E-01	166	147
Right entorhinal cortex	-0.178	0.180	[-0.531 - 0.175]	-1.21	3.224E-01	4.702E-01	155	144
Right fusiform gyrus	-0.325	0.197	[-0.712 - 0.062]	-1.99	9.939E-02	2.258E-01	170	145
Right inferior parietal cortex	-0.261	0.135	[-0.526 - 0.004]	-2.21	5.329E-02	2.106E-01	154	145
Right inferior temporal gyrus	-0.214	0.137	[-0.483 - 0.054]	-1.49	1.175E-01	2.419E-01	165	142
Right isthmus cingulate cortex	-0.297	0.148	[-0.588 - -0.006]	-2.13	4.566E-02	2.106E-01	174	147
Right lateral occipital cortex	-0.205	0.186	[-0.569 - 0.158]	-2.67	2.684E-01	4.369E-01	166	145
Right lateral orbitofrontal cortex	-0.543	0.193	[-0.92 - -0.165]	-1.17	4.813E-03	1.546E-01	167	146
Right lingual gyrus	-0.035	0.157	[-0.342 - 0.272]	-0.41	8.229E-01	8.471E-01	176	147
Right medial orbitofrontal cortex	-0.317	0.127	[-0.566 - -0.067]	-1.24	1.299E-02	1.965E-01	163	146
Right middle temporal gyrus	-0.272	0.201	[-0.666 - 0.123]	-2.28	1.778E-01	3.263E-01	160	143
Right parahippocampal gyrus	-0.424	0.224	[-0.864 - 0.016]	-3.65	5.882E-02	2.106E-01	171	146
Right paracentral lobule	-0.102	0.183	[-0.46 - 0.257]	-1.39	5.785E-01	6.864E-01	176	147
Right pars opercularis of inferior frontal gyrus	-0.297	0.163	[-0.617 - 0.022]	-0.8	6.834E-02	2.106E-01	168	144

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Unmedicated	N First And Second Generation
Right pars orbitalis of inferior frontal gyrus	-0.130	0.126	[-0.377 - 0.117]	-0.71	3.028E-01	4.593E-01	174	147
Right pars triangularis of inferior frontal gyrus	-0.283	0.172	[-0.619 - 0.054]	-2.09	9.999E-02	2.258E-01	168	146
Right pericalcarine cortex	0.111	0.126	[-0.136 - 0.359]	-0.17	3.787E-01	5.198E-01	175	147
Right postcentral gyrus	0.074	0.226	[-0.369 - 0.517]	-0.99	7.439E-01	8.399E-01	174	146
Right posterior cingulate cortex	-0.123	0.126	[-0.37 - 0.124]	-0.92	3.305E-01	4.721E-01	176	147
Right precentral gyrus	-0.212	0.159	[-0.523 - 0.099]	-1.28	1.818E-01	3.263E-01	172	144
Right precuneus	-0.150	0.200	[-0.542 - 0.242]	-0.92	4.536E-01	5.774E-01	171	147
Right rostral anterior cingulate cortex	-0.230	0.127	[-0.479 - 0.018]	0.12	6.903E-02	2.106E-01	166	147
Right rostral middle frontal gyrus	-0.323	0.173	[-0.662 - 0.015]	-0.44	6.122E-02	2.106E-01	168	146
Right superior frontal gyrus	-0.429	0.200	[-0.822 - -0.037]	-0.65	3.200E-02	1.965E-01	169	145
Right superior parietal cortex	-0.098	0.127	[-0.346 - 0.15]	-0.94	4.370E-01	5.774E-01	165	147
Right superior temporal gyrus	-0.165	0.254	[-0.662 - 0.332]	-1.33	5.146E-01	6.320E-01	166	144
Right supramarginal gyrus	-0.108	0.177	[-0.455 - 0.238]	-0.34	5.398E-01	6.515E-01	156	145
Right frontal pole	-0.348	0.210	[-0.759 - 0.064]	-1.72	9.752E-02	2.258E-01	176	147
Right temporal pole	-0.096	0.128	[-0.347 - 0.154]	-0.65	4.505E-01	5.774E-01	158	145
Right transverse temporal gyrus	-0.030	0.126	[-0.277 - 0.217]	-1.9	8.131E-01	8.471E-01	176	147
Right insula	-0.124	0.160	[-0.438 - 0.19]	-0.9	4.396E-01	5.774E-01	174	147
Left hemisphere	-0.328	0.153	[-0.629 - -0.028]	-1.38	3.213E-02	1.965E-01	176	147
Right hemisphere	-0.303	0.180	[-0.656 - 0.049]	-1.1	9.175E-02	2.258E-01	176	147

**Supplementary Table S29.** Cortical surface area differences between individuals with schizophrenia (SZ) on first-generation antipsychotic medication and individuals with SZ on second-generation antipsychotic medication

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Second Generation	N First Generation
Left banks of superior temporal sulcus	-0.073	0.066	[-0.203 - 0.057]	-0.88	2.718E-01	5.183E-01	1597	310
Left caudal anterior cingulate cortex	-0.138	0.099	[-0.332 - 0.056]	-0.85	1.641E-01	4.102E-01	1648	313
Left caudal middle frontal gyrus	-0.123	0.066	[-0.252 - 0.006]	-1.16	6.164E-02	2.229E-01	1636	313
Left cuneus	0.047	0.066	[-0.084 - 0.177]	-0.04	4.820E-01	7.335E-01	1595	309
Left entorhinal cortex	-0.083	0.096	[-0.272 - 0.106]	-0.33	3.871E-01	6.635E-01	1585	313
Left fusiform gyrus	-0.039	0.066	[-0.169 - 0.091]	-0.63	5.567E-01	7.444E-01	1608	310
Left inferior parietal cortex	-0.169	0.082	[-0.329 - -0.008]	-1.09	3.938E-02	2.120E-01	1553	307
Left inferior temporal gyrus	-0.148	0.066	[-0.279 - -0.018]	-1.14	2.536E-02	2.026E-01	1581	310
Left isthmus cingulate cortex	-0.008	0.066	[-0.138 - 0.122]	-0.57	9.025E-01	9.290E-01	1642	311
Left lateral occipital cortex	-0.125	0.096	[-0.314 - 0.064]	-1	1.941E-01	4.528E-01	1604	309
Left lateral orbitofrontal cortex	-0.006	0.070	[-0.144 - 0.132]	-0.41	9.337E-01	9.472E-01	1645	313
Left lingual gyrus	0.018	0.066	[-0.112 - 0.147]	0	7.883E-01	8.927E-01	1640	312
Left medial orbitofrontal cortex	0.041	0.076	[-0.107 - 0.19]	0.05	5.849E-01	7.444E-01	1640	313
Left middle temporal gyrus	-0.146	0.067	[-0.277 - -0.016]	-1.23	2.777E-02	2.026E-01	1547	309
Left parahippocampal gyrus	-0.023	0.066	[-0.152 - 0.107]	-0.45	7.332E-01	8.698E-01	1630	311
Left paracentral lobule	-0.120	0.112	[-0.34 - 0.101]	-1.33	2.876E-01	5.183E-01	1643	313
Left pars opercularis of inferior frontal gyrus	-0.041	0.066	[-0.171 - 0.089]	-0.24	5.377E-01	7.444E-01	1620	311
Left pars orbitalis of inferior frontal gyrus	-0.115	0.070	[-0.252 - 0.021]	-1.16	9.839E-02	2.837E-01	1623	312
Left pars triangularis of inferior frontal gyrus	-0.138	0.066	[-0.267 - -0.008]	-1.15	3.719E-02	2.120E-01	1607	312
Left pericalcarine cortex	0.071	0.066	[-0.058 - 0.2]	0.2	2.817E-01	5.183E-01	1646	313
Left postcentral gyrus	-0.140	0.066	[-0.27 - -0.01]	-0.87	3.425E-02	2.120E-01	1638	311
Left posterior cingulate cortex	-0.070	0.066	[-0.199 - 0.059]	-0.39	2.888E-01	5.183E-01	1644	313
Left precentral gyrus	-0.065	0.079	[-0.22 - 0.09]	-0.67	4.101E-01	6.635E-01	1634	311
Left precuneus	-0.145	0.066	[-0.275 - -0.016]	-1.16	2.755E-02	2.026E-01	1628	312
Left rostral anterior cingulate cortex	-0.006	0.088	[-0.177 - 0.166]	-0.07	9.475E-01	9.475E-01	1639	312

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Second Generation	N First Generation
Left rostral middle frontal gyrus	-0.116	0.066	[-0.246 - 0.013]	-0.97	7.830E-02	2.491E-01	1614	312
Left superior frontal gyrus	-0.195	0.066	[-0.324 - -0.066]	-1.51	3.101E-03	1.085E-01	1639	313
Left superior parietal cortex	-0.146	0.076	[-0.295 - 0.003]	-0.93	5.532E-02	2.229E-01	1594	310
Left superior temporal gyrus	-0.124	0.067	[-0.255 - 0.007]	-0.89	6.368E-02	2.229E-01	1562	307
Left supramarginal gyrus	-0.135	0.067	[-0.266 - -0.003]	-0.91	4.464E-02	2.229E-01	1557	305
Left frontal pole	-0.043	0.066	[-0.172 - 0.086]	-0.62	5.139E-01	7.444E-01	1648	313
Left temporal pole	0.070	0.066	[-0.059 - 0.2]	0.76	2.866E-01	5.183E-01	1620	313
Left transverse temporal gyrus	-0.035	0.084	[-0.199 - 0.129]	-1.11	6.756E-01	8.195E-01	1649	313
Left insula	-0.058	0.073	[-0.201 - 0.085]	-0.53	4.265E-01	6.635E-01	1646	312
Right banks of superior temporal sulcus	-0.033	0.119	[-0.266 - 0.201]	-0.58	7.844E-01	8.927E-01	1620	310
Right caudal anterior cingulate cortex	-0.095	0.066	[-0.224 - 0.034]	-0.62	1.499E-01	3.885E-01	1646	313
Right caudal middle frontal gyrus	-0.149	0.066	[-0.279 - -0.019]	-0.77	2.481E-02	2.026E-01	1629	310
Right cuneus	-0.012	0.094	[-0.197 - 0.172]	-0.52	8.970E-01	9.290E-01	1617	313
Right entorhinal cortex	0.072	0.067	[-0.059 - 0.203]	0.42	2.838E-01	5.183E-01	1511	306
Right fusiform gyrus	-0.019	0.077	[-0.17 - 0.132]	-0.5	8.035E-01	8.927E-01	1578	310
Right inferior parietal cortex	-0.115	0.067	[-0.246 - 0.015]	-0.74	8.386E-02	2.552E-01	1552	307
Right inferior temporal gyrus	-0.041	0.073	[-0.183 - 0.102]	-0.57	5.768E-01	7.444E-01	1587	306
Right isthmus cingulate cortex	-0.038	0.066	[-0.168 - 0.091]	-0.63	5.650E-01	7.444E-01	1636	312
Right lateral occipital cortex	-0.167	0.102	[-0.367 - 0.033]	-1.36	1.013E-01	2.837E-01	1596	306
Right lateral orbitofrontal cortex	-0.027	0.103	[-0.229 - 0.175]	-0.37	7.939E-01	8.927E-01	1627	312
Right lingual gyrus	-0.020	0.100	[-0.217 - 0.176]	-0.51	8.395E-01	9.182E-01	1644	310
Right medial orbitofrontal cortex	0.030	0.066	[-0.1 - 0.16]	0.13	6.519E-01	8.149E-01	1618	311
Right middle temporal gyrus	-0.043	0.067	[-0.174 - 0.088]	-0.52	5.207E-01	7.444E-01	1569	307
Right parahippocampal gyrus	0.071	0.066	[-0.06 - 0.201]	0.32	2.882E-01	5.183E-01	1613	309
Right paracentral lobule	-0.157	0.066	[-0.286 - -0.028]	-1.24	1.731E-02	2.026E-01	1640	313
Right pars opercularis of inferior frontal gyrus	-0.027	0.066	[-0.157 - 0.103]	-0.21	6.790E-01	8.195E-01	1603	310
Right pars orbitalis of inferior frontal gyrus	-0.094	0.147	[-0.381 - 0.194]	-0.77	5.240E-01	7.444E-01	1620	311
Right pars triangularis of inferior frontal gyrus	-0.126	0.066	[-0.257 - 0.004]	-1	5.707E-02	2.229E-01	1600	309

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Second Generation	N First Generation
Right pericalcarine cortex	-0.038	0.066	[-0.167 - 0.092]	-0.54	5.661E-01	7.444E-01	1645	311
Right postcentral gyrus	-0.144	0.066	[-0.273 - -0.015]	-1.05	2.894E-02	2.026E-01	1631	313
Right posterior cingulate cortex	-0.121	0.066	[-0.25 - 0.009]	-0.6	6.749E-02	2.250E-01	1644	313
Right precentral gyrus	-0.088	0.078	[-0.242 - 0.066]	-0.71	2.623E-01	5.183E-01	1629	311
Right precuneus	-0.167	0.066	[-0.297 - -0.038]	-1.43	1.129E-02	2.026E-01	1620	312
Right rostral anterior cingulate cortex	0.010	0.071	[-0.128 - 0.149]	0.33	8.824E-01	9.290E-01	1624	312
Right rostral middle frontal gyrus	-0.054	0.066	[-0.184 - 0.076]	-0.62	4.171E-01	6.635E-01	1603	310
Right superior frontal gyrus	-0.199	0.066	[-0.329 - -0.069]	-1.49	2.644E-03	1.085E-01	1633	311
Right superior parietal cortex	-0.152	0.066	[-0.281 - -0.022]	-1.1	2.158E-02	2.026E-01	1610	313
Right superior temporal gyrus	-0.010	0.067	[-0.14 - 0.121]	-0.2	8.853E-01	9.290E-01	1580	307
Right supramarginal gyrus	-0.089	0.067	[-0.219 - 0.042]	-0.87	1.841E-01	4.443E-01	1551	308
Right frontal pole	-0.053	0.066	[-0.182 - 0.076]	-0.97	4.199E-01	6.635E-01	1649	313
Right temporal pole	0.088	0.072	[-0.053 - 0.229]	0.43	2.197E-01	4.960E-01	1538	307
Right transverse temporal gyrus	-0.097	0.066	[-0.226 - 0.033]	-0.78	1.433E-01	3.859E-01	1648	312
Right insula	-0.054	0.066	[-0.183 - 0.075]	-0.6	4.128E-01	6.635E-01	1646	312
Left hemisphere	-0.129	0.066	[-0.258 - 0.001]	-0.79	5.100E-02	2.229E-01	1650	313
Right hemisphere	-0.123	0.066	[-0.252 - 0.006]	-0.78	6.254E-02	2.229E-01	1650	313



**Supplementary Table S30.** Cortical surface area differences between individuals with schizophrenia (SZ) on both first- and second-generation antipsychotic medication and individuals with SZ on second-generation antipsychotic medication

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Second Generation	N First and Second Generation
Left banks of superior temporal sulcus	-0.030	0.077	[-0.181 - 0.122]	-0.65	7.005E-01	8.652E-01	1241	212
Left caudal anterior cingulate cortex	-0.137	0.077	[-0.289 - 0.014]	-1.59	7.540E-02	4.786E-01	1244	212
Left caudal middle frontal gyrus	-0.106	0.077	[-0.257 - 0.045]	-0.48	1.694E-01	5.930E-01	1243	212
Left cuneus	-0.039	0.137	[-0.308 - 0.231]	-0.71	7.779E-01	8.731E-01	1244	211
Left entorhinal cortex	-0.092	0.094	[-0.277 - 0.092]	-0.33	3.255E-01	6.840E-01	1244	211
Left fusiform gyrus	-0.196	0.118	[-0.427 - 0.035]	-1.28	9.571E-02	4.786E-01	1242	211
Left inferior parietal cortex	-0.092	0.077	[-0.244 - 0.06]	-0.2	2.348E-01	6.064E-01	1241	211
Left inferior temporal gyrus	-0.119	0.104	[-0.322 - 0.084]	-0.67	2.512E-01	6.064E-01	1244	211
Left isthmus cingulate cortex	-0.116	0.077	[-0.268 - 0.035]	-0.69	1.333E-01	5.930E-01	1245	212
Left lateral occipital cortex	-0.027	0.077	[-0.178 - 0.125]	-0.26	7.292E-01	8.652E-01	1244	211
Left lateral orbitofrontal cortex	-0.033	0.106	[-0.241 - 0.174]	-0.29	7.534E-01	8.731E-01	1244	212
Left lingual gyrus	0.049	0.135	[-0.216 - 0.314]	-0.06	7.183E-01	8.652E-01	1243	212
Left medial orbitofrontal cortex	-0.078	0.077	[-0.23 - 0.073]	-0.24	3.096E-01	6.824E-01	1246	212
Left middle temporal gyrus	-0.249	0.084	[-0.412 - -0.085]	-1.06	2.926E-03	1.728E-01	1245	212
Left parahippocampal gyrus	-0.021	0.130	[-0.276 - 0.234]	-1.2	8.716E-01	9.106E-01	1245	211
Left paracentral lobule	-0.003	0.077	[-0.154 - 0.148]	0.16	9.667E-01	9.807E-01	1242	212
Left pars opercularis of inferior frontal gyrus	-0.218	0.077	[-0.369 - -0.066]	-0.56	4.937E-03	1.728E-01	1245	212
Left pars orbitalis of inferior frontal gyrus	-0.099	0.077	[-0.251 - 0.053]	-1.01	2.006E-01	6.064E-01	1245	211
Left pars triangularis of inferior frontal gyrus	-0.112	0.077	[-0.264 - 0.039]	-0.32	1.472E-01	5.930E-01	1246	212
Left pericalcarine cortex	0.070	0.107	[-0.14 - 0.28]	0.79	5.141E-01	8.178E-01	1244	211
Left postcentral gyrus	-0.022	0.077	[-0.174 - 0.129]	-0.05	7.716E-01	8.731E-01	1243	212
Left posterior cingulate cortex	-0.102	0.077	[-0.254 - 0.049]	-0.74	1.859E-01	6.064E-01	1243	212
Left precentral gyrus	-0.149	0.077	[-0.3 - 0.002]	-0.75	5.374E-02	4.702E-01	1243	212
Left precuneus	-0.155	0.077	[-0.306 - -0.003]	-0.38	4.499E-02	4.499E-01	1242	212



	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Second Generation	N First and Second Generation
Left rostral anterior cingulate cortex	-0.057	0.081	[-0.217 - 0.102]	-0.72	4.804E-01	8.178E-01	1244	212
Left rostral middle frontal gyrus	-0.158	0.078	[-0.311 - -0.006]	-0.9	4.144E-02	4.499E-01	1245	210
Left superior frontal gyrus	-0.141	0.078	[-0.293 - 0.011]	-0.55	6.848E-02	4.786E-01	1244	211
Left superior parietal cortex	-0.034	0.077	[-0.185 - 0.117]	-0.19	6.588E-01	8.652E-01	1244	212
Left superior temporal gyrus	-0.091	0.077	[-0.243 - 0.06]	-0.62	2.378E-01	6.064E-01	1243	211
Left supramarginal gyrus	-0.099	0.077	[-0.25 - 0.052]	-0.43	1.982E-01	6.064E-01	1241	212
Left frontal pole	0.031	0.077	[-0.12 - 0.183]	0.21	6.843E-01	8.652E-01	1244	212
Left temporal pole	0.035	0.129	[-0.218 - 0.288]	-1.19	7.858E-01	8.731E-01	1242	211
Left transverse temporal gyrus	-0.044	0.077	[-0.195 - 0.108]	0.09	5.724E-01	8.390E-01	1245	212
Left insula	-0.059	0.113	[-0.281 - 0.162]	-0.38	6.012E-01	8.416E-01	1242	212
Right banks of superior temporal sulcus	-0.111	0.077	[-0.262 - 0.041]	-0.21	1.534E-01	5.930E-01	1246	211
Right caudal anterior cingulate cortex	-0.045	0.077	[-0.197 - 0.107]	-0.02	5.637E-01	8.390E-01	1244	211
Right caudal middle frontal gyrus	-0.090	0.077	[-0.242 - 0.062]	-0.04	2.454E-01	6.064E-01	1245	211
Right cuneus	0.011	0.092	[-0.17 - 0.191]	0.66	9.075E-01	9.342E-01	1245	212
Right entorhinal cortex	-0.065	0.116	[-0.291 - 0.162]	-0.01	5.753E-01	8.390E-01	1244	212
Right fusiform gyrus	-0.041	0.111	[-0.258 - 0.177]	-0.23	7.144E-01	8.652E-01	1246	211
Right inferior parietal cortex	-0.071	0.085	[-0.239 - 0.096]	-0.12	4.024E-01	7.637E-01	1240	212
Right inferior temporal gyrus	-0.211	0.085	[-0.377 - -0.045]	-0.85	1.275E-02	2.975E-01	1241	211
Right isthmus cingulate cortex	-0.136	0.077	[-0.287 - 0.016]	-1.44	7.931E-02	4.786E-01	1243	212
Right lateral occipital cortex	0.000	0.109	[-0.213 - 0.213]	-0.13	9.989E-01	9.989E-01	1244	212
Right lateral orbitofrontal cortex	-0.135	0.077	[-0.287 - 0.017]	-0.15	8.226E-02	4.786E-01	1241	211
Right lingual gyrus	0.013	0.077	[-0.139 - 0.164]	0.04	8.692E-01	9.106E-01	1245	212
Right medial orbitofrontal cortex	-0.019	0.077	[-0.17 - 0.132]	-0.5	8.069E-01	8.826E-01	1243	212
Right middle temporal gyrus	-0.141	0.115	[-0.366 - 0.084]	-0.62	2.187E-01	6.064E-01	1245	212
Right parahippocampal gyrus	-0.093	0.096	[-0.281 - 0.095]	-1.39	3.322E-01	6.840E-01	1245	212
Right paracentral lobule	-0.056	0.077	[-0.207 - 0.095]	0	4.655E-01	8.146E-01	1243	212
Right pars opercularis of inferior frontal gyrus	-0.095	0.077	[-0.247 - 0.057]	-0.78	2.192E-01	6.064E-01	1246	212

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Second Generation	N First and Second Generation
Right pars orbitalis of inferior frontal gyrus	0.042	0.077	[-0.11 - 0.193]	0.68	5.894E-01	8.416E-01	1244	212
Right pars triangularis of inferior frontal gyrus	-0.082	0.108	[-0.294 - 0.13]	-0.85	4.486E-01	8.051E-01	1245	212
Right pericalcarine cortex	0.105	0.104	[-0.099 - 0.309]	0.96	3.119E-01	6.824E-01	1243	212
Right postcentral gyrus	-0.039	0.077	[-0.19 - 0.113]	0.29	6.176E-01	8.477E-01	1243	212
Right posterior cingulate cortex	-0.113	0.077	[-0.265 - 0.038]	-0.73	1.420E-01	5.930E-01	1244	212
Right precentral gyrus	-0.107	0.077	[-0.258 - 0.045]	-0.59	1.673E-01	5.930E-01	1245	212
Right precuneus	-0.063	0.077	[-0.214 - 0.088]	0.19	4.152E-01	7.648E-01	1243	212
Right rostral anterior cingulate cortex	0.076	0.121	[-0.161 - 0.312]	0.12	5.314E-01	8.266E-01	1246	212
Right rostral middle frontal gyrus	-0.051	0.078	[-0.203 - 0.101]	0.11	5.123E-01	8.178E-01	1244	210
Right superior frontal gyrus	-0.176	0.078	[-0.328 - -0.024]	-0.69	2.301E-02	4.027E-01	1245	211
Right superior parietal cortex	-0.015	0.077	[-0.166 - 0.137]	-0.01	8.503E-01	9.106E-01	1245	211
Right superior temporal gyrus	-0.065	0.077	[-0.216 - 0.087]	-0.31	4.037E-01	7.637E-01	1244	211
Right supramarginal gyrus	-0.037	0.086	[-0.206 - 0.132]	0.21	6.674E-01	8.652E-01	1245	212
Right frontal pole	-0.029	0.077	[-0.18 - 0.123]	-0.34	7.121E-01	8.652E-01	1245	211
Right temporal pole	-0.095	0.112	[-0.315 - 0.125]	-1.22	3.967E-01	7.637E-01	1243	212
Right transverse temporal gyrus	-0.072	0.108	[-0.285 - 0.141]	-0.73	5.068E-01	8.178E-01	1244	212
Right insula	-0.083	0.077	[-0.235 - 0.068]	-0.13	2.817E-01	6.572E-01	1245	212
Left hemisphere	-0.165	0.077	[-0.317 - -0.014]	-0.49	3.244E-02	4.499E-01	1246	212
Right hemisphere	-0.129	0.077	[-0.28 - 0.022]	-0.22	9.487E-02	4.786E-01	1246	212

**Supplementary Table S31.** Cortical surface area differences between individuals with schizophrenia (SZ) on both first- and second-generation antipsychotic medication and individuals with SZ on first-generation antipsychotic medication

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N First Generation	N First And Second Generation
Left banks of superior temporal sulcus	-0.035	0.164	[-0.357 - 0.287]	-0.38	8.330E-01	9.633E-01	358	216
Left caudal anterior cingulate cortex	-0.032	0.104	[-0.236 - 0.172]	-1.45	7.551E-01	9.633E-01	359	218
Left caudal middle frontal gyrus	0.050	0.104	[-0.154 - 0.254]	0.24	6.328E-01	9.633E-01	361	217
Left cuneus	-0.058	0.105	[-0.264 - 0.148]	-0.79	5.784E-01	9.633E-01	357	216
Left entorhinal cortex	-0.113	0.132	[-0.372 - 0.145]	-0.05	3.890E-01	9.633E-01	359	216
Left fusiform gyrus	-0.137	0.188	[-0.505 - 0.231]	-0.87	4.658E-01	9.633E-01	358	217
Left inferior parietal cortex	0.064	0.120	[-0.171 - 0.299]	0.27	5.945E-01	9.633E-01	354	213
Left inferior temporal gyrus	0.208	0.183	[-0.152 - 0.568]	0.1	2.568E-01	9.633E-01	358	215
Left isthmus cingulate cortex	0.023	0.216	[-0.401 - 0.446]	-1	9.170E-01	9.834E-01	359	218
Left lateral occipital cortex	0.042	0.220	[-0.389 - 0.474]	-0.4	8.471E-01	9.633E-01	357	215
Left lateral orbitofrontal cortex	0.073	0.194	[-0.306 - 0.453]	-0.85	7.054E-01	9.633E-01	360	218
Left lingual gyrus	0.050	0.198	[-0.339 - 0.439]	-0.65	8.009E-01	9.633E-01	360	218
Left medial orbitofrontal cortex	0.031	0.157	[-0.277 - 0.34]	-0.89	8.423E-01	9.633E-01	359	217
Left middle temporal gyrus	-0.036	0.129	[-0.289 - 0.218]	-0.62	7.823E-01	9.633E-01	357	216
Left parahippocampal gyrus	0.059	0.149	[-0.233 - 0.35]	0.38	6.936E-01	9.633E-01	359	217
Left paracentral lobule	0.199	0.163	[-0.12 - 0.518]	0.66	2.221E-01	9.633E-01	360	217
Left pars opercularis of inferior frontal gyrus	-0.088	0.121	[-0.326 - 0.149]	-0.42	4.666E-01	9.633E-01	359	218
Left pars orbitalis of inferior frontal gyrus	0.092	0.105	[-0.114 - 0.298]	0.64	3.806E-01	9.633E-01	360	214
Left pars triangularis of inferior frontal gyrus	0.088	0.105	[-0.118 - 0.293]	0.34	4.042E-01	9.633E-01	359	215
Left pericalcarine cortex	0.046	0.160	[-0.269 - 0.36]	0.19	7.766E-01	9.633E-01	361	218
Left postcentral gyrus	0.186	0.150	[-0.107 - 0.479]	0.55	2.142E-01	9.633E-01	359	217
Left posterior cingulate cortex	-0.024	0.145	[-0.308 - 0.261]	-1.28	8.712E-01	9.633E-01	361	218
Left precentral gyrus	-0.071	0.124	[-0.315 - 0.172]	-0.19	5.663E-01	9.633E-01	359	218
Left precuneus	0.039	0.138	[-0.232 - 0.31]	-0.2	7.759E-01	9.633E-01	360	217

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N First Generation	N First And Second Generation
Left rostral anterior cingulate cortex	-0.141	0.156	[-0.448 - 0.165]	-2.45	3.665E-01	9.633E-01	359	217
Left rostral middle frontal gyrus	0.024	0.106	[-0.183 - 0.231]	-0.19	8.210E-01	9.633E-01	359	213
Left superior frontal gyrus	0.101	0.104	[-0.104 - 0.306]	0.34	3.333E-01	9.633E-01	361	217
Left superior parietal cortex	0.164	0.156	[-0.142 - 0.47]	0.69	2.930E-01	9.633E-01	358	216
Left superior temporal gyrus	0.005	0.177	[-0.342 - 0.353]	-0.38	9.753E-01	9.926E-01	355	211
Left supramarginal gyrus	-0.048	0.107	[-0.258 - 0.162]	0.01	6.558E-01	9.633E-01	349	209
Left frontal pole	0.076	0.104	[-0.128 - 0.279]	0.23	4.666E-01	9.633E-01	361	218
Left temporal pole	-0.075	0.160	[-0.388 - 0.238]	-1.84	6.383E-01	9.633E-01	360	217
Left transverse temporal gyrus	0.001	0.145	[-0.282 - 0.285]	-1.13	9.926E-01	9.926E-01	361	217
Left insula	0.084	0.134	[-0.178 - 0.346]	0.05	5.295E-01	9.633E-01	360	218
Right banks of superior temporal sulcus	-0.019	0.105	[-0.224 - 0.186]	0.19	8.559E-01	9.633E-01	358	217
Right caudal anterior cingulate cortex	0.043	0.105	[-0.162 - 0.249]	-0.26	6.803E-01	9.633E-01	361	216
Right caudal middle frontal gyrus	0.135	0.106	[-0.072 - 0.342]	1.29	2.021E-01	9.633E-01	358	217
Right cuneus	0.107	0.104	[-0.097 - 0.311]	1.03	3.043E-01	9.633E-01	359	218
Right entorhinal cortex	-0.088	0.106	[-0.296 - 0.12]	-0.5	4.067E-01	9.633E-01	354	214
Right fusiform gyrus	-0.098	0.132	[-0.357 - 0.161]	-0.64	4.563E-01	9.633E-01	357	216
Right inferior parietal cortex	0.106	0.106	[-0.102 - 0.314]	0.64	3.172E-01	9.633E-01	355	216
Right inferior temporal gyrus	-0.057	0.208	[-0.466 - 0.351]	-0.85	7.831E-01	9.633E-01	355	213
Right isthmus cingulate cortex	-0.046	0.126	[-0.292 - 0.201]	-0.76	7.160E-01	9.633E-01	360	218
Right lateral occipital cortex	0.193	0.199	[-0.198 - 0.583]	0.89	3.337E-01	9.633E-01	356	216
Right lateral orbitofrontal cortex	-0.086	0.175	[-0.428 - 0.256]	-0.49	6.226E-01	9.633E-01	360	217
Right lingual gyrus	-0.021	0.140	[-0.295 - 0.253]	-0.26	8.807E-01	9.633E-01	360	218
Right medial orbitofrontal cortex	-0.121	0.108	[-0.333 - 0.091]	-0.73	2.624E-01	9.633E-01	359	217
Right middle temporal gyrus	-0.068	0.106	[-0.275 - 0.139]	-0.67	5.173E-01	9.633E-01	356	214
Right parahippocampal gyrus	-0.199	0.105	[-0.405 - 0.007]	-1.35	5.798E-02	9.633E-01	357	217
Right paracentral lobule	0.089	0.127	[-0.159 - 0.337]	0.43	4.829E-01	9.633E-01	360	218
Right pars opercularis of inferior frontal gyrus	-0.030	0.115	[-0.256 - 0.196]	-0.44	7.947E-01	9.633E-01	357	215

	Cohen's d	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N First Generation	N First And Second Generation
Right pars orbitalis of inferior frontal gyrus	-0.031	0.104	[-0.235 - 0.173]	-0.3	7.663E-01	9.633E-01	359	218
Right pars triangularis of inferior frontal gyrus	-0.028	0.112	[-0.247 - 0.191]	0.07	7.994E-01	9.633E-01	357	217
Right pericalcarine cortex	0.042	0.207	[-0.364 - 0.448]	0.21	8.388E-01	9.633E-01	361	218
Right postcentral gyrus	0.131	0.126	[-0.116 - 0.378]	1.42	2.996E-01	9.633E-01	361	217
Right posterior cingulate cortex	-0.010	0.105	[-0.215 - 0.196]	-0.72	9.272E-01	9.834E-01	361	218
Right precentral gyrus	-0.089	0.105	[-0.294 - 0.117]	-0.63	3.972E-01	9.633E-01	359	215
Right precuneus	0.169	0.124	[-0.074 - 0.412]	0.99	1.722E-01	9.633E-01	360	218
Right rostral anterior cingulate cortex	0.014	0.195	[-0.368 - 0.396]	-1.11	9.422E-01	9.844E-01	360	218
Right rostral middle frontal gyrus	0.037	0.105	[-0.169 - 0.243]	0.2	7.261E-01	9.633E-01	358	215
Right superior frontal gyrus	0.088	0.104	[-0.117 - 0.293]	0.39	4.007E-01	9.633E-01	359	216
Right superior parietal cortex	0.275	0.174	[-0.065 - 0.615]	0.88	1.127E-01	9.633E-01	361	217
Right superior temporal gyrus	-0.019	0.105	[-0.225 - 0.188]	-0.22	8.581E-01	9.633E-01	354	215
Right supramarginal gyrus	0.079	0.105	[-0.128 - 0.285]	0.58	4.554E-01	9.633E-01	356	216
Right frontal pole	0.019	0.104	[-0.186 - 0.223]	-0.47	8.563E-01	9.633E-01	360	217
Right temporal pole	-0.117	0.161	[-0.433 - 0.198]	-0.79	4.657E-01	9.633E-01	353	216
Right transverse temporal gyrus	-0.022	0.112	[-0.241 - 0.197]	0.26	8.451E-01	9.633E-01	360	218
Right insula	0.067	0.117	[-0.162 - 0.296]	0.13	5.687E-01	9.633E-01	360	218
Left hemisphere	0.003	0.129	[-0.25 - 0.256]	-0.25	9.820E-01	9.926E-01	361	218
Right hemisphere	0.039	0.105	[-0.167 - 0.246]	0.15	7.084E-01	9.633E-01	361	218

**Supplementary Table S32.** Partial correlations between cortical thickness and chlorpromazine equivalents

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.063	0.021	[-0.104 - -0.021]	3.200E-03	5.675E-03	2170
Left caudal anterior cingulate cortex	-0.009	0.026	[-0.061 - 0.043]	7.322E-01	7.322E-01	2169
Left caudal middle frontal gyrus	-0.102	0.021	[-0.143 - -0.06]	1.657E-06	8.921E-06	2170
Left cuneus	-0.031	0.021	[-0.073 - 0.011]	1.478E-01	1.617E-01	2168
Left entorhinal cortex	-0.041	0.027	[-0.095 - 0.013]	1.367E-01	1.518E-01	2169
Left fusiform gyrus	-0.087	0.021	[-0.128 - -0.045]	4.441E-05	1.295E-04	2169
Left inferior parietal cortex	-0.062	0.028	[-0.118 - -0.007]	2.700E-02	3.616E-02	2169
Left inferior temporal gyrus	-0.097	0.021	[-0.138 - -0.055]	4.685E-06	2.343E-05	2172
Left isthmus cingulate cortex	-0.098	0.024	[-0.144 - -0.051]	3.776E-05	1.149E-04	2174
Left lateral occipital cortex	-0.064	0.021	[-0.106 - -0.023]	2.483E-03	4.574E-03	2171
Left lateral orbitofrontal cortex	-0.097	0.033	[-0.161 - -0.032]	3.324E-03	5.675E-03	2171
Left lingual gyrus	-0.039	0.032	[-0.102 - 0.023]	2.178E-01	2.310E-01	2172
Left medial orbitofrontal cortex	-0.071	0.021	[-0.112 - -0.029]	8.155E-04	1.730E-03	2173
Left middle temporal gyrus	-0.113	0.021	[-0.154 - -0.072]	8.685E-08	8.857E-07	2173
Left parahippocampal gyrus	-0.024	0.039	[-0.1 - 0.052]	5.392E-01	5.551E-01	2173
Left paracentral lobule	-0.078	0.023	[-0.123 - -0.032]	9.140E-04	1.882E-03	2170
Left pars opercularis of inferior frontal gyrus	-0.096	0.021	[-0.137 - -0.054]	6.107E-06	2.543E-05	2173
Left pars orbitalis of inferior frontal gyrus	-0.094	0.033	[-0.16 - -0.029]	4.801E-03	7.536E-03	2173
Left pars triangularis of inferior frontal gyrus	-0.090	0.021	[-0.132 - -0.049]	1.971E-05	6.569E-05	2173
Left pericalcarine cortex	-0.027	0.027	[-0.08 - 0.025]	3.013E-01	3.148E-01	2173
Left postcentral gyrus	-0.042	0.021	[-0.084 - 0]	4.874E-02	5.985E-02	2173
Left posterior cingulate cortex	-0.079	0.021	[-0.121 - -0.038]	1.909E-04	4.906E-04	2171
Left precentral gyrus	-0.076	0.036	[-0.147 - -0.005]	3.488E-02	4.440E-02	2171
Left precuneus	-0.090	0.021	[-0.132 - -0.048]	2.411E-05	7.671E-05	2170
Left rostral anterior cingulate cortex	-0.062	0.021	[-0.104 - -0.021]	3.284E-03	5.675E-03	2171
Left rostral middle frontal gyrus	-0.096	0.027	[-0.148 - -0.044]	3.199E-04	7.722E-04	2170
Left superior frontal gyrus	-0.166	0.026	[-0.218 - -0.114]	3.703E-10	2.592E-08	2172

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.054	0.021	[-0.095 - -0.012]	1.168E-02	1.604E-02	2173
Left superior temporal gyrus	-0.112	0.021	[-0.153 - -0.071]	1.012E-07	8.857E-07	2167
Left supramarginal gyrus	-0.103	0.021	[-0.144 - -0.061]	1.251E-06	7.299E-06	2167
Left frontal pole	-0.095	0.026	[-0.145 - -0.045]	1.963E-04	4.906E-04	2172
Left temporal pole	-0.057	0.021	[-0.098 - -0.015]	7.798E-03	1.137E-02	2168
Left transverse temporal gyrus	-0.086	0.045	[-0.174 - 0.002]	5.501E-02	6.639E-02	2174
Left insula	-0.072	0.021	[-0.114 - -0.031]	6.588E-04	1.441E-03	2171
Right banks of superior temporal sulcus	-0.094	0.021	[-0.136 - -0.053]	8.698E-06	3.066E-05	2174
Right caudal anterior cingulate cortex	-0.069	0.022	[-0.112 - -0.026]	1.734E-03	3.281E-03	2170
Right caudal middle frontal gyrus	-0.108	0.021	[-0.15 - -0.067]	2.665E-07	2.072E-06	2173
Right cuneus	-0.069	0.021	[-0.111 - -0.027]	1.166E-03	2.333E-03	2168
Right entorhinal cortex	-0.035	0.021	[-0.077 - 0.007]	9.961E-02	1.162E-01	2170
Right fusiform gyrus	-0.094	0.021	[-0.136 - -0.053]	8.759E-06	3.066E-05	2172
Right inferior parietal cortex	-0.096	0.021	[-0.137 - -0.054]	6.176E-06	2.543E-05	2168
Right inferior temporal gyrus	-0.113	0.021	[-0.154 - -0.071]	9.191E-08	8.857E-07	2168
Right isthmus cingulate cortex	-0.078	0.023	[-0.123 - -0.034]	6.010E-04	1.357E-03	2172
Right lateral occipital cortex	-0.054	0.021	[-0.096 - -0.012]	1.153E-02	1.604E-02	2173
Right lateral orbitofrontal cortex	-0.095	0.027	[-0.148 - -0.042]	4.570E-04	1.066E-03	2169
Right lingual gyrus	-0.035	0.026	[-0.086 - 0.016]	1.831E-01	1.972E-01	2174
Right medial orbitofrontal cortex	-0.084	0.031	[-0.146 - -0.023]	6.935E-03	1.055E-02	2172
Right middle temporal gyrus	-0.108	0.021	[-0.15 - -0.067]	3.047E-07	2.133E-06	2172
Right parahippocampal gyrus	-0.064	0.030	[-0.123 - -0.006]	3.017E-02	3.911E-02	2173
Right paracentral lobule	-0.077	0.027	[-0.13 - -0.023]	4.844E-03	7.536E-03	2171
Right pars opercularis of inferior frontal gyrus	-0.081	0.030	[-0.139 - -0.022]	7.184E-03	1.070E-02	2174
Right pars orbitalis of inferior frontal gyrus	-0.071	0.032	[-0.134 - -0.008]	2.738E-02	3.616E-02	2172
Right pars triangularis of inferior frontal gyrus	-0.113	0.021	[-0.154 - -0.071]	8.634E-08	8.857E-07	2174
Right pericalcarine cortex	-0.012	0.021	[-0.054 - 0.03]	5.759E-01	5.843E-01	2172
Right postcentral gyrus	-0.056	0.021	[-0.098 - -0.014]	8.955E-03	1.279E-02	2172
Right posterior cingulate cortex	-0.081	0.025	[-0.131 - -0.031]	1.388E-03	2.699E-03	2173

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.075	0.026	[-0.127 - -0.024]	3.830E-03	6.384E-03	2174
Right precuneus	-0.083	0.022	[-0.127 - -0.04]	1.565E-04	4.213E-04	2171
Right rostral anterior cingulate cortex	-0.044	0.021	[-0.086 - -0.002]	4.050E-02	5.063E-02	2173
Right rostral middle frontal gyrus	-0.105	0.023	[-0.15 - -0.059]	5.572E-06	2.543E-05	2170
Right superior frontal gyrus	-0.148	0.025	[-0.196 - -0.1]	1.509E-09	3.231E-08	2173
Right superior parietal cortex	-0.054	0.030	[-0.113 - 0.006]	7.705E-02	9.141E-02	2172
Right superior temporal gyrus	-0.106	0.021	[-0.148 - -0.065]	5.406E-07	3.440E-06	2168
Right supramarginal gyrus	-0.094	0.021	[-0.135 - -0.053]	8.490E-06	3.066E-05	2174
Right frontal pole	-0.043	0.028	[-0.098 - 0.011]	1.173E-01	1.346E-01	2172
Right temporal pole	-0.061	0.021	[-0.103 - -0.019]	4.609E-03	7.503E-03	2168
Right transverse temporal gyrus	-0.040	0.026	[-0.091 - 0.011]	1.203E-01	1.359E-01	2172
Right insula	-0.083	0.021	[-0.125 - -0.041]	9.282E-05	2.599E-04	2174
Left hemisphere	-0.126	0.021	[-0.167 - -0.085]	1.846E-09	3.231E-08	2175
Right hemisphere	-0.126	0.021	[-0.167 - -0.085]	1.826E-09	3.231E-08	2175



