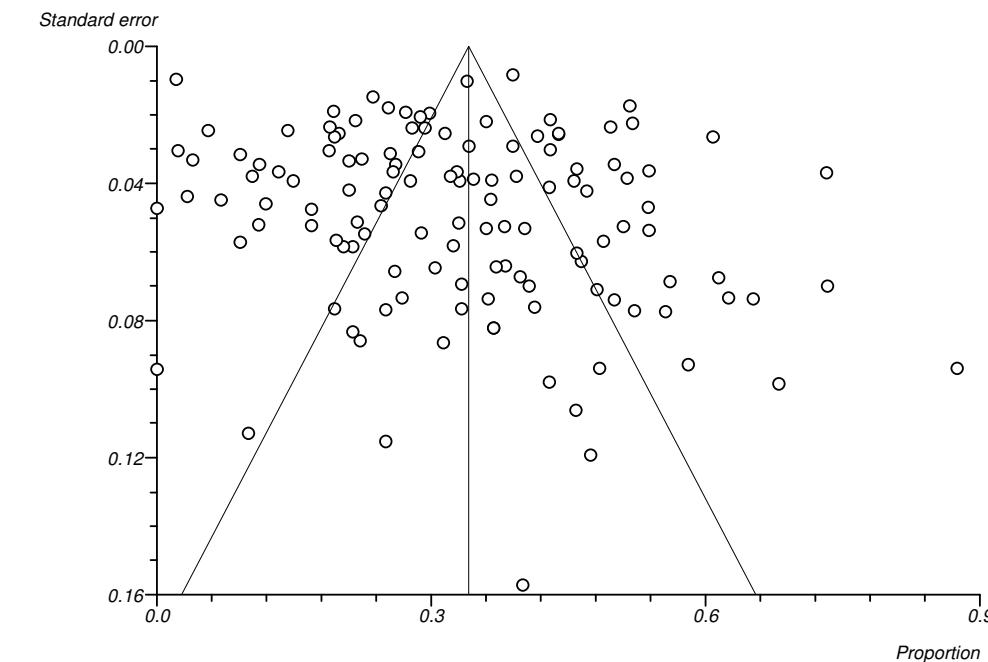


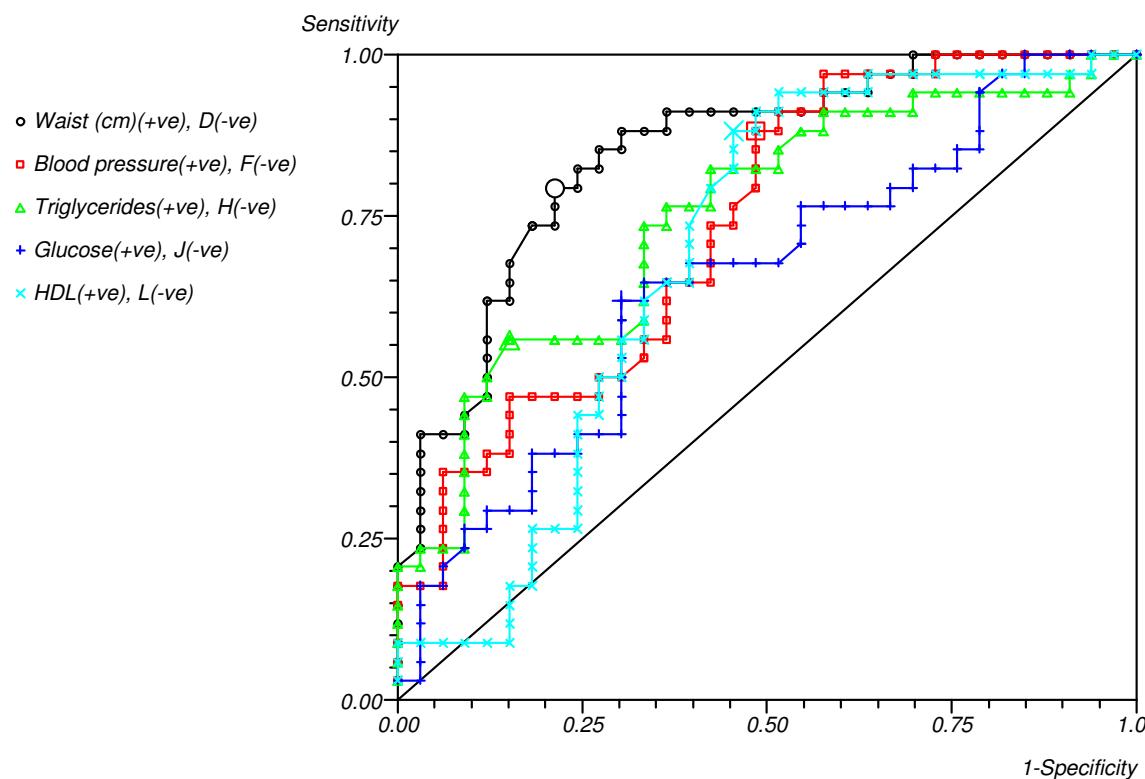
1 Appendix 1 – Bias assessment for schizophrenia Metabolic Syndrome studies
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Begg-Mazumdar: Kendall's tau b = 0.089 P = 0.1371

