



Predicting Metabolic Syndrome in Severe Mental Illness: Preliminary Cox Model Findings

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BACKGROUND

Patients with SMI face elevated risk of metabolic syndrome (MetS), defined by key clinical factors; we examined its determinants to enable generalizable prediction.



METHODS & RESULTS

526K SMI patients; 171K (33%) developed MetS (mean follow-up 3.9y).

Log-rank tests showed risk differences across disorders:

Disorder	Risk
Schizophrenia : Anxiety	167 : 100
Schizophrenia : Mood	138 : 100
Mood : Anxiety	122 : 100

Cox model demonstrated good concordance (C-index = 0.76, AUC ~0.80 over 1-5y).

Schizophrenia emerged as a notable predictor, alongside cardiovascular risk factors.



NEXT

ML model with broader predictors to refine accuracy and support proactive care.