**Supplementary Table S33.** Partial correlations between cortical thickness and age of onset

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.021	0.023	[-0.066 - 0.024]	3.559E-01	5.535E-01	3054
Left caudal anterior cingulate cortex	0.025	0.030	[-0.033 - 0.083]	3.911E-01	5.587E-01	3129
Left caudal middle frontal gyrus	0.027	0.018	[-0.008 - 0.062]	1.279E-01	3.474E-01	3113
Left cuneus	0.003	0.023	[-0.042 - 0.048]	8.860E-01	8.988E-01	3059
Left entorhinal cortex	0.034	0.018	[-0.001 - 0.069]	6.042E-02	3.291E-01	3017
Left fusiform gyrus	0.038	0.018	[0.003 - 0.074]	3.233E-02	3.233E-01	3070
Left inferior parietal cortex	0.020	0.022	[-0.024 - 0.064]	3.782E-01	5.577E-01	3012
Left inferior temporal gyrus	0.043	0.018	[0.007 - 0.078]	1.850E-02	2.775E-01	3046
Left isthmus cingulate cortex	0.012	0.020	[-0.027 - 0.051]	5.523E-01	6.783E-01	3123
Left lateral occipital cortex	0.030	0.019	[-0.007 - 0.066]	1.139E-01	3.322E-01	3072
Left lateral orbitofrontal cortex	0.029	0.018	[-0.006 - 0.064]	1.022E-01	3.291E-01	3127
Left lingual gyrus	0.010	0.019	[-0.027 - 0.047]	5.987E-01	7.031E-01	3122
Left medial orbitofrontal cortex	0.046	0.019	[0.009 - 0.083]	1.376E-02	2.775E-01	3120
Left middle temporal gyrus	0.034	0.018	[-0.001 - 0.07]	5.736E-02	3.291E-01	3008
Left parahippocampal gyrus	0.015	0.018	[-0.02 - 0.05]	4.092E-01	5.729E-01	3106
Left paracentral lobule	0.027	0.018	[-0.008 - 0.062]	1.346E-01	3.488E-01	3125
Left pars opercularis of inferior frontal gyrus	0.034	0.018	[-0.001 - 0.069]	5.525E-02	3.291E-01	3091
Left pars orbitalis of inferior frontal gyrus	0.024	0.025	[-0.026 - 0.073]	3.480E-01	5.535E-01	3095
Left pars triangularis of inferior frontal gyrus	0.016	0.018	[-0.019 - 0.051]	3.824E-01	5.577E-01	3074
Left pericalcarine cortex	0.025	0.018	[-0.009 - 0.06]	1.525E-01	3.681E-01	3130
Left postcentral gyrus	0.003	0.018	[-0.032 - 0.038]	8.731E-01	8.988E-01	3115
Left posterior cingulate cortex	0.018	0.027	[-0.034 - 0.071]	4.956E-01	6.627E-01	3127
Left precentral gyrus	0.033	0.018	[-0.002 - 0.068]	6.337E-02	3.291E-01	3112
Left precuneus	0.020	0.018	[-0.015 - 0.055]	2.567E-01	4.887E-01	3106
Left rostral anterior cingulate cortex	0.031	0.018	[-0.004 - 0.066]	8.675E-02	3.291E-01	3118
Left rostral middle frontal gyrus	0.010	0.019	[-0.028 - 0.048]	6.127E-01	7.031E-01	3079
Left superior frontal gyrus	0.029	0.018	[-0.006 - 0.064]	1.034E-01	3.291E-01	3119

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.005	0.018	[-0.041 - 0.03]	7.670E-01	8.592E-01	3057
Left superior temporal gyrus	0.037	0.024	[-0.011 - 0.084]	1.290E-01	3.474E-01	2997
Left supramarginal gyrus	0.030	0.018	[-0.006 - 0.066]	9.951E-02	3.291E-01	2989
Left frontal pole	0.014	0.021	[-0.028 - 0.056]	5.165E-01	6.627E-01	3132
Left temporal pole	0.030	0.018	[-0.005 - 0.065]	9.297E-02	3.291E-01	3090
Left transverse temporal gyrus	0.031	0.026	[-0.019 - 0.082]	2.272E-01	4.677E-01	3131
Left insula	0.049	0.018	[0.014 - 0.084]	5.592E-03	1.957E-01	3127
Right banks of superior temporal sulcus	0.009	0.018	[-0.026 - 0.044]	6.071E-01	7.031E-01	3089
Right caudal anterior cingulate cortex	0.064	0.028	[0.01 - 0.118]	2.052E-02	2.775E-01	3128
Right caudal middle frontal gyrus	0.010	0.018	[-0.025 - 0.045]	5.648E-01	6.817E-01	3104
Right cuneus	0.019	0.018	[-0.016 - 0.055]	2.806E-01	5.166E-01	3085
Right entorhinal cortex	0.019	0.018	[-0.017 - 0.055]	3.100E-01	5.166E-01	2928
Right fusiform gyrus	0.027	0.018	[-0.009 - 0.062]	1.395E-01	3.488E-01	3046
Right inferior parietal cortex	0.018	0.018	[-0.017 - 0.054]	3.093E-01	5.166E-01	3005
Right inferior temporal gyrus	0.039	0.021	[-0.001 - 0.08]	5.832E-02	3.291E-01	3044
Right isthmus cingulate cortex	0.011	0.018	[-0.024 - 0.046]	5.523E-01	6.783E-01	3113
Right lateral occipital cortex	0.029	0.028	[-0.026 - 0.083]	3.062E-01	5.166E-01	3060
Right lateral orbitofrontal cortex	0.022	0.018	[-0.013 - 0.057]	2.106E-01	4.467E-01	3101
Right lingual gyrus	0.030	0.018	[-0.005 - 0.065]	9.434E-02	3.291E-01	3125
Right medial orbitofrontal cortex	0.030	0.018	[-0.005 - 0.065]	8.930E-02	3.291E-01	3088
Right middle temporal gyrus	-0.005	0.018	[-0.041 - 0.03]	7.733E-01	8.592E-01	3026
Right parahippocampal gyrus	-0.003	0.018	[-0.038 - 0.032]	8.626E-01	8.988E-01	3086
Right paracentral lobule	0.025	0.018	[-0.01 - 0.06]	1.675E-01	3.782E-01	3126
Right pars opercularis of inferior frontal gyrus	0.034	0.022	[-0.008 - 0.076]	1.135E-01	3.322E-01	3071
Right pars orbitalis of inferior frontal gyrus	0.011	0.018	[-0.024 - 0.047]	5.207E-01	6.627E-01	3100
Right pars triangularis of inferior frontal gyrus	0.015	0.022	[-0.029 - 0.059]	5.099E-01	6.627E-01	3072
Right pericalcarine cortex	0.028	0.024	[-0.019 - 0.075]	2.476E-01	4.887E-01	3126
Right postcentral gyrus	-0.005	0.018	[-0.04 - 0.03]	7.889E-01	8.629E-01	3108
Right posterior cingulate cortex	0.001	0.020	[-0.038 - 0.04]	9.573E-01	9.573E-01	3128

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	0.023	0.018	[-0.012 - 0.058]	1.963E-01	4.293E-01	3103
Right precuneus	0.018	0.018	[-0.017 - 0.053]	3.065E-01	5.166E-01	3097
Right rostral anterior cingulate cortex	0.038	0.022	[-0.006 - 0.082]	8.746E-02	3.291E-01	3096
Right rostral middle frontal gyrus	0.018	0.018	[-0.018 - 0.053]	3.297E-01	5.367E-01	3071
Right superior frontal gyrus	0.036	0.018	[0.001 - 0.071]	4.419E-02	3.291E-01	3107
Right superior parietal cortex	0.005	0.023	[-0.04 - 0.05]	8.348E-01	8.854E-01	3081
Right superior temporal gyrus	0.027	0.023	[-0.019 - 0.072]	2.583E-01	4.887E-01	3030
Right supramarginal gyrus	0.020	0.023	[-0.024 - 0.064]	3.761E-01	5.577E-01	2996
Right frontal pole	0.012	0.018	[-0.023 - 0.047]	5.139E-01	6.627E-01	3131
Right temporal pole	0.004	0.018	[-0.032 - 0.04]	8.258E-01	8.854E-01	2993
Right transverse temporal gyrus	0.025	0.018	[-0.01 - 0.06]	1.645E-01	3.782E-01	3129
Right insula	0.063	0.018	[0.028 - 0.098]	4.044E-04	2.831E-02	3127
Left hemisphere	0.040	0.018	[0.005 - 0.075]	2.379E-02	2.775E-01	3135
Right hemisphere	0.033	0.018	[-0.002 - 0.067]	6.699E-02	3.291E-01	3135

**Supplementary Table S34.** Partial correlations between cortical thickness and duration of illness

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	0.015	0.018	[-0.02 - 0.05]	4.093E-01	5.209E-01	3101
Left caudal anterior cingulate cortex	-0.022	0.031	[-0.083 - 0.039]	4.727E-01	5.705E-01	3176
Left caudal middle frontal gyrus	-0.033	0.018	[-0.068 - 0.001]	5.987E-02	2.004E-01	3160
Left cuneus	-0.017	0.023	[-0.062 - 0.027]	4.452E-01	5.565E-01	3106
Left entorhinal cortex	-0.032	0.021	[-0.073 - 0.009]	1.269E-01	2.551E-01	3064
Left fusiform gyrus	-0.043	0.018	[-0.078 - -0.008]	1.545E-02	1.803E-01	3117
Left inferior parietal cortex	-0.021	0.018	[-0.056 - 0.014]	2.442E-01	3.638E-01	3059
Left inferior temporal gyrus	-0.049	0.018	[-0.084 - -0.014]	6.372E-03	1.487E-01	3093
Left isthmus cingulate cortex	-0.019	0.018	[-0.054 - 0.016]	2.804E-01	3.926E-01	3170
Left lateral occipital cortex	-0.038	0.018	[-0.073 - -0.003]	3.419E-02	1.803E-01	3119
Left lateral orbitofrontal cortex	-0.031	0.020	[-0.07 - 0.008]	1.210E-01	2.551E-01	3174
Left lingual gyrus	-0.013	0.018	[-0.048 - 0.022]	4.562E-01	5.602E-01	3169
Left medial orbitofrontal cortex	-0.046	0.021	[-0.088 - -0.005]	2.987E-02	1.803E-01	3167
Left middle temporal gyrus	-0.039	0.018	[-0.074 - -0.004]	2.962E-02	1.803E-01	3055
Left parahippocampal gyrus	-0.008	0.021	[-0.05 - 0.033]	6.945E-01	7.841E-01	3153
Left paracentral lobule	-0.037	0.018	[-0.072 - -0.002]	3.606E-02	1.803E-01	3172
Left pars opercularis of inferior frontal gyrus	-0.031	0.018	[-0.066 - 0.004]	8.040E-02	2.345E-01	3138
Left pars orbitalis of inferior frontal gyrus	-0.032	0.021	[-0.074 - 0.009]	1.276E-01	2.551E-01	3142
Left pars triangularis of inferior frontal gyrus	-0.020	0.018	[-0.055 - 0.014]	2.498E-01	3.643E-01	3121
Left pericalcarine cortex	-0.030	0.019	[-0.068 - 0.008]	1.197E-01	2.551E-01	3177
Left postcentral gyrus	-0.002	0.018	[-0.037 - 0.033]	9.015E-01	9.281E-01	3162
Left posterior cingulate cortex	-0.013	0.027	[-0.065 - 0.039]	6.325E-01	7.379E-01	3174
Left precentral gyrus	-0.039	0.018	[-0.074 - -0.004]	2.740E-02	1.803E-01	3159
Left precuneus	-0.028	0.018	[-0.062 - 0.007]	1.187E-01	2.551E-01	3153
Left rostral anterior cingulate cortex	-0.033	0.018	[-0.068 - 0.001]	5.967E-02	2.004E-01	3165
Left rostral middle frontal gyrus	-0.015	0.018	[-0.05 - 0.02]	3.962E-01	5.209E-01	3126
Left superior frontal gyrus	-0.032	0.018	[-0.066 - 0.003]	7.244E-02	2.305E-01	3166

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.005	0.018	[-0.04 - 0.03]	7.930E-01	8.411E-01	3104
Left superior temporal gyrus	-0.052	0.028	[-0.106 - 0.002]	6.012E-02	2.004E-01	3044
Left supramarginal gyrus	-0.029	0.018	[-0.064 - 0.007]	1.117E-01	2.551E-01	3036
Left frontal pole	-0.028	0.024	[-0.074 - 0.019]	2.410E-01	3.638E-01	3179
Left temporal pole	-0.027	0.018	[-0.061 - 0.008]	1.347E-01	2.619E-01	3137
Left transverse temporal gyrus	-0.034	0.021	[-0.076 - 0.007]	1.026E-01	2.551E-01	3178
Left insula	-0.055	0.018	[-0.089 - -0.02]	1.823E-03	6.379E-02	3174
Right banks of superior temporal sulcus	-0.004	0.018	[-0.039 - 0.031]	8.346E-01	8.720E-01	3136
Right caudal anterior cingulate cortex	-0.062	0.029	[-0.12 - -0.005]	3.257E-02	1.803E-01	3175
Right caudal middle frontal gyrus	-0.018	0.018	[-0.052 - 0.017]	3.217E-01	4.416E-01	3151
Right cuneus	-0.028	0.018	[-0.063 - 0.007]	1.112E-01	2.551E-01	3132
Right entorhinal cortex	-0.025	0.018	[-0.061 - 0.011]	1.732E-01	3.032E-01	2975
Right fusiform gyrus	-0.029	0.018	[-0.064 - 0.007]	1.121E-01	2.551E-01	3093
Right inferior parietal cortex	-0.022	0.018	[-0.057 - 0.013]	2.211E-01	3.503E-01	3052
Right inferior temporal gyrus	-0.046	0.022	[-0.089 - -0.003]	3.451E-02	1.803E-01	3091
Right isthmus cingulate cortex	-0.002	0.023	[-0.047 - 0.044]	9.435E-01	9.572E-01	3160
Right lateral occipital cortex	-0.045	0.023	[-0.09 - 0]	5.081E-02	2.004E-01	3107
Right lateral orbitofrontal cortex	-0.022	0.018	[-0.057 - 0.012]	2.076E-01	3.460E-01	3148
Right lingual gyrus	-0.037	0.019	[-0.074 - 0.001]	5.638E-02	2.004E-01	3172
Right medial orbitofrontal cortex	-0.035	0.018	[-0.07 - 0]	4.891E-02	2.004E-01	3135
Right middle temporal gyrus	0.000	0.018	[-0.035 - 0.035]	9.910E-01	9.910E-01	3073
Right parahippocampal gyrus	0.005	0.018	[-0.031 - 0.041]	7.828E-01	8.411E-01	3133
Right paracentral lobule	-0.031	0.018	[-0.066 - 0.003]	7.743E-02	2.345E-01	3173
Right pars opercularis of inferior frontal gyrus	-0.030	0.018	[-0.065 - 0.005]	9.125E-02	2.551E-01	3118
Right pars orbitalis of inferior frontal gyrus	-0.015	0.018	[-0.05 - 0.02]	4.078E-01	5.209E-01	3147
Right pars triangularis of inferior frontal gyrus	-0.016	0.018	[-0.052 - 0.019]	3.717E-01	5.003E-01	3119
Right pericalcarine cortex	-0.031	0.025	[-0.081 - 0.019]	2.192E-01	3.503E-01	3173
Right postcentral gyrus	0.006	0.018	[-0.029 - 0.041]	7.393E-01	8.215E-01	3155
Right posterior cingulate cortex	-0.006	0.023	[-0.051 - 0.038]	7.793E-01	8.411E-01	3175

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.026	0.018	[-0.061 - 0.009]	1.477E-01	2.795E-01	3150
Right precuneus	-0.025	0.018	[-0.059 - 0.01]	1.646E-01	3.021E-01	3144
Right rostral anterior cingulate cortex	-0.038	0.019	[-0.075 - 0]	5.036E-02	2.004E-01	3143
Right rostral middle frontal gyrus	-0.023	0.018	[-0.058 - 0.012]	1.933E-01	3.299E-01	3118
Right superior frontal gyrus	-0.039	0.018	[-0.074 - -0.004]	2.892E-02	1.803E-01	3154
Right superior parietal cortex	-0.015	0.023	[-0.06 - 0.03]	5.161E-01	6.123E-01	3128
Right superior temporal gyrus	-0.031	0.022	[-0.075 - 0.013]	1.683E-01	3.021E-01	3077
Right supramarginal gyrus	-0.021	0.020	[-0.06 - 0.017]	2.765E-01	3.926E-01	3043
Right frontal pole	-0.021	0.018	[-0.056 - 0.013]	2.252E-01	3.503E-01	3178
Right temporal pole	-0.007	0.018	[-0.042 - 0.028]	6.941E-01	7.841E-01	3040
Right transverse temporal gyrus	-0.028	0.018	[-0.063 - 0.006]	1.091E-01	2.551E-01	3176
Right insula	-0.061	0.018	[-0.095 - -0.026]	5.584E-04	3.909E-02	3174
Left hemisphere	-0.045	0.018	[-0.079 - -0.01]	1.112E-02	1.803E-01	3182
Right hemisphere	-0.037	0.018	[-0.072 - -0.003]	3.399E-02	1.803E-01	3182

**Supplementary Table S35.** Partial correlations between cortical thickness and PANSS total

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.053	0.026	[-0.105 - -0.002]	4.309E-02	1.774E-01	1897
Left caudal anterior cingulate cortex	0.030	0.030	[-0.028 - 0.089]	3.082E-01	5.393E-01	1910
Left caudal middle frontal gyrus	-0.082	0.024	[-0.128 - -0.036]	5.339E-04	1.682E-02	1911
Left cuneus	0.048	0.037	[-0.024 - 0.12]	1.888E-01	4.307E-01	1907
Left entorhinal cortex	0.067	0.035	[-0.001 - 0.136]	5.499E-02	1.856E-01	1877
Left fusiform gyrus	-0.064	0.023	[-0.108 - -0.019]	4.999E-03	4.374E-02	1906
Left inferior parietal cortex	-0.014	0.023	[-0.059 - 0.03]	5.270E-01	6.960E-01	1910
Left inferior temporal gyrus	-0.061	0.037	[-0.134 - 0.012]	1.038E-01	2.906E-01	1907
Left isthmus cingulate cortex	-0.019	0.033	[-0.084 - 0.047]	5.721E-01	7.026E-01	1909
Left lateral occipital cortex	-0.010	0.035	[-0.078 - 0.058]	7.739E-01	8.737E-01	1906
Left lateral orbitofrontal cortex	-0.058	0.023	[-0.102 - -0.013]	1.083E-02	7.002E-02	1910
Left lingual gyrus	-0.042	0.024	[-0.09 - 0.005]	8.067E-02	2.455E-01	1909
Left medial orbitofrontal cortex	-0.016	0.023	[-0.061 - 0.028]	4.687E-01	6.433E-01	1911
Left middle temporal gyrus	-0.071	0.024	[-0.118 - -0.023]	3.542E-03	4.132E-02	1905
Left parahippocampal gyrus	-0.037	0.047	[-0.13 - 0.056]	4.366E-01	6.273E-01	1910
Left paracentral lobule	-0.023	0.039	[-0.098 - 0.053]	5.563E-01	6.971E-01	1910
Left pars opercularis of inferior frontal gyrus	-0.071	0.037	[-0.143 - 0.001]	5.286E-02	1.856E-01	1911
Left pars orbitalis of inferior frontal gyrus	-0.031	0.023	[-0.076 - 0.013]	1.717E-01	4.144E-01	1909
Left pars triangularis of inferior frontal gyrus	-0.080	0.023	[-0.124 - -0.036]	4.097E-04	1.682E-02	1911
Left pericalcarine cortex	0.046	0.039	[-0.031 - 0.123]	2.396E-01	5.057E-01	1909
Left postcentral gyrus	-0.044	0.023	[-0.089 - 0]	5.043E-02	1.856E-01	1908
Left posterior cingulate cortex	-0.031	0.034	[-0.097 - 0.035]	3.547E-01	5.728E-01	1911
Left precentral gyrus	-0.021	0.041	[-0.101 - 0.06]	6.176E-01	7.327E-01	1909
Left precuneus	-0.047	0.023	[-0.092 - -0.003]	3.726E-02	1.630E-01	1909
Left rostral anterior cingulate cortex	0.038	0.035	[-0.031 - 0.107]	2.818E-01	5.057E-01	1910
Left rostral middle frontal gyrus	-0.061	0.023	[-0.105 - -0.016]	7.352E-03	5.718E-02	1909
Left superior frontal gyrus	-0.077	0.025	[-0.126 - -0.029]	1.748E-03	2.447E-02	1911

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.025	0.023	[-0.07 - 0.019]	2.693E-01	5.057E-01	1909
Left superior temporal gyrus	-0.055	0.037	[-0.127 - 0.017]	1.352E-01	3.506E-01	1893
Left supramarginal gyrus	-0.037	0.032	[-0.1 - 0.026]	2.506E-01	5.057E-01	1895
Left frontal pole	-0.040	0.025	[-0.089 - 0.01]	1.180E-01	3.176E-01	1911
Left temporal pole	-0.049	0.023	[-0.094 - -0.004]	3.128E-02	1.460E-01	1907
Left transverse temporal gyrus	-0.006	0.030	[-0.065 - 0.053]	8.378E-01	8.880E-01	1911
Left insula	0.003	0.033	[-0.061 - 0.067]	9.307E-01	9.581E-01	1910
Right banks of superior temporal sulcus	-0.023	0.028	[-0.077 - 0.031]	4.009E-01	5.970E-01	1904
Right caudal anterior cingulate cortex	0.005	0.025	[-0.044 - 0.055]	8.354E-01	8.880E-01	1911
Right caudal middle frontal gyrus	-0.103	0.030	[-0.162 - -0.043]	7.210E-04	1.682E-02	1911
Right cuneus	0.026	0.027	[-0.028 - 0.08]	3.392E-01	5.728E-01	1908
Right entorhinal cortex	-0.021	0.023	[-0.066 - 0.024]	3.601E-01	5.728E-01	1873
Right fusiform gyrus	-0.058	0.023	[-0.102 - -0.013]	1.100E-02	7.002E-02	1908
Right inferior parietal cortex	-0.041	0.023	[-0.086 - 0.004]	7.162E-02	2.279E-01	1911
Right inferior temporal gyrus	-0.072	0.023	[-0.117 - -0.028]	1.388E-03	2.428E-02	1905
Right isthmus cingulate cortex	0.056	0.050	[-0.043 - 0.154]	2.670E-01	5.057E-01	1910
Right lateral occipital cortex	-0.010	0.025	[-0.058 - 0.038]	6.798E-01	7.932E-01	1906
Right lateral orbitofrontal cortex	-0.028	0.032	[-0.091 - 0.036]	3.887E-01	5.915E-01	1911
Right lingual gyrus	-0.023	0.038	[-0.098 - 0.052]	5.462E-01	6.971E-01	1908
Right medial orbitofrontal cortex	-0.033	0.036	[-0.103 - 0.037]	3.599E-01	5.728E-01	1911
Right middle temporal gyrus	-0.064	0.023	[-0.109 - -0.02]	4.500E-03	4.374E-02	1909
Right parahippocampal gyrus	0.005	0.023	[-0.04 - 0.05]	8.311E-01	8.880E-01	1907
Right paracentral lobule	-0.019	0.036	[-0.089 - 0.052]	5.978E-01	7.215E-01	1911
Right pars opercularis of inferior frontal gyrus	-0.042	0.054	[-0.149 - 0.065]	4.391E-01	6.273E-01	1911
Right pars orbitalis of inferior frontal gyrus	-0.013	0.023	[-0.058 - 0.031]	5.577E-01	6.971E-01	1910
Right pars triangularis of inferior frontal gyrus	-0.044	0.023	[-0.088 - 0.001]	5.567E-02	1.856E-01	1910
Right pericalcarine cortex	0.048	0.036	[-0.024 - 0.119]	1.907E-01	4.307E-01	1907
Right postcentral gyrus	0.007	0.036	[-0.064 - 0.078]	8.478E-01	8.880E-01	1907
Right posterior cingulate cortex	0.002	0.047	[-0.091 - 0.095]	9.732E-01	9.782E-01	1911



	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.029	0.044	[-0.116 - 0.058]	5.135E-01	6.913E-01	1910
Right precuneus	-0.027	0.024	[-0.075 - 0.02]	2.589E-01	5.057E-01	1911
Right rostral anterior cingulate cortex	-0.009	0.031	[-0.07 - 0.051]	7.633E-01	8.737E-01	1910
Right rostral middle frontal gyrus	-0.053	0.023	[-0.097 - -0.008]	2.054E-02	1.106E-01	1909
Right superior frontal gyrus	-0.065	0.027	[-0.119 - -0.012]	1.726E-02	1.007E-01	1911
Right superior parietal cortex	-0.038	0.026	[-0.089 - 0.013]	1.414E-01	3.534E-01	1910
Right superior temporal gyrus	-0.078	0.036	[-0.148 - -0.008]	2.907E-02	1.454E-01	1897
Right supramarginal gyrus	-0.027	0.036	[-0.097 - 0.043]	4.494E-01	6.292E-01	1899
Right frontal pole	0.004	0.023	[-0.04 - 0.049]	8.499E-01	8.880E-01	1911
Right temporal pole	-0.020	0.023	[-0.065 - 0.025]	3.886E-01	5.915E-01	1910
Right transverse temporal gyrus	-0.001	0.034	[-0.067 - 0.065]	9.782E-01	9.782E-01	1910
Right insula	-0.030	0.028	[-0.084 - 0.024]	2.817E-01	5.057E-01	1909
Left hemisphere	-0.051	0.030	[-0.109 - 0.007]	8.474E-02	2.471E-01	1911
Right hemisphere	-0.040	0.033	[-0.105 - 0.024]	2.181E-01	4.771E-01	1911

**Supplementary Table S36.** Partial correlations between cortical thickness and PANSS positive

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.037	0.023	[-0.081 - 0.008]	1.073E-01	3.005E-01	1910
Left caudal anterior cingulate cortex	0.035	0.038	[-0.04 - 0.111]	3.541E-01	5.764E-01	1923
Left caudal middle frontal gyrus	-0.089	0.026	[-0.14 - -0.038]	6.248E-04	1.093E-02	1924
Left cuneus	0.054	0.034	[-0.014 - 0.121]	1.189E-01	3.202E-01	1920
Left entorhinal cortex	0.037	0.025	[-0.011 - 0.086]	1.333E-01	3.456E-01	1890
Left fusiform gyrus	-0.039	0.023	[-0.083 - 0.006]	8.862E-02	2.868E-01	1919
Left inferior parietal cortex	-0.012	0.023	[-0.056 - 0.032]	5.964E-01	7.591E-01	1923
Left inferior temporal gyrus	-0.032	0.023	[-0.076 - 0.012]	1.587E-01	3.703E-01	1920
Left isthmus cingulate cortex	-0.005	0.027	[-0.057 - 0.047]	8.549E-01	9.207E-01	1922
Left lateral occipital cortex	0.026	0.037	[-0.046 - 0.098]	4.831E-01	6.886E-01	1919
Left lateral orbitofrontal cortex	-0.037	0.023	[-0.081 - 0.008]	1.073E-01	3.005E-01	1923
Left lingual gyrus	-0.014	0.023	[-0.058 - 0.031]	5.493E-01	7.255E-01	1922
Left medial orbitofrontal cortex	0.007	0.023	[-0.037 - 0.052]	7.412E-01	8.729E-01	1924
Left middle temporal gyrus	-0.067	0.023	[-0.111 - -0.023]	3.112E-03	3.744E-02	1918
Left parahippocampal gyrus	-0.012	0.036	[-0.082 - 0.058]	7.405E-01	8.729E-01	1923
Left paracentral lobule	-0.034	0.034	[-0.101 - 0.033]	3.176E-01	5.558E-01	1923
Left pars opercularis of inferior frontal gyrus	-0.066	0.031	[-0.126 - -0.005]	3.271E-02	1.901E-01	1924
Left pars orbitalis of inferior frontal gyrus	-0.030	0.023	[-0.074 - 0.014]	1.838E-01	4.020E-01	1922
Left pars triangularis of inferior frontal gyrus	-0.078	0.023	[-0.122 - -0.034]	5.338E-04	1.093E-02	1924
Left pericalcarine cortex	0.037	0.035	[-0.032 - 0.106]	2.924E-01	5.248E-01	1922
Left postcentral gyrus	-0.031	0.026	[-0.081 - 0.019]	2.283E-01	4.439E-01	1921
Left posterior cingulate cortex	-0.020	0.030	[-0.079 - 0.039]	5.017E-01	6.886E-01	1924
Left precentral gyrus	-0.054	0.030	[-0.112 - 0.004]	6.851E-02	2.664E-01	1922
Left precuneus	-0.029	0.023	[-0.073 - 0.016]	2.044E-01	4.336E-01	1922
Left rostral anterior cingulate cortex	0.007	0.024	[-0.039 - 0.054]	7.614E-01	8.730E-01	1923
Left rostral middle frontal gyrus	-0.043	0.023	[-0.087 - 0.001]	5.743E-02	2.365E-01	1922
Left superior frontal gyrus	-0.056	0.023	[-0.1 - -0.011]	1.365E-02	1.365E-01	1924

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.028	0.023	[-0.072 - 0.017]	2.203E-01	4.407E-01	1922
Left superior temporal gyrus	-0.040	0.023	[-0.085 - 0.005]	8.005E-02	2.868E-01	1905
Left supramarginal gyrus	-0.041	0.024	[-0.089 - 0.007]	9.423E-02	2.868E-01	1907
Left frontal pole	-0.045	0.023	[-0.09 - -0.001]	4.522E-02	1.978E-01	1924
Left temporal pole	-0.050	0.023	[-0.094 - -0.005]	2.859E-02	1.901E-01	1920
Left transverse temporal gyrus	-0.009	0.033	[-0.073 - 0.055]	7.792E-01	8.730E-01	1924
Left insula	-0.013	0.023	[-0.058 - 0.031]	5.610E-01	7.272E-01	1923
Right banks of superior temporal sulcus	-0.025	0.023	[-0.069 - 0.02]	2.720E-01	5.011E-01	1917
Right caudal anterior cingulate cortex	0.001	0.028	[-0.053 - 0.055]	9.662E-01	9.802E-01	1924
Right caudal middle frontal gyrus	-0.086	0.023	[-0.13 - -0.041]	1.471E-04	1.030E-02	1924
Right cuneus	0.021	0.033	[-0.043 - 0.085]	5.247E-01	7.063E-01	1921
Right entorhinal cortex	-0.042	0.024	[-0.09 - 0.006]	8.280E-02	2.868E-01	1886
Right fusiform gyrus	-0.047	0.023	[-0.091 - -0.002]	4.074E-02	1.901E-01	1921
Right inferior parietal cortex	-0.038	0.023	[-0.083 - 0.006]	9.167E-02	2.868E-01	1924
Right inferior temporal gyrus	-0.050	0.023	[-0.094 - -0.005]	2.786E-02	1.901E-01	1918
Right isthmus cingulate cortex	0.032	0.047	[-0.06 - 0.124]	4.934E-01	6.886E-01	1923
Right lateral occipital cortex	0.011	0.024	[-0.036 - 0.058]	6.512E-01	8.140E-01	1919
Right lateral orbitofrontal cortex	0.000	0.023	[-0.045 - 0.044]	9.951E-01	9.951E-01	1924
Right lingual gyrus	-0.002	0.028	[-0.058 - 0.054]	9.462E-01	9.740E-01	1921
Right medial orbitofrontal cortex	-0.017	0.023	[-0.061 - 0.028]	4.556E-01	6.886E-01	1924
Right middle temporal gyrus	-0.067	0.023	[-0.111 - -0.022]	3.210E-03	3.744E-02	1922
Right parahippocampal gyrus	-0.021	0.023	[-0.066 - 0.023]	3.524E-01	5.764E-01	1920
Right paracentral lobule	-0.024	0.032	[-0.087 - 0.039]	4.633E-01	6.886E-01	1924
Right pars opercularis of inferior frontal gyrus	-0.034	0.029	[-0.092 - 0.023]	2.409E-01	4.558E-01	1924
Right pars orbitalis of inferior frontal gyrus	0.009	0.023	[-0.036 - 0.053]	7.006E-01	8.604E-01	1923
Right pars triangularis of inferior frontal gyrus	-0.028	0.023	[-0.073 - 0.016]	2.112E-01	4.349E-01	1923
Right pericalcarine cortex	0.057	0.040	[-0.021 - 0.136]	1.519E-01	3.666E-01	1920
Right postcentral gyrus	-0.002	0.029	[-0.058 - 0.054]	9.409E-01	9.740E-01	1920
Right posterior cingulate cortex	-0.009	0.029	[-0.065 - 0.047]	7.482E-01	8.729E-01	1924

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.050	0.034	[-0.116 - 0.016]	1.395E-01	3.487E-01	1923
Right precuneus	-0.018	0.026	[-0.069 - 0.033]	4.882E-01	6.886E-01	1924
Right rostral anterior cingulate cortex	-0.009	0.032	[-0.071 - 0.054]	7.857E-01	8.730E-01	1923
Right rostral middle frontal gyrus	-0.047	0.023	[-0.091 - -0.002]	3.879E-02	1.901E-01	1922
Right superior frontal gyrus	-0.047	0.023	[-0.092 - -0.003]	3.656E-02	1.901E-01	1924
Right superior parietal cortex	-0.031	0.023	[-0.076 - 0.013]	1.644E-01	3.713E-01	1923
Right superior temporal gyrus	-0.078	0.023	[-0.122 - -0.033]	6.207E-04	1.093E-02	1910
Right supramarginal gyrus	-0.030	0.031	[-0.09 - 0.03]	3.288E-01	5.613E-01	1912
Right frontal pole	0.004	0.023	[-0.04 - 0.048]	8.540E-01	9.207E-01	1924
Right temporal pole	-0.019	0.023	[-0.064 - 0.025]	3.920E-01	6.237E-01	1923
Right transverse temporal gyrus	-0.019	0.023	[-0.063 - 0.026]	4.077E-01	6.342E-01	1923
Right insula	-0.004	0.023	[-0.048 - 0.041]	8.683E-01	9.209E-01	1922
Left hemisphere	-0.048	0.023	[-0.092 - -0.003]	3.494E-02	1.901E-01	1924
Right hemisphere	-0.049	0.023	[-0.093 - -0.004]	3.108E-02	1.901E-01	1924

**Supplementary Table S37.** Partial correlations between cortical thickness and PANSS negative

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.063	0.023	[-0.107 - -0.018]	5.771E-03	1.924E-02	1912
Left caudal anterior cingulate cortex	0.019	0.023	[-0.025 - 0.064]	3.930E-01	4.754E-01	1925
Left caudal middle frontal gyrus	-0.081	0.036	[-0.152 - -0.01]	2.458E-02	5.297E-02	1926
Left cuneus	-0.017	0.023	[-0.062 - 0.029]	4.794E-01	5.501E-01	1922
Left entorhinal cortex	0.002	0.029	[-0.055 - 0.059]	9.517E-01	9.517E-01	1892
Left fusiform gyrus	-0.106	0.022	[-0.15 - -0.062]	2.282E-06	1.598E-04	1921
Left inferior parietal cortex	-0.036	0.023	[-0.08 - 0.009]	1.154E-01	1.835E-01	1925
Left inferior temporal gyrus	-0.089	0.026	[-0.141 - -0.038]	7.088E-04	4.875E-03	1922
Left isthmus cingulate cortex	-0.049	0.023	[-0.093 - -0.004]	3.282E-02	6.758E-02	1924
Left lateral occipital cortex	-0.060	0.027	[-0.113 - -0.008]	2.497E-02	5.297E-02	1921
Left lateral orbitofrontal cortex	-0.099	0.023	[-0.143 - -0.055]	1.168E-05	4.088E-04	1925
Left lingual gyrus	-0.055	0.031	[-0.117 - 0.006]	7.827E-02	1.362E-01	1924
Left medial orbitofrontal cortex	-0.055	0.023	[-0.099 - -0.011]	1.515E-02	3.657E-02	1926
Left middle temporal gyrus	-0.086	0.023	[-0.131 - -0.041]	1.883E-04	2.197E-03	1920
Left parahippocampal gyrus	-0.069	0.042	[-0.151 - 0.013]	9.910E-02	1.652E-01	1925
Left paracentral lobule	-0.017	0.023	[-0.061 - 0.028]	4.578E-01	5.341E-01	1925
Left pars opercularis of inferior frontal gyrus	-0.099	0.043	[-0.183 - -0.014]	2.181E-02	4.992E-02	1926
Left pars orbitalis of inferior frontal gyrus	-0.057	0.023	[-0.101 - -0.013]	1.154E-02	2.992E-02	1924
Left pars triangularis of inferior frontal gyrus	-0.066	0.023	[-0.11 - -0.022]	3.495E-03	1.529E-02	1926
Left pericalcarine cortex	0.021	0.025	[-0.027 - 0.07]	3.939E-01	4.754E-01	1924
Left postcentral gyrus	-0.056	0.031	[-0.118 - 0.005]	7.185E-02	1.290E-01	1923
Left posterior cingulate cortex	-0.039	0.030	[-0.097 - 0.02]	1.934E-01	2.821E-01	1926
Left precentral gyrus	-0.032	0.037	[-0.105 - 0.04]	3.859E-01	4.754E-01	1924
Left precuneus	-0.059	0.023	[-0.104 - -0.015]	9.052E-03	2.535E-02	1924
Left rostral anterior cingulate cortex	0.028	0.023	[-0.016 - 0.073]	2.153E-01	2.955E-01	1925
Left rostral middle frontal gyrus	-0.088	0.022	[-0.132 - -0.044]	8.235E-05	1.441E-03	1924
Left superior frontal gyrus	-0.095	0.031	[-0.155 - -0.035]	2.056E-03	1.028E-02	1926

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.028	0.023	[-0.073 - 0.016]	2.139E-01	2.955E-01	1924
Left superior temporal gyrus	-0.100	0.037	[-0.173 - -0.027]	7.457E-03	2.373E-02	1908
Left supramarginal gyrus	-0.052	0.026	[-0.103 - -0.001]	4.583E-02	8.912E-02	1910
Left frontal pole	-0.027	0.023	[-0.072 - 0.019]	2.522E-01	3.395E-01	1926
Left temporal pole	-0.064	0.023	[-0.108 - -0.019]	4.811E-03	1.772E-02	1922
Left transverse temporal gyrus	-0.030	0.023	[-0.074 - 0.015]	1.919E-01	2.821E-01	1926
Left insula	-0.049	0.036	[-0.12 - 0.022]	1.800E-01	2.800E-01	1925
Right banks of superior temporal sulcus	-0.027	0.030	[-0.086 - 0.032]	3.650E-01	4.646E-01	1919
Right caudal anterior cingulate cortex	-0.004	0.023	[-0.048 - 0.041]	8.772E-01	9.030E-01	1926
Right caudal middle frontal gyrus	-0.099	0.034	[-0.166 - -0.031]	4.171E-03	1.622E-02	1926
Right cuneus	-0.010	0.023	[-0.054 - 0.035]	6.710E-01	7.323E-01	1923
Right entorhinal cortex	-0.028	0.023	[-0.073 - 0.016]	2.142E-01	2.955E-01	1888
Right fusiform gyrus	-0.082	0.023	[-0.126 - -0.038]	2.828E-04	2.828E-03	1923
Right inferior parietal cortex	-0.057	0.023	[-0.102 - -0.013]	1.130E-02	2.992E-02	1926
Right inferior temporal gyrus	-0.096	0.023	[-0.14 - -0.052]	2.155E-05	5.029E-04	1920
Right isthmus cingulate cortex	0.005	0.043	[-0.079 - 0.089]	9.041E-01	9.172E-01	1925
Right lateral occipital cortex	-0.044	0.023	[-0.088 - 0]	5.159E-02	9.503E-02	1921
Right lateral orbitofrontal cortex	-0.091	0.040	[-0.169 - -0.013]	2.211E-02	4.992E-02	1926
Right lingual gyrus	-0.046	0.049	[-0.142 - 0.049]	3.414E-01	4.426E-01	1923
Right medial orbitofrontal cortex	-0.075	0.029	[-0.132 - -0.019]	9.002E-03	2.535E-02	1926
Right middle temporal gyrus	-0.080	0.022	[-0.124 - -0.036]	3.753E-04	3.284E-03	1924
Right parahippocampal gyrus	-0.010	0.024	[-0.057 - 0.038]	6.905E-01	7.323E-01	1922
Right paracentral lobule	-0.026	0.023	[-0.07 - 0.019]	2.607E-01	3.443E-01	1926
Right pars opercularis of inferior frontal gyrus	-0.026	0.046	[-0.116 - 0.064]	5.736E-01	6.476E-01	1926
Right pars orbitalis of inferior frontal gyrus	-0.079	0.027	[-0.133 - -0.026]	3.495E-03	1.529E-02	1925
Right pars triangularis of inferior frontal gyrus	-0.056	0.023	[-0.1 - -0.011]	1.424E-02	3.560E-02	1925
Right pericalcarine cortex	0.014	0.026	[-0.037 - 0.065]	5.927E-01	6.585E-01	1922
Right postcentral gyrus	-0.050	0.029	[-0.107 - 0.006]	7.977E-02	1.362E-01	1922
Right posterior cingulate cortex	-0.013	0.051	[-0.114 - 0.088]	8.003E-01	8.362E-01	1926