Egger: bias = 1.414 (95% CI = -0.138 to 2.96) P = 0.0739

Harbord: bias = -0.676 (92.5% CI = -1.758 to 0.406) P = 0.2644

Appendix 2 – Study Level Correlates of MetS using ROC Analysis



Test	Sensitivity	Specificity	PPV	NPV	Clinical Utility Index (+)	Clinical Utility Index (-)	AUC	LR+	LR-
Waist	79.4%	78.8%	79.4%	78.8%	0.631	0.621	0.848 (95% CI = 0.756 to 0.941)	3.74	0.26
Blood pressure	88.2%	51.5%	65.2%	81.0%	0.575	0.417	0.735 (95% CI = 0.616 to 0.855)	1.82	0.23
Triglycerides	55.9%	84.8%	79.2%	65.1%	0.442	0.553	0.750 (95% CI = 0.632 to 0.868)	3.69	0.52
Glucose	61.8%	69.7%	67.7%	63.9%	0.418	0.445	0.650 (95% CI = 0.517 to 0.783)	2.04	0.55
HDL	88.2%	54.5%	66.7%	81.8%	0.588	0.446	0.689 (95% CI = 0.556 to 0.824)	1.94	0.22
Duration (years)	95.5%	56.5%	67.7%	92.9%	0.647	0.525	0.836 (95% CI = 0.722 to 0.950)	2.20	0.08
Age	77.3%	69.6%	70.8%	76.2%	0.547	0.530	0.731 (95% CI = 0.579 to 0.884)	2.54	0.33

Legend PPV = positive predictive value; NPV = negative predictive value; AUC = Area under the receiver operator characteristic curve; LR = likelihood ratio;

