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- INVENTOR -

**PREDICTING SUICIDALITY USING A COMBINED GENOMIC  
AND CLINICAL RISK ASSESSMENT**

Indiana University Research and Technology Corporation, Assignee

1. A method for assessing and mitigating suicidality in a male subject in need thereof, comprising:

determining an expression level of at least a first panel of blood biomarkers or a second panel of blood biomarkers in a sample from the subject, where the first panel of blood biomarkers comprises solute carrier family 4 (sodium bicarbonate cotransporter), member 4 (SLC4A4), cell adhesion molecule 1 CADM1, dystrobrevin, alpha (DTNA), spermidine/spermine N1-acetyl transferase 1 (SAT1), interleukin 6 (interferon, beta 2) (IL6), RAS-like family 11 member B (RASL11B), Glutamate Receptor, Ionotropic, Kainate 2 (GRIK2), histone cluster 1, H2bo (HIST1H2BO), jun proto-oncogene (JUN), and GRB2-Associated Binding Protein 1 (GAB1), and where the second panel of blood biomarkers comprises spindle and kinetochore associated complex subunit 2 (SKA2), CAP-GLY domain containing linker protein family, member 4 (CLIP4), kinesin family member 2C (KIF2C), kelch domain containing 3 (KLHDC3), chemokine (C-C motif) ligand 28 (CCL28), v-ets avian erythroblastosis virus E26 oncogene homolog (ERG),

**Suicidal Ideation (SI)**

from Hamilton Rating Scale for Depression (HAMD).

No SI-score of 0; High SI-score of 2 or above

**Suicide**

0 = Absent

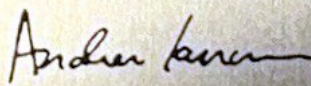
1 = Feels life is not worth living

2 = Wishes he were dead or any thoughts of possible death to self

3 = Suicidal ideas or gesture

4 = Attempts at suicide (any serious attempt rates 4)

*The Director of the United States Patent and Trademark Office has received an application for patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.*

  
Director of the United States Patent and Trademark Office