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.055	0.034	[-0.121 - 0.012]	1.086E-01	1.768E-01	1925
Right precuneus	-0.047	0.023	[-0.092 - -0.003]	3.673E-02	7.346E-02	1926
Right rostral anterior cingulate cortex	-0.020	0.026	[-0.071 - 0.03]	4.369E-01	5.183E-01	1925
Right rostral middle frontal gyrus	-0.076	0.023	[-0.12 - -0.032]	7.661E-04	4.875E-03	1924
Right superior frontal gyrus	-0.089	0.027	[-0.142 - -0.036]	9.867E-04	5.756E-03	1926
Right superior parietal cortex	-0.060	0.023	[-0.104 - -0.015]	8.374E-03	2.535E-02	1925
Right superior temporal gyrus	-0.084	0.029	[-0.141 - -0.027]	4.022E-03	1.622E-02	1912
Right supramarginal gyrus	-0.071	0.023	[-0.115 - -0.027]	1.726E-03	9.296E-03	1914
Right frontal pole	-0.030	0.023	[-0.075 - 0.015]	1.869E-01	2.821E-01	1926
Right temporal pole	-0.044	0.023	[-0.088 - 0]	5.089E-02	9.503E-02	1925
Right transverse temporal gyrus	-0.011	0.028	[-0.066 - 0.044]	6.873E-01	7.323E-01	1925
Right insula	-0.085	0.030	[-0.144 - -0.025]	5.240E-03	1.834E-02	1924
Left hemisphere	-0.085	0.024	[-0.132 - -0.038]	4.225E-04	3.286E-03	1926
Right hemisphere	-0.089	0.024	[-0.136 - -0.043]	1.771E-04	2.197E-03	1926

**Supplementary Table S38.** Partial correlations between cortical thickness and SAPS total

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.002	0.029	[-0.06 - 0.055]	9.397E-01	9.733E-01	1155
Left caudal anterior cingulate cortex	-0.012	0.030	[-0.071 - 0.048]	7.007E-01	9.250E-01	1156
Left caudal middle frontal gyrus	-0.056	0.029	[-0.113 - 0.001]	5.607E-02	4.906E-01	1156
Left cuneus	0.021	0.047	[-0.071 - 0.112]	6.582E-01	9.250E-01	1158
Left entorhinal cortex	0.002	0.036	[-0.069 - 0.073]	9.565E-01	9.733E-01	1157
Left fusiform gyrus	-0.042	0.041	[-0.123 - 0.038]	2.990E-01	6.002E-01	1156
Left inferior parietal cortex	-0.011	0.029	[-0.068 - 0.047]	7.197E-01	9.250E-01	1157
Left inferior temporal gyrus	-0.025	0.036	[-0.097 - 0.046]	4.909E-01	7.470E-01	1159
Left isthmus cingulate cortex	-0.026	0.058	[-0.139 - 0.087]	6.504E-01	9.250E-01	1160
Left lateral occipital cortex	-0.013	0.038	[-0.087 - 0.062]	7.360E-01	9.250E-01	1159
Left lateral orbitofrontal cortex	-0.031	0.041	[-0.112 - 0.05]	4.551E-01	7.409E-01	1158
Left lingual gyrus	0.016	0.046	[-0.075 - 0.107]	7.320E-01	9.250E-01	1159
Left medial orbitofrontal cortex	0.014	0.040	[-0.065 - 0.092]	7.325E-01	9.250E-01	1159
Left middle temporal gyrus	-0.011	0.029	[-0.068 - 0.047]	7.149E-01	9.250E-01	1161
Left parahippocampal gyrus	0.003	0.030	[-0.057 - 0.063]	9.191E-01	9.733E-01	1160
Left paracentral lobule	-0.058	0.037	[-0.131 - 0.016]	1.225E-01	5.359E-01	1157
Left pars opercularis of inferior frontal gyrus	-0.087	0.044	[-0.173 - 0]	4.984E-02	4.906E-01	1156
Left pars orbitalis of inferior frontal gyrus	-0.057	0.029	[-0.114 - 0]	5.072E-02	4.906E-01	1161
Left pars triangularis of inferior frontal gyrus	-0.046	0.029	[-0.103 - 0.012]	1.177E-01	5.359E-01	1158
Left pericalcarine cortex	0.001	0.033	[-0.064 - 0.066]	9.733E-01	9.733E-01	1160
Left postcentral gyrus	-0.002	0.034	[-0.069 - 0.064]	9.492E-01	9.733E-01	1159
Left posterior cingulate cortex	-0.015	0.046	[-0.106 - 0.075]	7.400E-01	9.250E-01	1157
Left precentral gyrus	-0.062	0.040	[-0.139 - 0.016]	1.170E-01	5.359E-01	1156
Left precuneus	-0.045	0.043	[-0.129 - 0.039]	2.914E-01	6.002E-01	1159
Left rostral anterior cingulate cortex	0.030	0.029	[-0.027 - 0.088]	2.980E-01	6.002E-01	1158
Left rostral middle frontal gyrus	-0.030	0.029	[-0.088 - 0.027]	3.001E-01	6.002E-01	1155
Left superior frontal gyrus	-0.068	0.029	[-0.125 - -0.01]	2.066E-02	4.821E-01	1159



	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.026	0.038	[-0.101 - 0.049]	4.907E-01	7.470E-01	1158
Left superior temporal gyrus	-0.038	0.030	[-0.098 - 0.021]	2.053E-01	5.882E-01	1156
Left supramarginal gyrus	-0.044	0.034	[-0.11 - 0.022]	1.876E-01	5.708E-01	1156
Left frontal pole	-0.067	0.035	[-0.135 - 0]	5.083E-02	4.906E-01	1159
Left temporal pole	-0.018	0.029	[-0.075 - 0.039]	5.392E-01	8.031E-01	1151
Left transverse temporal gyrus	0.004	0.042	[-0.079 - 0.087]	9.250E-01	9.733E-01	1159
Left insula	-0.055	0.052	[-0.158 - 0.048]	2.933E-01	6.002E-01	1157
Right banks of superior temporal sulcus	-0.033	0.029	[-0.09 - 0.025]	2.620E-01	6.002E-01	1161
Right caudal anterior cingulate cortex	0.002	0.041	[-0.078 - 0.081]	9.641E-01	9.733E-01	1155
Right caudal middle frontal gyrus	-0.100	0.032	[-0.162 - -0.038]	1.674E-03	1.172E-01	1160
Right cuneus	0.040	0.029	[-0.017 - 0.097]	1.681E-01	5.708E-01	1155
Right entorhinal cortex	-0.040	0.037	[-0.114 - 0.033]	2.785E-01	6.002E-01	1156
Right fusiform gyrus	-0.043	0.053	[-0.147 - 0.061]	4.224E-01	7.211E-01	1158
Right inferior parietal cortex	-0.033	0.043	[-0.117 - 0.051]	4.377E-01	7.295E-01	1154
Right inferior temporal gyrus	-0.043	0.036	[-0.113 - 0.026]	2.241E-01	6.002E-01	1154
Right isthmus cingulate cortex	0.037	0.051	[-0.063 - 0.137]	4.729E-01	7.470E-01	1155
Right lateral occipital cortex	-0.006	0.038	[-0.081 - 0.069]	8.746E-01	9.733E-01	1160
Right lateral orbitofrontal cortex	-0.002	0.033	[-0.066 - 0.063]	9.638E-01	9.733E-01	1156
Right lingual gyrus	0.057	0.045	[-0.032 - 0.145]	2.101E-01	5.882E-01	1161
Right medial orbitofrontal cortex	0.030	0.034	[-0.036 - 0.096]	3.728E-01	6.691E-01	1159
Right middle temporal gyrus	-0.060	0.029	[-0.118 - -0.003]	3.811E-02	4.906E-01	1159
Right parahippocampal gyrus	0.004	0.035	[-0.065 - 0.073]	9.117E-01	9.733E-01	1158
Right paracentral lobule	-0.060	0.066	[-0.19 - 0.07]	3.667E-01	6.691E-01	1158
Right pars opercularis of inferior frontal gyrus	-0.076	0.044	[-0.163 - 0.011]	8.666E-02	5.359E-01	1159
Right pars orbitalis of inferior frontal gyrus	-0.037	0.036	[-0.107 - 0.032]	2.936E-01	6.002E-01	1159
Right pars triangularis of inferior frontal gyrus	-0.010	0.036	[-0.081 - 0.061]	7.883E-01	9.514E-01	1161
Right pericalcarine cortex	-0.003	0.046	[-0.093 - 0.086]	9.467E-01	9.733E-01	1159
Right postcentral gyrus	-0.036	0.040	[-0.114 - 0.042]	3.640E-01	6.691E-01	1157
Right posterior cingulate cortex	-0.016	0.056	[-0.126 - 0.094]	7.710E-01	9.468E-01	1158

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.075	0.047	[-0.167 - 0.017]	1.114E-01	5.359E-01	1160
Right precuneus	-0.054	0.039	[-0.131 - 0.023]	1.670E-01	5.708E-01	1157
Right rostral anterior cingulate cortex	0.024	0.029	[-0.033 - 0.082]	4.061E-01	7.107E-01	1160
Right rostral middle frontal gyrus	-0.057	0.033	[-0.122 - 0.008]	8.696E-02	5.359E-01	1156
Right superior frontal gyrus	-0.076	0.029	[-0.133 - -0.019]	9.466E-03	3.313E-01	1160
Right superior parietal cortex	-0.039	0.029	[-0.096 - 0.018]	1.813E-01	5.708E-01	1158
Right superior temporal gyrus	-0.073	0.046	[-0.162 - 0.017]	1.116E-01	5.359E-01	1154
Right supramarginal gyrus	-0.060	0.034	[-0.126 - 0.007]	7.941E-02	5.359E-01	1160
Right frontal pole	-0.075	0.049	[-0.171 - 0.022]	1.316E-01	5.420E-01	1157
Right temporal pole	-0.040	0.029	[-0.098 - 0.017]	1.712E-01	5.708E-01	1155
Right transverse temporal gyrus	-0.007	0.051	[-0.107 - 0.092]	8.828E-01	9.733E-01	1157
Right insula	-0.040	0.044	[-0.127 - 0.047]	3.648E-01	6.691E-01	1160
Left hemisphere	-0.044	0.039	[-0.121 - 0.033]	2.645E-01	6.002E-01	1162
Right hemisphere	-0.057	0.043	[-0.142 - 0.027]	1.828E-01	5.708E-01	1162

**Supplementary Table S39.** Partial correlations between cortical thickness and SANS total

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	0.011	0.027	[-0.041 - 0.064]	6.685E-01	8.829E-01	1526
Left caudal anterior cingulate cortex	0.045	0.026	[-0.006 - 0.097]	8.517E-02	4.718E-01	1585
Left caudal middle frontal gyrus	-0.003	0.028	[-0.059 - 0.052]	9.087E-01	9.496E-01	1569
Left cuneus	0.011	0.030	[-0.047 - 0.069]	7.079E-01	8.956E-01	1520
Left entorhinal cortex	-0.065	0.026	[-0.115 - -0.014]	1.161E-02	4.065E-01	1513
Left fusiform gyrus	-0.055	0.029	[-0.113 - 0.002]	5.791E-02	4.718E-01	1534
Left inferior parietal cortex	0.022	0.032	[-0.041 - 0.085]	4.887E-01	7.307E-01	1470
Left inferior temporal gyrus	-0.022	0.026	[-0.072 - 0.028]	3.911E-01	6.678E-01	1510
Left isthmus cingulate cortex	0.009	0.025	[-0.04 - 0.058]	7.165E-01	8.956E-01	1583
Left lateral occipital cortex	-0.004	0.027	[-0.058 - 0.049]	8.775E-01	9.450E-01	1533
Left lateral orbitofrontal cortex	-0.042	0.029	[-0.099 - 0.015]	1.497E-01	4.764E-01	1584
Left lingual gyrus	-0.030	0.025	[-0.079 - 0.019]	2.332E-01	5.302E-01	1580
Left medial orbitofrontal cortex	-0.044	0.038	[-0.119 - 0.031]	2.502E-01	5.302E-01	1576
Left middle temporal gyrus	-0.016	0.026	[-0.067 - 0.035]	5.455E-01	7.582E-01	1476
Left parahippocampal gyrus	0.030	0.029	[-0.027 - 0.086]	3.027E-01	5.719E-01	1563
Left paracentral lobule	-0.017	0.030	[-0.076 - 0.041]	5.633E-01	7.582E-01	1582
Left pars opercularis of inferior frontal gyrus	-0.101	0.043	[-0.186 - -0.017]	1.837E-02	4.069E-01	1549
Left pars orbitalis of inferior frontal gyrus	-0.070	0.040	[-0.148 - 0.008]	7.975E-02	4.718E-01	1554
Left pars triangularis of inferior frontal gyrus	-0.058	0.025	[-0.108 - -0.008]	2.325E-02	4.069E-01	1532
Left pericalcarine cortex	0.032	0.025	[-0.017 - 0.081]	2.056E-01	5.302E-01	1588
Left postcentral gyrus	-0.026	0.040	[-0.104 - 0.053]	5.207E-01	7.582E-01	1574
Left posterior cingulate cortex	-0.003	0.025	[-0.052 - 0.046]	9.089E-01	9.496E-01	1583
Left precentral gyrus	-0.046	0.029	[-0.102 - 0.011]	1.113E-01	4.718E-01	1569
Left precuneus	-0.037	0.041	[-0.116 - 0.043]	3.637E-01	6.528E-01	1564
Left rostral anterior cingulate cortex	0.019	0.032	[-0.044 - 0.082]	5.558E-01	7.582E-01	1575
Left rostral middle frontal gyrus	-0.052	0.028	[-0.107 - 0.004]	6.715E-02	4.718E-01	1540
Left superior frontal gyrus	-0.057	0.031	[-0.118 - 0.005]	7.046E-02	4.718E-01	1576

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	0.022	0.032	[-0.041 - 0.085]	4.906E-01	7.307E-01	1518
Left superior temporal gyrus	-0.045	0.034	[-0.113 - 0.022]	1.851E-01	5.184E-01	1478
Left supramarginal gyrus	-0.026	0.032	[-0.089 - 0.037]	4.213E-01	7.022E-01	1463
Left frontal pole	-0.028	0.025	[-0.077 - 0.021]	2.658E-01	5.302E-01	1588
Left temporal pole	-0.062	0.037	[-0.133 - 0.01]	9.224E-02	4.718E-01	1551
Left transverse temporal gyrus	-0.022	0.029	[-0.08 - 0.036]	4.511E-01	7.245E-01	1587
Left insula	-0.058	0.037	[-0.131 - 0.016]	1.228E-01	4.718E-01	1585
Right banks of superior temporal sulcus	0.007	0.028	[-0.047 - 0.061]	7.914E-01	9.233E-01	1551
Right caudal anterior cingulate cortex	-0.007	0.028	[-0.062 - 0.048]	8.071E-01	9.261E-01	1582
Right caudal middle frontal gyrus	-0.047	0.031	[-0.108 - 0.015]	1.381E-01	4.764E-01	1560
Right cuneus	-0.009	0.048	[-0.103 - 0.085]	8.513E-01	9.450E-01	1547
Right entorhinal cortex	-0.009	0.027	[-0.062 - 0.044]	7.505E-01	9.119E-01	1424
Right fusiform gyrus	-0.036	0.032	[-0.099 - 0.027]	2.598E-01	5.302E-01	1507
Right inferior parietal cortex	0.000	0.044	[-0.086 - 0.086]	9.960E-01	9.960E-01	1464
Right inferior temporal gyrus	-0.035	0.040	[-0.114 - 0.043]	3.782E-01	6.619E-01	1512
Right isthmus cingulate cortex	0.031	0.025	[-0.019 - 0.08]	2.217E-01	5.302E-01	1571
Right lateral occipital cortex	-0.007	0.031	[-0.066 - 0.053]	8.290E-01	9.360E-01	1521
Right lateral orbitofrontal cortex	-0.050	0.025	[-0.099 - -0.001]	4.639E-02	4.718E-01	1558
Right lingual gyrus	-0.038	0.033	[-0.104 - 0.027]	2.490E-01	5.302E-01	1585
Right medial orbitofrontal cortex	-0.049	0.036	[-0.12 - 0.022]	1.786E-01	5.184E-01	1545
Right middle temporal gyrus	-0.002	0.039	[-0.078 - 0.074]	9.660E-01	9.800E-01	1490
Right parahippocampal gyrus	0.034	0.025	[-0.016 - 0.084]	1.782E-01	5.184E-01	1545
Right paracentral lobule	-0.049	0.030	[-0.109 - 0.01]	1.016E-01	4.718E-01	1580
Right pars opercularis of inferior frontal gyrus	-0.021	0.034	[-0.088 - 0.045]	5.343E-01	7.582E-01	1529
Right pars orbitalis of inferior frontal gyrus	-0.039	0.025	[-0.089 - 0.01]	1.205E-01	4.718E-01	1558
Right pars triangularis of inferior frontal gyrus	-0.031	0.025	[-0.081 - 0.019]	2.303E-01	5.302E-01	1531
Right pericalcarine cortex	0.007	0.026	[-0.044 - 0.058]	7.817E-01	9.233E-01	1586
Right postcentral gyrus	-0.041	0.040	[-0.12 - 0.038]	3.104E-01	5.719E-01	1570
Right posterior cingulate cortex	0.008	0.025	[-0.041 - 0.057]	7.556E-01	9.119E-01	1584

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.073	0.039	[-0.15 - 0.003]	6.128E-02	4.718E-01	1562
Right precuneus	-0.006	0.039	[-0.082 - 0.07]	8.709E-01	9.450E-01	1556
Right rostral anterior cingulate cortex	-0.061	0.042	[-0.143 - 0.022]	1.493E-01	4.764E-01	1554
Right rostral middle frontal gyrus	-0.041	0.027	[-0.094 - 0.012]	1.268E-01	4.718E-01	1530
Right superior frontal gyrus	-0.069	0.027	[-0.122 - -0.017]	9.952E-03	4.065E-01	1563
Right superior parietal cortex	0.002	0.039	[-0.073 - 0.078]	9.520E-01	9.800E-01	1540
Right superior temporal gyrus	-0.029	0.039	[-0.106 - 0.048]	4.554E-01	7.245E-01	1503
Right supramarginal gyrus	-0.027	0.038	[-0.101 - 0.047]	4.713E-01	7.307E-01	1468
Right frontal pole	-0.009	0.025	[-0.058 - 0.04]	7.056E-01	8.956E-01	1586
Right temporal pole	-0.047	0.040	[-0.126 - 0.032]	2.454E-01	5.302E-01	1455
Right transverse temporal gyrus	-0.069	0.045	[-0.158 - 0.02]	1.281E-01	4.718E-01	1586
Right insula	-0.059	0.029	[-0.117 - -0.002]	4.223E-02	4.718E-01	1584
Left hemisphere	-0.039	0.036	[-0.109 - 0.031]	2.727E-01	5.302E-01	1591
Right hemisphere	-0.042	0.036	[-0.111 - 0.028]	2.435E-01	5.302E-01	1591

**Supplementary Table S40.** Partial correlations between cortical thickness and negative symptom severity

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.037	0.035	[-0.105 - 0.031]	2.915E-01	4.334E-01	1873
Left caudal anterior cingulate cortex	0.023	0.026	[-0.028 - 0.074]	3.745E-01	4.706E-01	1872
Left caudal middle frontal gyrus	-0.034	0.039	[-0.11 - 0.042]	3.832E-01	4.706E-01	1873
Left cuneus	-0.021	0.023	[-0.066 - 0.024]	3.588E-01	4.656E-01	1871
Left entorhinal cortex	-0.079	0.023	[-0.124 - -0.034]	6.147E-04	1.076E-02	1872
Left fusiform gyrus	-0.122	0.024	[-0.17 - -0.074]	6.268E-07	4.388E-05	1872
Left inferior parietal cortex	-0.017	0.023	[-0.062 - 0.028]	4.563E-01	5.324E-01	1872
Left inferior temporal gyrus	-0.066	0.023	[-0.11 - -0.021]	4.082E-03	4.224E-02	1875
Left isthmus cingulate cortex	-0.026	0.030	[-0.084 - 0.032]	3.789E-01	4.706E-01	1877
Left lateral occipital cortex	-0.044	0.033	[-0.108 - 0.02]	1.807E-01	3.012E-01	1874
Left lateral orbitofrontal cortex	-0.086	0.023	[-0.13 - -0.041]	1.684E-04	5.894E-03	1874
Left lingual gyrus	-0.067	0.032	[-0.13 - -0.004]	3.840E-02	1.034E-01	1875
Left medial orbitofrontal cortex	-0.031	0.023	[-0.075 - 0.014]	1.795E-01	3.012E-01	1876
Left middle temporal gyrus	-0.064	0.023	[-0.108 - -0.019]	5.381E-03	4.467E-02	1876
Left parahippocampal gyrus	-0.042	0.039	[-0.118 - 0.035]	2.829E-01	4.334E-01	1876
Left paracentral lobule	-0.025	0.026	[-0.075 - 0.026]	3.370E-01	4.537E-01	1873
Left pars opercularis of inferior frontal gyrus	-0.085	0.042	[-0.166 - -0.003]	4.151E-02	1.076E-01	1876
Left pars orbitalis of inferior frontal gyrus	-0.043	0.029	[-0.1 - 0.015]	1.477E-01	2.720E-01	1876
Left pars triangularis of inferior frontal gyrus	-0.065	0.023	[-0.11 - -0.021]	4.224E-03	4.224E-02	1876
Left pericalcarine cortex	0.021	0.023	[-0.024 - 0.066]	3.592E-01	4.656E-01	1876
Left postcentral gyrus	-0.015	0.033	[-0.08 - 0.051]	6.560E-01	6.699E-01	1876
Left posterior cingulate cortex	-0.035	0.029	[-0.092 - 0.022]	2.301E-01	3.745E-01	1874
Left precentral gyrus	-0.048	0.023	[-0.093 - -0.003]	3.469E-02	1.012E-01	1874
Left precuneus	-0.056	0.034	[-0.122 - 0.01]	9.357E-02	1.985E-01	1873
Left rostral anterior cingulate cortex	0.019	0.028	[-0.035 - 0.073]	4.834E-01	5.548E-01	1874
Left rostral middle frontal gyrus	-0.068	0.026	[-0.12 - -0.017]	9.680E-03	4.840E-02	1873
Left superior frontal gyrus	-0.078	0.034	[-0.145 - -0.011]	2.323E-02	8.129E-02	1875

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.015	0.028	[-0.07 - 0.039]	5.756E-01	6.295E-01	1876
Left superior temporal gyrus	-0.087	0.040	[-0.165 - -0.008]	3.149E-02	9.707E-02	1871
Left supramarginal gyrus	-0.052	0.023	[-0.097 - -0.008]	2.194E-02	8.129E-02	1871
Left frontal pole	-0.035	0.023	[-0.08 - 0.01]	1.326E-01	2.510E-01	1875
Left temporal pole	-0.081	0.023	[-0.126 - -0.037]	3.624E-04	8.456E-03	1871
Left transverse temporal gyrus	-0.042	0.030	[-0.101 - 0.016]	1.575E-01	2.826E-01	1877
Left insula	-0.060	0.033	[-0.124 - 0.005]	7.077E-02	1.552E-01	1874
Right banks of superior temporal sulcus	-0.022	0.023	[-0.067 - 0.023]	3.322E-01	4.537E-01	1877
Right caudal anterior cingulate cortex	-0.015	0.023	[-0.06 - 0.03]	5.144E-01	5.715E-01	1873
Right caudal middle frontal gyrus	-0.057	0.031	[-0.118 - 0.005]	6.955E-02	1.552E-01	1876
Right cuneus	-0.012	0.027	[-0.064 - 0.041]	6.604E-01	6.699E-01	1871
Right entorhinal cortex	-0.052	0.023	[-0.097 - -0.007]	2.292E-02	8.129E-02	1873
Right fusiform gyrus	-0.080	0.029	[-0.137 - -0.022]	6.931E-03	4.467E-02	1875
Right inferior parietal cortex	-0.012	0.023	[-0.057 - 0.033]	6.065E-01	6.432E-01	1871
Right inferior temporal gyrus	-0.054	0.025	[-0.102 - -0.005]	3.063E-02	9.707E-02	1871
Right isthmus cingulate cortex	-0.016	0.029	[-0.072 - 0.041]	5.882E-01	6.335E-01	1875
Right lateral occipital cortex	-0.023	0.024	[-0.071 - 0.024]	3.367E-01	4.537E-01	1876
Right lateral orbitofrontal cortex	-0.062	0.023	[-0.108 - -0.016]	8.240E-03	4.467E-02	1873
Right lingual gyrus	-0.084	0.044	[-0.17 - 0.002]	5.650E-02	1.364E-01	1877
Right medial orbitofrontal cortex	-0.061	0.029	[-0.118 - -0.003]	3.841E-02	1.034E-01	1875
Right middle temporal gyrus	-0.044	0.029	[-0.102 - 0.013]	1.325E-01	2.510E-01	1875
Right parahippocampal gyrus	-0.015	0.031	[-0.077 - 0.046]	6.275E-01	6.556E-01	1876
Right paracentral lobule	-0.039	0.024	[-0.086 - 0.007]	9.908E-02	2.040E-01	1874
Right pars opercularis of inferior frontal gyrus	-0.028	0.035	[-0.096 - 0.04]	4.207E-01	5.030E-01	1877
Right pars orbitalis of inferior frontal gyrus	-0.053	0.023	[-0.098 - -0.008]	2.024E-02	8.129E-02	1875
Right pars triangularis of inferior frontal gyrus	-0.062	0.023	[-0.107 - -0.017]	7.066E-03	4.467E-02	1877
Right pericalcarine cortex	0.010	0.035	[-0.059 - 0.079]	7.777E-01	7.777E-01	1875
Right postcentral gyrus	-0.020	0.030	[-0.08 - 0.039]	5.064E-01	5.715E-01	1875
Right posterior cingulate cortex	-0.058	0.042	[-0.14 - 0.025]	1.736E-01	3.012E-01	1876

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.068	0.023	[-0.113 - -0.023]	3.034E-03	4.224E-02	1877
Right precuneus	-0.031	0.029	[-0.089 - 0.026]	2.868E-01	4.334E-01	1874
Right rostral anterior cingulate cortex	-0.043	0.026	[-0.094 - 0.009]	1.049E-01	2.097E-01	1876
Right rostral middle frontal gyrus	-0.060	0.023	[-0.105 - -0.016]	8.295E-03	4.467E-02	1873
Right superior frontal gyrus	-0.082	0.030	[-0.14 - -0.024]	5.854E-03	4.467E-02	1876
Right superior parietal cortex	-0.030	0.029	[-0.086 - 0.026]	2.922E-01	4.334E-01	1875
Right superior temporal gyrus	-0.079	0.041	[-0.16 - 0.002]	5.491E-02	1.364E-01	1871
Right supramarginal gyrus	-0.035	0.035	[-0.103 - 0.033]	3.158E-01	4.512E-01	1877
Right frontal pole	-0.028	0.035	[-0.097 - 0.041]	4.239E-01	5.030E-01	1875
Right temporal pole	-0.041	0.023	[-0.086 - 0.004]	7.093E-02	1.552E-01	1871
Right transverse temporal gyrus	-0.042	0.040	[-0.121 - 0.037]	2.972E-01	4.334E-01	1875
Right insula	-0.073	0.029	[-0.131 - -0.015]	1.315E-02	5.755E-02	1877
Left hemisphere	-0.068	0.031	[-0.129 - -0.006]	3.189E-02	9.707E-02	1878
Right hemisphere	-0.066	0.026	[-0.118 - -0.014]	1.286E-02	5.755E-02	1878

Negative symptom severity in this analysis was based on the SANS Total. For samples that did not have SANS Total, SANS Total was computed based on the PANSS Negative to SANS Total conversion equation provided by van Erp, T. G. *et al.* Converting positive and negative symptom scores between PANSS and SAPS/SANS. *Schizophr Res* **152**, 289-294, doi:S0920-9964(13)00609-9 [pii] 10.1016/j.schres.2013.11.013 (2014).



**Supplementary Table S41.** Partial correlations between cortical thickness and chlorpromazine equivalents controlling for negative symptom severity

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.084	0.028	[-0.138 - -0.03]	2.448E-03	4.760E-03	1873
Left caudal anterior cingulate cortex	-0.025	0.033	[-0.089 - 0.04]	4.528E-01	4.662E-01	1872
Left caudal middle frontal gyrus	-0.128	0.031	[-0.189 - -0.066]	4.459E-05	1.836E-04	1873
Left cuneus	-0.036	0.023	[-0.081 - 0.009]	1.209E-01	1.365E-01	1871
Left entorhinal cortex	-0.041	0.038	[-0.116 - 0.035]	2.887E-01	3.016E-01	1872
Left fusiform gyrus	-0.092	0.025	[-0.142 - -0.043]	2.633E-04	8.376E-04	1872
Left inferior parietal cortex	-0.083	0.033	[-0.148 - -0.018]	1.183E-02	1.800E-02	1872
Left inferior temporal gyrus	-0.103	0.039	[-0.181 - -0.026]	8.777E-03	1.396E-02	1875
Left isthmus cingulate cortex	-0.096	0.024	[-0.144 - -0.048]	8.021E-05	3.119E-04	1877
Left lateral occipital cortex	-0.070	0.036	[-0.141 - 0.001]	5.265E-02	6.701E-02	1874
Left lateral orbitofrontal cortex	-0.114	0.042	[-0.196 - -0.033]	6.080E-03	1.064E-02	1874
Left lingual gyrus	-0.049	0.023	[-0.094 - -0.004]	3.130E-02	4.297E-02	1875
Left medial orbitofrontal cortex	-0.087	0.023	[-0.132 - -0.043]	1.301E-04	4.793E-04	1876
Left middle temporal gyrus	-0.148	0.045	[-0.237 - -0.059]	1.080E-03	2.291E-03	1876
Left parahippocampal gyrus	-0.015	0.045	[-0.102 - 0.073]	7.414E-01	7.522E-01	1876
Left paracentral lobule	-0.094	0.027	[-0.146 - -0.041]	5.067E-04	1.267E-03	1873
Left pars opercularis of inferior frontal gyrus	-0.117	0.025	[-0.166 - -0.067]	4.104E-06	2.394E-05	1876
Left pars orbitalis of inferior frontal gyrus	-0.103	0.045	[-0.19 - -0.016]	2.075E-02	2.964E-02	1876
Left pars triangularis of inferior frontal gyrus	-0.109	0.030	[-0.168 - -0.05]	3.194E-04	9.722E-04	1876
Left pericalcarine cortex	-0.042	0.031	[-0.104 - 0.02]	1.832E-01	1.973E-01	1876
Left postcentral gyrus	-0.048	0.023	[-0.093 - -0.003]	3.509E-02	4.724E-02	1876
Left posterior cingulate cortex	-0.102	0.030	[-0.161 - -0.043]	6.927E-04	1.616E-03	1874
Left precentral gyrus	-0.098	0.047	[-0.19 - -0.006]	3.693E-02	4.878E-02	1874
Left precuneus	-0.109	0.023	[-0.153 - -0.064]	2.111E-06	1.343E-05	1873
Left rostral anterior cingulate cortex	-0.101	0.025	[-0.149 - -0.052]	4.374E-05	1.836E-04	1874
Left rostral middle frontal gyrus	-0.109	0.030	[-0.167 - -0.051]	2.339E-04	7.796E-04	1873

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior frontal gyrus	-0.180	0.029	[-0.237 - -0.123]	6.709E-10	4.696E-08	1875
Left superior parietal cortex	-0.085	0.036	[-0.156 - -0.015]	1.809E-02	2.638E-02	1876
Left superior temporal gyrus	-0.146	0.029	[-0.203 - -0.089]	6.138E-07	5.371E-06	1871
Left supramarginal gyrus	-0.132	0.031	[-0.194 - -0.071]	2.287E-05	1.067E-04	1871
Left frontal pole	-0.116	0.034	[-0.182 - -0.05]	5.526E-04	1.334E-03	1875
Left temporal pole	-0.075	0.023	[-0.12 - -0.031]	9.838E-04	2.152E-03	1871
Left transverse temporal gyrus	-0.082	0.051	[-0.181 - 0.018]	1.088E-01	1.249E-01	1877
Left insula	-0.103	0.029	[-0.16 - -0.046]	3.752E-04	1.094E-03	1874
Right banks of superior temporal sulcus	-0.106	0.030	[-0.166 - -0.047]	4.624E-04	1.199E-03	1877
Right caudal anterior cingulate cortex	-0.073	0.034	[-0.139 - -0.007]	3.041E-02	4.257E-02	1873
Right caudal middle frontal gyrus	-0.111	0.023	[-0.155 - -0.066]	1.009E-06	7.847E-06	1876
Right cuneus	-0.077	0.023	[-0.122 - -0.032]	7.468E-04	1.686E-03	1871
Right entorhinal cortex	-0.045	0.023	[-0.091 - 0]	4.866E-02	6.308E-02	1873
Right fusiform gyrus	-0.115	0.024	[-0.162 - -0.068]	1.687E-06	1.181E-05	1875
Right inferior parietal cortex	-0.118	0.023	[-0.162 - -0.073]	2.290E-07	2.671E-06	1871
Right inferior temporal gyrus	-0.134	0.038	[-0.208 - -0.059]	4.332E-04	1.166E-03	1871
Right isthmus cingulate cortex	-0.074	0.023	[-0.119 - -0.029]	1.181E-03	2.431E-03	1875
Right lateral occipital cortex	-0.054	0.040	[-0.131 - 0.024]	1.722E-01	1.883E-01	1876
Right lateral orbitofrontal cortex	-0.116	0.039	[-0.193 - -0.04]	2.907E-03	5.256E-03	1873
Right lingual gyrus	-0.048	0.037	[-0.12 - 0.025]	1.948E-01	2.067E-01	1877
Right medial orbitofrontal cortex	-0.105	0.040	[-0.182 - -0.027]	8.595E-03	1.396E-02	1875
Right middle temporal gyrus	-0.126	0.033	[-0.191 - -0.061]	1.416E-04	4.957E-04	1875
Right parahippocampal gyrus	-0.073	0.028	[-0.127 - -0.019]	7.990E-03	1.332E-02	1876
Right paracentral lobule	-0.085	0.033	[-0.149 - -0.02]	9.914E-03	1.542E-02	1874
Right pars opercularis of inferior frontal gyrus	-0.064	0.044	[-0.15 - 0.021]	1.400E-01	1.556E-01	1877
Right pars orbitalis of inferior frontal gyrus	-0.089	0.047	[-0.181 - 0.003]	5.924E-02	7.404E-02	1875
Right pars triangularis of inferior frontal gyrus	-0.134	0.023	[-0.179 - -0.09]	2.542E-09	8.898E-08	1877
Right pericalcarine cortex	-0.005	0.023	[-0.05 - 0.04]	8.318E-01	8.318E-01	1875
Right postcentral gyrus	-0.061	0.023	[-0.106 - -0.016]	7.939E-03	1.332E-02	1875

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right posterior cingulate cortex	-0.089	0.029	[-0.146 - -0.031]	2.559E-03	4.841E-03	1876
Right precentral gyrus	-0.089	0.037	[-0.162 - -0.017]	1.533E-02	2.284E-02	1877
Right precuneus	-0.111	0.035	[-0.179 - -0.043]	1.346E-03	2.692E-03	1874
Right rostral anterior cingulate cortex	-0.053	0.032	[-0.116 - 0.01]	9.841E-02	1.148E-01	1876
Right rostral middle frontal gyrus	-0.118	0.023	[-0.165 - -0.072]	4.555E-07	4.555E-06	1873
Right superior frontal gyrus	-0.157	0.029	[-0.215 - -0.1]	9.060E-08	1.268E-06	1876
Right superior parietal cortex	-0.072	0.043	[-0.155 - 0.012]	9.341E-02	1.108E-01	1875
Right superior temporal gyrus	-0.127	0.023	[-0.173 - -0.081]	5.165E-08	1.205E-06	1871
Right supramarginal gyrus	-0.122	0.023	[-0.166 - -0.077]	7.830E-08	1.268E-06	1877
Right frontal pole	-0.055	0.031	[-0.115 - 0.004]	6.946E-02	8.387E-02	1875
Right temporal pole	-0.068	0.023	[-0.114 - -0.023]	2.928E-03	5.256E-03	1871
Right transverse temporal gyrus	-0.051	0.028	[-0.106 - 0.004]	6.949E-02	8.387E-02	1875
Right insula	-0.113	0.032	[-0.176 - -0.05]	4.098E-04	1.147E-03	1877
Left hemisphere	-0.165	0.037	[-0.238 - -0.092]	1.030E-05	5.548E-05	1878
Right hemisphere	-0.159	0.038	[-0.233 - -0.086]	2.202E-05	1.067E-04	1878

Negative symptom severity in this analysis was based on the SANS Total. For samples that did not have SANS Total, SANS Total was computed based on the PANSS Negative to SANS Total conversion equation provided by van Erp, T. G. *et al.* Converting positive and negative symptom scores between PANSS and SAPS/SANS. *Schizophr Res* **152**, 289-294, doi:S0920-9964(13)00609-9 [pii] 10.1016/j.schres.2013.11.013 (2014).