1 Appendix 4 – Excluded Study List

1	Arango, C; Bobes, J; Randa, P; et al. A comparison of schizophrenia outpatients treated with antipsychotics with and without metabolic syndrome: Findings from the CLAMORS study. <i>Schizophr Res</i> 2008; 104(1):1-12.
2	Barnes TR, Paton C, Hancock E, Cavanagh MR, Taylor D, Lelliott P. Screening for the metabolic syndrome in community psychiatric patients prescribed antipsychotics: a quality improvement programme. <i>Acta Psychiatr Scand</i> 2008; 118: 26–33
3	Basu R, Brar JS, Chengappa KN et al. The prevalence of the metabolic syndrome in patients with schizoaffective disorder - bipolar subtype. <i>Bipolar Disord</i> 2004;6:314-8.
4	Bermudes, RA; Keck, PE; Welge, JA. The prevalence of the metabolic syndrome in psychiatric inpatients with primary psychotic and mood disorders. <i>Psychosomatics</i> 2006; 47:491–497
5	Bobes, J; Arango, C; Aranda, P et al. Cardiovascular and metabolic risk in outpatients with schizoaffective disorder treated with antipsychotics: results from the CLAMORS study. <i>European Psychiatry</i> 2010: in press
6	Cohen D, Nugter A. (2010). Metabolic screening in FACT population. Poster presented at EPA Munchen February 27-March 2.
7	Correll CU, Frederickson AM, Kane JM et al. Does antipsychotic polypharmacy increase the risk for metabolic syndrome? <i>Schizophr Res</i> 2007;89:91-100.
8	Correll CU, Frederickson AM, Kane JM et al. Metabolic syndrome and the risk of coronary heart disease in 367 patients treated with second-generation antipsychotic drugs. <i>J Clin Psychiatry</i> 2006; 67:575-83.
9	De Hert M, van Winkel R, Van Eyck D et al. Prevalence of diabetes, metabolic syndrome and metabolic abnormalities in schizophrenia over the course of the illness: a cross-sectional study. <i>Clin Pract Epidemiol Mental Health</i> 2006;2:14.
10	De Hert M, van Winkel R, Van Eyck D et al. Prevalence of the metabolic syndrome in patients with schizophrenia treated with antipsychotic medication. <i>Schizophr Res</i> 2006;83:87-93.
11	De Hert, M; Mauri, M, Shaw, K et al The METEOR study of diabetes and other metabolic disorders in patients with schizophrenia treated with antipsychotic drugs. I. Methodology. <i>International Journal of Methods in Psychiatric Research</i> . In press.
12	Goeb JL, Marco S, Duhamel A, Kechid G, Bordet R, Thomas P, Delion P, Jardri R. (2010). Metabolic side effects of risperidone in early onset schizophrenia. <i>Encephale</i> ; 36(3):242-52
13	Holt, RIG; Abdelrahman, T; Hirsh, M. et al. (2010) The prevalence of undiagnosed metabolic abnormalities in people with serious mental illness. <i>J Psychopharmacol</i> 24 (6), 867-873 .
14	John, AP; Koloth, R; Dragovic, M; et al. Prevalence of metabolic syndrome among Australians with severe mental illness. <i>MEDICAL JOURNAL OF AUSTRALIA</i> , 190 (4): 176-179 FEB 16 2009
15	Johnsen E, Gjestad R, Kroken R, Mellesdal L, Løberg EM, Jørgensen H. (2010). Cardiovascular risk in patients admitted for psychosis compared with findings from a population-based study. <i>Nordic Journal of Psychiatry</i> . In press.
16	Kim, EY; Lee, NY; Kim, SH; Jung, DC; Ahn, YMChange in the rate of metabolic syndrome in patients with schizophrenia and bipolar disorder in the course of treatment. cConference Title 4th Biennial Conference of the International-Society-for-Bipolar-Disorders
17	Koponen HJ, Hakko HH, Saari KM, Lindeman SM, Karvonen KM, Isohanni MK, Lauren LH, Savolainen MJ, Jarvelin MR (2010) The prevalence and predictive value of individual criteria for metabolic syndrome in schizophrenia: A Northern Finland 1966 Birth Cohort Study. <i>World J Biol Psychiatry</i> : 11(2): 262-267.
18	Krane-Gartiser, K., Breum, L., Glümer, C., Linneberg, A., Madsen, M., Koster, A., Jepsen, P., Fink-Jensen, A. (2010). Prevalence of the metabolic syndrome in Danish psychiatric outpatients treated with antipsychotics. In press.
19	Mackin, P; Bishop, D; Watkinson, H et al. Metabolic disease and cardiovascular risk in people treated with antipsychotics in the community. <i>Brit J Psychiatry</i> 2007; 91: 23-29.
20	Mackin, P; Bishop, D; Watkinson. A prospective study of monitoring practices for metabolic disease in antipsychotic-treated community psychiatric patients <i>BMC Psychiatry</i> 2007, 7:28
21	Mackin, P; Watkinson, H; Young AH. Prevalence of obesity, glucose homeostasis disorders and metabolic syndrome in psychiatric patients taking typical or atypical antipsychotic drugs: a cross-sectional study. <i>Diabetologia</i> 2005; 48: 215–221
22	Meyer JM, Davis VG, Goff DC et al. Change in metabolic syndrome parameters with antipsychotic treatment in the CATIE Schizophrenia Trial: prospective data from phase 1. <i>Schizophr Res</i> 2008;101:273-86.
23	Meyer JM, Nasrallah HA, McEvoy JP et al. The Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) Schizophrenia Trial: clinical comparison of subgroups with and without the metabolic syndrome. <i>Schizophr Res</i> 2005;80:9-18.
24	Millar, H. Physical health status in severe mental illness: A crosssectional study in a health screening clinic in Scotland. <i>Journal of Psychopharmacology</i> . In press
25	Rejas, J; Bobes, J; Arango, C; et al. Concordance of standard and modified NCEP ATP III criteria for identification of metabolic syndrome in outpatients with schizophrenia treated with antipsychotics: A corollary from the CLAMORS study. <i>Schizophr Res</i> 2007; 99(1): 23-28.
26	Sanchez-Araña Moreno T, Ruiz-Doblado S, Hernández-Fleta JL, Touriño-Gonzalez R, León-Pérez P (2010). Quality of life in a sample of schizophrenic patients with and without metabolic syndrome. <i>Journal of Psychiatric Intensive Care</i> , doi: 10.1017/S1742646410000117 .
27	Schorr SG, Slooff CJ, Bruggeman R et al. Incidence of metabolic syndrome and its reversibility in a cohort of schizophrenic patients followed for one year. <i>Journal of Psychiatric Research</i> 2009; 43: 1106–1111
28	Schorr SG, Slooff CJ, Bruggeman, R. et al. The prevalence of metabolic syndrome in patients with psychotic disorders in the Netherlands, <i>J Clin Psychopharmacol</i> 2009;29: 399-402.
29	Schorr SG, Slooff CJ, Postema R. A 12-month follow-up study of treating overweight schizophrenic patients with aripiprazole. <i>Acta Psychiatr Scand</i> . 2008;118:246–250