**Supplementary Table S42.** Partial correlations between cortical surface area and chlorpromazine equivalents

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	0.000	0.021	[-0.042 - 0.042]	9.884E-01	9.884E-01	2168
Left caudal anterior cingulate cortex	0.044	0.021	[0.002 - 0.085]	3.981E-02	8.529E-01	2166
Left caudal middle frontal gyrus	-0.014	0.021	[-0.056 - 0.028]	5.244E-01	8.952E-01	2168
Left cuneus	0.028	0.035	[-0.041 - 0.097]	4.259E-01	8.952E-01	2169
Left entorhinal cortex	0.031	0.028	[-0.024 - 0.087]	2.689E-01	8.555E-01	2167
Left fusiform gyrus	0.050	0.039	[-0.027 - 0.127]	2.002E-01	8.529E-01	2169
Left inferior parietal cortex	0.006	0.028	[-0.048 - 0.06]	8.231E-01	9.766E-01	2169
Left inferior temporal gyrus	0.007	0.022	[-0.036 - 0.05]	7.400E-01	9.251E-01	2169
Left isthmus cingulate cortex	0.032	0.021	[-0.01 - 0.074]	1.366E-01	8.529E-01	2171
Left lateral occipital cortex	0.013	0.024	[-0.034 - 0.06]	6.004E-01	8.952E-01	2170
Left lateral orbitofrontal cortex	0.004	0.025	[-0.044 - 0.052]	8.795E-01	9.884E-01	2171
Left lingual gyrus	-0.017	0.034	[-0.084 - 0.05]	6.228E-01	8.952E-01	2169
Left medial orbitofrontal cortex	0.012	0.025	[-0.037 - 0.061]	6.214E-01	8.952E-01	2171
Left middle temporal gyrus	0.009	0.021	[-0.032 - 0.051]	6.563E-01	8.952E-01	2169
Left parahippocampal gyrus	0.003	0.021	[-0.039 - 0.045]	8.967E-01	9.884E-01	2170
Left paracentral lobule	0.000	0.021	[-0.042 - 0.042]	9.875E-01	9.884E-01	2166
Left pars opercularis of inferior frontal gyrus	-0.028	0.023	[-0.074 - 0.018]	2.315E-01	8.529E-01	2171
Left pars orbitalis of inferior frontal gyrus	0.004	0.032	[-0.06 - 0.067]	9.079E-01	9.884E-01	2171
Left pars triangularis of inferior frontal gyrus	-0.006	0.021	[-0.048 - 0.036]	7.856E-01	9.647E-01	2172
Left pericalcarine cortex	-0.027	0.028	[-0.081 - 0.028]	3.421E-01	8.952E-01	2170
Left postcentral gyrus	0.042	0.037	[-0.03 - 0.113]	2.577E-01	8.555E-01	2171
Left posterior cingulate cortex	0.039	0.034	[-0.027 - 0.104]	2.488E-01	8.555E-01	2168
Left precentral gyrus	-0.002	0.021	[-0.044 - 0.04]	9.414E-01	9.884E-01	2169
Left precuneus	0.018	0.023	[-0.027 - 0.063]	4.250E-01	8.952E-01	2171
Left rostral anterior cingulate cortex	0.010	0.021	[-0.032 - 0.051]	6.478E-01	8.952E-01	2171
Left rostral middle frontal gyrus	0.020	0.027	[-0.033 - 0.073]	4.512E-01	8.952E-01	2167
Left superior frontal gyrus	-0.030	0.021	[-0.072 - 0.012]	1.584E-01	8.529E-01	2171

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	0.019	0.033	[-0.045 - 0.083]	5.612E-01	8.952E-01	2169
Left superior temporal gyrus	0.017	0.029	[-0.04 - 0.074]	5.606E-01	8.952E-01	2168
Left supramarginal gyrus	0.022	0.033	[-0.042 - 0.087]	4.999E-01	8.952E-01	2168
Left frontal pole	-0.010	0.021	[-0.052 - 0.032]	6.455E-01	8.952E-01	2168
Left temporal pole	0.009	0.021	[-0.033 - 0.051]	6.628E-01	8.952E-01	2164
Left transverse temporal gyrus	0.013	0.030	[-0.046 - 0.073]	6.608E-01	8.952E-01	2170
Left insula	-0.012	0.030	[-0.071 - 0.046]	6.778E-01	8.952E-01	2163
Right banks of superior temporal sulcus	0.045	0.025	[-0.005 - 0.094]	7.946E-02	8.529E-01	2171
Right caudal anterior cingulate cortex	0.016	0.034	[-0.05 - 0.083]	6.331E-01	8.952E-01	2169
Right caudal middle frontal gyrus	-0.008	0.021	[-0.049 - 0.034]	7.254E-01	9.233E-01	2167
Right cuneus	0.059	0.042	[-0.022 - 0.141]	1.536E-01	8.529E-01	2172
Right entorhinal cortex	0.047	0.032	[-0.015 - 0.11]	1.366E-01	8.529E-01	2168
Right fusiform gyrus	0.016	0.023	[-0.029 - 0.06]	4.871E-01	8.952E-01	2172
Right inferior parietal cortex	0.014	0.030	[-0.046 - 0.073]	6.482E-01	8.952E-01	2166
Right inferior temporal gyrus	0.034	0.021	[-0.008 - 0.076]	1.077E-01	8.529E-01	2165
Right isthmus cingulate cortex	0.045	0.021	[0.003 - 0.087]	3.474E-02	8.529E-01	2170
Right lateral occipital cortex	-0.017	0.027	[-0.07 - 0.036]	5.377E-01	8.952E-01	2169
Right lateral orbitofrontal cortex	-0.001	0.021	[-0.043 - 0.04]	9.488E-01	9.884E-01	2168
Right lingual gyrus	-0.026	0.021	[-0.068 - 0.016]	2.207E-01	8.529E-01	2166
Right medial orbitofrontal cortex	0.029	0.021	[-0.013 - 0.071]	1.704E-01	8.529E-01	2170
Right middle temporal gyrus	0.033	0.021	[-0.008 - 0.075]	1.179E-01	8.529E-01	2171
Right parahippocampal gyrus	-0.008	0.021	[-0.05 - 0.034]	7.100E-01	9.203E-01	2169
Right paracentral lobule	-0.021	0.021	[-0.063 - 0.021]	3.167E-01	8.952E-01	2167
Right pars opercularis of inferior frontal gyrus	-0.030	0.021	[-0.072 - 0.012]	1.590E-01	8.529E-01	2170
Right pars orbitalis of inferior frontal gyrus	0.010	0.024	[-0.037 - 0.057]	6.713E-01	8.952E-01	2169
Right pars triangularis of inferior frontal gyrus	-0.035	0.021	[-0.077 - 0.007]	9.927E-02	8.529E-01	2170
Right pericalcarine cortex	-0.032	0.027	[-0.084 - 0.02]	2.296E-01	8.529E-01	2168
Right postcentral gyrus	0.027	0.031	[-0.035 - 0.088]	3.924E-01	8.952E-01	2169
Right posterior cingulate cortex	-0.010	0.024	[-0.056 - 0.036]	6.645E-01	8.952E-01	2171

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.007	0.033	[-0.071 - 0.058]	8.422E-01	9.826E-01	2170
Right precuneus	0.035	0.022	[-0.008 - 0.079]	1.125E-01	8.529E-01	2169
Right rostral anterior cingulate cortex	0.019	0.028	[-0.035 - 0.074]	4.816E-01	8.952E-01	2173
Right rostral middle frontal gyrus	0.011	0.021	[-0.031 - 0.053]	6.095E-01	8.952E-01	2169
Right superior frontal gyrus	-0.002	0.021	[-0.044 - 0.04]	9.242E-01	9.884E-01	2170
Right superior parietal cortex	0.016	0.032	[-0.047 - 0.08]	6.175E-01	8.952E-01	2171
Right superior temporal gyrus	-0.001	0.021	[-0.043 - 0.041]	9.729E-01	9.884E-01	2168
Right supramarginal gyrus	0.018	0.028	[-0.037 - 0.072]	5.318E-01	8.952E-01	2171
Right frontal pole	-0.029	0.021	[-0.071 - 0.013]	1.769E-01	8.529E-01	2169
Right temporal pole	-0.002	0.022	[-0.045 - 0.042]	9.427E-01	9.884E-01	2169
Right transverse temporal gyrus	-0.026	0.022	[-0.069 - 0.016]	2.193E-01	8.529E-01	2166
Right insula	-0.017	0.031	[-0.078 - 0.045]	5.944E-01	8.952E-01	2171
Left hemisphere	0.012	0.027	[-0.04 - 0.065]	6.447E-01	8.952E-01	2173
Right hemisphere	0.005	0.022	[-0.038 - 0.048]	8.231E-01	9.766E-01	2173

**Supplementary Table S43.** Partial correlations between cortical surface area and age of onset

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.024	0.018	[-0.06 - 0.011]	1.758E-01	4.557E-01	3050
Left caudal anterior cingulate cortex	-0.007	0.020	[-0.046 - 0.032]	7.104E-01	8.880E-01	3124
Left caudal middle frontal gyrus	-0.030	0.018	[-0.065 - 0.005]	9.469E-02	4.557E-01	3109
Left cuneus	-0.024	0.018	[-0.06 - 0.011]	1.766E-01	4.557E-01	3055
Left entorhinal cortex	-0.033	0.024	[-0.081 - 0.014]	1.698E-01	4.557E-01	3014
Left fusiform gyrus	0.011	0.018	[-0.025 - 0.046]	5.587E-01	7.822E-01	3069
Left inferior parietal cortex	-0.008	0.018	[-0.044 - 0.027]	6.388E-01	8.437E-01	3012
Left inferior temporal gyrus	-0.002	0.021	[-0.044 - 0.039]	9.085E-01	9.492E-01	3042
Left isthmus cingulate cortex	-0.012	0.018	[-0.047 - 0.023]	5.029E-01	7.333E-01	3120
Left lateral occipital cortex	-0.030	0.018	[-0.066 - 0.005]	9.002E-02	4.557E-01	3069
Left lateral orbitofrontal cortex	-0.027	0.018	[-0.062 - 0.008]	1.327E-01	4.557E-01	3127
Left lingual gyrus	-0.012	0.023	[-0.057 - 0.034]	6.175E-01	8.312E-01	3116
Left medial orbitofrontal cortex	-0.028	0.026	[-0.078 - 0.023]	2.786E-01	5.132E-01	3118
Left middle temporal gyrus	-0.025	0.020	[-0.065 - 0.015]	2.137E-01	4.674E-01	3003
Left parahippocampal gyrus	-0.004	0.018	[-0.039 - 0.031]	8.262E-01	9.272E-01	3098
Left paracentral lobule	-0.042	0.020	[-0.08 - -0.004]	3.141E-02	4.557E-01	3120
Left pars opercularis of inferior frontal gyrus	-0.021	0.027	[-0.074 - 0.031]	4.223E-01	6.874E-01	3087
Left pars orbitalis of inferior frontal gyrus	0.008	0.020	[-0.031 - 0.047]	6.941E-01	8.834E-01	3092
Left pars triangularis of inferior frontal gyrus	-0.024	0.018	[-0.059 - 0.011]	1.788E-01	4.557E-01	3072
Left pericalcarine cortex	0.006	0.020	[-0.034 - 0.046]	7.667E-01	9.096E-01	3126
Left postcentral gyrus	-0.030	0.022	[-0.073 - 0.013]	1.712E-01	4.557E-01	3110
Left posterior cingulate cortex	-0.037	0.029	[-0.093 - 0.019]	1.961E-01	4.557E-01	3125
Left precentral gyrus	-0.025	0.018	[-0.06 - 0.01]	1.557E-01	4.557E-01	3108
Left precuneus	0.004	0.018	[-0.031 - 0.039]	8.188E-01	9.272E-01	3102
Left rostral anterior cingulate cortex	-0.028	0.018	[-0.063 - 0.007]	1.166E-01	4.557E-01	3118
Left rostral middle frontal gyrus	-0.041	0.018	[-0.076 - -0.005]	2.352E-02	4.557E-01	3075
Left superior frontal gyrus	-0.003	0.018	[-0.038 - 0.032]	8.477E-01	9.272E-01	3115

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	0.005	0.024	[-0.043 - 0.053]	8.359E-01	9.272E-01	3049
Left superior temporal gyrus	-0.054	0.028	[-0.11 - 0.002]	5.725E-02	4.557E-01	2998
Left supramarginal gyrus	-0.022	0.019	[-0.06 - 0.015]	2.381E-01	4.856E-01	2986
Left frontal pole	-0.014	0.021	[-0.056 - 0.028]	5.181E-01	7.402E-01	3128
Left temporal pole	-0.007	0.018	[-0.043 - 0.028]	6.798E-01	8.812E-01	3085
Left transverse temporal gyrus	-0.021	0.027	[-0.073 - 0.032]	4.441E-01	6.909E-01	3127
Left insula	-0.042	0.018	[-0.077 - -0.008]	1.700E-02	4.557E-01	3119
Right banks of superior temporal sulcus	-0.021	0.018	[-0.056 - 0.014]	2.428E-01	4.856E-01	3085
Right caudal anterior cingulate cortex	-0.025	0.018	[-0.06 - 0.01]	1.546E-01	4.557E-01	3126
Right caudal middle frontal gyrus	-0.021	0.018	[-0.056 - 0.014]	2.375E-01	4.856E-01	3098
Right cuneus	0.001	0.025	[-0.047 - 0.049]	9.615E-01	9.769E-01	3086
Right entorhinal cortex	-0.049	0.027	[-0.101 - 0.004]	6.761E-02	4.557E-01	2924
Right fusiform gyrus	-0.004	0.019	[-0.04 - 0.033]	8.388E-01	9.272E-01	3046
Right inferior parietal cortex	-0.015	0.018	[-0.051 - 0.02]	3.996E-01	6.660E-01	3003
Right inferior temporal gyrus	-0.005	0.018	[-0.041 - 0.03]	7.634E-01	9.096E-01	3041
Right isthmus cingulate cortex	-0.020	0.018	[-0.055 - 0.015]	2.548E-01	4.954E-01	3110
Right lateral occipital cortex	-0.033	0.019	[-0.07 - 0.003]	7.586E-02	4.557E-01	3056
Right lateral orbitofrontal cortex	-0.030	0.018	[-0.065 - 0.005]	9.623E-02	4.557E-01	3099
Right lingual gyrus	-0.035	0.025	[-0.084 - 0.014]	1.611E-01	4.557E-01	3118
Right medial orbitofrontal cortex	-0.015	0.018	[-0.05 - 0.02]	3.949E-01	6.660E-01	3085
Right middle temporal gyrus	-0.032	0.018	[-0.067 - 0.004]	8.162E-02	4.557E-01	3023
Right parahippocampal gyrus	0.006	0.020	[-0.033 - 0.045]	7.633E-01	9.096E-01	3081
Right paracentral lobule	-0.040	0.018	[-0.075 - -0.004]	2.940E-02	4.557E-01	3122
Right pars opercularis of inferior frontal gyrus	-0.001	0.018	[-0.036 - 0.035]	9.769E-01	9.769E-01	3067
Right pars orbitalis of inferior frontal gyrus	0.004	0.031	[-0.056 - 0.064]	9.065E-01	9.492E-01	3098
Right pars triangularis of inferior frontal gyrus	0.001	0.030	[-0.058 - 0.06]	9.737E-01	9.769E-01	3066
Right pericalcarine cortex	-0.019	0.022	[-0.063 - 0.024]	3.854E-01	6.660E-01	3121
Right postcentral gyrus	-0.022	0.020	[-0.062 - 0.018]	2.756E-01	5.132E-01	3104
Right posterior cingulate cortex	-0.036	0.018	[-0.071 - -0.001]	4.433E-02	4.557E-01	3124



	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.026	0.018	[-0.061 - 0.009]	1.513E-01	4.557E-01	3098
Right precuneus	0.003	0.021	[-0.038 - 0.044]	8.758E-01	9.431E-01	3094
Right rostral anterior cingulate cortex	-0.025	0.019	[-0.063 - 0.013]	1.936E-01	4.557E-01	3092
Right rostral middle frontal gyrus	-0.024	0.018	[-0.059 - 0.011]	1.842E-01	4.557E-01	3071
Right superior frontal gyrus	-0.030	0.018	[-0.065 - 0.005]	9.161E-02	4.557E-01	3102
Right superior parietal cortex	0.013	0.018	[-0.022 - 0.048]	4.783E-01	7.180E-01	3077
Right superior temporal gyrus	-0.031	0.024	[-0.077 - 0.016]	2.018E-01	4.557E-01	3032
Right supramarginal gyrus	-0.014	0.020	[-0.054 - 0.026]	4.821E-01	7.180E-01	2992
Right frontal pole	-0.019	0.018	[-0.054 - 0.016]	2.884E-01	5.177E-01	3127
Right temporal pole	-0.015	0.028	[-0.07 - 0.039]	5.794E-01	7.953E-01	2993
Right transverse temporal gyrus	-0.021	0.027	[-0.074 - 0.032]	4.433E-01	6.909E-01	3124
Right insula	-0.036	0.018	[-0.071 - -0.001]	4.430E-02	4.557E-01	3123
Left hemisphere	-0.029	0.018	[-0.064 - 0.006]	1.003E-01	4.557E-01	3132
Right hemisphere	-0.027	0.018	[-0.062 - 0.007]	1.224E-01	4.557E-01	3132

**Supplementary Table S44.** Partial correlations between cortical surface area and duration of illness

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	0.022	0.018	[-0.012 - 0.057]	2.074E-01	8.848E-01	3097
Left caudal anterior cingulate cortex	0.003	0.021	[-0.038 - 0.044]	8.764E-01	9.615E-01	3171
Left caudal middle frontal gyrus	0.015	0.019	[-0.022 - 0.052]	4.299E-01	8.848E-01	3156
Left cuneus	0.010	0.024	[-0.037 - 0.057]	6.805E-01	8.848E-01	3102
Left entorhinal cortex	0.029	0.024	[-0.018 - 0.077]	2.280E-01	8.848E-01	3061
Left fusiform gyrus	-0.021	0.018	[-0.056 - 0.014]	2.402E-01	8.848E-01	3116
Left inferior parietal cortex	-0.001	0.018	[-0.036 - 0.034]	9.630E-01	9.849E-01	3059
Left inferior temporal gyrus	-0.015	0.027	[-0.067 - 0.038]	5.865E-01	8.848E-01	3089
Left isthmus cingulate cortex	0.005	0.018	[-0.03 - 0.04]	7.844E-01	9.227E-01	3167
Left lateral occipital cortex	0.015	0.018	[-0.02 - 0.05]	3.889E-01	8.848E-01	3116
Left lateral orbitofrontal cortex	0.018	0.018	[-0.016 - 0.053]	2.967E-01	8.848E-01	3174
Left lingual gyrus	0.007	0.026	[-0.043 - 0.057]	7.700E-01	9.227E-01	3163
Left medial orbitofrontal cortex	0.013	0.030	[-0.046 - 0.071]	6.701E-01	8.848E-01	3165
Left middle temporal gyrus	0.016	0.022	[-0.026 - 0.059]	4.467E-01	8.848E-01	3050
Left parahippocampal gyrus	0.003	0.023	[-0.042 - 0.049]	8.791E-01	9.615E-01	3145
Left paracentral lobule	0.026	0.023	[-0.02 - 0.072]	2.684E-01	8.848E-01	3167
Left pars opercularis of inferior frontal gyrus	-0.006	0.022	[-0.049 - 0.038]	7.909E-01	9.227E-01	3134
Left pars orbitalis of inferior frontal gyrus	-0.023	0.026	[-0.074 - 0.028]	3.761E-01	8.848E-01	3139
Left pars triangularis of inferior frontal gyrus	0.012	0.021	[-0.029 - 0.053]	5.668E-01	8.848E-01	3119
Left pericalcarine cortex	-0.026	0.027	[-0.078 - 0.026]	3.316E-01	8.848E-01	3173
Left postcentral gyrus	0.015	0.024	[-0.031 - 0.061]	5.166E-01	8.848E-01	3157
Left posterior cingulate cortex	0.013	0.031	[-0.048 - 0.073]	6.826E-01	8.848E-01	3172
Left precentral gyrus	0.015	0.025	[-0.034 - 0.065]	5.455E-01	8.848E-01	3155
Left precuneus	-0.010	0.018	[-0.045 - 0.025]	5.781E-01	8.848E-01	3149
Left rostral anterior cingulate cortex	0.013	0.021	[-0.029 - 0.054]	5.465E-01	8.848E-01	3165
Left rostral middle frontal gyrus	0.037	0.018	[0.002 - 0.072]	3.911E-02	8.848E-01	3122
Left superior frontal gyrus	-0.003	0.018	[-0.038 - 0.032]	8.665E-01	9.615E-01	3162

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.017	0.025	[-0.067 - 0.033]	5.043E-01	8.848E-01	3096
Left superior temporal gyrus	0.044	0.029	[-0.013 - 0.101]	1.268E-01	8.848E-01	3045
Left supramarginal gyrus	0.018	0.022	[-0.025 - 0.06]	4.139E-01	8.848E-01	3033
Left frontal pole	0.019	0.018	[-0.016 - 0.053]	2.913E-01	8.848E-01	3175
Left temporal pole	-0.002	0.021	[-0.043 - 0.039]	9.276E-01	9.838E-01	3132
Left transverse temporal gyrus	0.013	0.030	[-0.046 - 0.071]	6.732E-01	8.848E-01	3174
Left insula	0.035	0.018	[0.001 - 0.07]	4.656E-02	8.848E-01	3166
Right banks of superior temporal sulcus	0.012	0.018	[-0.023 - 0.047]	4.939E-01	8.848E-01	3132
Right caudal anterior cingulate cortex	0.019	0.018	[-0.015 - 0.054]	2.777E-01	8.848E-01	3173
Right caudal middle frontal gyrus	0.012	0.018	[-0.023 - 0.047]	4.965E-01	8.848E-01	3145
Right cuneus	-0.014	0.026	[-0.065 - 0.037]	5.961E-01	8.848E-01	3133
Right entorhinal cortex	0.045	0.026	[-0.006 - 0.096]	8.222E-02	8.848E-01	2971
Right fusiform gyrus	-0.001	0.020	[-0.041 - 0.038]	9.477E-01	9.849E-01	3093
Right inferior parietal cortex	0.002	0.018	[-0.033 - 0.038]	9.006E-01	9.699E-01	3050
Right inferior temporal gyrus	0.000	0.018	[-0.035 - 0.035]	9.849E-01	9.849E-01	3088
Right isthmus cingulate cortex	0.004	0.018	[-0.031 - 0.038]	8.303E-01	9.528E-01	3157
Right lateral occipital cortex	0.027	0.023	[-0.018 - 0.071]	2.429E-01	8.848E-01	3103
Right lateral orbitofrontal cortex	0.018	0.019	[-0.018 - 0.055]	3.312E-01	8.848E-01	3146
Right lingual gyrus	0.026	0.026	[-0.026 - 0.077]	3.326E-01	8.848E-01	3165
Right medial orbitofrontal cortex	0.011	0.018	[-0.024 - 0.046]	5.246E-01	8.848E-01	3132
Right middle temporal gyrus	0.024	0.018	[-0.011 - 0.059]	1.830E-01	8.848E-01	3070
Right parahippocampal gyrus	-0.011	0.023	[-0.056 - 0.035]	6.365E-01	8.848E-01	3128
Right paracentral lobule	0.035	0.020	[-0.004 - 0.074]	7.998E-02	8.848E-01	3169
Right pars opercularis of inferior frontal gyrus	-0.008	0.018	[-0.043 - 0.027]	6.396E-01	8.848E-01	3114
Right pars orbitalis of inferior frontal gyrus	-0.008	0.031	[-0.069 - 0.053]	7.902E-01	9.227E-01	3145
Right pars triangularis of inferior frontal gyrus	-0.011	0.031	[-0.071 - 0.049]	7.092E-01	9.026E-01	3113
Right pericalcarine cortex	0.014	0.028	[-0.041 - 0.068]	6.220E-01	8.848E-01	3168
Right postcentral gyrus	0.015	0.018	[-0.02 - 0.049]	4.083E-01	8.848E-01	3151
Right posterior cingulate cortex	0.029	0.020	[-0.01 - 0.068]	1.447E-01	8.848E-01	3171

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	0.021	0.021	[-0.02 - 0.061]	3.101E-01	8.848E-01	3145
Right precuneus	-0.010	0.019	[-0.048 - 0.028]	6.099E-01	8.848E-01	3141
Right rostral anterior cingulate cortex	0.020	0.019	[-0.017 - 0.057]	2.914E-01	8.848E-01	3139
Right rostral middle frontal gyrus	0.018	0.018	[-0.017 - 0.053]	3.130E-01	8.848E-01	3118
Right superior frontal gyrus	0.017	0.018	[-0.017 - 0.052]	3.234E-01	8.848E-01	3149
Right superior parietal cortex	-0.019	0.018	[-0.054 - 0.016]	2.810E-01	8.848E-01	3124
Right superior temporal gyrus	0.014	0.030	[-0.045 - 0.073]	6.381E-01	8.848E-01	3079
Right supramarginal gyrus	0.007	0.022	[-0.036 - 0.05]	7.546E-01	9.227E-01	3039
Right frontal pole	0.011	0.023	[-0.034 - 0.056]	6.301E-01	8.848E-01	3174
Right temporal pole	0.001	0.026	[-0.051 - 0.053]	9.732E-01	9.849E-01	3040
Right transverse temporal gyrus	0.013	0.027	[-0.04 - 0.066]	6.208E-01	8.848E-01	3171
Right insula	0.021	0.018	[-0.014 - 0.057]	2.417E-01	8.848E-01	3170
Left hemisphere	0.014	0.022	[-0.028 - 0.057]	5.091E-01	8.848E-01	3179
Right hemisphere	0.015	0.019	[-0.022 - 0.053]	4.295E-01	8.848E-01	3179

**Supplementary Table S45.** Partial correlations between cortical surface area and PANSS total

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	0.015	0.038	[-0.06 - 0.09]	6.939E-01	7.371E-01	1895
Left caudal anterior cingulate cortex	-0.008	0.040	[-0.086 - 0.07]	8.487E-01	8.610E-01	1904
Left caudal middle frontal gyrus	-0.041	0.023	[-0.086 - 0.003]	6.850E-02	2.847E-01	1906
Left cuneus	-0.013	0.031	[-0.075 - 0.048]	6.665E-01	7.351E-01	1905
Left entorhinal cortex	-0.033	0.045	[-0.122 - 0.056]	4.649E-01	6.381E-01	1875
Left fusiform gyrus	-0.033	0.034	[-0.099 - 0.034]	3.383E-01	5.648E-01	1905
Left inferior parietal cortex	-0.038	0.024	[-0.086 - 0.01]	1.197E-01	3.258E-01	1908
Left inferior temporal gyrus	-0.021	0.041	[-0.101 - 0.059]	6.045E-01	7.052E-01	1904
Left isthmus cingulate cortex	-0.020	0.038	[-0.094 - 0.054]	5.943E-01	7.052E-01	1906
Left lateral occipital cortex	-0.043	0.023	[-0.088 - 0.002]	5.840E-02	2.847E-01	1905
Left lateral orbitofrontal cortex	-0.079	0.023	[-0.125 - -0.034]	6.192E-04	4.335E-02	1907
Left lingual gyrus	-0.012	0.023	[-0.057 - 0.033]	5.960E-01	7.052E-01	1903
Left medial orbitofrontal cortex	-0.011	0.023	[-0.055 - 0.034]	6.312E-01	7.243E-01	1907
Left middle temporal gyrus	-0.014	0.036	[-0.085 - 0.058]	7.055E-01	7.371E-01	1900
Left parahippocampal gyrus	-0.013	0.025	[-0.063 - 0.036]	5.937E-01	7.052E-01	1905
Left paracentral lobule	-0.022	0.025	[-0.07 - 0.027]	3.792E-01	5.648E-01	1905
Left pars opercularis of inferior frontal gyrus	-0.071	0.023	[-0.116 - -0.027]	1.572E-03	5.502E-02	1907
Left pars orbitalis of inferior frontal gyrus	-0.038	0.030	[-0.096 - 0.021]	2.092E-01	4.307E-01	1907
Left pars triangularis of inferior frontal gyrus	-0.024	0.023	[-0.069 - 0.02]	2.848E-01	4.984E-01	1908
Left pericalcarine cortex	-0.011	0.024	[-0.059 - 0.037]	6.519E-01	7.351E-01	1906
Left postcentral gyrus	-0.038	0.033	[-0.104 - 0.027]	2.542E-01	4.810E-01	1905
Left posterior cingulate cortex	-0.042	0.039	[-0.119 - 0.035]	2.830E-01	4.984E-01	1906
Left precentral gyrus	-0.063	0.029	[-0.12 - -0.007]	2.738E-02	2.395E-01	1906
Left precuneus	-0.044	0.023	[-0.088 - 0]	5.223E-02	2.812E-01	1907
Left rostral anterior cingulate cortex	-0.052	0.041	[-0.132 - 0.027]	1.988E-01	4.231E-01	1908
Left rostral middle frontal gyrus	-0.027	0.023	[-0.072 - 0.018]	2.372E-01	4.650E-01	1904
Left superior frontal gyrus	-0.041	0.023	[-0.086 - 0.003]	6.938E-02	2.847E-01	1907

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.051	0.030	[-0.11 - 0.007]	8.711E-02	3.049E-01	1904
Left superior temporal gyrus	-0.027	0.030	[-0.085 - 0.031]	3.642E-01	5.648E-01	1890
Left supramarginal gyrus	-0.060	0.036	[-0.13 - 0.01]	9.549E-02	3.183E-01	1893
Left frontal pole	0.034	0.027	[-0.018 - 0.086]	1.995E-01	4.231E-01	1905
Left temporal pole	-0.020	0.038	[-0.094 - 0.054]	5.944E-01	7.052E-01	1903
Left transverse temporal gyrus	-0.014	0.034	[-0.081 - 0.052]	6.721E-01	7.351E-01	1905
Left insula	-0.051	0.025	[-0.1 - -0.001]	4.452E-02	2.597E-01	1905
Right banks of superior temporal sulcus	-0.034	0.038	[-0.108 - 0.041]	3.739E-01	5.648E-01	1901
Right caudal anterior cingulate cortex	-0.030	0.026	[-0.081 - 0.02]	2.392E-01	4.650E-01	1908
Right caudal middle frontal gyrus	-0.032	0.035	[-0.101 - 0.037]	3.661E-01	5.648E-01	1906
Right cuneus	0.009	0.023	[-0.036 - 0.053]	7.010E-01	7.371E-01	1904
Right entorhinal cortex	-0.033	0.023	[-0.078 - 0.012]	1.527E-01	3.960E-01	1868
Right fusiform gyrus	-0.064	0.023	[-0.108 - -0.019]	4.924E-03	8.616E-02	1906
Right inferior parietal cortex	-0.041	0.037	[-0.113 - 0.032]	2.704E-01	4.981E-01	1908
Right inferior temporal gyrus	-0.037	0.023	[-0.081 - 0.008]	1.093E-01	3.258E-01	1901
Right isthmus cingulate cortex	-0.080	0.033	[-0.146 - -0.015]	1.551E-02	1.563E-01	1905
Right lateral occipital cortex	-0.048	0.023	[-0.093 - -0.004]	3.428E-02	2.510E-01	1902
Right lateral orbitofrontal cortex	-0.071	0.041	[-0.153 - 0.01]	8.423E-02	3.049E-01	1908
Right lingual gyrus	0.029	0.030	[-0.03 - 0.087]	3.390E-01	5.648E-01	1902
Right medial orbitofrontal cortex	-0.046	0.034	[-0.113 - 0.02]	1.724E-01	4.161E-01	1908
Right middle temporal gyrus	-0.039	0.029	[-0.095 - 0.017]	1.718E-01	4.161E-01	1906
Right parahippocampal gyrus	-0.030	0.032	[-0.093 - 0.033]	3.482E-01	5.648E-01	1901
Right paracentral lobule	-0.036	0.023	[-0.08 - 0.008]	1.124E-01	3.258E-01	1908
Right pars opercularis of inferior frontal gyrus	-0.056	0.031	[-0.118 - 0.005]	7.321E-02	2.847E-01	1907
Right pars orbitalis of inferior frontal gyrus	-0.060	0.023	[-0.104 - -0.015]	8.411E-03	1.178E-01	1908
Right pars triangularis of inferior frontal gyrus	-0.055	0.023	[-0.099 - -0.01]	1.563E-02	1.563E-01	1907
Right pericalcarine cortex	0.002	0.030	[-0.056 - 0.06]	9.391E-01	9.391E-01	1903
Right postcentral gyrus	-0.050	0.039	[-0.125 - 0.026]	1.980E-01	4.231E-01	1903
Right posterior cingulate cortex	-0.032	0.042	[-0.114 - 0.05]	4.498E-01	6.298E-01	1908

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.022	0.031	[-0.084 - 0.04]	4.876E-01	6.563E-01	1907
Right precuneus	-0.068	0.023	[-0.112 - -0.024]	2.661E-03	6.210E-02	1907
Right rostral anterior cingulate cortex	-0.039	0.024	[-0.086 - 0.009]	1.082E-01	3.258E-01	1908
Right rostral middle frontal gyrus	-0.046	0.023	[-0.09 - -0.001]	4.429E-02	2.597E-01	1906
Right superior frontal gyrus	-0.046	0.030	[-0.104 - 0.012]	1.210E-01	3.258E-01	1906
Right superior parietal cortex	-0.022	0.029	[-0.079 - 0.034]	4.433E-01	6.298E-01	1907
Right superior temporal gyrus	-0.026	0.030	[-0.085 - 0.033]	3.945E-01	5.753E-01	1895
Right supramarginal gyrus	-0.020	0.029	[-0.077 - 0.038]	5.019E-01	6.629E-01	1896
Right frontal pole	0.007	0.023	[-0.038 - 0.052]	7.670E-01	7.896E-01	1907
Right temporal pole	-0.019	0.030	[-0.077 - 0.039]	5.228E-01	6.777E-01	1906
Right transverse temporal gyrus	-0.023	0.043	[-0.107 - 0.06]	5.855E-01	7.052E-01	1904
Right insula	-0.039	0.030	[-0.099 - 0.02]	1.937E-01	4.231E-01	1906
Left hemisphere	-0.047	0.026	[-0.098 - 0.004]	7.243E-02	2.847E-01	1908
Right hemisphere	-0.053	0.025	[-0.103 - -0.004]	3.586E-02	2.510E-01	1908

**Supplementary Table S46.** Partial correlations between cortical surface area and PANSS positive

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.016	0.036	[-0.086 - 0.054]	6.558E-01	7.780E-01	1908
Left caudal anterior cingulate cortex	-0.008	0.049	[-0.104 - 0.087]	8.646E-01	9.033E-01	1917
Left caudal middle frontal gyrus	-0.025	0.023	[-0.069 - 0.02]	2.790E-01	4.658E-01	1918
Left cuneus	0.002	0.032	[-0.06 - 0.064]	9.533E-01	9.533E-01	1918
Left entorhinal cortex	-0.083	0.040	[-0.162 - -0.004]	3.949E-02	1.455E-01	1888
Left fusiform gyrus	-0.040	0.028	[-0.094 - 0.015]	1.515E-01	3.213E-01	1918
Left inferior parietal cortex	-0.039	0.030	[-0.097 - 0.019]	1.889E-01	3.777E-01	1921
Left inferior temporal gyrus	-0.015	0.030	[-0.074 - 0.043]	6.040E-01	7.418E-01	1917
Left isthmus cingulate cortex	-0.051	0.027	[-0.105 - 0.003]	6.198E-02	1.808E-01	1919
Left lateral occipital cortex	-0.045	0.023	[-0.09 - -0.001]	4.555E-02	1.594E-01	1918
Left lateral orbitofrontal cortex	-0.072	0.029	[-0.129 - -0.015]	1.373E-02	1.011E-01	1920
Left lingual gyrus	-0.014	0.023	[-0.058 - 0.031]	5.446E-01	7.059E-01	1916
Left medial orbitofrontal cortex	-0.039	0.023	[-0.083 - 0.006]	8.938E-02	2.235E-01	1920
Left middle temporal gyrus	-0.016	0.039	[-0.093 - 0.06]	6.732E-01	7.854E-01	1913
Left parahippocampal gyrus	-0.029	0.035	[-0.097 - 0.039]	4.024E-01	5.868E-01	1918
Left paracentral lobule	-0.003	0.036	[-0.075 - 0.068]	9.253E-01	9.495E-01	1918
Left pars opercularis of inferior frontal gyrus	-0.051	0.023	[-0.095 - -0.007]	2.375E-02	1.100E-01	1920
Left pars orbitalis of inferior frontal gyrus	-0.061	0.023	[-0.106 - -0.017]	6.441E-03	6.441E-02	1920
Left pars triangularis of inferior frontal gyrus	-0.007	0.023	[-0.052 - 0.037]	7.425E-01	8.436E-01	1921
Left pericalcarine cortex	-0.008	0.025	[-0.057 - 0.041]	7.472E-01	8.436E-01	1919
Left postcentral gyrus	-0.040	0.023	[-0.084 - 0.005]	8.081E-02	2.095E-01	1918
Left posterior cingulate cortex	-0.059	0.033	[-0.123 - 0.005]	7.208E-02	2.018E-01	1919
Left precentral gyrus	-0.066	0.022	[-0.11 - -0.022]	3.172E-03	5.088E-02	1919
Left precuneus	-0.038	0.025	[-0.087 - 0.011]	1.269E-01	2.876E-01	1920
Left rostral anterior cingulate cortex	-0.049	0.042	[-0.13 - 0.033]	2.434E-01	4.483E-01	1921
Left rostral middle frontal gyrus	-0.042	0.023	[-0.087 - 0.002]	6.040E-02	1.808E-01	1917
Left superior frontal gyrus	-0.036	0.031	[-0.097 - 0.026]	2.541E-01	4.561E-01	1920



	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.038	0.045	[-0.126 - 0.049]	3.943E-01	5.868E-01	1917
Left superior temporal gyrus	-0.055	0.023	[-0.1 - -0.011]	1.444E-02	1.011E-01	1902
Left supramarginal gyrus	-0.061	0.027	[-0.115 - -0.008]	2.450E-02	1.100E-01	1905
Left frontal pole	0.028	0.032	[-0.035 - 0.091]	3.807E-01	5.793E-01	1918
Left temporal pole	-0.023	0.033	[-0.089 - 0.042]	4.850E-01	6.876E-01	1916
Left transverse temporal gyrus	0.026	0.040	[-0.054 - 0.105]	5.252E-01	7.059E-01	1918
Left insula	-0.076	0.022	[-0.12 - -0.032]	6.888E-04	1.607E-02	1918
Right banks of superior temporal sulcus	-0.011	0.044	[-0.097 - 0.076]	8.091E-01	8.948E-01	1914
Right caudal anterior cingulate cortex	-0.025	0.028	[-0.081 - 0.03]	3.696E-01	5.751E-01	1921
Right caudal middle frontal gyrus	-0.078	0.023	[-0.122 - -0.033]	5.831E-04	1.607E-02	1919
Right cuneus	0.013	0.023	[-0.032 - 0.057]	5.716E-01	7.179E-01	1917
Right entorhinal cortex	-0.027	0.029	[-0.085 - 0.03]	3.514E-01	5.721E-01	1881
Right fusiform gyrus	-0.031	0.035	[-0.099 - 0.037]	3.697E-01	5.751E-01	1919
Right inferior parietal cortex	-0.046	0.030	[-0.105 - 0.013]	1.265E-01	2.876E-01	1921
Right inferior temporal gyrus	-0.044	0.023	[-0.088 - 0.001]	5.403E-02	1.719E-01	1914
Right isthmus cingulate cortex	-0.107	0.024	[-0.153 - -0.06]	7.494E-06	5.246E-04	1918
Right lateral occipital cortex	-0.045	0.023	[-0.089 - 0]	4.785E-02	1.595E-01	1915
Right lateral orbitofrontal cortex	-0.074	0.026	[-0.126 - -0.023]	4.758E-03	5.551E-02	1921
Right lingual gyrus	0.006	0.034	[-0.061 - 0.074]	8.548E-01	9.033E-01	1915
Right medial orbitofrontal cortex	-0.041	0.038	[-0.117 - 0.034]	2.786E-01	4.658E-01	1921
Right middle temporal gyrus	-0.026	0.038	[-0.102 - 0.049]	4.911E-01	6.876E-01	1919
Right parahippocampal gyrus	-0.024	0.043	[-0.107 - 0.06]	5.743E-01	7.179E-01	1914
Right paracentral lobule	-0.033	0.030	[-0.092 - 0.027]	2.795E-01	4.658E-01	1921
Right pars opercularis of inferior frontal gyrus	-0.056	0.025	[-0.105 - -0.007]	2.621E-02	1.100E-01	1920
Right pars orbitalis of inferior frontal gyrus	-0.050	0.023	[-0.095 - -0.006]	2.672E-02	1.100E-01	1921
Right pars triangularis of inferior frontal gyrus	-0.041	0.028	[-0.096 - 0.015]	1.505E-01	3.213E-01	1920
Right pericalcarine cortex	0.003	0.037	[-0.069 - 0.075]	9.360E-01	9.495E-01	1916
Right postcentral gyrus	-0.048	0.023	[-0.092 - -0.003]	3.473E-02	1.351E-01	1916
Right posterior cingulate cortex	-0.026	0.042	[-0.109 - 0.056]	5.315E-01	7.059E-01	1920

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.035	0.023	[-0.079 - 0.01]	1.274E-01	2.876E-01	1920
Right precuneus	-0.056	0.024	[-0.102 - -0.009]	2.020E-02	1.100E-01	1920
Right rostral anterior cingulate cortex	-0.015	0.025	[-0.064 - 0.034]	5.414E-01	7.059E-01	1921
Right rostral middle frontal gyrus	-0.060	0.023	[-0.104 - -0.016]	8.021E-03	7.018E-02	1919
Right superior frontal gyrus	-0.044	0.033	[-0.108 - 0.02]	1.745E-01	3.592E-01	1919
Right superior parietal cortex	0.007	0.043	[-0.076 - 0.091]	8.633E-01	9.033E-01	1919
Right superior temporal gyrus	-0.039	0.032	[-0.102 - 0.024]	2.251E-01	4.259E-01	1908
Right supramarginal gyrus	-0.007	0.031	[-0.068 - 0.054]	8.181E-01	8.948E-01	1909
Right frontal pole	0.050	0.040	[-0.029 - 0.13]	2.142E-01	4.165E-01	1920
Right temporal pole	-0.059	0.033	[-0.124 - 0.007]	7.993E-02	2.095E-01	1919
Right transverse temporal gyrus	-0.016	0.036	[-0.088 - 0.055]	6.517E-01	7.780E-01	1917
Right insula	-0.065	0.023	[-0.11 - -0.021]	3.634E-03	5.088E-02	1919
Left hemisphere	-0.057	0.024	[-0.104 - -0.01]	1.730E-02	1.100E-01	1921
Right hemisphere	-0.058	0.025	[-0.107 - -0.008]	2.259E-02	1.100E-01	1921

**Supplementary Table S47.** Partial correlations between cortical surface area and PANSS negative

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	0.052	0.027	[-0.002 - 0.105]	5.710E-02	5.570E-01	1910
Left caudal anterior cingulate cortex	-0.003	0.023	[-0.047 - 0.042]	9.099E-01	9.838E-01	1919
Left caudal middle frontal gyrus	-0.041	0.023	[-0.086 - 0.003]	6.904E-02	5.570E-01	1920
Left cuneus	-0.016	0.027	[-0.069 - 0.038]	5.642E-01	9.368E-01	1920
Left entorhinal cortex	0.014	0.043	[-0.07 - 0.099]	7.373E-01	9.384E-01	1890
Left fusiform gyrus	-0.012	0.032	[-0.075 - 0.05]	6.959E-01	9.368E-01	1920
Left inferior parietal cortex	-0.015	0.037	[-0.088 - 0.058]	6.871E-01	9.368E-01	1923
Left inferior temporal gyrus	0.001	0.039	[-0.076 - 0.078]	9.791E-01	9.838E-01	1919
Left isthmus cingulate cortex	-0.016	0.042	[-0.098 - 0.067]	7.116E-01	9.384E-01	1921
Left lateral occipital cortex	-0.022	0.023	[-0.067 - 0.022]	3.271E-01	7.761E-01	1920
Left lateral orbitofrontal cortex	-0.050	0.026	[-0.102 - 0.001]	5.657E-02	5.570E-01	1922
Left lingual gyrus	-0.008	0.023	[-0.053 - 0.037]	7.263E-01	9.384E-01	1918
Left medial orbitofrontal cortex	0.011	0.026	[-0.041 - 0.063]	6.759E-01	9.368E-01	1922
Left middle temporal gyrus	0.001	0.037	[-0.071 - 0.073]	9.798E-01	9.838E-01	1915
Left parahippocampal gyrus	0.028	0.031	[-0.031 - 0.088]	3.515E-01	7.761E-01	1920
Left paracentral lobule	0.003	0.026	[-0.048 - 0.053]	9.228E-01	9.838E-01	1920
Left pars opercularis of inferior frontal gyrus	-0.053	0.023	[-0.097 - -0.009]	1.899E-02	5.570E-01	1922
Left pars orbitalis of inferior frontal gyrus	-0.027	0.033	[-0.092 - 0.038]	4.179E-01	8.125E-01	1922
Left pars triangularis of inferior frontal gyrus	-0.023	0.023	[-0.067 - 0.021]	3.116E-01	7.761E-01	1923
Left pericalcarine cortex	0.001	0.023	[-0.044 - 0.046]	9.647E-01	9.838E-01	1921
Left postcentral gyrus	-0.032	0.029	[-0.089 - 0.025]	2.719E-01	7.761E-01	1920
Left posterior cingulate cortex	-0.017	0.035	[-0.086 - 0.051]	6.191E-01	9.368E-01	1921
Left precentral gyrus	-0.041	0.026	[-0.093 - 0.011]	1.202E-01	6.473E-01	1921
Left precuneus	-0.034	0.025	[-0.083 - 0.015]	1.743E-01	6.777E-01	1922
Left rostral anterior cingulate cortex	-0.052	0.028	[-0.106 - 0.002]	5.829E-02	5.570E-01	1923
Left rostral middle frontal gyrus	-0.009	0.027	[-0.062 - 0.045]	7.517E-01	9.393E-01	1919
Left superior frontal gyrus	-0.041	0.038	[-0.116 - 0.033]	2.787E-01	7.761E-01	1922