1	Shi L, Zhao Y, Fonseca V, Ascher-Svanum H, Chiang YJ, Winstead D. Healthcare resource utilization, adherence and persistence with antipsychotic therapy among schizophrenia patients with vs. without pre-existing metabolic syndrome. <i>Curr Med Res Opin.</i> 2010 Sep 10. [Epub ahead of print]
2	Sicras-Mainar, A; Blanca-Tamayo, M; Rejas-Gutierrez, J, et al. Metabolic syndrome in outpatients receiving antipsychotic therapy in routine clinical practice: A cross-sectional assessment of a primary health care database. <i>Eur Psychiatry</i> 2008; 23(2):100-108
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4	Straker D, Correll CU, Kramer-Ginsberg E et al. Cost-effective screening for the metabolic syndrome in patients treated with second generation antipsychotic medications. <i>Am J Psychiatry</i> 2005;162:1217-21
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6	Tirupati, S; Chua, LE. Obesity and metabolic syndrome in a psychiatric rehabilitation service. <i>Australian and New Zealand Journal of Psychiatry</i> 2007; 41:606 610
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8	van Winkel R, Moons T, Peerbooms O, Rutten B, et al. (2010) MTHFR genotype and differential evolution of metabolic parameters after initiation of a second generation antipsychotic: an observational study
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10	van Winkel R, Rutten BP, Peerbooms O, Peuskens J, van Os J, De Hert M. (2010) MTHFR and risk of metabolic syndrome in patients with schizophrenia. <i>Schizophrenia Research</i> 1 (1-3):193-8
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12	Yazici, MK; Yagcioglu, AEA; Ertugrul, A ve ark. (2005) The prevalence of metabolic syndrome in schizophrenic patients: a preliminary report. <i>Eur Neuropsychopharmacol</i> , 15: S520-S521
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