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.015	0.028	[-0.069 - 0.039]	5.907E-01	9.368E-01	1919
Left superior temporal gyrus	-0.031	0.034	[-0.097 - 0.035]	3.548E-01	7.761E-01	1905
Left supramarginal gyrus	-0.065	0.042	[-0.147 - 0.016]	1.177E-01	6.473E-01	1908
Left frontal pole	0.019	0.038	[-0.055 - 0.093]	6.199E-01	9.368E-01	1920
Left temporal pole	-0.015	0.030	[-0.073 - 0.043]	6.064E-01	9.368E-01	1918
Left transverse temporal gyrus	-0.045	0.023	[-0.089 - 0]	4.763E-02	5.570E-01	1920
Left insula	-0.019	0.041	[-0.099 - 0.06]	6.337E-01	9.368E-01	1920
Right banks of superior temporal sulcus	-0.009	0.023	[-0.054 - 0.035]	6.841E-01	9.368E-01	1916
Right caudal anterior cingulate cortex	-0.025	0.032	[-0.087 - 0.037]	4.305E-01	8.144E-01	1923
Right caudal middle frontal gyrus	-0.015	0.034	[-0.081 - 0.051]	6.630E-01	9.368E-01	1921
Right cuneus	0.007	0.023	[-0.038 - 0.051]	7.649E-01	9.393E-01	1919
Right entorhinal cortex	-0.007	0.024	[-0.054 - 0.041]	7.827E-01	9.446E-01	1883
Right fusiform gyrus	-0.037	0.027	[-0.089 - 0.016]	1.687E-01	6.777E-01	1921
Right inferior parietal cortex	-0.033	0.041	[-0.113 - 0.047]	4.152E-01	8.125E-01	1923
Right inferior temporal gyrus	0.005	0.023	[-0.039 - 0.05]	8.102E-01	9.452E-01	1916
Right isthmus cingulate cortex	-0.062	0.044	[-0.149 - 0.025]	1.636E-01	6.777E-01	1920
Right lateral occipital cortex	-0.032	0.023	[-0.076 - 0.013]	1.605E-01	6.777E-01	1917
Right lateral orbitofrontal cortex	-0.048	0.041	[-0.129 - 0.033]	2.477E-01	7.761E-01	1923
Right lingual gyrus	0.030	0.028	[-0.025 - 0.084]	2.920E-01	7.761E-01	1917
Right medial orbitofrontal cortex	-0.033	0.030	[-0.092 - 0.025]	2.660E-01	7.761E-01	1923
Right middle temporal gyrus	-0.009	0.023	[-0.054 - 0.035]	6.805E-01	9.368E-01	1921
Right parahippocampal gyrus	0.021	0.023	[-0.024 - 0.066]	3.547E-01	7.761E-01	1916
Right paracentral lobule	0.001	0.023	[-0.044 - 0.045]	9.766E-01	9.838E-01	1923
Right pars opercularis of inferior frontal gyrus	-0.038	0.023	[-0.084 - 0.008]	1.019E-01	6.473E-01	1922
Right pars orbitalis of inferior frontal gyrus	-0.054	0.039	[-0.131 - 0.023]	1.666E-01	6.777E-01	1923
Right pars triangularis of inferior frontal gyrus	-0.060	0.023	[-0.104 - -0.015]	8.434E-03	5.570E-01	1922
Right pericalcarine cortex	0.022	0.027	[-0.03 - 0.075]	4.008E-01	8.125E-01	1918
Right postcentral gyrus	-0.030	0.041	[-0.111 - 0.051]	4.636E-01	8.540E-01	1918
Right posterior cingulate cortex	-0.027	0.031	[-0.088 - 0.035]	3.965E-01	8.125E-01	1922

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.023	0.040	[-0.102 - 0.055]	5.568E-01	9.368E-01	1922
Right precuneus	-0.059	0.028	[-0.113 - -0.005]	3.350E-02	5.570E-01	1922
Right rostral anterior cingulate cortex	-0.061	0.039	[-0.137 - 0.016]	1.201E-01	6.473E-01	1923
Right rostral middle frontal gyrus	-0.015	0.033	[-0.08 - 0.051]	6.595E-01	9.368E-01	1921
Right superior frontal gyrus	-0.035	0.036	[-0.105 - 0.035]	3.308E-01	7.761E-01	1921
Right superior parietal cortex	-0.021	0.023	[-0.066 - 0.023]	3.444E-01	7.761E-01	1921
Right superior temporal gyrus	-0.004	0.023	[-0.049 - 0.041]	8.584E-01	9.801E-01	1910
Right supramarginal gyrus	-0.005	0.028	[-0.061 - 0.051]	8.680E-01	9.801E-01	1911
Right frontal pole	-0.006	0.023	[-0.05 - 0.039]	8.048E-01	9.452E-01	1922
Right temporal pole	0.001	0.036	[-0.071 - 0.072]	9.838E-01	9.838E-01	1921
Right transverse temporal gyrus	-0.056	0.031	[-0.116 - 0.005]	7.162E-02	5.570E-01	1919
Right insula	-0.001	0.041	[-0.082 - 0.08]	9.782E-01	9.838E-01	1921
Left hemisphere	-0.028	0.031	[-0.088 - 0.031]	3.512E-01	7.761E-01	1923
Right hemisphere	-0.032	0.031	[-0.093 - 0.029]	3.032E-01	7.761E-01	1923

**Supplementary Table S48.** Partial correlations between cortical surface area and SAPS total

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.032	0.038	[-0.108 - 0.043]	4.026E-01	5.451E-01	1154
Left caudal anterior cingulate cortex	-0.028	0.047	[-0.12 - 0.065]	5.591E-01	6.634E-01	1157
Left caudal middle frontal gyrus	0.015	0.037	[-0.059 - 0.088]	6.917E-01	7.686E-01	1157
Left cuneus	-0.038	0.029	[-0.096 - 0.019]	1.884E-01	3.689E-01	1159
Left entorhinal cortex	-0.045	0.029	[-0.102 - 0.012]	1.242E-01	3.106E-01	1156
Left fusiform gyrus	-0.053	0.043	[-0.138 - 0.033]	2.264E-01	3.689E-01	1157
Left inferior parietal cortex	-0.023	0.044	[-0.11 - 0.064]	6.044E-01	6.935E-01	1158
Left inferior temporal gyrus	-0.013	0.044	[-0.1 - 0.073]	7.633E-01	8.349E-01	1158
Left isthmus cingulate cortex	-0.036	0.036	[-0.107 - 0.035]	3.140E-01	4.677E-01	1160
Left lateral occipital cortex	-0.088	0.045	[-0.177 - 0.001]	5.256E-02	2.312E-01	1159
Left lateral orbitofrontal cortex	-0.039	0.053	[-0.142 - 0.065]	4.652E-01	5.786E-01	1160
Left lingual gyrus	-0.064	0.045	[-0.153 - 0.024]	1.522E-01	3.329E-01	1159
Left medial orbitofrontal cortex	-0.039	0.046	[-0.129 - 0.052]	4.049E-01	5.451E-01	1160
Left middle temporal gyrus	-0.078	0.032	[-0.142 - -0.015]	1.553E-02	1.359E-01	1160
Left parahippocampal gyrus	-0.090	0.053	[-0.194 - 0.014]	9.123E-02	2.554E-01	1159
Left paracentral lobule	-0.053	0.029	[-0.11 - 0.004]	6.980E-02	2.502E-01	1156
Left pars opercularis of inferior frontal gyrus	-0.023	0.043	[-0.107 - 0.061]	5.847E-01	6.821E-01	1156
Left pars orbitalis of inferior frontal gyrus	-0.051	0.037	[-0.122 - 0.021]	1.642E-01	3.418E-01	1160
Left pars triangularis of inferior frontal gyrus	-0.050	0.041	[-0.13 - 0.03]	2.171E-01	3.689E-01	1159
Left pericalcarine cortex	-0.068	0.034	[-0.136 - -0.001]	4.672E-02	2.312E-01	1159
Left postcentral gyrus	-0.073	0.044	[-0.159 - 0.013]	9.538E-02	2.568E-01	1159
Left posterior cingulate cortex	0.004	0.052	[-0.098 - 0.106]	9.361E-01	9.361E-01	1158
Left precentral gyrus	-0.082	0.057	[-0.195 - 0.03]	1.505E-01	3.329E-01	1157
Left precuneus	-0.027	0.038	[-0.102 - 0.047]	4.723E-01	5.786E-01	1160
Left rostral anterior cingulate cortex	-0.085	0.046	[-0.175 - 0.005]	6.377E-02	2.480E-01	1160
Left rostral middle frontal gyrus	-0.059	0.029	[-0.116 - -0.002]	4.218E-02	2.312E-01	1155
Left superior frontal gyrus	-0.082	0.029	[-0.139 - -0.025]	4.852E-03	7.537E-02	1160

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.089	0.032	[-0.151 - -0.026]	5.383E-03	7.537E-02	1156
Left superior temporal gyrus	-0.061	0.036	[-0.131 - 0.009]	8.817E-02	2.554E-01	1159
Left supramarginal gyrus	-0.037	0.029	[-0.094 - 0.02]	2.061E-01	3.689E-01	1157
Left frontal pole	-0.026	0.029	[-0.083 - 0.031]	3.728E-01	5.326E-01	1159
Left temporal pole	-0.023	0.050	[-0.121 - 0.074]	6.395E-01	7.221E-01	1149
Left transverse temporal gyrus	-0.033	0.029	[-0.09 - 0.025]	2.669E-01	4.061E-01	1159
Left insula	-0.047	0.033	[-0.111 - 0.017]	1.481E-01	3.329E-01	1152
Right banks of superior temporal sulcus	-0.040	0.034	[-0.105 - 0.026]	2.365E-01	3.689E-01	1160
Right caudal anterior cingulate cortex	-0.065	0.029	[-0.123 - -0.008]	2.486E-02	1.740E-01	1156
Right caudal middle frontal gyrus	-0.009	0.034	[-0.075 - 0.058]	8.001E-01	8.486E-01	1158
Right cuneus	-0.065	0.036	[-0.135 - 0.006]	7.183E-02	2.502E-01	1160
Right entorhinal cortex	-0.050	0.042	[-0.133 - 0.033]	2.344E-01	3.689E-01	1157
Right fusiform gyrus	-0.086	0.045	[-0.175 - 0.002]	5.615E-02	2.312E-01	1160
Right inferior parietal cortex	-0.026	0.035	[-0.095 - 0.043]	4.632E-01	5.786E-01	1154
Right inferior temporal gyrus	0.007	0.045	[-0.081 - 0.094]	8.824E-01	8.952E-01	1154
Right isthmus cingulate cortex	-0.088	0.030	[-0.147 - -0.03]	2.978E-03	7.055E-02	1156
Right lateral occipital cortex	-0.073	0.037	[-0.146 - 0]	5.060E-02	2.312E-01	1159
Right lateral orbitofrontal cortex	-0.036	0.051	[-0.137 - 0.064]	4.756E-01	5.786E-01	1157
Right lingual gyrus	-0.074	0.029	[-0.131 - -0.017]	1.083E-02	1.083E-01	1157
Right medial orbitofrontal cortex	-0.054	0.036	[-0.126 - 0.017]	1.350E-01	3.257E-01	1159
Right middle temporal gyrus	-0.035	0.030	[-0.094 - 0.023]	2.372E-01	3.689E-01	1159
Right parahippocampal gyrus	-0.081	0.046	[-0.171 - 0.009]	7.627E-02	2.502E-01	1158
Right paracentral lobule	-0.031	0.043	[-0.117 - 0.054]	4.697E-01	5.786E-01	1156
Right pars opercularis of inferior frontal gyrus	-0.025	0.029	[-0.082 - 0.032]	3.867E-01	5.413E-01	1158
Right pars orbitalis of inferior frontal gyrus	-0.088	0.029	[-0.145 - -0.031]	2.566E-03	7.055E-02	1158
Right pars triangularis of inferior frontal gyrus	-0.046	0.036	[-0.116 - 0.025]	2.020E-01	3.689E-01	1159
Right pericalcarine cortex	-0.067	0.029	[-0.124 - -0.01]	2.044E-02	1.589E-01	1158
Right postcentral gyrus	-0.052	0.040	[-0.13 - 0.027]	1.963E-01	3.689E-01	1157
Right posterior cingulate cortex	-0.057	0.045	[-0.145 - 0.032]	2.108E-01	3.689E-01	1158

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.057	0.030	[-0.116 - 0.001]	5.515E-02	2.312E-01	1158
Right precuneus	-0.039	0.033	[-0.103 - 0.025]	2.325E-01	3.689E-01	1158
Right rostral anterior cingulate cortex	-0.086	0.029	[-0.143 - -0.029]	3.023E-03	7.055E-02	1160
Right rostral middle frontal gyrus	-0.066	0.042	[-0.148 - 0.016]	1.134E-01	2.941E-01	1157
Right superior frontal gyrus	-0.083	0.032	[-0.145 - -0.021]	8.687E-03	1.013E-01	1160
Right superior parietal cortex	-0.040	0.029	[-0.098 - 0.017]	1.660E-01	3.418E-01	1158
Right superior temporal gyrus	-0.056	0.032	[-0.119 - 0.008]	8.466E-02	2.554E-01	1156
Right supramarginal gyrus	-0.009	0.035	[-0.078 - 0.059]	7.858E-01	8.462E-01	1159
Right frontal pole	-0.010	0.043	[-0.094 - 0.074]	8.180E-01	8.535E-01	1157
Right temporal pole	-0.033	0.047	[-0.126 - 0.059]	4.794E-01	5.786E-01	1158
Right transverse temporal gyrus	-0.009	0.040	[-0.086 - 0.069]	8.291E-01	8.535E-01	1155
Right insula	-0.039	0.043	[-0.123 - 0.045]	3.598E-01	5.248E-01	1159
Left hemisphere	-0.072	0.037	[-0.144 - 0]	5.074E-02	2.312E-01	1162
Right hemisphere	-0.068	0.038	[-0.143 - 0.008]	7.862E-02	2.502E-01	1162



**Supplementary Table S49.** Partial correlations between cortical surface area and SANS total

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	-0.016	0.028	[-0.071 - 0.039]	5.733E-01	8.357E-01	1525
Left caudal anterior cingulate cortex	-0.015	0.025	[-0.064 - 0.034]	5.422E-01	8.357E-01	1586
Left caudal middle frontal gyrus	-0.020	0.025	[-0.069 - 0.03]	4.366E-01	8.357E-01	1570
Left cuneus	-0.047	0.028	[-0.102 - 0.008]	9.368E-02	8.081E-01	1521
Left entorhinal cortex	-0.027	0.038	[-0.101 - 0.047]	4.699E-01	8.357E-01	1512
Left fusiform gyrus	-0.040	0.025	[-0.09 - 0.009]	1.111E-01	8.081E-01	1535
Left inferior parietal cortex	0.003	0.026	[-0.048 - 0.055]	8.941E-01	9.367E-01	1472
Left inferior temporal gyrus	-0.010	0.029	[-0.067 - 0.046]	7.182E-01	8.423E-01	1508
Left isthmus cingulate cortex	0.018	0.025	[-0.031 - 0.068]	4.705E-01	8.357E-01	1583
Left lateral occipital cortex	-0.040	0.025	[-0.09 - 0.01]	1.196E-01	8.081E-01	1532
Left lateral orbitofrontal cortex	-0.030	0.025	[-0.079 - 0.019]	2.309E-01	8.081E-01	1587
Left lingual gyrus	-0.024	0.025	[-0.073 - 0.025]	3.406E-01	8.357E-01	1580
Left medial orbitofrontal cortex	-0.018	0.025	[-0.067 - 0.032]	4.839E-01	8.357E-01	1577
Left middle temporal gyrus	-0.024	0.047	[-0.116 - 0.068]	6.040E-01	8.357E-01	1475
Left parahippocampal gyrus	-0.051	0.035	[-0.12 - 0.018]	1.456E-01	8.081E-01	1562
Left paracentral lobule	0.027	0.037	[-0.047 - 0.1]	4.789E-01	8.357E-01	1581
Left pars opercularis of inferior frontal gyrus	0.003	0.033	[-0.062 - 0.068]	9.307E-01	9.442E-01	1549
Left pars orbitalis of inferior frontal gyrus	-0.016	0.025	[-0.066 - 0.034]	5.261E-01	8.357E-01	1553
Left pars triangularis of inferior frontal gyrus	-0.017	0.026	[-0.067 - 0.033]	5.129E-01	8.357E-01	1533
Left pericalcarine cortex	-0.037	0.039	[-0.114 - 0.04]	3.488E-01	8.357E-01	1587
Left postcentral gyrus	-0.050	0.028	[-0.105 - 0.005]	7.608E-02	8.081E-01	1573
Left posterior cingulate cortex	0.004	0.025	[-0.045 - 0.053]	8.835E-01	9.367E-01	1585
Left precentral gyrus	-0.054	0.025	[-0.103 - -0.004]	3.265E-02	8.081E-01	1570
Left precuneus	-0.014	0.025	[-0.063 - 0.036]	5.838E-01	8.357E-01	1565
Left rostral anterior cingulate cortex	-0.062	0.026	[-0.113 - -0.011]	1.675E-02	8.081E-01	1577
Left rostral middle frontal gyrus	-0.014	0.025	[-0.064 - 0.036]	5.859E-01	8.357E-01	1540
Left superior frontal gyrus	-0.044	0.026	[-0.095 - 0.006]	8.207E-02	8.081E-01	1577

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.031	0.026	[-0.081 - 0.019]	2.213E-01	8.081E-01	1515
Left superior temporal gyrus	-0.012	0.033	[-0.076 - 0.052]	7.220E-01	8.423E-01	1481
Left supramarginal gyrus	0.021	0.030	[-0.037 - 0.079]	4.801E-01	8.357E-01	1464
Left frontal pole	-0.025	0.027	[-0.078 - 0.029]	3.656E-01	8.357E-01	1588
Left temporal pole	-0.013	0.028	[-0.068 - 0.041]	6.328E-01	8.357E-01	1550
Left transverse temporal gyrus	0.044	0.047	[-0.048 - 0.137]	3.478E-01	8.357E-01	1587
Left insula	0.033	0.037	[-0.039 - 0.105]	3.739E-01	8.357E-01	1580
Right banks of superior temporal sulcus	-0.004	0.025	[-0.053 - 0.046]	8.886E-01	9.367E-01	1550
Right caudal anterior cingulate cortex	-0.001	0.025	[-0.051 - 0.048]	9.533E-01	9.533E-01	1583
Right caudal middle frontal gyrus	-0.005	0.025	[-0.055 - 0.044]	8.307E-01	9.230E-01	1558
Right cuneus	-0.015	0.035	[-0.083 - 0.053]	6.743E-01	8.423E-01	1552
Right entorhinal cortex	-0.010	0.026	[-0.062 - 0.041]	6.992E-01	8.423E-01	1425
Right fusiform gyrus	-0.020	0.032	[-0.083 - 0.043]	5.341E-01	8.357E-01	1509
Right inferior parietal cortex	-0.008	0.032	[-0.071 - 0.055]	7.929E-01	8.952E-01	1464
Right inferior temporal gyrus	-0.034	0.042	[-0.117 - 0.048]	4.167E-01	8.357E-01	1512
Right isthmus cingulate cortex	0.004	0.032	[-0.059 - 0.067]	8.994E-01	9.367E-01	1572
Right lateral occipital cortex	-0.039	0.027	[-0.092 - 0.015]	1.585E-01	8.081E-01	1520
Right lateral orbitofrontal cortex	0.014	0.025	[-0.036 - 0.063]	5.870E-01	8.357E-01	1559
Right lingual gyrus	0.016	0.039	[-0.061 - 0.093]	6.873E-01	8.423E-01	1581
Right medial orbitofrontal cortex	-0.012	0.025	[-0.062 - 0.037]	6.256E-01	8.357E-01	1545
Right middle temporal gyrus	-0.029	0.026	[-0.079 - 0.022]	2.618E-01	8.331E-01	1490
Right parahippocampal gyrus	-0.022	0.025	[-0.071 - 0.028]	3.899E-01	8.357E-01	1545
Right paracentral lobule	0.008	0.025	[-0.041 - 0.057]	7.498E-01	8.605E-01	1578
Right pars opercularis of inferior frontal gyrus	-0.037	0.029	[-0.093 - 0.02]	2.024E-01	8.081E-01	1529
Right pars orbitalis of inferior frontal gyrus	-0.017	0.025	[-0.066 - 0.033]	5.091E-01	8.357E-01	1559
Right pars triangularis of inferior frontal gyrus	-0.021	0.030	[-0.08 - 0.038]	4.887E-01	8.357E-01	1528
Right pericalcarine cortex	0.033	0.027	[-0.019 - 0.086]	2.117E-01	8.081E-01	1584
Right postcentral gyrus	-0.050	0.029	[-0.107 - 0.008]	9.302E-02	8.081E-01	1570
Right posterior cingulate cortex	-0.017	0.025	[-0.066 - 0.032]	5.021E-01	8.357E-01	1584

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.014	0.038	[-0.089 - 0.06]	7.049E-01	8.423E-01	1560
Right precuneus	-0.032	0.025	[-0.082 - 0.017]	2.042E-01	8.081E-01	1557
Right rostral anterior cingulate cortex	0.026	0.025	[-0.024 - 0.075]	3.109E-01	8.357E-01	1552
Right rostral middle frontal gyrus	-0.035	0.025	[-0.085 - 0.015]	1.734E-01	8.081E-01	1533
Right superior frontal gyrus	-0.034	0.025	[-0.084 - 0.015]	1.748E-01	8.081E-01	1563
Right superior parietal cortex	-0.034	0.026	[-0.084 - 0.016]	1.835E-01	8.081E-01	1540
Right superior temporal gyrus	0.015	0.031	[-0.045 - 0.075]	6.318E-01	8.357E-01	1505
Right supramarginal gyrus	-0.005	0.041	[-0.085 - 0.075]	9.099E-01	9.367E-01	1467
Right frontal pole	-0.027	0.042	[-0.109 - 0.054]	5.127E-01	8.357E-01	1586
Right temporal pole	-0.037	0.028	[-0.092 - 0.018]	1.900E-01	8.081E-01	1458
Right transverse temporal gyrus	0.011	0.025	[-0.038 - 0.06]	6.531E-01	8.423E-01	1585
Right insula	-0.021	0.025	[-0.07 - 0.029]	4.139E-01	8.357E-01	1583
Left hemisphere	-0.035	0.025	[-0.084 - 0.014]	1.599E-01	8.081E-01	1591
Right hemisphere	-0.028	0.025	[-0.077 - 0.021]	2.578E-01	8.331E-01	1591

**Supplementary Table S50.** Partial correlations between cortical surface area and negative symptom severity

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	0.015	0.025	[-0.034 - 0.063]	5.551E-01	9.291E-01	1871
Left caudal anterior cingulate cortex	-0.014	0.023	[-0.059 - 0.031]	5.471E-01	9.291E-01	1869
Left caudal middle frontal gyrus	-0.018	0.023	[-0.064 - 0.027]	4.225E-01	9.291E-01	1871
Left cuneus	-0.052	0.037	[-0.126 - 0.021]	1.620E-01	9.291E-01	1872
Left entorhinal cortex	0.031	0.042	[-0.052 - 0.114]	4.616E-01	9.291E-01	1870
Left fusiform gyrus	-0.002	0.023	[-0.047 - 0.044]	9.431E-01	9.534E-01	1872
Left inferior parietal cortex	0.024	0.023	[-0.021 - 0.069]	3.018E-01	9.291E-01	1872
Left inferior temporal gyrus	0.021	0.025	[-0.028 - 0.071]	3.962E-01	9.291E-01	1872
Left isthmus cingulate cortex	0.029	0.023	[-0.016 - 0.074]	2.078E-01	9.291E-01	1874
Left lateral occipital cortex	-0.017	0.035	[-0.085 - 0.051]	6.250E-01	9.291E-01	1873
Left lateral orbitofrontal cortex	-0.030	0.031	[-0.09 - 0.03]	3.308E-01	9.291E-01	1874
Left lingual gyrus	-0.013	0.023	[-0.058 - 0.032]	5.750E-01	9.291E-01	1872
Left medial orbitofrontal cortex	-0.013	0.027	[-0.066 - 0.041]	6.391E-01	9.291E-01	1874
Left middle temporal gyrus	0.016	0.031	[-0.044 - 0.076]	6.051E-01	9.291E-01	1872
Left parahippocampal gyrus	0.012	0.040	[-0.066 - 0.091]	7.602E-01	9.291E-01	1873
Left paracentral lobule	0.041	0.028	[-0.015 - 0.096]	1.497E-01	9.291E-01	1869
Left pars opercularis of inferior frontal gyrus	-0.005	0.029	[-0.061 - 0.051]	8.643E-01	9.291E-01	1874
Left pars orbitalis of inferior frontal gyrus	-0.019	0.023	[-0.064 - 0.026]	4.059E-01	9.291E-01	1874
Left pars triangularis of inferior frontal gyrus	-0.001	0.023	[-0.046 - 0.044]	9.534E-01	9.534E-01	1875
Left pericalcarine cortex	-0.002	0.024	[-0.05 - 0.046]	9.400E-01	9.534E-01	1873
Left postcentral gyrus	-0.031	0.036	[-0.101 - 0.039]	3.891E-01	9.291E-01	1874
Left posterior cingulate cortex	-0.013	0.026	[-0.065 - 0.039]	6.251E-01	9.291E-01	1871
Left precentral gyrus	-0.030	0.023	[-0.075 - 0.015]	1.945E-01	9.291E-01	1872
Left precuneus	-0.024	0.027	[-0.077 - 0.028]	3.650E-01	9.291E-01	1874
Left rostral anterior cingulate cortex	-0.051	0.023	[-0.097 - -0.006]	2.534E-02	9.291E-01	1874
Left rostral middle frontal gyrus	0.018	0.023	[-0.027 - 0.063]	4.302E-01	9.291E-01	1870
Left superior frontal gyrus	-0.019	0.034	[-0.086 - 0.049]	5.893E-01	9.291E-01	1874

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	-0.023	0.023	[-0.068 - 0.022]	3.086E-01	9.291E-01	1872
Left superior temporal gyrus	-0.007	0.026	[-0.058 - 0.044]	7.937E-01	9.291E-01	1872
Left supramarginal gyrus	-0.003	0.025	[-0.052 - 0.047]	9.198E-01	9.534E-01	1872
Left frontal pole	0.008	0.030	[-0.05 - 0.066]	7.769E-01	9.291E-01	1871
Left temporal pole	0.009	0.029	[-0.048 - 0.065]	7.660E-01	9.291E-01	1867
Left transverse temporal gyrus	0.011	0.023	[-0.034 - 0.057]	6.225E-01	9.291E-01	1873
Left insula	0.021	0.023	[-0.024 - 0.066]	3.642E-01	9.291E-01	1866
Right banks of superior temporal sulcus	-0.011	0.023	[-0.056 - 0.034]	6.259E-01	9.291E-01	1874
Right caudal anterior cingulate cortex	-0.012	0.031	[-0.072 - 0.048]	6.998E-01	9.291E-01	1872
Right caudal middle frontal gyrus	0.004	0.023	[-0.041 - 0.049]	8.604E-01	9.291E-01	1870
Right cuneus	-0.005	0.029	[-0.061 - 0.051]	8.599E-01	9.291E-01	1875
Right entorhinal cortex	-0.008	0.026	[-0.06 - 0.043]	7.528E-01	9.291E-01	1871
Right fusiform gyrus	-0.043	0.038	[-0.118 - 0.032]	2.645E-01	9.291E-01	1875
Right inferior parietal cortex	0.017	0.026	[-0.035 - 0.068]	5.237E-01	9.291E-01	1869
Right inferior temporal gyrus	-0.011	0.023	[-0.056 - 0.035]	6.442E-01	9.291E-01	1868
Right isthmus cingulate cortex	0.025	0.037	[-0.048 - 0.099]	4.986E-01	9.291E-01	1873
Right lateral occipital cortex	-0.027	0.033	[-0.09 - 0.037]	4.140E-01	9.291E-01	1872
Right lateral orbitofrontal cortex	-0.006	0.033	[-0.07 - 0.058]	8.605E-01	9.291E-01	1872
Right lingual gyrus	0.022	0.023	[-0.023 - 0.067]	3.439E-01	9.291E-01	1869
Right medial orbitofrontal cortex	-0.008	0.025	[-0.057 - 0.04]	7.379E-01	9.291E-01	1873
Right middle temporal gyrus	-0.008	0.023	[-0.053 - 0.037]	7.299E-01	9.291E-01	1874
Right parahippocampal gyrus	0.008	0.024	[-0.038 - 0.055]	7.208E-01	9.291E-01	1872
Right paracentral lobule	0.010	0.032	[-0.052 - 0.072]	7.527E-01	9.291E-01	1870
Right pars opercularis of inferior frontal gyrus	-0.018	0.023	[-0.063 - 0.027]	4.374E-01	9.291E-01	1873
Right pars orbitalis of inferior frontal gyrus	-0.012	0.026	[-0.062 - 0.038]	6.398E-01	9.291E-01	1873
Right pars triangularis of inferior frontal gyrus	-0.013	0.023	[-0.058 - 0.032]	5.752E-01	9.291E-01	1873
Right pericalcarine cortex	0.029	0.023	[-0.016 - 0.074]	2.076E-01	9.291E-01	1871
Right postcentral gyrus	-0.020	0.025	[-0.069 - 0.029]	4.348E-01	9.291E-01	1872
Right posterior cingulate cortex	0.007	0.031	[-0.053 - 0.067]	8.288E-01	9.291E-01	1874

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	0.014	0.034	[-0.053 - 0.081]	6.844E-01	9.291E-01	1873
Right precuneus	-0.059	0.033	[-0.123 - 0.005]	6.968E-02	9.291E-01	1872
Right rostral anterior cingulate cortex	-0.056	0.039	[-0.132 - 0.02]	1.485E-01	9.291E-01	1876
Right rostral middle frontal gyrus	-0.004	0.023	[-0.049 - 0.041]	8.760E-01	9.291E-01	1872
Right superior frontal gyrus	-0.021	0.026	[-0.073 - 0.03]	4.184E-01	9.291E-01	1873
Right superior parietal cortex	-0.031	0.026	[-0.082 - 0.019]	2.215E-01	9.291E-01	1874
Right superior temporal gyrus	0.023	0.031	[-0.038 - 0.083]	4.650E-01	9.291E-01	1871
Right supramarginal gyrus	0.006	0.034	[-0.061 - 0.074]	8.521E-01	9.291E-01	1874
Right frontal pole	-0.024	0.024	[-0.07 - 0.023]	3.263E-01	9.291E-01	1872
Right temporal pole	-0.018	0.023	[-0.063 - 0.027]	4.231E-01	9.291E-01	1872
Right transverse temporal gyrus	0.007	0.023	[-0.039 - 0.052]	7.737E-01	9.291E-01	1870
Right insula	0.004	0.023	[-0.041 - 0.05]	8.470E-01	9.291E-01	1874
Left hemisphere	-0.004	0.023	[-0.049 - 0.041]	8.530E-01	9.291E-01	1876
Right hemisphere	-0.007	0.025	[-0.056 - 0.041]	7.618E-01	9.291E-01	1876

Negative symptom severity in this analysis was based on the SANS Total. For samples that did not have SANS Total, SANS Total was computed based on the PANSS Negative to SANS Total conversion equation provided by van Erp, T. G. *et al.* Converting positive and negative symptom scores between PANSS and SAPS/SANS. *Schizophr Res* **152**, 289-294, doi:S0920-9964(13)00609-9 [pii] 10.1016/j.schres.2013.11.013 (2014).

**Supplementary Table S51.** Partial correlations between cortical surface area chlorpromazine equivalents controlling for negative symptom severity

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left banks of superior temporal sulcus	0.008	0.026	[-0.043 - 0.059]	7.597E-01	8.863E-01	1857
Left caudal anterior cingulate cortex	0.061	0.023	[0.016 - 0.105]	8.148E-03	2.852E-01	1857
Left caudal middle frontal gyrus	-0.011	0.023	[-0.056 - 0.035]	6.494E-01	8.863E-01	1857
Left cuneus	0.032	0.040	[-0.046 - 0.111]	4.199E-01	8.863E-01	1859
Left entorhinal cortex	0.038	0.034	[-0.028 - 0.104]	2.599E-01	8.863E-01	1856
Left fusiform gyrus	0.050	0.043	[-0.034 - 0.134]	2.450E-01	8.863E-01	1858
Left inferior parietal cortex	0.013	0.034	[-0.054 - 0.081]	7.044E-01	8.863E-01	1858
Left inferior temporal gyrus	0.009	0.024	[-0.039 - 0.057]	7.096E-01	8.863E-01	1858
Left isthmus cingulate cortex	0.024	0.023	[-0.021 - 0.069]	2.972E-01	8.863E-01	1860
Left lateral occipital cortex	0.010	0.027	[-0.042 - 0.063]	6.996E-01	8.863E-01	1859
Left lateral orbitofrontal cortex	0.012	0.033	[-0.053 - 0.077]	7.150E-01	8.863E-01	1860
Left lingual gyrus	-0.024	0.039	[-0.1 - 0.051]	5.291E-01	8.863E-01	1859
Left medial orbitofrontal cortex	0.014	0.028	[-0.042 - 0.069]	6.314E-01	8.863E-01	1860
Left middle temporal gyrus	0.017	0.025	[-0.032 - 0.067]	4.924E-01	8.863E-01	1859
Left parahippocampal gyrus	0.008	0.023	[-0.038 - 0.053]	7.441E-01	8.863E-01	1859
Left paracentral lobule	-0.003	0.023	[-0.048 - 0.043]	9.037E-01	9.391E-01	1855
Left pars opercularis of inferior frontal gyrus	-0.017	0.029	[-0.074 - 0.04]	5.643E-01	8.863E-01	1860
Left pars orbitalis of inferior frontal gyrus	0.014	0.034	[-0.053 - 0.081]	6.834E-01	8.863E-01	1860
Left pars triangularis of inferior frontal gyrus	-0.018	0.023	[-0.063 - 0.027]	4.335E-01	8.863E-01	1861
Left pericalcarine cortex	-0.015	0.036	[-0.086 - 0.057]	6.852E-01	8.863E-01	1859
Left postcentral gyrus	0.047	0.039	[-0.029 - 0.123]	2.234E-01	8.863E-01	1861
Left posterior cingulate cortex	0.060	0.037	[-0.013 - 0.133]	1.048E-01	8.863E-01	1859
Left precentral gyrus	0.004	0.023	[-0.041 - 0.049]	8.648E-01	9.313E-01	1858
Left precuneus	0.030	0.034	[-0.036 - 0.096]	3.796E-01	8.863E-01	1860
Left rostral anterior cingulate cortex	0.026	0.033	[-0.038 - 0.091]	4.258E-01	8.863E-01	1860
Left rostral middle frontal gyrus	0.013	0.028	[-0.042 - 0.068]	6.391E-01	8.863E-01	1856
Left superior frontal gyrus	-0.039	0.023	[-0.084 - 0.006]	8.996E-02	8.863E-01	1860

	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Left superior parietal cortex	0.024	0.040	[-0.054 - 0.101]	5.460E-01	8.863E-01	1858
Left superior temporal gyrus	0.024	0.036	[-0.047 - 0.094]	5.138E-01	8.863E-01	1859
Left supramarginal gyrus	0.026	0.045	[-0.062 - 0.114]	5.630E-01	8.863E-01	1858
Left frontal pole	-0.010	0.023	[-0.055 - 0.036]	6.735E-01	8.863E-01	1857
Left temporal pole	0.003	0.023	[-0.043 - 0.048]	9.123E-01	9.391E-01	1853
Left transverse temporal gyrus	0.002	0.037	[-0.07 - 0.074]	9.541E-01	9.541E-01	1859
Left insula	0.002	0.042	[-0.079 - 0.084]	9.531E-01	9.541E-01	1853
Right banks of superior temporal sulcus	0.077	0.031	[0.016 - 0.138]	1.313E-02	3.065E-01	1860
Right caudal anterior cingulate cortex	0.012	0.039	[-0.064 - 0.088]	7.513E-01	8.863E-01	1858
Right caudal middle frontal gyrus	-0.009	0.023	[-0.054 - 0.037]	7.100E-01	8.863E-01	1857
Right cuneus	0.074	0.052	[-0.027 - 0.175]	1.501E-01	8.863E-01	1861
Right entorhinal cortex	0.048	0.041	[-0.032 - 0.128]	2.434E-01	8.863E-01	1858
Right fusiform gyrus	0.043	0.034	[-0.024 - 0.11]	2.107E-01	8.863E-01	1861
Right inferior parietal cortex	0.018	0.036	[-0.053 - 0.09]	6.127E-01	8.863E-01	1855
Right inferior temporal gyrus	0.038	0.023	[-0.007 - 0.083]	1.001E-01	8.863E-01	1855
Right isthmus cingulate cortex	0.026	0.023	[-0.02 - 0.071]	2.659E-01	8.863E-01	1859
Right lateral occipital cortex	-0.025	0.038	[-0.099 - 0.05]	5.152E-01	8.863E-01	1858
Right lateral orbitofrontal cortex	0.013	0.033	[-0.051 - 0.078]	6.813E-01	8.863E-01	1858
Right lingual gyrus	-0.024	0.029	[-0.081 - 0.032]	4.024E-01	8.863E-01	1857
Right medial orbitofrontal cortex	0.034	0.030	[-0.024 - 0.093]	2.503E-01	8.863E-01	1859
Right middle temporal gyrus	0.040	0.023	[-0.005 - 0.085]	8.398E-02	8.863E-01	1860
Right parahippocampal gyrus	0.005	0.023	[-0.041 - 0.05]	8.317E-01	9.150E-01	1859
Right paracentral lobule	-0.008	0.023	[-0.053 - 0.038]	7.417E-01	8.863E-01	1856
Right pars opercularis of inferior frontal gyrus	-0.034	0.023	[-0.079 - 0.012]	1.452E-01	8.863E-01	1860
Right pars orbitalis of inferior frontal gyrus	0.019	0.028	[-0.037 - 0.074]	5.066E-01	8.863E-01	1859
Right pars triangularis of inferior frontal gyrus	-0.065	0.023	[-0.111 - -0.02]	4.554E-03	2.852E-01	1859
Right pericalcarine cortex	-0.030	0.029	[-0.088 - 0.027]	2.995E-01	8.863E-01	1858
Right postcentral gyrus	0.036	0.036	[-0.034 - 0.105]	3.166E-01	8.863E-01	1859
Right posterior cingulate cortex	-0.017	0.023	[-0.062 - 0.029]	4.696E-01	8.863E-01	1860

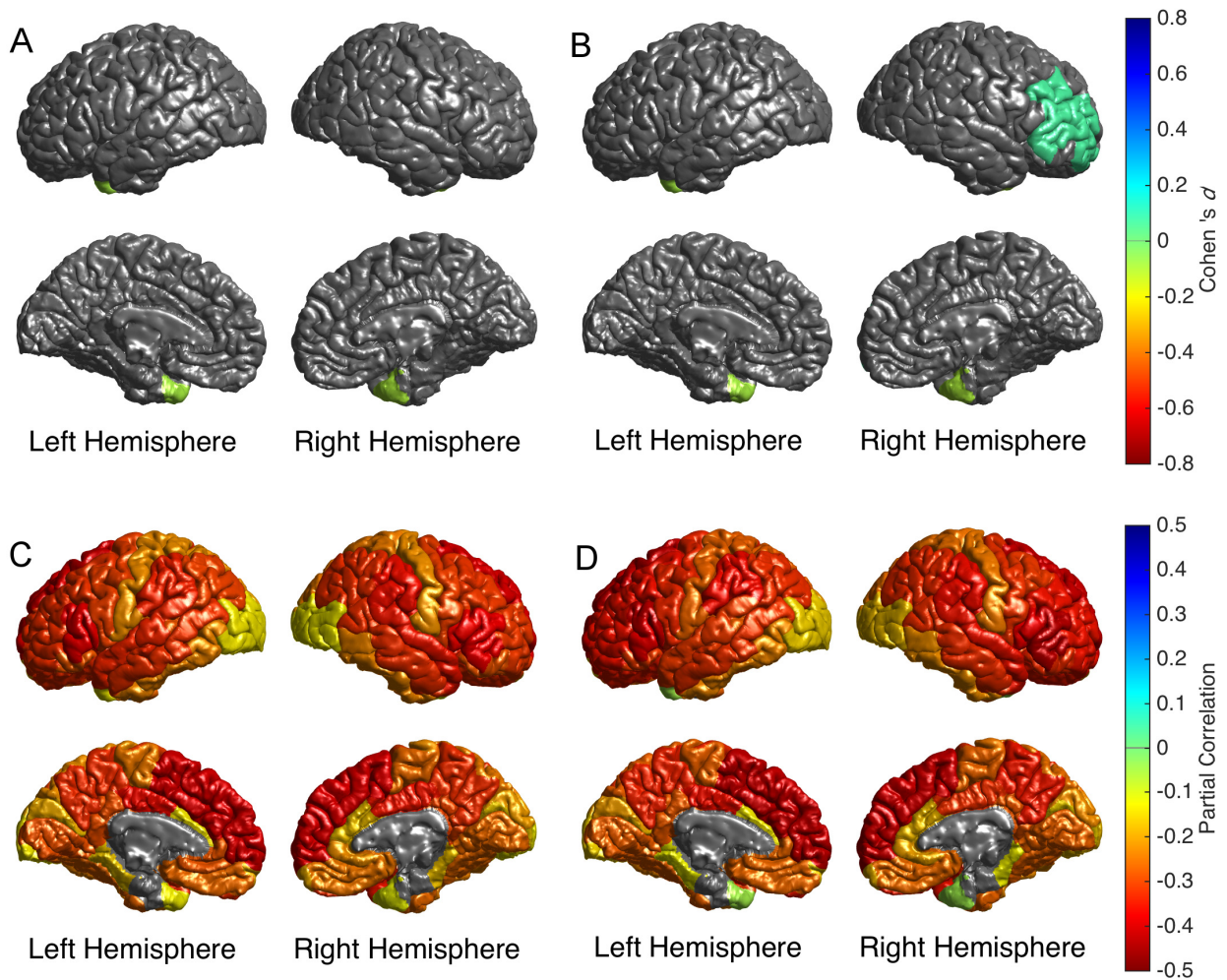


	Partial R	Std. Err.	95% CI	p-value	FDR p-value	N Patients
Right precentral gyrus	-0.017	0.026	[-0.068 - 0.034]	5.215E-01	8.863E-01	1859
Right precuneus	0.046	0.024	[-0.001 - 0.092]	5.335E-02	8.863E-01	1859
Right rostral anterior cingulate cortex	0.022	0.024	[-0.026 - 0.07]	3.631E-01	8.863E-01	1862
Right rostral middle frontal gyrus	0.010	0.023	[-0.036 - 0.055]	6.699E-01	8.863E-01	1858
Right superior frontal gyrus	0.005	0.023	[-0.04 - 0.05]	8.319E-01	9.150E-01	1860
Right superior parietal cortex	0.008	0.039	[-0.068 - 0.084]	8.366E-01	9.150E-01	1860
Right superior temporal gyrus	-0.003	0.023	[-0.049 - 0.042]	8.878E-01	9.391E-01	1857
Right supramarginal gyrus	0.026	0.029	[-0.032 - 0.084]	3.745E-01	8.863E-01	1860
Right frontal pole	-0.031	0.023	[-0.077 - 0.014]	1.766E-01	8.863E-01	1859
Right temporal pole	-0.005	0.023	[-0.05 - 0.04]	8.307E-01	9.150E-01	1858
Right transverse temporal gyrus	-0.026	0.023	[-0.072 - 0.019]	2.610E-01	8.863E-01	1857
Right insula	-0.022	0.043	[-0.107 - 0.062]	6.029E-01	8.863E-01	1860
Left hemisphere	0.020	0.034	[-0.046 - 0.086]	5.583E-01	8.863E-01	1862
Right hemisphere	0.015	0.030	[-0.045 - 0.074]	6.311E-01	8.863E-01	1862

Negative symptom severity in this analysis was based on the SANS Total. For samples that did not have SANS Total, SANS Total was computed based on the PANSS Negative to SANS Total conversion equation provided by van Erp, T. G. *et al.* Converting positive and negative symptom scores between PANSS and SAPS/SANS. *Schizophr Res* **152**, 289-294, doi:S0920-9964(13)00609-9 [pii] 10.1016/j.schres.2013.11.013 (2014).

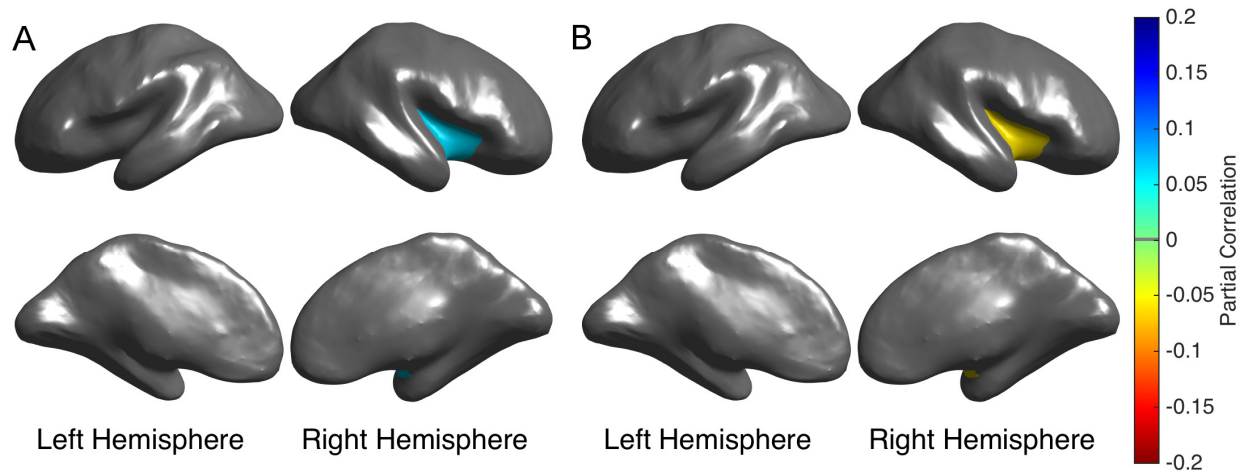
**Supplementary Figure S1.** ENIGMA Schizophrenia Working Group World Map

**Supplementary Figure S2.** Cortical maps of group by age interaction effects on regional cortical thickness



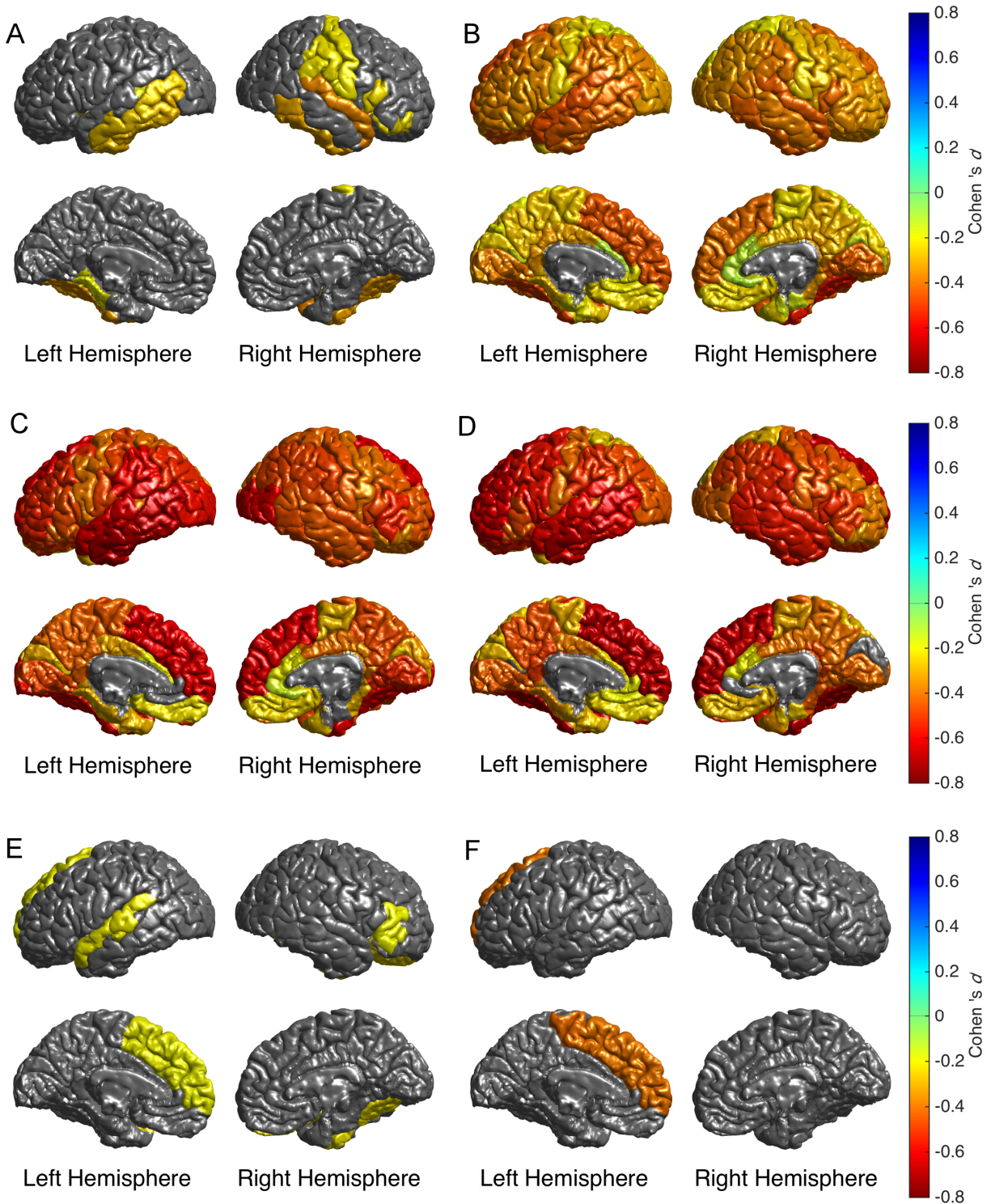
Cortical maps of regional Cohen's  $d$  effect sizes for group by age interaction cortical thickness contrast statistically controlling for A) age and sex, and B) age, sex, and global mean cortical thickness, and cortical maps of partial correlations between age and cortical thickness in C) individuals with schizophrenia, and D) healthy volunteers.

**Supplementary Figure S3.** Cortical maps of partial correlation effect sizes between A) age at onset, and B) duration of illness and regional cortical thickness controlling for age and sex





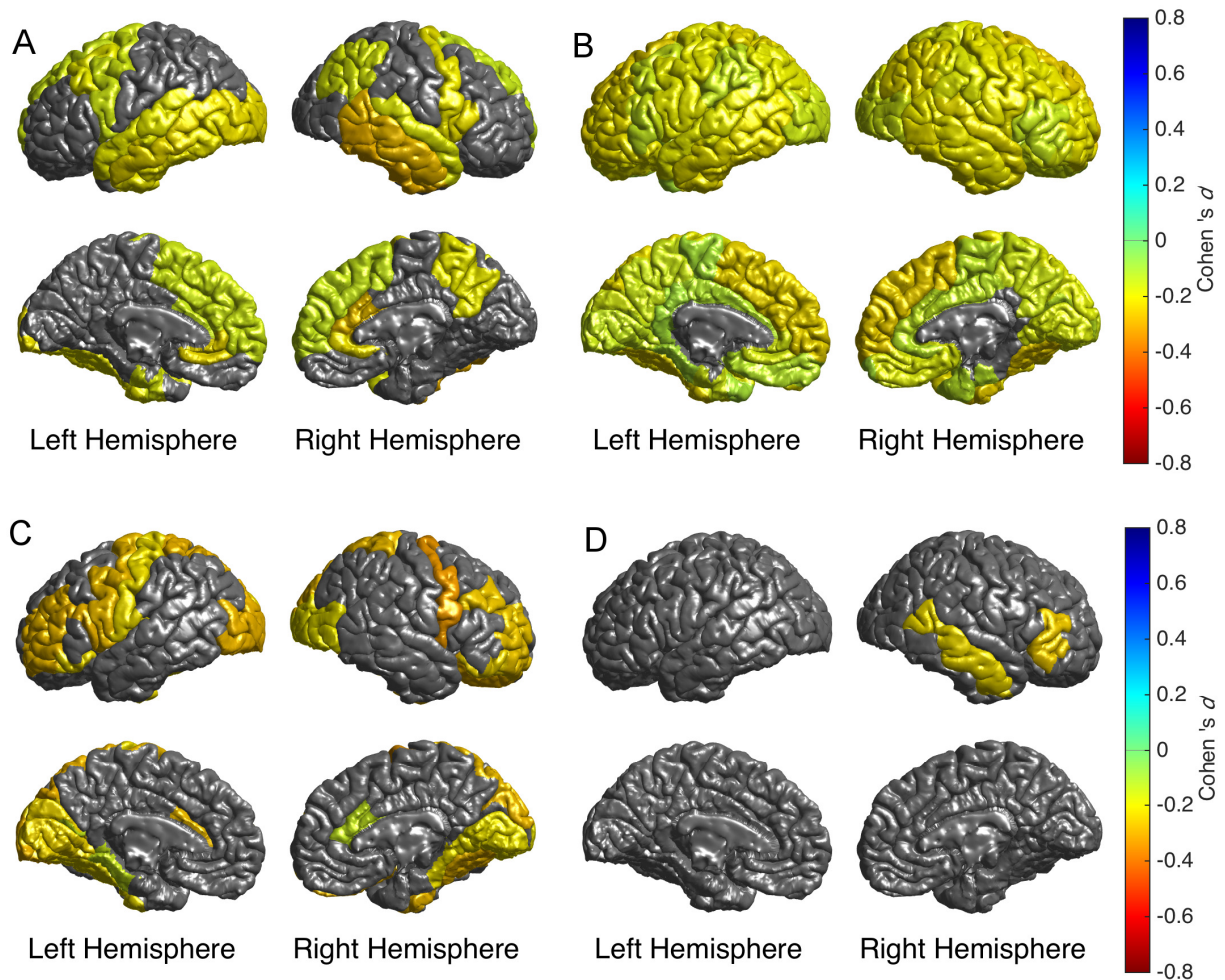
**Supplementary Figure S4.** Cortical maps of Cohen's  $d$  effect sizes of medication effects on regional cortical thickness



Cortical maps of regional Cohen's  $d$  effect sizes for schizophrenia A) without (unmedicated), B) on second-generation (atypical), C) on first-generation (typical), and D) on both antipsychotic medications versus healthy group, and E) schizophrenia on second-generation (atypical), and F)

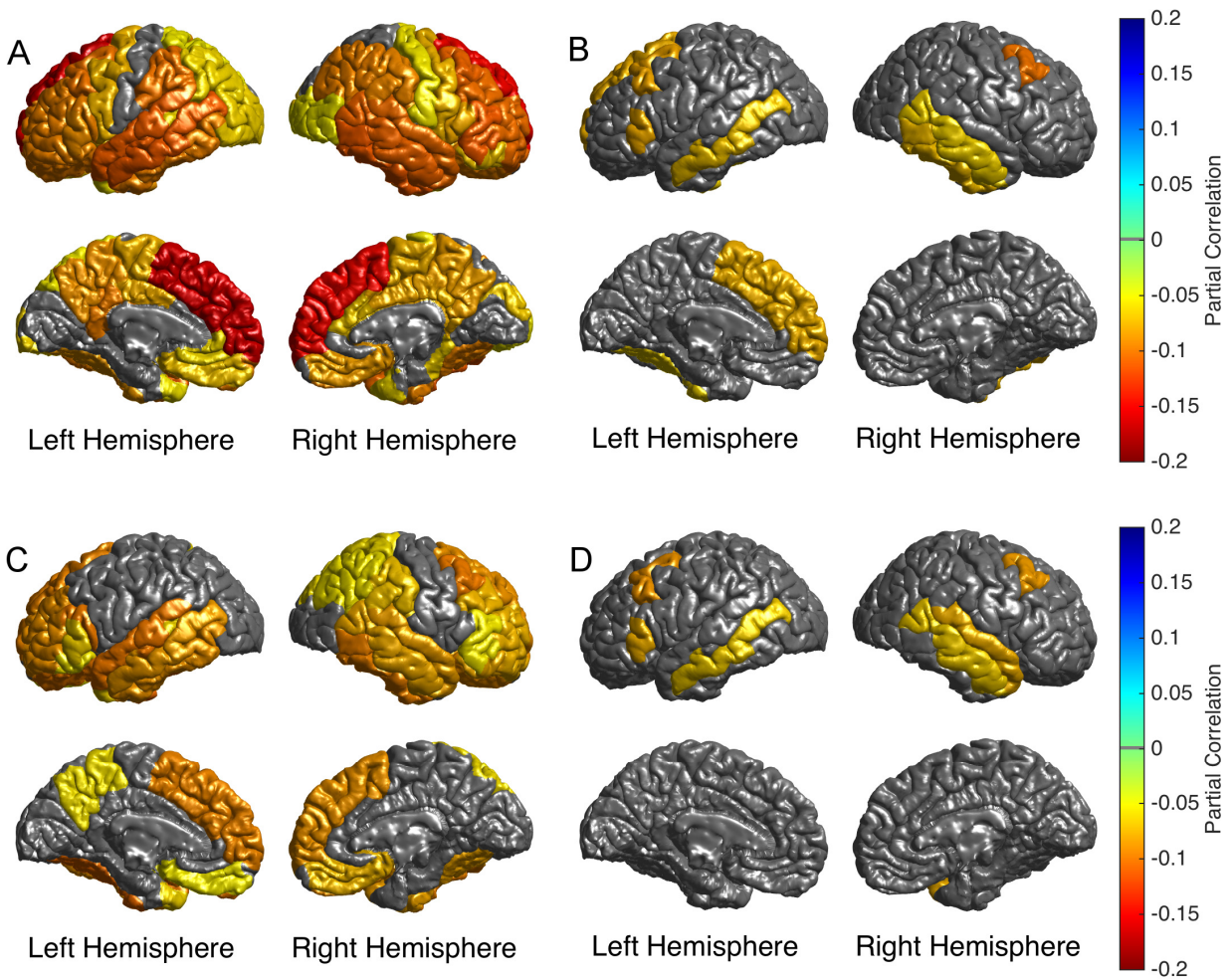
schizophrenia on first-generation (typical) versus schizophrenia without (unmedicated) antipsychotic medications group cortical thickness contrasts, statistically controlling for age and sex.

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**Supplementary Figure S5.** Cortical maps of Cohen's  $d$  effect sizes of medication effects on regional cortical surface area

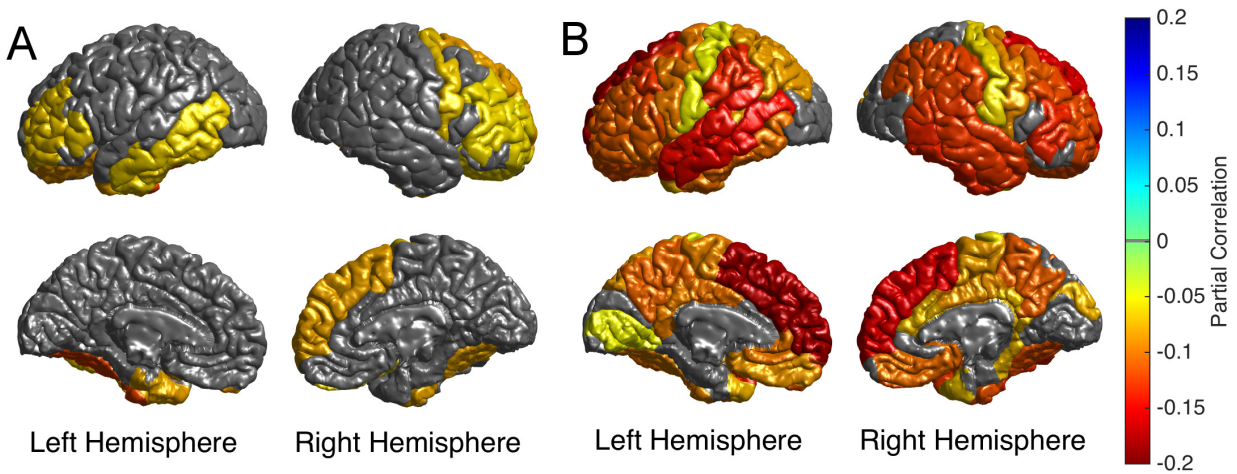
Cortical maps of regional Cohen's  $d$  effect sizes for schizophrenia A) without (unmedicated), B) on second-generation (atypical), C) on first-generation (typical), and D) on both antipsychotic medications versus healthy group cortical surface area contrasts, statistically controlling for age and sex.

**Supplementary Figure S6.** Cortical maps of partial correlations between A) chlorpromazine equivalents and B) PANSS total, C) PANSS negative, and D) PANSS positive symptom severity and regional cortical thickness controlling for age and sex





**Supplementary Figure S7.** Cortical maps of partial correlations between A) negative symptom severity and B) chlorpromazine equivalents and regional cortical thickness controlling for negative symptom severity, age, and sex



Negative symptom severity in this analysis was based on the SANS Total. For samples that did not have SANS Total, SANS Total was computed based on the PANSS Negative to SANS Total conversion equation provided by van Erp, T. G. *et al.* Converting positive and negative symptom scores between PANSS and SAPS/SANS. *Schizophr Res* **152**, 289-294, doi:S0920-9964(13)00609-9 [pii] 10.1016/j.schres.2013.11.013 (2014).

**Supplementary Results SR1.** Supplementary results for regional effects of antipsychotic medications on cortical thickness and effects of antipsychotic medications on cortical surface area

*Effects of antipsychotic medications on regional cortical thickness*

More specifically, compared to controls, *unmedicated* individuals with schizophrenia have significantly thinner *regional* cortex ( $d=-0.367$  to  $0.004$ ; LSM difference= $-2.5$  to  $0.16\%$ ) in bilateral fusiform, inferior temporal gyri, and insula; left parahippocampal and middle temporal gyri and banks of superior temporal sulcus; and right pars opercularis and orbitalis of inferior frontal, superior temporal, transverse temporal, postcentral, and supramarginal gyri (Figure S4A; Table S12). In turn, compared to controls, individuals with schizophrenia on *second-generation* (atypical;  $d=-0.552$  to  $-0.102$ ; LSM difference= $-3.59$  to  $0.87\%$ ; Figure S4B; Table S13), *first-generation* (typical;  $d=-0.765$  to  $-0.138$ ; LSM difference= $-4.19$  to  $-0.48\%$ ; Figure S4C; Table S14), or *both* antipsychotic medications show *widespread* thinner cortex (typical and atypical;  $d=-0.770$  to  $-0.045$ ; LSM difference= $-4.38$  to  $-0.23\%$ ; Figure S4D; Table S15).

Individuals with schizophrenia on *second-generation* (atypical) antipsychotic medications had significantly thinner cortex in several frontal and temporal lobe regions (left superior temporal and superior frontal gyri and right fusiform and pars triangularis of inferior frontal gyrus and lateral orbitofrontal cortex; Figure S4E; Table S16) and those on *first-generation* (typical) antipsychotics had significantly thinner cortex in left superior frontal gyrus when compared to unmedicated individuals with schizophrenia (Figure S4F; Table S17). No significant regional differences in cortical thickness were detected for any of the other group comparisons ( $p_{\text{FDR}} > 0.05$ ; Tables S18-S21).

It must be noted that the weighted mean age and duration of illness across the *no*, *second-generation*, *first-generation*, or *both* antipsychotic treatment groups were 30.2, 33.2, 36, and 34.5; and 5.3, 9.3, 11.5, and 12.9 years, respectively. Thus at least two potentially confounding variables show a pattern similar to the effect sizes across the medication groups (Supplement 2; Table S1c). However, importantly age was included as a covariate in the medication type analysis, partial correlations only showed a significant effect between duration of illness -above-and-beyond age- and right insula thickness, we only found a group by age interaction on temporal pole thickness, and meta-regressions predicting left, right, or global cortical thickness with sample mean age or duration of illness were non-significant (see below).

*Effects of antipsychotic medication on cortical surface area*

Effect sizes for left and right hemisphere comparing cortical surface area from individuals with schizophrenia on *no* (unmedicated; left/right  $d=-0.246/-0.250$ ), *second-generation* (left/right  $d=-0.268/-0.277$ ), *first-generation* (left/right  $d=-0.321/-0.341$ ), or *both* (left/right  $d=-0.205/-0.227$ ) antipsychotic medications to healthy volunteers were significant for all but the smallest group on both antipsychotic medications ( $p_{\text{FDR}} > 0.05$ ). The observed effect sizes for cortical surface area appear comparable across antipsychotic medication groups.

*Unmedicated* individuals with schizophrenia have significantly smaller cortical surface area ( $d=-0.298$  to  $-0.010$ ; LSM difference= $-5.48$  to  $-0.27\%$ ) in bilateral inferior, middle, and superior temporal, superior frontal, and precentral gyri, and rostral anterior cingulate cortex; left banks of

superior temporal, caudal middle frontal, and fusiform gyri and lateral occipital, entorhinal, caudal anterior cingulate cortices; and the right inferior parietal cortex and precuneus (Supplementary Figure S5A and Table S22), those on *second-generation* (atypical;  $d=-0.277$  to  $-0.069$ ; LSM difference= $-3.48$  to  $-0.87\%$ ) in all but the right parahippocampus and isthmus cingulate cortex (Supplementary Figure S5B and Table S23), those on *first-generation* (typical;  $d=-0.341$  to  $-0.030$ ; LSM difference= $-6.92$  to  $-0.26\%$ ) in the bilateral cuneus, and parahippocampal, fusiform, lingual, pars orbitalis of inferior frontal, precentral, rostral middle frontal gyri, and caudal anterior cingulate, superior parietal, and lateral occipital cortices; the left pars opercularis of inferior frontal, transverse temporal, and poscentral gyri; and right pericalcarine and lateral orbitofrontal cortices (Supplementary Figure S5C and Table S24), and those on *both* antipsychotic medications (typical and atypical;  $d=-0.319$  to  $0.102$ ; LSM difference= $-3.76$  to  $1.61\%$ ) in the right pars triangularis of inferior frontal, and middle temporal gyri (Supplementary Figure S5D, Table S25) when compared to healthy volunteers.

In sum, individuals with schizophrenia who are unmedicated, on first-generation, or both first-generation and second-generation antipsychotic medications show significantly lower *regional* cortical surface area, while individuals with schizophrenia on second-generation antipsychotic medications show *widespread* lower cortical surface area when compared with healthy volunteers.

There are no significant differences in cortical surface area for any of the other group comparisons (Supplementary Tables S26-S31).

**Supplementary Results SR2.** Supplementary results for partial correlations with symptom severity scores*Partial correlations with total symptom severity*

Higher PANSS total symptom severity scores are significantly correlated with lower cortical thickness in left ( $r=-0.082$ ) and right ( $r=-0.103$ ) caudal middle frontal gyrus, left ( $r=-0.071$ ) and right ( $r=-0.064$ ) middle temporal gyrus, left pars triangularis of inferior frontal gyrus ( $r=-0.08$ ), left superior frontal gyrus ( $r=-0.077$ ), left fusiform gyrus ( $r=0.604$ ), and right inferior temporal gyrus ( $r=0.072$ ; Supplementary Figure 6B and Table S35).

There are no significant correlations between PANSS total symptom severity scores and cortical surface area for any of the DK atlas regions (Supplementary Table S45).

*Partial correlations with negative symptom severity*

Higher PANSS negative symptom severity scores are significantly correlated with lower cortical thickness for overall left ( $r=-0.085$ ) and right ( $r=-0.089$ ) hemisphere, and more specifically in the left ( $r=-0.106$ ) and right ( $r=-0.082$ ) fusiform gyrus, left ( $r=-0.099$ ) and right ( $r=-0.091$ ) lateral orbitofrontal cortex, left ( $r=-0.089$ ) and right ( $r=-0.096$ ) inferior temporal gyrus, left ( $r=-0.088$ ) and right ( $r=-0.076$ ) rostral middle frontal gyrus, left ( $r=-0.086$ ) and right ( $r=-0.08$ ) middle temporal gyrus, left ( $r=-0.095$ ) and right ( $r=-0.089$ ) superior frontal gyrus, left ( $r=-0.066$ ) and right ( $r=-0.056$ ) pars triangularis of inferior frontal gyrus, left ( $r=-0.079$ ) and right ( $r=-0.057$ ) pars orbitalis of inferior frontal gyrus, left ( $r=-0.1$ ) and right ( $r=-0.084$ ) superior temporal gyrus, left ( $r=-0.055$ ) and right ( $r=-0.075$ ) medial orbitofrontal cortex; the left banks of superior temporal sulcus ( $r=-0.063$ ), precuneus ( $r=-0.059$ ), temporal pole ( $r=-0.064$ ), and pars opercularis of inferior frontal gyrus ( $r=-0.099$ ); and the right caudal middle frontal gyrus ( $r=-0.099$ ), insula, ( $r=-0.085$ ), supramarginal gyrus ( $r=-0.071$ ), superior parietal cortex ( $r=-0.06$ ), and inferior parietal cortex ( $r=-0.057$ ; Supplementary Figure 6C and Table S37).

There are no significant correlations between PANSS negative symptom severity scores and cortical surface area for any of the DK atlas regions (Supplementary Table S47).

*Partial correlations with positive symptom severity*

Higher PANSS positive symptom severity scores are significantly correlated with lower cortical thickness in left ( $r=-0.089$ ) and right ( $r=-0.086$ ) caudal middle frontal gyrus, left ( $r=-0.067$ ) and right ( $r=-0.067$ ) middle temporal gyrus, left pars triangularis of inferior frontal gyrus ( $r=-0.078$ ), and right superior temporal gyrus ( $r=-0.078$ ; Supplementary Figure 6D and Table S36).

There are no significant correlations between PANSS total symptom severity scores and cortical surface area for any of the DK atlas regions (Supplementary Table S46).

**Supplementary Results SR3.** Supplementary results for subsamples with and without equal parental socioeconomic status

Parental socioeconomic status (SES) information was obtained from 18 (1987 SZ, 2620 HV) of the 39 samples (see Supplementary Table S1a. Sample demographics). Among these samples, 9 had non-significantly different parental SES between the groups (1050 SZ, 1038 HV), 1 had higher parental SES in SZ compared with HV, and 8 had lower parental SES in SZ compared with healthy volunteers (912 SZ, 1547 HV).

**Cortical thickness in subsamples with and without equal parental socioeconomic status.**

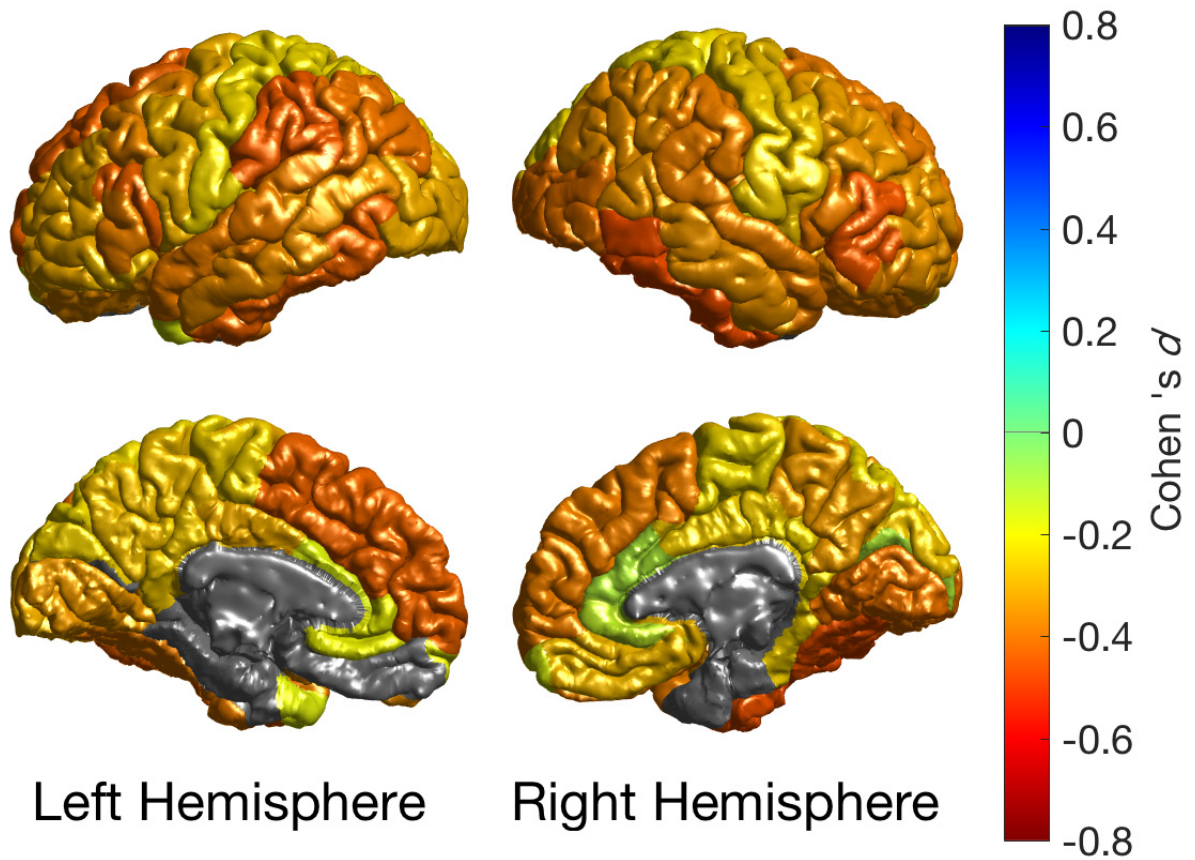
Analysis of samples with equivalent parental socioeconomic status (SES) and samples in which the parental socioeconomic status was higher in the HV compared with the SZ subjects show a largely similar pattern of effect sizes to those in the overall sample (Figures S8a and S8b, respectively, and Tables S52a and S52b, respectively). The total left and right mean thickness effect sizes for the groups with larger SES in HV than in SZ samples were  $d=-0.66$  and  $d=-0.62$ . The total left and right mean thickness effect sizes for the groups with similar SES in HV and SZ samples were  $d=-0.51$  and  $d=-0.51$ . The regional case-control effect sizes were more negative in 55 out of 68 regions for the samples in which HV SES was larger than SZ SES compared to the samples in which HV SES was similar to SZ SES. These findings suggest that case-control differences in parental SES affect cortical thickness differences between SZ and HV subjects and that controlling for parental SES is important.

**Surface area in subsamples with and without equal parental socioeconomic status.**

Analysis of samples with equivalent parental socioeconomic status (SES) and samples in which the parental socioeconomic status was higher in the HV compared with the SZ subjects both show only a few regions with significant effect sizes when compared to the overall sample (Figures S9a and S9b, respectively, and Tables S53a and S53b, respectively). The total left and right mean surface area effect sizes for the groups with larger SES in HV than in SZ samples were  $d=-0.24$  and  $d=-0.24$ . The total left and right mean surface effect sizes for the groups with similar SES in HV and SZ samples were  $d=-0.18$  and  $d=-0.19$ . The regional case-control effect sizes were more negative in 49 out of 68 regions for the samples in which HV SES was larger than SZ SES compared to the samples in which HV SES was similar to SZ SES. These findings suggest that case-control differences in parental SES have some effect on cortical surface area differences between SZ and HV subjects and that controlling for parental SES is important. They also suggest that the smaller effect sizes observed for cortical surface area compared with cortical thickness require substantive samples to detect cortical surface area differences between SZ and HV subjects reliably.

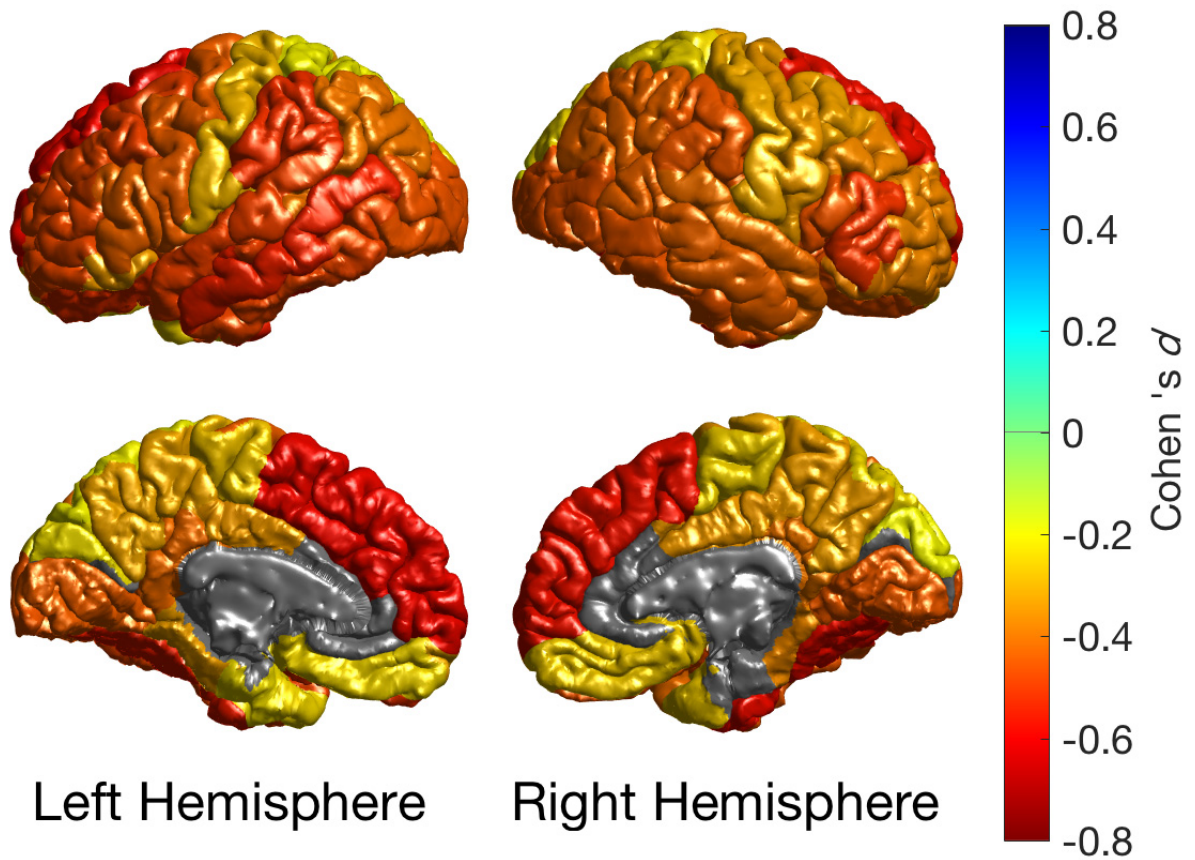


**Supplementary Figure S8a.** Cortical thickness differences between schizophrenia (SZ) and healthy volunteer (HV) groups with equivalent parental socioeconomic status

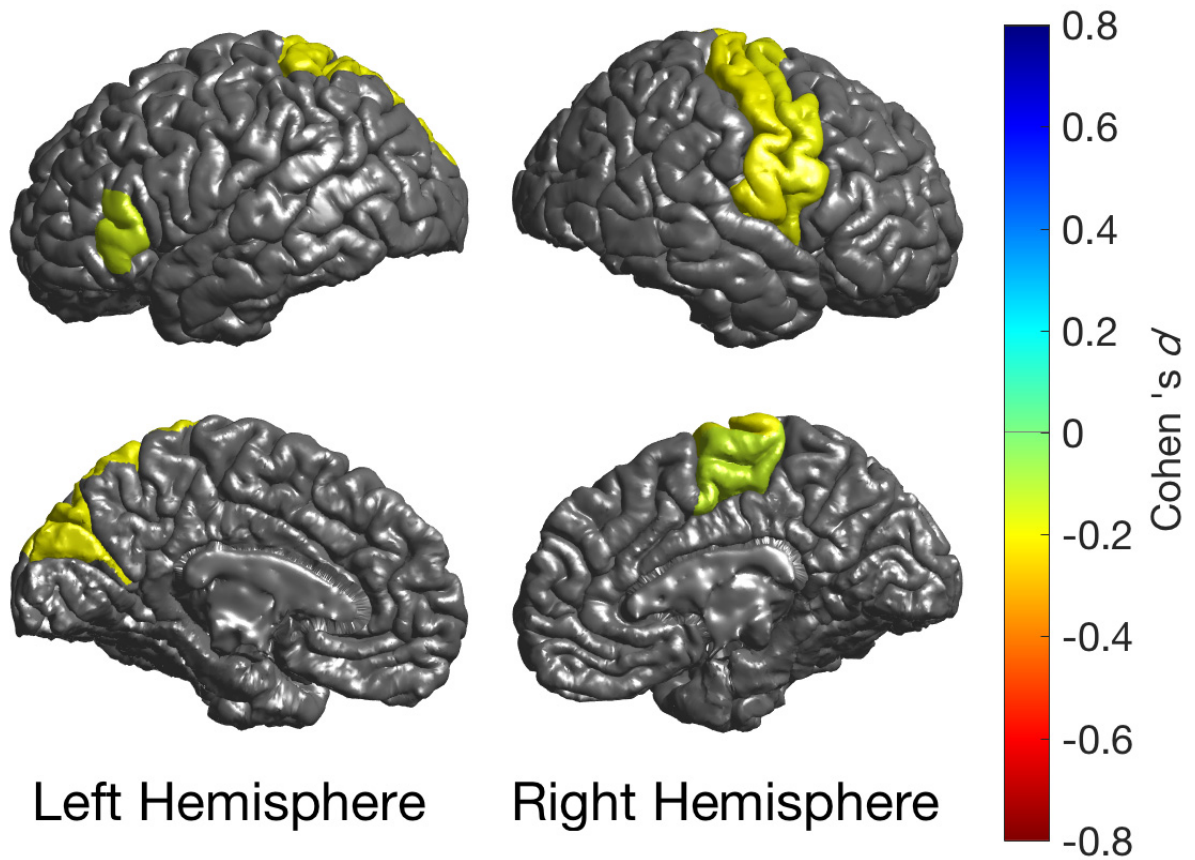


ACCEPTED

**Supplementary Figure S8b.** Cortical thickness differences between schizophrenia (SZ) and healthy volunteer (HV) groups with HV greater than SZ parental socioeconomic status



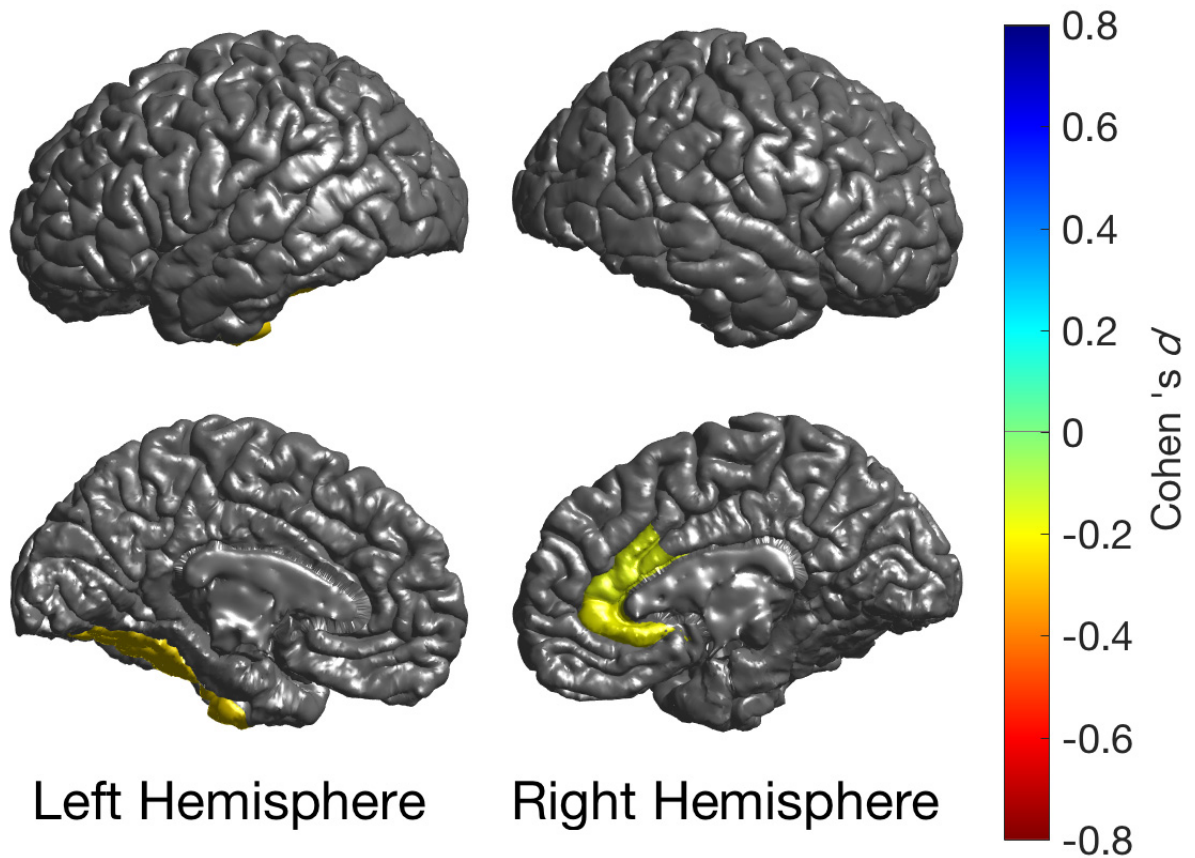
**Supplementary Figure S9a.** Cortical surface area differences between schizophrenia (SZ) and healthy volunteer (HV) groups with equivalent parental socioeconomic status



ACCEPTED



**Supplementary Figure S9b.** Cortical surface area differences between schizophrenia (SZ) and healthy volunteer (HV) groups with HV greater than SZ parental socioeconomic status



ACCEPT

**Supplementary Table S52a.** Cortical thickness differences between schizophrenia (SZ) and healthy volunteer (HV) groups with equivalent parental socioeconomic status

	Cohen's d		95% CI	%	p-value	FDR	N	N
	(SZ vs HV)	Std. Err.		Difference LSMeans		p-value	Controls	Patients
Left banks of superior temporal sulcus	-0.354	0.082	[-0.514 - -0.193]	-2.78	1.53E-05	5.35E-05	945	882
Left caudal anterior cingulate cortex	-0.168	0.049	[-0.263 - -0.073]	-1.73	5.51E-04	1.07E-03	941	888
Left caudal middle frontal gyrus	-0.369	0.06	[-0.486 - -0.252]	-2.13	6.94E-10	1.62E-08	943	886
Left cuneus	-0.255	0.063	[-0.379 - -0.132]	-1.69	4.97E-05	1.39E-04	944	889
Left entorhinal cortex	-0.129	0.075	[-0.276 - 0.017]	-1.57	8.30E-02	8.67E-02	942	887
Left fusiform gyrus	-0.388	0.123	[-0.63 - -0.147]	-2.28	1.63E-03	2.59E-03	943	884
Left inferior parietal cortex	-0.403	0.108	[-0.616 - -0.191]	-2.17	2.02E-04	5.18E-04	944	886
Left inferior temporal gyrus	-0.433	0.099	[-0.626 - -0.24]	-2.73	1.14E-05	4.42E-05	941	887
Left isthmus cingulate cortex	-0.272	0.047	[-0.364 - -0.179]	-2.14	9.72E-09	1.36E-07	943	886
Left lateral occipital cortex	-0.311	0.111	[-0.527 - -0.094]	-1.75	4.97E-03	6.96E-03	943	888
Left lateral orbitofrontal cortex	-0.357	0.1	[-0.553 - -0.161]	-2.48	3.54E-04	7.52E-04	943	888
Left lingual gyrus	-0.343	0.098	[-0.536 - -0.151]	-2.16	4.70E-04	9.40E-04	944	887
Left medial orbitofrontal cortex	-0.273	0.139	[-0.545 - -0.002]	-1.62	4.87E-02	5.24E-02	943	889
Left middle temporal gyrus	-0.358	0.099	[-0.552 - -0.165]	-2.35	2.73E-04	6.26E-04	943	889
Left parahippocampal gyrus	-0.125	0.099	[-0.319 - 0.07]	-1.89	2.08E-01	2.11E-01	941	889
Left paracentral lobule	-0.26	0.077	[-0.411 - -0.11]	-1.56	7.04E-04	1.31E-03	942	886
Left pars opercularis of inferior frontal gyrus	-0.433	0.087	[-0.603 - -0.263]	-2.66	6.11E-07	3.56E-06	945	885
Left pars orbitalis of inferior frontal gyrus	-0.291	0.124	[-0.534 - -0.049]	-2.69	1.83E-02	2.21E-02	941	889
Left pars triangularis of inferior frontal gyrus	-0.381	0.114	[-0.604 - -0.158]	-2.47	8.00E-04	1.40E-03	943	888
Left pericalcarine cortex	-0.07	0.047	[-0.162 - 0.023]	-0.62	1.39E-01	1.43E-01	944	888
Left postcentral gyrus	-0.244	0.095	[-0.431 - -0.058]	-1.41	1.04E-02	1.32E-02	940	886
Left posterior cingulate cortex	-0.315	0.068	[-0.448 - -0.183]	-1.86	3.13E-06	1.68E-05	944	886
Left precentral gyrus	-0.307	0.069	[-0.443 - -0.171]	-1.60	9.90E-06	4.08E-05	941	885
Left precuneus	-0.287	0.135	[-0.552 - -0.022]	-1.67	3.40E-02	3.91E-02	943	888
Left rostral anterior cingulate cortex	-0.191	0.062	[-0.313 - -0.069]	-1.65	2.21E-03	3.44E-03	944	887

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left rostral middle frontal gyrus	-0.316	0.094	[-0.5 - -0.133]	-1.84	7.23E-04	1.31E-03	944	885
Left superior frontal gyrus	-0.431	0.071	[-0.572 - -0.291]	-2.36	1.59E-09	2.78E-08	945	887
Left superior parietal cortex	-0.239	0.098	[-0.431 - -0.047]	-1.15	1.48E-02	1.82E-02	941	886
Left superior temporal gyrus	-0.386	0.104	[-0.59 - -0.182]	-2.05	2.07E-04	5.18E-04	942	886
Left supramarginal gyrus	-0.447	0.082	[-0.609 - -0.285]	-2.34	6.07E-08	4.25E-07	941	885
Left frontal pole	-0.19	0.067	[-0.322 - -0.058]	-1.66	4.76E-03	6.81E-03	941	888
Left temporal pole	-0.175	0.066	[-0.305 - -0.045]	-1.41	8.36E-03	1.12E-02	939	882
Left transverse temporal gyrus	-0.249	0.095	[-0.435 - -0.062]	-1.76	8.86E-03	1.15E-02	939	887
Left insula	-0.378	0.104	[-0.582 - -0.174]	-1.83	2.77E-04	6.26E-04	940	885
Right banks of superior temporal sulcus	-0.373	0.086	[-0.541 - -0.205]	-2.68	1.30E-05	4.79E-05	944	889
Right caudal anterior cingulate cortex	-0.098	0.047	[-0.191 - -0.006]	-0.99	3.76E-02	4.11E-02	944	885
Right caudal middle frontal gyrus	-0.333	0.047	[-0.426 - -0.24]	-2.13	2.32E-12	1.62E-10	944	888
Right cuneus	-0.275	0.06	[-0.393 - -0.158]	-1.83	4.13E-06	2.06E-05	943	888
Right entorhinal cortex	-0.128	0.113	[-0.348 - 0.093]	-1.38	2.57E-01	2.57E-01	941	887
Right fusiform gyrus	-0.46	0.089	[-0.634 - -0.285]	-2.54	2.61E-07	1.66E-06	943	888
Right inferior parietal cortex	-0.354	0.112	[-0.572 - -0.135]	-1.89	1.53E-03	2.49E-03	943	883
Right inferior temporal gyrus	-0.469	0.109	[-0.683 - -0.256]	-2.72	1.66E-05	5.52E-05	941	881
Right isthmus cingulate cortex	-0.248	0.054	[-0.354 - -0.141]	-1.98	5.10E-06	2.27E-05	942	883
Right lateral occipital cortex	-0.4	0.132	[-0.659 - -0.14]	-2.11	2.54E-03	3.79E-03	943	888
Right lateral orbitofrontal cortex	-0.381	0.145	[-0.664 - -0.097]	-2.45	8.54E-03	1.13E-02	945	883
Right lingual gyrus	-0.404	0.089	[-0.578 - -0.23]	-2.54	5.19E-06	2.27E-05	945	888
Right medial orbitofrontal cortex	-0.296	0.103	[-0.498 - -0.095]	-2.20	3.96E-03	5.77E-03	944	887
Right middle temporal gyrus	-0.349	0.103	[-0.551 - -0.147]	-2.08	7.29E-04	1.31E-03	945	888
Right parahippocampal gyrus	-0.26	0.047	[-0.352 - -0.167]	-2.66	4.00E-08	3.11E-07	945	887
Right paracentral lobule	-0.24	0.097	[-0.431 - -0.049]	-1.34	1.36E-02	1.70E-02	942	887
Right pars opercularis of inferior frontal gyrus	-0.388	0.105	[-0.594 - -0.182]	-2.58	2.25E-04	5.43E-04	941	888
Right pars orbitalis of inferior frontal gyrus	-0.366	0.066	[-0.495 - -0.236]	-3.06	2.89E-08	2.89E-07	943	887

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Right pars triangularis of inferior frontal gyrus	-0.453	0.082	[-0.615 - -0.291]	-3.00	3.97E-08	3.11E-07	943	888
Right pericalcarine cortex	-0.104	0.047	[-0.197 - -0.012]	-0.88	2.70E-02	3.15E-02	945	887
Right postcentral gyrus	-0.269	0.082	[-0.43 - -0.109]	-1.51	1.01E-03	1.72E-03	940	885
Right posterior cingulate cortex	-0.266	0.047	[-0.359 - -0.174]	-1.66	1.81E-08	2.11E-07	945	886
Right precentral gyrus	-0.281	0.092	[-0.461 - -0.101]	-1.48	2.26E-03	3.44E-03	939	888
Right precuneus	-0.339	0.126	[-0.586 - -0.092]	-1.89	7.14E-03	9.80E-03	943	886
Right rostral anterior cingulate cortex	-0.129	0.062	[-0.25 - -0.008]	-0.99	3.67E-02	4.08E-02	940	889
Right rostral middle frontal gyrus	-0.344	0.084	[-0.509 - -0.179]	-2.16	4.56E-05	1.33E-04	944	885
Right superior frontal gyrus	-0.386	0.062	[-0.507 - -0.265]	-2.16	3.78E-10	1.32E-08	945	888
Right superior parietal cortex	-0.239	0.105	[-0.445 - -0.032]	-1.03	2.34E-02	2.78E-02	942	886
Right superior temporal gyrus	-0.382	0.109	[-0.596 - -0.169]	-1.96	4.46E-04	9.17E-04	945	884
Right supramarginal gyrus	-0.382	0.12	[-0.618 - -0.147]	-1.94	1.47E-03	2.45E-03	944	888
Right frontal pole	-0.17	0.047	[-0.263 - -0.077]	-1.90	3.20E-04	7.01E-04	940	886
Right temporal pole	-0.203	0.109	[-0.417 - 0.01]	-1.47	6.17E-02	6.54E-02	935	886
Right transverse temporal gyrus	-0.199	0.095	[-0.385 - -0.013]	-1.52	3.61E-02	4.08E-02	942	885
Right insula	-0.32	0.083	[-0.483 - -0.157]	-1.69	1.24E-04	3.34E-04	942	887

**Supplementary Table S52b.** Cortical thickness differences between schizophrenia (SZ) and healthy volunteer (HV) groups with HV greater than SZ parental socioeconomic status

	Cohen's d			%		FDR	N	N
	(SZ vs HV)	Std. Err.	95% CI	Difference	p-value	p-value	Controls	Patients
				LSMeans				
Left banks of superior temporal sulcus	-0.409	0.06	[-0.526 - -0.292]	-2.14	7.56E-12	4.81E-11	1574	921
Left caudal anterior cingulate cortex	-0.121	0.124	[-0.365 - 0.122]	-0.91	3.30E-01	3.39E-01	1573	919
Left caudal middle frontal gyrus	-0.489	0.103	[-0.69 - -0.287]	-1.88	1.96E-06	3.62E-06	1573	920
Left cuneus	-0.232	0.105	[-0.437 - -0.027]	-1.10	2.63E-02	2.92E-02	1572	917
Left entorhinal cortex	-0.235	0.081	[-0.394 - -0.076]	-2.15	3.78E-03	4.81E-03	1574	922
Left fusiform gyrus	-0.551	0.086	[-0.719 - -0.382]	-2.16	1.50E-10	6.56E-10	1573	920
Left inferior parietal cortex	-0.404	0.081	[-0.562 - -0.246]	-1.63	5.44E-07	1.06E-06	1573	920
Left inferior temporal gyrus	-0.483	0.111	[-0.701 - -0.265]	-2.05	1.42E-05	2.17E-05	1574	922
Left isthmus cingulate cortex	-0.422	0.186	[-0.785 - -0.058]	-2.12	2.30E-02	2.60E-02	1574	922
Left lateral occipital cortex	-0.455	0.149	[-0.747 - -0.164]	-1.93	2.21E-03	2.91E-03	1572	920
Left lateral orbitofrontal cortex	-0.514	0.111	[-0.732 - -0.297]	-2.11	3.67E-06	6.27E-06	1573	920
Left lingual gyrus	-0.441	0.054	[-0.547 - -0.334]	-1.91	4.46E-16	1.04E-14	1573	922
Left medial orbitofrontal cortex	-0.248	0.095	[-0.434 - -0.063]	-0.98	8.77E-03	1.02E-02	1571	922
Left middle temporal gyrus	-0.542	0.088	[-0.714 - -0.37]	-2.25	6.76E-10	2.49E-09	1574	922
Left parahippocampal gyrus	-0.335	0.05	[-0.433 - -0.237]	-2.68	1.81E-11	9.72E-11	1574	922
Left paracentral lobule	-0.279	0.053	[-0.383 - -0.175]	-1.39	1.40E-07	2.97E-07	1572	921
Left pars opercularis of inferior frontal gyrus	-0.43	0.092	[-0.611 - -0.249]	-1.86	3.20E-06	5.59E-06	1573	920
Left pars orbitalis of inferior frontal gyrus	-0.341	0.125	[-0.585 - -0.096]	-2.11	6.26E-03	7.43E-03	1573	920
Left pars triangularis of inferior frontal gyrus	-0.432	0.075	[-0.578 - -0.286]	-2.05	6.81E-09	2.07E-08	1572	922
Left pericalcarine cortex	-0.105	0.118	[-0.335 - 0.126]	-0.38	3.73E-01	3.75E-01	1572	921
Left postcentral gyrus	-0.302	0.065	[-0.428 - -0.175]	-1.43	2.99E-06	5.37E-06	1573	921
Left posterior cingulate cortex	-0.344	0.077	[-0.496 - -0.193]	-1.56	8.21E-06	1.31E-05	1573	921
Left precentral gyrus	-0.44	0.077	[-0.59 - -0.289]	-1.90	9.33E-09	2.72E-08	1574	920
Left precuneus	-0.325	0.044	[-0.412 - -0.238]	-1.56	2.42E-13	2.42E-12	1573	919
Left rostral anterior cingulate cortex	-0.15	0.117	[-0.38 - 0.081]	-1.18	2.03E-01	2.12E-01	1574	921

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left rostral middle frontal gyrus	-0.475	0.112	[-0.695 - -0.256]	-1.83	2.24E-05	3.27E-05	1573	920
Left superior frontal gyrus	-0.585	0.114	[-0.808 - -0.362]	-2.18	2.80E-07	5.67E-07	1573	922
Left superior parietal cortex	-0.203	0.061	[-0.322 - -0.085]	-0.98	7.82E-04	1.05E-03	1573	921
Left superior temporal gyrus	-0.489	0.079	[-0.644 - -0.335]	-2.04	5.61E-10	2.18E-09	1574	920
Left supramarginal gyrus	-0.517	0.101	[-0.714 - -0.32]	-1.95	2.84E-07	5.67E-07	1574	920
Left frontal pole	-0.318	0.111	[-0.535 - -0.101]	-2.02	4.15E-03	5.09E-03	1571	921
Left temporal pole	-0.248	0.085	[-0.414 - -0.082]	-1.97	3.42E-03	4.43E-03	1573	921
Left transverse temporal gyrus	-0.262	0.044	[-0.349 - -0.175]	-1.92	3.13E-09	1.04E-08	1573	922
Left insula	-0.465	0.088	[-0.637 - -0.293]	-1.61	1.19E-07	2.61E-07	1574	920
Right banks of superior temporal sulcus	-0.389	0.044	[-0.476 - -0.301]	-2.00	2.19E-18	1.53E-16	1574	922
Right caudal anterior cingulate cortex	-0.219	0.119	[-0.452 - 0.015]	-1.66	6.61E-02	7.23E-02	1573	921
Right caudal middle frontal gyrus	-0.333	0.044	[-0.42 - -0.246]	-1.43	6.00E-14	7.00E-13	1574	922
Right cuneus	-0.198	0.085	[-0.364 - -0.033]	-0.96	1.90E-02	2.18E-02	1574	919
Right entorhinal cortex	-0.124	0.089	[-0.298 - 0.051]	-1.48	1.65E-01	1.75E-01	1574	920
Right fusiform gyrus	-0.578	0.086	[-0.748 - -0.409]	-2.28	2.18E-11	1.09E-10	1574	921
Right inferior parietal cortex	-0.426	0.073	[-0.569 - -0.283]	-1.68	5.75E-09	1.83E-08	1573	921
Right inferior temporal gyrus	-0.453	0.082	[-0.613 - -0.292]	-1.99	3.56E-08	8.58E-08	1573	922
Right isthmus cingulate cortex	-0.401	0.113	[-0.622 - -0.179]	-2.14	3.93E-04	5.40E-04	1572	921
Right lateral occipital cortex	-0.457	0.162	[-0.775 - -0.139]	-1.84	4.86E-03	5.86E-03	1573	922
Right lateral orbitofrontal cortex	-0.462	0.054	[-0.567 - -0.357]	-1.99	6.73E-18	2.36E-16	1572	922
Right lingual gyrus	-0.448	0.082	[-0.608 - -0.287]	-1.88	4.65E-08	1.09E-07	1573	922
Right medial orbitofrontal cortex	-0.269	0.044	[-0.356 - -0.182]	-1.14	1.22E-09	4.27E-09	1574	922
Right middle temporal gyrus	-0.43	0.056	[-0.539 - -0.321]	-1.74	1.23E-14	2.15E-13	1574	921
Right parahippocampal gyrus	-0.372	0.052	[-0.474 - -0.269]	-2.57	1.15E-12	8.95E-12	1574	922
Right paracentral lobule	-0.257	0.046	[-0.347 - -0.166]	-1.29	2.62E-08	6.94E-08	1573	922
Right pars opercularis of inferior frontal gyrus	-0.456	0.08	[-0.613 - -0.299]	-1.83	1.36E-08	3.81E-08	1574	922
Right pars orbitalis of inferior frontal gyrus	-0.38	0.069	[-0.515 - -0.245]	-2.20	3.53E-08	8.58E-08	1574	921

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Right pars triangularis of inferior frontal gyrus	-0.511	0.118	[-0.742 - -0.28]	-1.86	1.45E-05	2.17E-05	1574	922
Right pericalcarine cortex	-0.082	0.092	[-0.263 - 0.099]	-0.22	3.75E-01	3.75E-01	1573	922
Right postcentral gyrus	-0.319	0.044	[-0.406 - -0.232]	-1.46	6.12E-13	5.35E-12	1574	922
Right posterior cingulate cortex	-0.344	0.079	[-0.499 - -0.189]	-1.70	1.39E-05	2.17E-05	1573	922
Right precentral gyrus	-0.341	0.052	[-0.444 - -0.239]	-1.52	6.21E-11	2.90E-10	1574	922
Right precuneus	-0.336	0.044	[-0.422 - -0.249]	-1.50	4.01E-14	5.62E-13	1574	921
Right rostral anterior cingulate cortex	-0.137	0.083	[-0.3 - 0.026]	-1.05	9.86E-02	1.06E-01	1573	921
Right rostral middle frontal gyrus	-0.373	0.102	[-0.573 - -0.173]	-1.40	2.57E-04	3.60E-04	1573	922
Right superior frontal gyrus	-0.569	0.124	[-0.811 - -0.326]	-2.00	4.28E-06	7.14E-06	1574	922
Right superior parietal cortex	-0.243	0.053	[-0.347 - -0.138]	-1.18	5.36E-06	8.72E-06	1574	922
Right superior temporal gyrus	-0.415	0.083	[-0.578 - -0.252]	-1.73	6.33E-07	1.20E-06	1574	920
Right supramarginal gyrus	-0.451	0.065	[-0.577 - -0.324]	-1.81	2.75E-12	1.93E-11	1573	922
Right frontal pole	-0.266	0.071	[-0.405 - -0.127]	-1.84	1.71E-04	2.44E-04	1574	922
Right temporal pole	-0.265	0.092	[-0.445 - -0.084]	-1.99	4.12E-03	5.09E-03	1574	920
Right transverse temporal gyrus	-0.298	0.044	[-0.385 - -0.211]	-1.85	1.65E-11	9.65E-11	1574	921
Right insula	-0.474	0.089	[-0.649 - -0.299]	-1.66	1.13E-07	2.55E-07	1574	922



**Supplementary Table S53a.** Cortical surface area differences between schizophrenia (SZ) and healthy volunteer (HV) groups with equivalent parental socioeconomic status

	Cohen's d			%		FDR	N	N
	(SZ vs HV)	Std. Err.	95% CI	Difference	p-value	p-value	Controls	Patients
				LSMeans				
Left banks of superior temporal sulcus	-0.122	0.071	[-0.261 - 0.017]	-1.91	8.54E-02	2.99E-01	944	880
Left caudal anterior cingulate cortex	-0.078	0.099	[-0.271 - 0.116]	-1.79	4.32E-01	5.50E-01	940	886
Left caudal middle frontal gyrus	-0.148	0.06	[-0.266 - -0.031]	-2.38	1.34E-02	9.40E-02	942	883
Left cuneus	-0.198	0.063	[-0.321 - -0.075]	-2.57	1.57E-03	1.83E-02	944	887
Left entorhinal cortex	-0.109	0.096	[-0.296 - 0.079]	-2.96	2.55E-01	3.88E-01	942	886
Left fusiform gyrus	-0.114	0.11	[-0.329 - 0.101]	-2.21	2.99E-01	4.19E-01	942	883
Left inferior parietal cortex	-0.186	0.091	[-0.364 - -0.007]	-2.98	4.11E-02	2.06E-01	944	886
Left inferior temporal gyrus	-0.175	0.116	[-0.402 - 0.051]	-3.01	1.30E-01	3.37E-01	941	887
Left isthmus cingulate cortex	-0.062	0.089	[-0.237 - 0.112]	-1.38	4.84E-01	5.55E-01	943	888
Left lateral occipital cortex	-0.092	0.105	[-0.298 - 0.114]	-1.67	3.82E-01	5.08E-01	943	887
Left lateral orbitofrontal cortex	-0.116	0.076	[-0.264 - 0.032]	-1.75	1.23E-01	3.37E-01	943	887
Left lingual gyrus	-0.045	0.079	[-0.2 - 0.11]	-0.90	5.67E-01	6.20E-01	944	885
Left medial orbitofrontal cortex	-0.06	0.105	[-0.265 - 0.145]	-1.82	5.67E-01	6.20E-01	943	888
Left middle temporal gyrus	-0.135	0.1	[-0.332 - 0.062]	-1.94	1.78E-01	3.55E-01	943	887
Left parahippocampal gyrus	-0.066	0.113	[-0.287 - 0.155]	-1.71	5.58E-01	6.20E-01	941	885
Left paracentral lobule	-0.072	0.047	[-0.165 - 0.02]	-1.04	1.25E-01	3.37E-01	942	884
Left pars opercularis of inferior frontal gyrus	-0.167	0.093	[-0.349 - 0.014]	-3.25	7.05E-02	2.84E-01	945	883
Left pars orbitalis of inferior frontal gyrus	-0.104	0.078	[-0.257 - 0.05]	-1.69	1.85E-01	3.55E-01	941	888
Left pars triangularis of inferior frontal gyrus	-0.15	0.047	[-0.242 - -0.057]	-2.17	1.52E-03	1.83E-02	943	887
Left pericalcarine cortex	-0.066	0.059	[-0.182 - 0.05]	-1.13	2.63E-01	3.92E-01	944	886
Left postcentral gyrus	-0.18	0.101	[-0.377 - 0.018]	-2.32	7.47E-02	2.84E-01	940	885
Left posterior cingulate cortex	-0.092	0.106	[-0.3 - 0.116]	-1.78	3.85E-01	5.08E-01	943	886
Left precentral gyrus	-0.145	0.082	[-0.306 - 0.016]	-1.97	7.71E-02	2.84E-01	943	884
Left precuneus	-0.125	0.086	[-0.293 - 0.043]	-1.95	1.44E-01	3.49E-01	945	887
Left rostral anterior cingulate cortex	-0.099	0.071	[-0.238 - 0.04]	-2.58	1.63E-01	3.55E-01	944	888



	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left rostral middle frontal gyrus	-0.144	0.109	[-0.357 - 0.07]	-2.66	1.87E-01	3.55E-01	943	884
Left superior frontal gyrus	-0.155	0.098	[-0.347 - 0.037]	-2.25	1.13E-01	3.37E-01	945	885
Left superior parietal cortex	-0.196	0.071	[-0.336 - -0.056]	-2.71	5.94E-03	4.62E-02	942	883
Left superior temporal gyrus	-0.12	0.075	[-0.267 - 0.026]	-1.57	1.07E-01	3.37E-01	942	886
Left supramarginal gyrus	-0.119	0.088	[-0.292 - 0.054]	-2.25	1.77E-01	3.55E-01	942	883
Left frontal pole	0.03	0.106	[-0.177 - 0.237]	-0.96	7.74E-01	7.97E-01	941	886
Left temporal pole	-0.071	0.06	[-0.188 - 0.046]	-0.93	2.34E-01	3.88E-01	937	881
Left transverse temporal gyrus	-0.082	0.07	[-0.218 - 0.055]	-1.68	2.41E-01	3.88E-01	938	885
Left insula	-0.112	0.086	[-0.281 - 0.056]	-1.33	1.93E-01	3.55E-01	939	883
Right banks of superior temporal sulcus	-0.143	0.068	[-0.276 - -0.01]	-2.22	3.46E-02	1.86E-01	944	888
Right caudal anterior cingulate cortex	-0.055	0.076	[-0.205 - 0.094]	-1.83	4.69E-01	5.55E-01	944	885
Right caudal middle frontal gyrus	-0.16	0.084	[-0.325 - 0.006]	-2.61	5.87E-02	2.72E-01	944	886
Right cuneus	-0.129	0.097	[-0.32 - 0.061]	-2.12	1.84E-01	3.55E-01	943	885
Right entorhinal cortex	-0.015	0.047	[-0.107 - 0.078]	-0.35	7.57E-01	7.90E-01	940	885
Right fusiform gyrus	-0.13	0.121	[-0.368 - 0.107]	-2.27	2.81E-01	4.08E-01	944	886
Right inferior parietal cortex	-0.157	0.094	[-0.341 - 0.028]	-2.22	9.61E-02	3.20E-01	943	883
Right inferior temporal gyrus	-0.178	0.136	[-0.445 - 0.089]	-3.09	1.92E-01	3.55E-01	941	881
Right isthmus cingulate cortex	-0.078	0.087	[-0.248 - 0.092]	-1.61	3.70E-01	5.08E-01	942	883
Right lateral occipital cortex	-0.153	0.082	[-0.313 - 0.008]	-2.26	6.22E-02	2.72E-01	943	887
Right lateral orbitofrontal cortex	-0.109	0.094	[-0.294 - 0.075]	-1.85	2.45E-01	3.88E-01	945	883
Right lingual gyrus	-0.07	0.093	[-0.252 - 0.112]	-1.01	4.51E-01	5.54E-01	945	888
Right medial orbitofrontal cortex	-0.094	0.123	[-0.335 - 0.147]	-1.96	4.43E-01	5.54E-01	944	887
Right middle temporal gyrus	-0.108	0.129	[-0.361 - 0.145]	-2.34	4.04E-01	5.24E-01	945	886
Right parahippocampal gyrus	-0.046	0.107	[-0.256 - 0.165]	-1.43	6.71E-01	7.11E-01	944	886
Right paracentral lobule	-0.13	0.047	[-0.223 - -0.038]	-1.81	5.78E-03	4.62E-02	943	886
Right pars opercularis of inferior frontal gyrus	-0.22	0.091	[-0.397 - -0.042]	-3.85	1.52E-02	9.70E-02	941	887
Right pars orbitalis of inferior frontal gyrus	-0.056	0.077	[-0.207 - 0.094]	-1.38	4.63E-01	5.55E-01	943	887

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Right pars triangularis of inferior frontal gyrus	-0.132	0.058	[-0.246 - -0.017]	-2.28	2.43E-02	1.42E-01	942	887
Right pericalcarine cortex	-0.069	0.06	[-0.186 - 0.048]	-0.95	2.50E-01	3.88E-01	945	886
Right postcentral gyrus	-0.204	0.067	[-0.335 - -0.072]	-2.46	2.46E-03	2.46E-02	942	884
Right posterior cingulate cortex	-0.021	0.115	[-0.246 - 0.205]	-0.99	8.56E-01	8.56E-01	945	884
Right precentral gyrus	-0.185	0.047	[-0.277 - -0.092]	-2.02	9.46E-05	2.04E-03	939	887
Right precuneus	-0.136	0.091	[-0.316 - 0.043]	-2.22	1.36E-01	3.39E-01	943	886
Right rostral anterior cingulate cortex	-0.06	0.108	[-0.272 - 0.152]	-2.38	5.77E-01	6.21E-01	940	887
Right rostral middle frontal gyrus	-0.114	0.092	[-0.294 - 0.065]	-1.96	2.11E-01	3.68E-01	943	885
Right superior frontal gyrus	-0.189	0.125	[-0.434 - 0.055]	-2.67	1.29E-01	3.37E-01	945	886
Right superior parietal cortex	-0.134	0.106	[-0.342 - 0.073]	-2.25	2.05E-01	3.68E-01	942	884
Right superior temporal gyrus	-0.079	0.113	[-0.3 - 0.142]	-1.67	4.83E-01	5.55E-01	945	885
Right supramarginal gyrus	-0.121	0.113	[-0.342 - 0.101]	-2.17	2.86E-01	4.08E-01	943	888
Right frontal pole	0.015	0.084	[-0.149 - 0.179]	-0.54	8.55E-01	8.56E-01	940	885
Right temporal pole	-0.061	0.049	[-0.157 - 0.035]	-0.76	2.16E-01	3.68E-01	937	885
Right transverse temporal gyrus	-0.182	0.047	[-0.275 - -0.089]	-3.04	1.17E-04	2.04E-03	941	886
Right insula	-0.11	0.08	[-0.266 - 0.047]	-1.70	1.70E-01	3.55E-01	943	886

**Supplementary Table S53b.** Cortical surface area differences between schizophrenia (SZ) and healthy volunteer (HV) groups with HV greater than SZ parental socioeconomic status

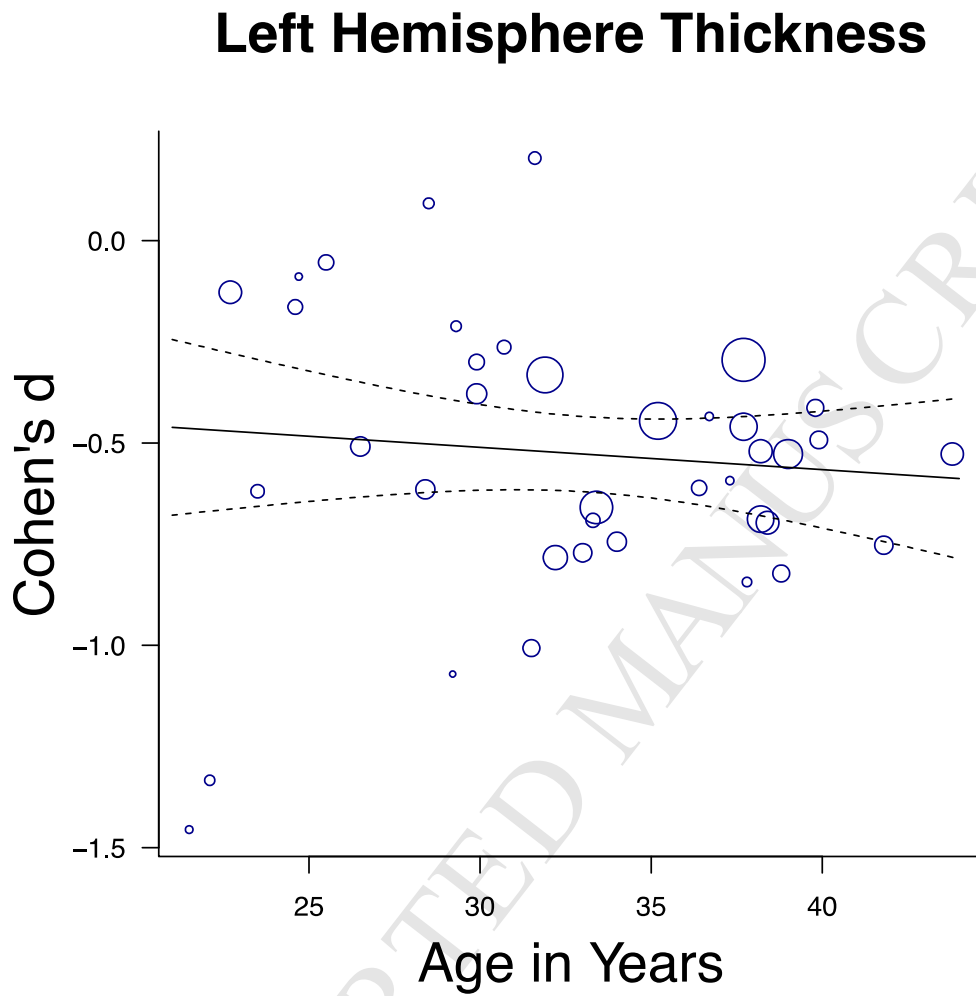
	Cohen's d			%		FDR	N	N
	(SZ vs HV)	Std. Err.	95% CI	Difference	p-value	p-value	Controls	Patients
				LSMeans				
Left banks of superior temporal sulcus	-0.182	0.095	[-0.368 - 0.004]	-1.88	5.47E-02	2.13E-01	1573	921
Left caudal anterior cingulate cortex	-0.084	0.111	[-0.302 - 0.134]	-1.09	4.48E-01	4.94E-01	1574	921
Left caudal middle frontal gyrus	-0.164	0.125	[-0.409 - 0.081]	-1.58	1.90E-01	2.90E-01	1573	921
Left cuneus	-0.079	0.105	[-0.286 - 0.127]	-0.72	4.52E-01	4.94E-01	1572	920
Left entorhinal cortex	-0.185	0.073	[-0.328 - -0.042]	-2.26	1.13E-02	7.21E-02	1572	921
Left fusiform gyrus	-0.253	0.053	[-0.356 - -0.15]	-2.11	1.54E-06	1.08E-04	1571	922
Left inferior parietal cortex	-0.173	0.135	[-0.438 - 0.091]	-1.67	1.99E-01	2.90E-01	1572	921
Left inferior temporal gyrus	-0.234	0.089	[-0.408 - -0.06]	-2.48	8.43E-03	6.63E-02	1574	920
Left isthmus cingulate cortex	-0.089	0.125	[-0.333 - 0.155]	-1.21	4.74E-01	5.10E-01	1572	919
Left lateral occipital cortex	-0.175	0.114	[-0.399 - 0.049]	-1.42	1.25E-01	2.45E-01	1571	922
Left lateral orbitofrontal cortex	-0.151	0.171	[-0.486 - 0.184]	-1.44	3.77E-01	4.36E-01	1571	922
Left lingual gyrus	-0.161	0.1	[-0.358 - 0.036]	-1.27	1.09E-01	2.45E-01	1573	921
Left medial orbitofrontal cortex	-0.134	0.148	[-0.423 - 0.155]	-1.39	3.64E-01	4.32E-01	1573	920
Left middle temporal gyrus	-0.218	0.141	[-0.494 - 0.058]	-2.02	1.22E-01	2.45E-01	1571	921
Left parahippocampal gyrus	-0.133	0.052	[-0.235 - -0.031]	-0.74	1.08E-02	7.21E-02	1574	921
Left paracentral lobule	-0.084	0.096	[-0.273 - 0.104]	-0.55	3.80E-01	4.36E-01	1573	920
Left pars opercularis of inferior frontal gyrus	-0.147	0.095	[-0.333 - 0.04]	-1.20	1.24E-01	2.45E-01	1573	922
Left pars orbitalis of inferior frontal gyrus	-0.249	0.16	[-0.562 - 0.064]	-2.31	1.19E-01	2.45E-01	1571	921
Left pars triangularis of inferior frontal gyrus	-0.063	0.113	[-0.285 - 0.159]	-0.30	5.78E-01	5.95E-01	1572	921
Left pericalcarine cortex	-0.12	0.091	[-0.297 - 0.057]	-1.27	1.85E-01	2.90E-01	1573	922
Left postcentral gyrus	-0.17	0.116	[-0.398 - 0.058]	-1.09	1.43E-01	2.45E-01	1572	922
Left posterior cingulate cortex	-0.122	0.115	[-0.347 - 0.103]	-0.97	2.88E-01	3.74E-01	1574	921
Left precentral gyrus	-0.184	0.15	[-0.478 - 0.109]	-0.83	2.19E-01	3.06E-01	1573	921
Left precuneus	-0.105	0.104	[-0.309 - 0.099]	-0.65	3.14E-01	3.92E-01	1573	922
Left rostral anterior cingulate cortex	-0.183	0.143	[-0.463 - 0.096]	-1.90	1.99E-01	2.90E-01	1573	922

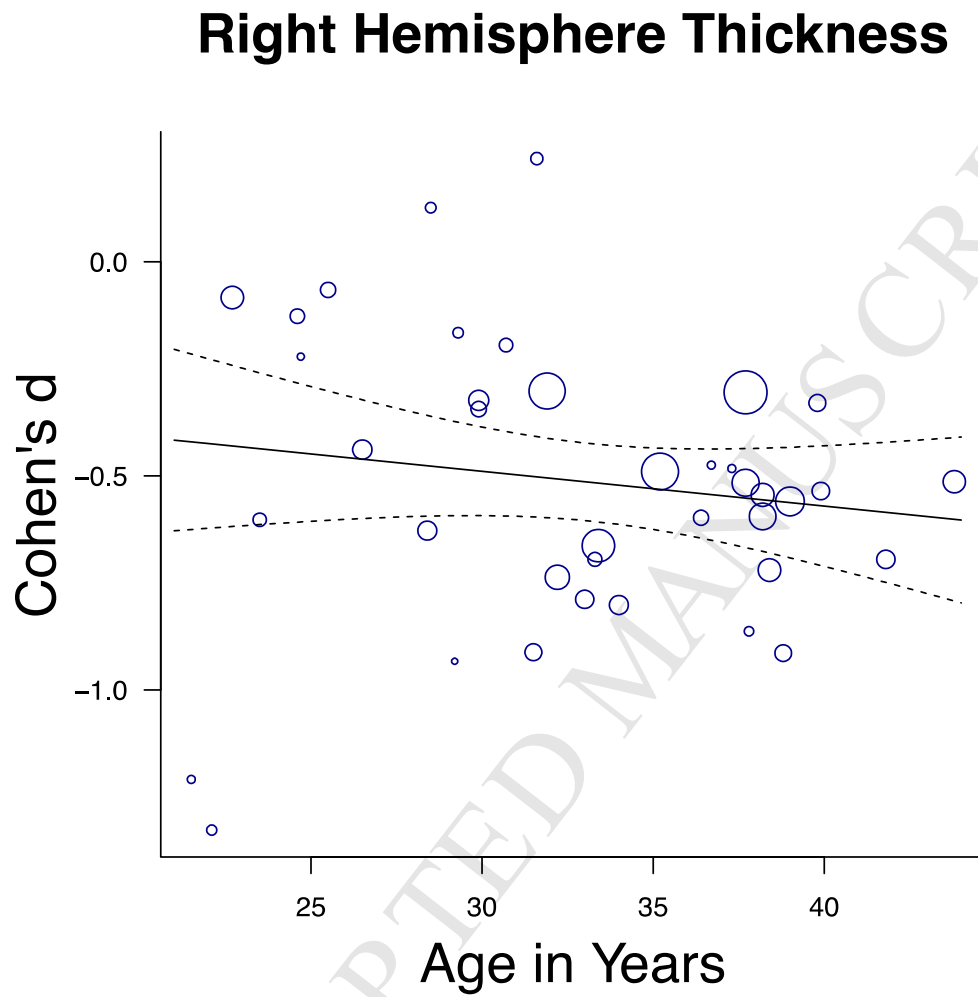
	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Left rostral middle frontal gyrus	-0.142	0.127	[-0.39 - 0.106]	-1.12	2.61E-01	3.45E-01	1574	918
Left superior frontal gyrus	-0.224	0.134	[-0.486 - 0.039]	-1.52	9.47E-02	2.45E-01	1573	922
Left superior parietal cortex	-0.179	0.091	[-0.357 - -0.001]	-1.23	4.92E-02	2.02E-01	1574	921
Left superior temporal gyrus	-0.164	0.11	[-0.38 - 0.052]	-1.31	1.36E-01	2.45E-01	1574	921
Left supramarginal gyrus	-0.083	0.122	[-0.322 - 0.155]	-1.16	4.93E-01	5.23E-01	1574	922
Left frontal pole	-0.096	0.075	[-0.242 - 0.051]	-1.24	1.99E-01	2.90E-01	1574	920
Left temporal pole	-0.116	0.071	[-0.256 - 0.023]	-0.96	1.03E-01	2.45E-01	1573	920
Left transverse temporal gyrus	-0.138	0.082	[-0.299 - 0.023]	-1.44	9.25E-02	2.45E-01	1571	920
Left insula	-0.064	0.14	[-0.338 - 0.21]	-0.57	6.46E-01	6.55E-01	1574	920
Right banks of superior temporal sulcus	-0.177	0.113	[-0.399 - 0.044]	-2.04	1.17E-01	2.45E-01	1573	922
Right caudal anterior cingulate cortex	-0.166	0.054	[-0.273 - -0.059]	-2.51	2.32E-03	3.25E-02	1573	922
Right caudal middle frontal gyrus	-0.111	0.107	[-0.321 - 0.099]	-0.84	3.01E-01	3.82E-01	1572	921
Right cuneus	-0.152	0.105	[-0.357 - 0.053]	-1.24	1.47E-01	2.45E-01	1573	921
Right entorhinal cortex	-0.173	0.061	[-0.293 - -0.053]	-2.95	4.65E-03	5.18E-02	1574	920
Right fusiform gyrus	-0.216	0.097	[-0.407 - -0.025]	-2.18	2.70E-02	1.26E-01	1574	922
Right inferior parietal cortex	-0.216	0.097	[-0.407 - -0.025]	-1.90	2.64E-02	1.26E-01	1572	921
Right inferior temporal gyrus	-0.203	0.124	[-0.446 - 0.041]	-2.28	1.02E-01	2.45E-01	1574	921
Right isthmus cingulate cortex	-0.01	0.116	[-0.238 - 0.218]	-0.02	9.34E-01	9.34E-01	1572	921
Right lateral occipital cortex	-0.108	0.126	[-0.355 - 0.138]	-0.76	3.90E-01	4.41E-01	1573	921
Right lateral orbitofrontal cortex	-0.123	0.133	[-0.382 - 0.137]	-0.81	3.55E-01	4.29E-01	1574	922
Right lingual gyrus	-0.192	0.069	[-0.327 - -0.058]	-1.31	5.18E-03	5.18E-02	1574	922
Right medial orbitofrontal cortex	-0.192	0.131	[-0.448 - 0.064]	-1.47	1.42E-01	2.45E-01	1573	922
Right middle temporal gyrus	-0.207	0.142	[-0.484 - 0.07]	-1.77	1.44E-01	2.45E-01	1573	922
Right parahippocampal gyrus	-0.139	0.081	[-0.297 - 0.019]	-0.94	8.48E-02	2.45E-01	1573	919
Right paracentral lobule	-0.112	0.099	[-0.306 - 0.083]	-0.65	2.59E-01	3.45E-01	1573	921
Right pars opercularis of inferior frontal gyrus	-0.124	0.047	[-0.216 - -0.032]	-1.00	8.53E-03	6.63E-02	1572	921
Right pars orbitalis of inferior frontal gyrus	-0.219	0.119	[-0.452 - 0.015]	-2.08	6.68E-02	2.45E-01	1574	920

	Cohen's d (SZ vs HV)	Std. Err.	95% CI	% Difference LSMeans	p-value	FDR p-value	N Controls	N Patients
Right pars triangularis of inferior frontal gyrus	-0.156	0.097	[-0.346 - 0.035]	-1.58	1.09E-01	2.45E-01	1574	920
Right pericalcarine cortex	-0.109	0.092	[-0.29 - 0.073]	-0.87	2.40E-01	3.29E-01	1573	922
Right postcentral gyrus	-0.183	0.106	[-0.392 - 0.025]	-1.27	8.50E-02	2.45E-01	1574	922
Right posterior cingulate cortex	-0.143	0.092	[-0.323 - 0.037]	-1.64	1.18E-01	2.45E-01	1573	922
Right precentral gyrus	-0.194	0.147	[-0.482 - 0.093]	-1.10	1.85E-01	2.90E-01	1574	922
Right precuneus	-0.167	0.071	[-0.307 - -0.027]	-1.26	1.95E-02	1.14E-01	1574	922
Right rostral anterior cingulate cortex	-0.197	0.048	[-0.29 - -0.104]	-2.57	3.42E-05	7.99E-04	1574	922
Right rostral middle frontal gyrus	-0.146	0.15	[-0.44 - 0.148]	-1.02	3.30E-01	4.05E-01	1574	922
Right superior frontal gyrus	-0.182	0.145	[-0.465 - 0.102]	-1.15	2.09E-01	2.98E-01	1573	922
Right superior parietal cortex	-0.161	0.071	[-0.301 - -0.021]	-1.08	2.38E-02	1.26E-01	1572	922
Right superior temporal gyrus	-0.177	0.115	[-0.401 - 0.048]	-1.25	1.23E-01	2.45E-01	1574	919
Right supramarginal gyrus	-0.132	0.089	[-0.307 - 0.043]	-1.29	1.38E-01	2.45E-01	1573	921
Right frontal pole	-0.131	0.074	[-0.277 - 0.015]	-1.48	7.86E-02	2.45E-01	1574	922
Right temporal pole	-0.123	0.083	[-0.286 - 0.04]	-1.00	1.39E-01	2.45E-01	1573	922
Right transverse temporal gyrus	-0.18	0.089	[-0.354 - -0.005]	-2.20	4.34E-02	1.90E-01	1574	919
Right insula	-0.08	0.139	[-0.353 - 0.194]	-1.00	5.68E-01	5.93E-01	1574	921

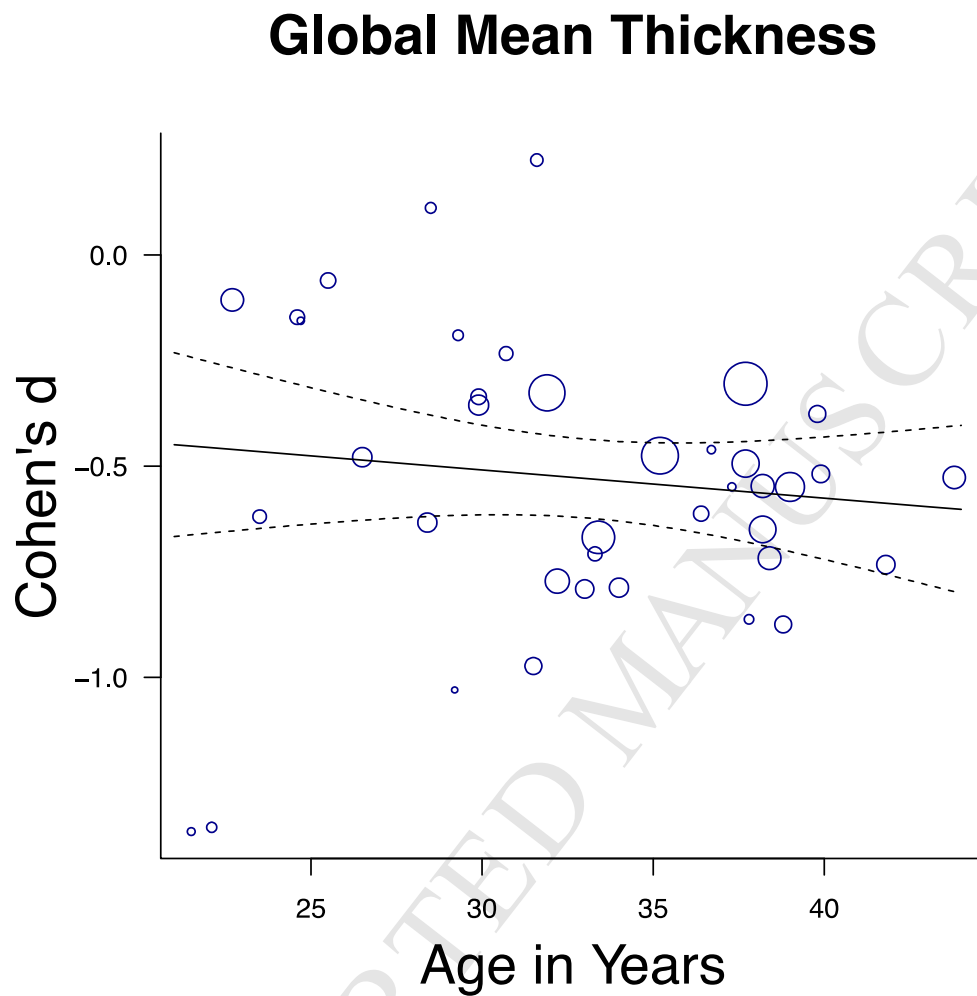
**Meta-Regression Results for Relationship between Left, Right, and Global Mean SZ-HV Cortical Thickness Contrast and Sample Mean Age**

Region of Interest	Beta	p-value	SE	CI
Left Hemisphere Mean Thickness	-0.006	0.504	0.008	-0.022 - 0.011
Right Hemisphere Mean Thickness	-0.008	0.313	0.008	-0.024 - 0.008
Global Mean Thickness	-0.007	0.420	0.008	-0.023 - 0.010

**Regression Plot of Relationship between Left Hemisphere SZ-HV Cortical Thickness Contrast and Sample Mean Age**

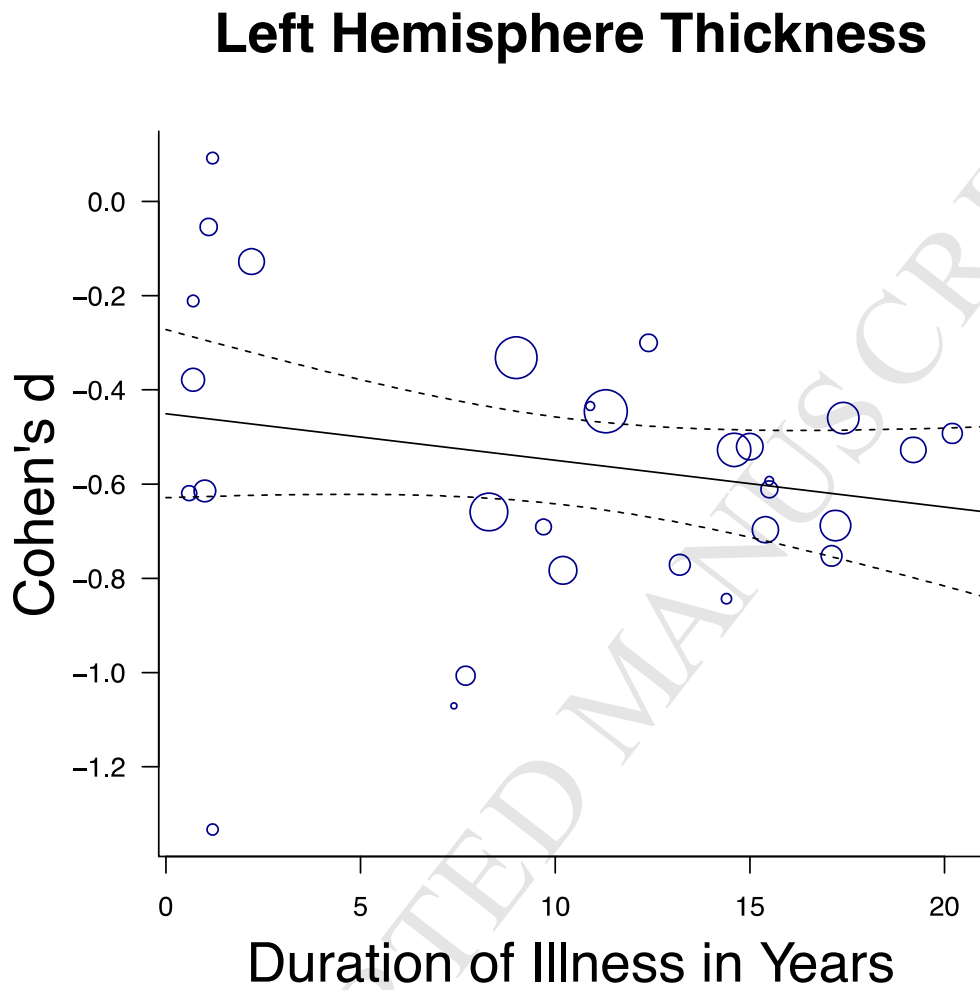
**Regression Plot of Relationship between Right Hemisphere SZ-HV Cortical Thickness Contrast and Sample Mean Age**

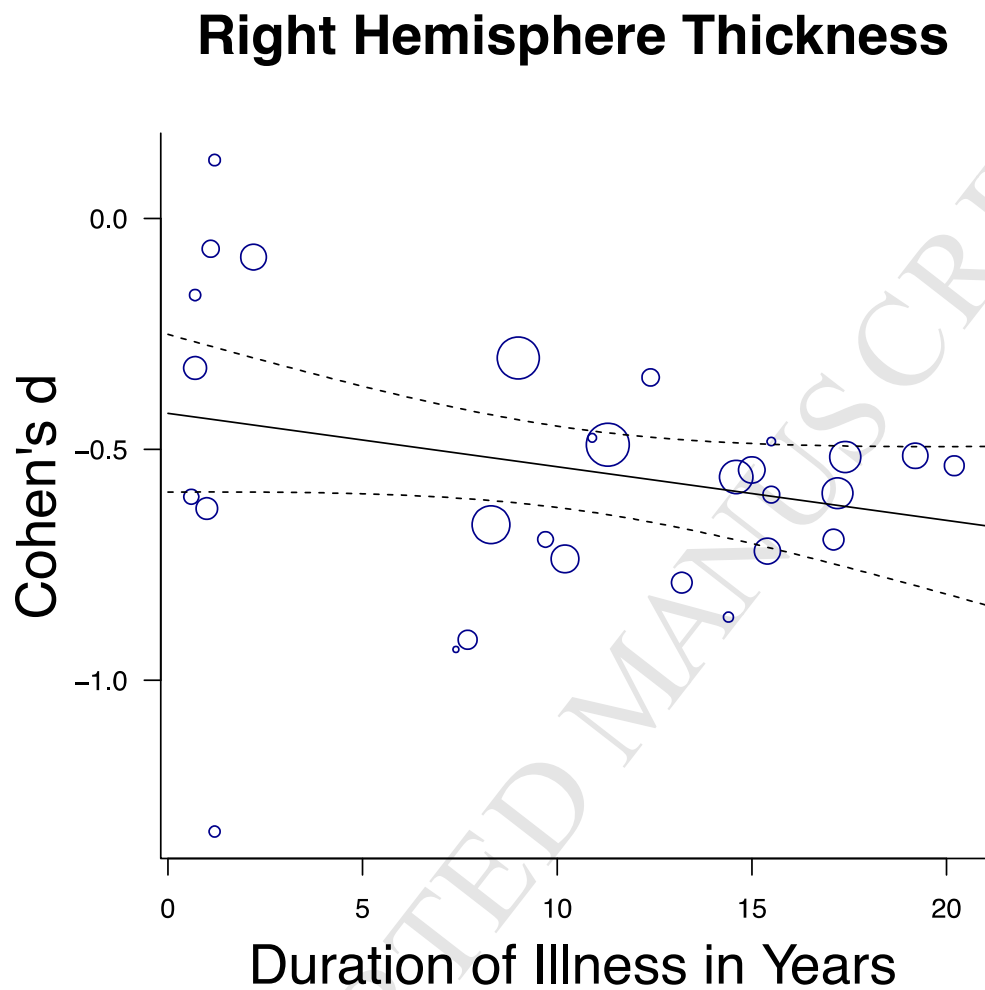


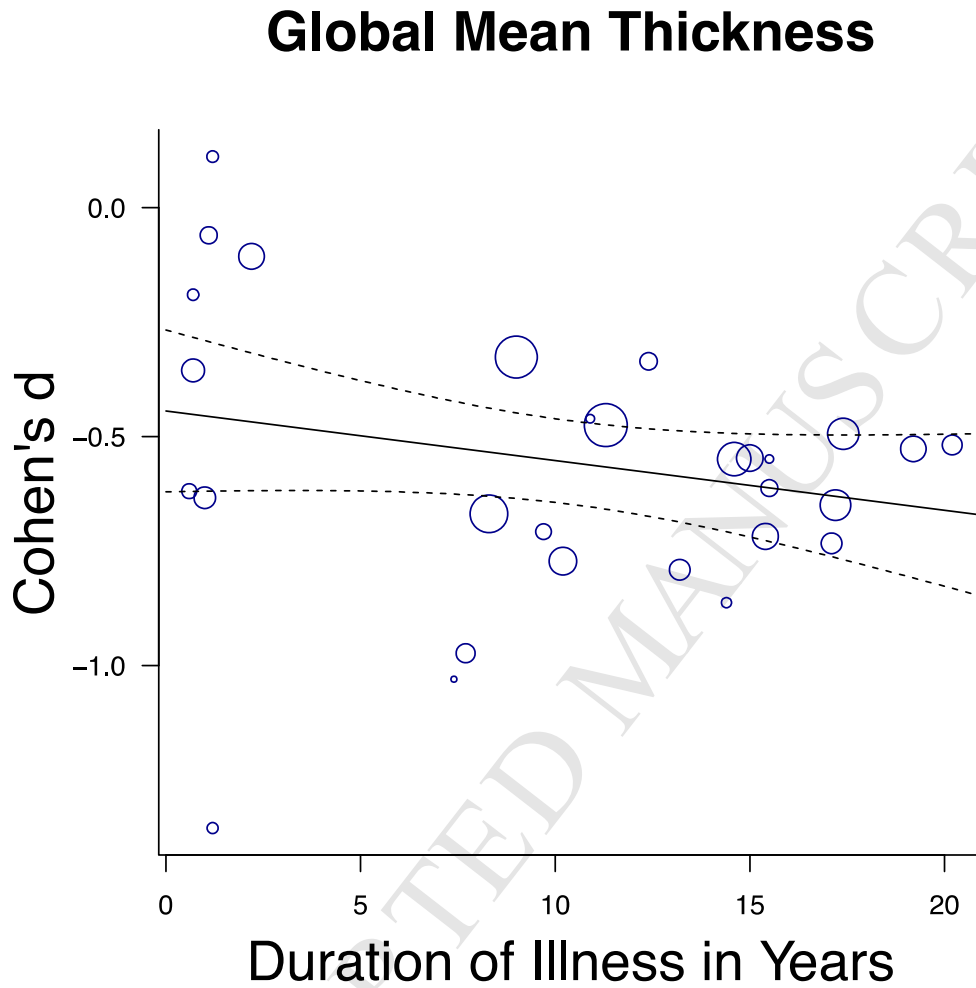
**Regression Plot of Relationship between Global Mean SZ-HV Cortical Thickness Contrast and Sample Mean Age**

**Meta-Regression Results for Relationship between Left, Right, and Global Mean SZ-HV Cortical Thickness Contrast and Sample Duration of Illness**

Region of Interest	Beta	p-value	SE	CI
Left Hemisphere Mean Thickness	-0.010	0.185	0.007	-0.025 - 0.005
Right Hemisphere Mean Thickness	-0.012	0.105	0.007	-0.026 - 0.002
Global Mean Thickness	-0.011	0.143	0.007	-0.025 - 0.004

**Regression Plot of Relationship between Left Hemisphere SZ-HV Cortical Thickness Contrast and Sample Mean Duration of Illness**

**Regression Plot of Relationship between Right Hemisphere SZ-HV Cortical Thickness Contrast and Sample Mean Duration of Illness**

**Regression Plot of Relationship between Global Mean SZ-HV Cortical Thickness Contrast and Sample Mean Duration of Illness**

**FreeSurfer Version and Scanner Field Strength**

Meta-regressions showed no noteworthy significant associations between FreeSurfer version or scanner field strength and sample schizophrenia versus control effect sizes for regional cortical thickness or surface area (see Tables below).

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### Meta-Regression Results for Relationship between SZ-HV Regional Cortical Thickness Contrast and Scanner Field Strength

Region of Interest	Beta	p-value	SE	CI
Left banks of superior temporal sulcus	-0.017	0.692	0.043	-0.101 - 0.067
Left caudal anterior cingulate cortex	0.016	0.743	0.05	-0.081 - 0.114
Left caudal middle frontal gyrus	0.054	0.481	0.077	-0.097 - 0.206
Left cuneus	-0.014	0.822	0.06	-0.132 - 0.105
Left entorhinal cortex	-0.029	0.609	0.057	-0.141 - 0.083
Left fusiform gyrus	-0.022	0.72	0.062	-0.144 - 0.1
Left inferior parietal cortex	-0.012	0.831	0.058	-0.126 - 0.101
Left inferior temporal gyrus	0.036	0.528	0.057	-0.076 - 0.148
Left isthmus cingulate cortex	0.021	0.615	0.043	-0.062 - 0.105
Left lateral occipital cortex	-0.014	0.824	0.063	-0.137 - 0.109
Left lateral orbitofrontal cortex	0.008	0.895	0.059	-0.107 - 0.122
Left lingual gyrus	-0.029	0.66	0.066	-0.159 - 0.101
Left medial orbitofrontal cortex	0.062	0.264	0.055	-0.046 - 0.169
Left middle temporal gyrus	0.01	0.884	0.07	-0.127 - 0.147
Left parahippocampal gyrus	0.008	0.886	0.052	-0.095 - 0.11
Left paracentral lobule	-0.06	0.262	0.053	-0.164 - 0.045
Left pars opercularis of inferior frontal gyrus	-0.012	0.844	0.063	-0.137 - 0.112
Left pars orbitalis of inferior frontal gyrus	-0.079	0.219	0.064	-0.204 - 0.047
Left pars triangularis of inferior frontal gyrus	0.035	0.559	0.061	-0.083 - 0.154
Left pericalcarine cortex	-0.039	0.595	0.073	-0.181 - 0.104
Left postcentral gyrus	0.026	0.684	0.064	-0.099 - 0.151
Left posterior cingulate cortex	-0.044	0.203	0.035	-0.112 - 0.024
Left precentral gyrus	0	0.996	0.059	-0.116 - 0.117
Left precuneus	-0.042	0.456	0.057	-0.154 - 0.069
Left rostral anterior cingulate cortex	0.013	0.822	0.059	-0.103 - 0.129
Left rostral middle frontal gyrus	0.069	0.407	0.083	-0.094 - 0.231
Left superior frontal gyrus	0.054	0.523	0.084	-0.111 - 0.219
Left superior parietal cortex	-0.046	0.42	0.058	-0.159 - 0.066
Left superior temporal gyrus	-0.009	0.886	0.062	-0.13 - 0.112
Left supramarginal gyrus	0.023	0.722	0.066	-0.106 - 0.153
Left frontal pole	0.007	0.892	0.05	-0.091 - 0.104
Left temporal pole	-0.032	0.555	0.055	-0.139 - 0.075
Left transverse temporal gyrus	-0.013	0.819	0.058	-0.128 - 0.101
Left insula	0.054	0.365	0.06	-0.063 - 0.172
Right banks of superior temporal sulcus	-0.007	0.864	0.042	-0.09 - 0.075
Right caudal anterior cingulate cortex	0.06	0.18	0.045	-0.028 - 0.148
Right caudal middle frontal gyrus	0.022	0.714	0.059	-0.094 - 0.137
Right cuneus	0	0.997	0.059	-0.115 - 0.115
Right entorhinal cortex	-0.033	0.558	0.056	-0.142 - 0.077

Region of Interest	Beta	p-value	SE	CI
Right fusiform gyrus	-0.061	0.318	0.061	-0.18 - 0.059
Right inferior parietal cortex	-0.008	0.897	0.065	-0.136 - 0.119
Right inferior temporal gyrus	-0.05	0.374	0.057	-0.162 - 0.061
Right isthmus cingulate cortex	0.023	0.52	0.035	-0.046 - 0.091
Right lateral occipital cortex	-0.023	0.743	0.071	-0.163 - 0.117
Right lateral orbitofrontal cortex	0.027	0.699	0.071	-0.112 - 0.167
Right lingual gyrus	-0.049	0.482	0.07	-0.186 - 0.088
Right medial orbitofrontal cortex	0.061	0.223	0.05	-0.037 - 0.159
Right middle temporal gyrus	0.003	0.961	0.066	-0.127 - 0.134
Right parahippocampal gyrus	0.017	0.748	0.054	-0.088 - 0.123
Right paracentral lobule	-0.056	0.315	0.056	-0.165 - 0.053
Right pars opercularis of inferior frontal gyrus	0.013	0.821	0.058	-0.1 - 0.126
Right pars orbitalis of inferior frontal gyrus	-0.015	0.818	0.063	-0.138 - 0.109
Right pars triangularis of inferior frontal gyrus	0.031	0.685	0.076	-0.118 - 0.179
Right pericalcarine cortex	-0.04	0.573	0.07	-0.177 - 0.098
Right postcentral gyrus	0.012	0.834	0.058	-0.102 - 0.126
Right posterior cingulate cortex	-0.039	0.285	0.036	-0.11 - 0.032
Right precentral gyrus	-0.012	0.83	0.056	-0.123 - 0.099
Right precuneus	-0.075	0.121	0.048	-0.169 - 0.02
Right rostral anterior cingulate cortex	0.034	0.501	0.051	-0.066 - 0.135
Right rostral middle frontal gyrus	0.078	0.336	0.081	-0.081 - 0.238
Right superior frontal gyrus	0.07	0.385	0.081	-0.088 - 0.228
Right superior parietal cortex	-0.052	0.434	0.067	-0.183 - 0.078
Right superior temporal gyrus	0.032	0.613	0.063	-0.091 - 0.154
Right supramarginal gyrus	0.025	0.691	0.064	-0.099 - 0.15
Right frontal pole	0.012	0.74	0.036	-0.058 - 0.081
Right temporal pole	-0.008	0.886	0.056	-0.117 - 0.101
Right transverse temporal gyrus	0.013	0.821	0.058	-0.1 - 0.126
Right insula	0.025	0.709	0.067	-0.106 - 0.155



### Meta-Regression Results for Relationship between SZ-HV Regional Cortical Thickness Contrast and FreeSurfer Version

Region of Interest	Beta	p-value	SE	CI
Left banks of superior temporal sulcus	0.075	0.759	0.246	-0.406 - 0.557
Left caudal anterior cingulate cortex	-0.188	0.434	0.24	-0.659 - 0.283
Left caudal middle frontal gyrus	-0.056	0.884	0.379	-0.798 - 0.687
Left cuneus	0.382	0.205	0.302	-0.209 - 0.973
Left entorhinal cortex	0.226	0.47	0.313	-0.387 - 0.84
Left fusiform gyrus	0.11	0.756	0.353	-0.582 - 0.801
Left inferior parietal cortex	0.135	0.672	0.319	-0.49 - 0.761
Left inferior temporal gyrus	0.351	0.295	0.335	-0.306 - 1.008
Left isthmus cingulate cortex	0.07	0.776	0.245	-0.41 - 0.549
Left lateral occipital cortex	0.26	0.477	0.367	-0.458 - 0.979
Left lateral orbitofrontal cortex	-0.039	0.9	0.313	-0.653 - 0.574
Left lingual gyrus	0.186	0.594	0.348	-0.497 - 0.869
Left medial orbitofrontal cortex	0.018	0.95	0.294	-0.558 - 0.595
Left middle temporal gyrus	0.048	0.899	0.374	-0.686 - 0.781
Left parahippocampal gyrus	-0.135	0.646	0.294	-0.711 - 0.441
Left paracentral lobule	0.133	0.665	0.307	-0.469 - 0.735
Left pars opercularis of inferior frontal gyrus	-0.183	0.586	0.336	-0.843 - 0.476
Left pars orbitalis of inferior frontal gyrus	0.092	0.79	0.344	-0.583 - 0.766
Left pars triangularis of inferior frontal gyrus	-0.071	0.818	0.308	-0.674 - 0.532
Left pericalcarine cortex	0.137	0.707	0.365	-0.578 - 0.853
Left postcentral gyrus	0.016	0.964	0.347	-0.665 - 0.697
Left posterior cingulate cortex	0.317	0.03	0.146	0.032 - 0.603
Left precentral gyrus	-0.048	0.878	0.31	-0.656 - 0.56
Left precuneus	0.107	0.731	0.311	-0.503 - 0.716
Left rostral anterior cingulate cortex	-0.312	0.29	0.295	-0.891 - 0.266
Left rostral middle frontal gyrus	-0.168	0.704	0.443	-1.036 - 0.7
Left superior frontal gyrus	-0.014	0.974	0.45	-0.896 - 0.867
Left superior parietal cortex	0.141	0.662	0.322	-0.49 - 0.771
Left superior temporal gyrus	-0.043	0.895	0.323	-0.676 - 0.591
Left supramarginal gyrus	0.197	0.585	0.36	-0.509 - 0.903
Left frontal pole	-0.053	0.812	0.223	-0.49 - 0.384
Left temporal pole	0.295	0.348	0.315	-0.321 - 0.912
Left transverse temporal gyrus	0.148	0.579	0.266	-0.374 - 0.67
Left insula	-0.119	0.728	0.342	-0.788 - 0.551
Right banks of superior temporal sulcus	-0.194	0.433	0.247	-0.678 - 0.29
Right caudal anterior cingulate cortex	-0.188	0.436	0.242	-0.662 - 0.285
Right caudal middle frontal gyrus	-0.245	0.347	0.261	-0.756 - 0.266
Right cuneus	0.399	0.166	0.288	-0.166 - 0.964
Right entorhinal cortex	0.477	0.136	0.32	-0.15 - 1.104

Region of Interest	Beta	p-value	SE	CI
Right fusiform gyrus	0.138	0.679	0.333	-0.514 - 0.79
Right inferior parietal cortex	0.145	0.669	0.339	-0.52 - 0.81
Right inferior temporal gyrus	0.235	0.46	0.319	-0.389 - 0.86
Right isthmus cingulate cortex	-0.167	0.33	0.172	-0.504 - 0.169
Right lateral occipital cortex	0.286	0.457	0.384	-0.467 - 1.039
Right lateral orbitofrontal cortex	-0.069	0.85	0.365	-0.785 - 0.647
Right lingual gyrus	0.275	0.479	0.388	-0.486 - 1.036
Right medial orbitofrontal cortex	-0.174	0.488	0.25	-0.665 - 0.317
Right middle temporal gyrus	0.014	0.969	0.368	-0.707 - 0.735
Right parahippocampal gyrus	-0.05	0.868	0.303	-0.644 - 0.543
Right paracentral lobule	0.136	0.661	0.31	-0.471 - 0.743
Right pars opercularis of inferior frontal gyrus	-0.202	0.508	0.305	-0.8 - 0.396
Right pars orbitalis of inferior frontal gyrus	-0.097	0.749	0.304	-0.694 - 0.499
Right pars triangularis of inferior frontal gyrus	0.009	0.983	0.426	-0.827 - 0.845
Right pericalcarine cortex	0.249	0.505	0.374	-0.484 - 0.983
Right postcentral gyrus	-0.049	0.872	0.302	-0.641 - 0.544
Right posterior cingulate cortex	-0.147	0.418	0.182	-0.504 - 0.209
Right precentral gyrus	-0.085	0.764	0.284	-0.642 - 0.471
Right precuneus	0.201	0.461	0.272	-0.333 - 0.734
Right rostral anterior cingulate cortex	-0.055	0.839	0.274	-0.592 - 0.481
Right rostral middle frontal gyrus	-0.109	0.809	0.449	-0.989 - 0.772
Right superior frontal gyrus	-0.045	0.915	0.423	-0.874 - 0.784
Right superior parietal cortex	0.022	0.953	0.372	-0.707 - 0.75
Right superior temporal gyrus	-0.07	0.843	0.355	-0.766 - 0.625
Right supramarginal gyrus	-0.005	0.989	0.337	-0.664 - 0.655
Right frontal pole	-0.103	0.52	0.161	-0.419 - 0.212
Right temporal pole	0.149	0.65	0.328	-0.494 - 0.792
Right transverse temporal gyrus	0.078	0.804	0.313	-0.535 - 0.69
Right insula	-0.183	0.614	0.362	-0.893 - 0.527

### Meta-Regression Results for Relationship between SZ-HV Regional Cortical Surface Area Contrast and Scanner Field Strength

Region of Interest	Beta	p-value	SE	CI
Left banks of superior temporal sulcus	-0.058	0.113	0.036	-0.129 - 0.014
Left caudal anterior cingulate cortex	-0.065	0.1	0.04	-0.143 - 0.012
Left caudal middle frontal gyrus	-0.06	0.117	0.038	-0.135 - 0.015
Left cuneus	0.019	0.541	0.03	-0.041 - 0.078
Left entorhinal cortex	0.04	0.208	0.032	-0.022 - 0.103
Left fusiform gyrus	-0.012	0.729	0.033	-0.077 - 0.054
Left inferior parietal cortex	-0.018	0.627	0.036	-0.089 - 0.053
Left inferior temporal gyrus	-0.055	0.175	0.04	-0.134 - 0.024
Left isthmus cingulate cortex	-0.077	0.045	0.039	-0.153 - -0.002
Left lateral occipital cortex	0	0.998	0.038	-0.075 - 0.074
Left lateral orbitofrontal cortex	-0.064	0.156	0.045	-0.151 - 0.024
Left lingual gyrus	0.025	0.485	0.036	-0.046 - 0.097
Left medial orbitofrontal cortex	-0.035	0.572	0.061	-0.155 - 0.086
Left middle temporal gyrus	-0.053	0.084	0.031	-0.113 - 0.007
Left parahippocampal gyrus	-0.003	0.915	0.032	-0.066 - 0.059
Left paracentral lobule	-0.004	0.898	0.034	-0.071 - 0.062
Left pars opercularis of inferior frontal gyrus	-0.008	0.855	0.046	-0.098 - 0.081
Left pars orbitalis of inferior frontal gyrus	-0.074	0.099	0.045	-0.162 - 0.014
Left pars triangularis of inferior frontal gyrus	0.037	0.27	0.034	-0.029 - 0.104
Left pericalcarine cortex	0.038	0.386	0.044	-0.048 - 0.123
Left postcentral gyrus	-0.039	0.274	0.036	-0.11 - 0.031
Left posterior cingulate cortex	-0.029	0.486	0.041	-0.109 - 0.052
Left precentral gyrus	-0.032	0.482	0.045	-0.121 - 0.057
Left precuneus	-0.042	0.331	0.044	-0.128 - 0.043
Left rostral anterior cingulate cortex	-0.066	0.105	0.041	-0.146 - 0.014
Left rostral middle frontal gyrus	-0.021	0.525	0.033	-0.086 - 0.044
Left superior frontal gyrus	-0.051	0.22	0.042	-0.132 - 0.03
Left superior parietal cortex	0.004	0.909	0.034	-0.063 - 0.071
Left superior temporal gyrus	-0.044	0.168	0.032	-0.107 - 0.019
Left supramarginal gyrus	-0.029	0.465	0.039	-0.105 - 0.048
Left frontal pole	-0.028	0.497	0.041	-0.108 - 0.052
Left temporal pole	-0.019	0.591	0.036	-0.09 - 0.051
Left transverse temporal gyrus	-0.022	0.459	0.03	-0.081 - 0.037
Left insula	-0.043	0.364	0.048	-0.137 - 0.05
Right banks of superior temporal sulcus	-0.052	0.096	0.031	-0.114 - 0.009
Right caudal anterior cingulate cortex	-0.011	0.754	0.035	-0.08 - 0.058
Right caudal middle frontal gyrus	-0.041	0.341	0.043	-0.126 - 0.044
Right cuneus	0.033	0.382	0.037	-0.04 - 0.105
Right entorhinal cortex	-0.018	0.644	0.04	-0.096 - 0.06

Region of Interest	Beta	p-value	SE	CI
Right fusiform gyrus	-0.015	0.626	0.03	-0.074 - 0.044
Right inferior parietal cortex	-0.008	0.782	0.031	-0.068 - 0.051
Right inferior temporal gyrus	-0.066	0.147	0.045	-0.154 - 0.023
Right isthmus cingulate cortex	-0.034	0.342	0.035	-0.103 - 0.036
Right lateral occipital cortex	0	0.999	0.041	-0.081 - 0.081
Right lateral orbitofrontal cortex	-0.02	0.705	0.052	-0.121 - 0.082
Right lingual gyrus	0.042	0.275	0.038	-0.033 - 0.117
Right medial orbitofrontal cortex	-0.088	0.038	0.043	-0.172 - -0.005
Right middle temporal gyrus	-0.023	0.467	0.031	-0.084 - 0.038
Right parahippocampal gyrus	-0.038	0.22	0.031	-0.1 - 0.023
Right paracentral lobule	-0.004	0.899	0.032	-0.067 - 0.058
Right pars opercularis of inferior frontal gyrus	-0.023	0.586	0.042	-0.104 - 0.059
Right pars orbitalis of inferior frontal gyrus	-0.034	0.296	0.032	-0.097 - 0.029
Right pars triangularis of inferior frontal gyrus	0.044	0.144	0.03	-0.015 - 0.103
Right pericalcarine cortex	0.044	0.296	0.042	-0.038 - 0.126
Right postcentral gyrus	-0.041	0.272	0.037	-0.115 - 0.032
Right posterior cingulate cortex	-0.06	0.138	0.04	-0.139 - 0.019
Right precentral gyrus	-0.036	0.43	0.045	-0.124 - 0.053
Right precuneus	-0.013	0.703	0.033	-0.078 - 0.052
Right rostral anterior cingulate cortex	-0.024	0.524	0.038	-0.099 - 0.05
Right rostral middle frontal gyrus	-0.043	0.238	0.037	-0.115 - 0.029
Right superior frontal gyrus	-0.068	0.19	0.052	-0.169 - 0.034
Right superior parietal cortex	-0.027	0.525	0.042	-0.109 - 0.056
Right superior temporal gyrus	-0.025	0.516	0.038	-0.099 - 0.05
Right supramarginal gyrus	-0.034	0.34	0.036	-0.104 - 0.036
Right frontal pole	-0.007	0.825	0.03	-0.065 - 0.052
Right temporal pole	-0.082	0.034	0.038	-0.157 - -0.006
Right transverse temporal gyrus	-0.063	0.045	0.031	-0.124 - -0.001
Right insula	-0.003	0.95	0.042	-0.084 - 0.079

### Meta-Regression Results for Relationship between SZ-HV Regional Cortical Surface Area Contrast and FreeSurfer Version

Region of Interest	Beta	p-value	SE	CI
Left banks of superior temporal sulcus	-0.059	0.715	0.162	-0.377 - 0.258
Left caudal anterior cingulate cortex	-0.248	0.244	0.213	-0.665 - 0.169
Left caudal middle frontal gyrus	0.005	0.98	0.207	-0.4 - 0.411
Left cuneus	-0.195	0.231	0.163	-0.514 - 0.124
Left entorhinal cortex	0.039	0.789	0.145	-0.245 - 0.322
Left fusiform gyrus	-0.129	0.382	0.148	-0.418 - 0.16
Left inferior parietal cortex	0.064	0.742	0.193	-0.315 - 0.442
Left inferior temporal gyrus	-0.163	0.442	0.212	-0.579 - 0.253
Left isthmus cingulate cortex	0.288	0.182	0.216	-0.135 - 0.71
Left lateral occipital cortex	-0.188	0.393	0.22	-0.621 - 0.244
Left lateral orbitofrontal cortex	-0.097	0.699	0.251	-0.589 - 0.395
Left lingual gyrus	-0.136	0.478	0.192	-0.512 - 0.24
Left medial orbitofrontal cortex	0.093	0.742	0.281	-0.458 - 0.643
Left middle temporal gyrus	-0.055	0.743	0.168	-0.384 - 0.274
Left parahippocampal gyrus	0.118	0.413	0.144	-0.165 - 0.401
Left paracentral lobule	0.244	0.149	0.169	-0.087 - 0.575
Left pars opercularis of inferior frontal gyrus	-0.073	0.771	0.252	-0.568 - 0.421
Left pars orbitalis of inferior frontal gyrus	-0.042	0.851	0.222	-0.477 - 0.393
Left pars triangularis of inferior frontal gyrus	-0.188	0.304	0.183	-0.547 - 0.171
Left pericalcarine cortex	-0.163	0.516	0.25	-0.653 - 0.328
Left postcentral gyrus	0.095	0.616	0.19	-0.277 - 0.468
Left posterior cingulate cortex	-0.017	0.928	0.193	-0.396 - 0.361
Left precentral gyrus	0.07	0.753	0.222	-0.365 - 0.505
Left precuneus	-0.106	0.653	0.235	-0.567 - 0.355
Left rostral anterior cingulate cortex	-0.022	0.926	0.243	-0.499 - 0.454
Left rostral middle frontal gyrus	0.194	0.281	0.18	-0.159 - 0.548
Left superior frontal gyrus	0.026	0.901	0.209	-0.384 - 0.437
Left superior parietal cortex	-0.044	0.813	0.186	-0.408 - 0.32
Left superior temporal gyrus	0.075	0.633	0.157	-0.232 - 0.382
Left supramarginal gyrus	0.042	0.842	0.213	-0.376 - 0.461
Left frontal pole	-0.113	0.594	0.212	-0.529 - 0.303
Left temporal pole	-0.022	0.907	0.189	-0.392 - 0.348
Left transverse temporal gyrus	-0.02	0.887	0.144	-0.303 - 0.262
Left insula	0.092	0.732	0.268	-0.434 - 0.618
Right banks of superior temporal sulcus	-0.114	0.437	0.146	-0.4 - 0.173
Right caudal anterior cingulate cortex	-0.149	0.42	0.185	-0.512 - 0.214
Right caudal middle frontal gyrus	-0.098	0.628	0.202	-0.493 - 0.298
Right cuneus	-0.219	0.309	0.216	-0.643 - 0.204
Right entorhinal cortex	-0.203	0.312	0.201	-0.598 - 0.191

Region of Interest	Beta	p-value	SE	CI
Right fusiform gyrus	-0.096	0.607	0.187	-0.462 - 0.27
Right inferior parietal cortex	-0.103	0.531	0.165	-0.426 - 0.22
Right inferior temporal gyrus	0.071	0.773	0.246	-0.411 - 0.553
Right isthmus cingulate cortex	0.199	0.313	0.197	-0.188 - 0.585
Right lateral occipital cortex	-0.039	0.867	0.232	-0.494 - 0.416
Right lateral orbitofrontal cortex	-0.089	0.757	0.287	-0.651 - 0.474
Right lingual gyrus	-0.321	0.122	0.208	-0.728 - 0.086
Right medial orbitofrontal cortex	0.031	0.9	0.242	-0.444 - 0.505
Right middle temporal gyrus	-0.067	0.747	0.207	-0.473 - 0.339
Right parahippocampal gyrus	-0.158	0.307	0.154	-0.46 - 0.145
Right paracentral lobule	0.099	0.544	0.163	-0.22 - 0.418
Right pars opercularis of inferior frontal gyrus	0.1	0.628	0.206	-0.303 - 0.503
Right pars orbitalis of inferior frontal gyrus	-0.081	0.651	0.178	-0.43 - 0.268
Right pars triangularis of inferior frontal gyrus	-0.021	0.897	0.158	-0.331 - 0.29
Right pericalcarine cortex	-0.088	0.708	0.235	-0.549 - 0.373
Right postcentral gyrus	0.121	0.528	0.191	-0.254 - 0.496
Right posterior cingulate cortex	0.086	0.709	0.231	-0.366 - 0.538
Right precentral gyrus	-0.044	0.85	0.236	-0.506 - 0.417
Right precuneus	-0.003	0.984	0.166	-0.328 - 0.321
Right rostral anterior cingulate cortex	-0.025	0.902	0.207	-0.43 - 0.379
Right rostral middle frontal gyrus	0.101	0.607	0.197	-0.284 - 0.487
Right superior frontal gyrus	0.14	0.571	0.247	-0.344 - 0.624
Right superior parietal cortex	-0.121	0.587	0.223	-0.559 - 0.316
Right superior temporal gyrus	0.137	0.488	0.198	-0.251 - 0.526
Right supramarginal gyrus	0.13	0.511	0.198	-0.257 - 0.517
Right frontal pole	0.058	0.689	0.145	-0.225 - 0.341
Right temporal pole	0.359	0.076	0.202	-0.037 - 0.754
Right transverse temporal gyrus	0.148	0.368	0.164	-0.174 - 0.469
Right insula	0.153	0.437	0.197	-0.233 - 0.54

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Table S10. System information by sample group

Sample ID	Sex	Age	Year	Site	Month	Day	Hour	Minute	Second	Microsecond	Nucleotide Count	%GC	%AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT	%GC-AT
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

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