

FIG. 1A

A. Figure 1 Cohorts used in study depicting flow of discovery, prioritization, validation, and testing of biomarkers

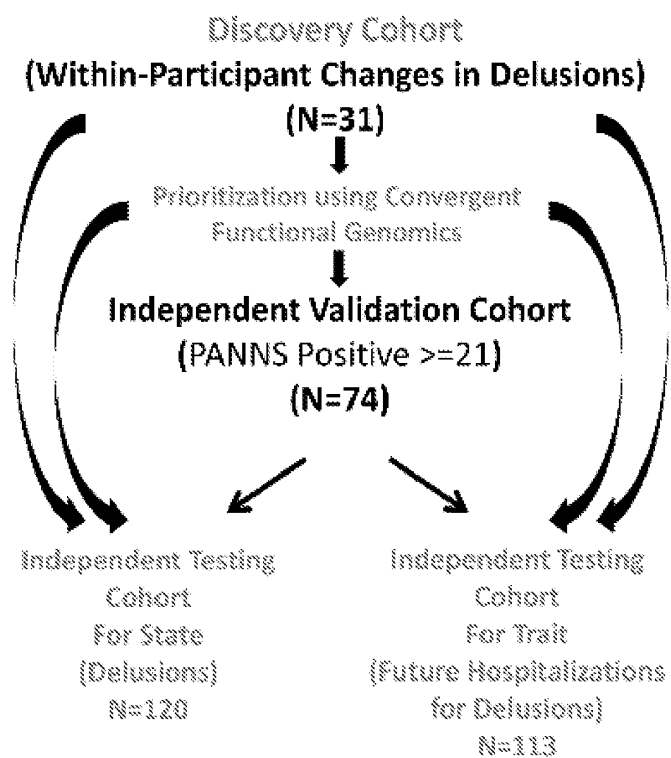


FIG. 1B

B. Discovery Cohort:
27 male and 4 female psychiatric participants who have at least one switch between a Low Delusion state visit and a High Delusion state visit.

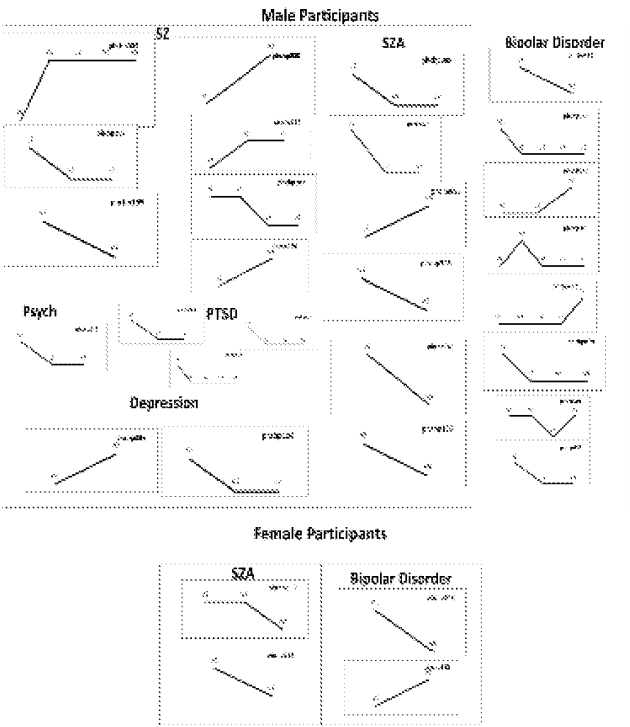


FIG. 1C

C. Delusions Scoring as part of administration of the Positive and Negative Symptom Scale (PANSS)

	Delusions Score	State	Definition
None	1	Absent	Definition does not apply
	2	Minimal	Questionable pathology; may be at the upper extreme of normal limits
Low	3	Mild	Presence of one or two delusions which are vague, uncrystallized, and not tenaciously held. Delusions do not interfere with thinking, social relations, or behavior.
	4	Moderate	Presence of either a kaleidoscopic array of poorly formed, unstable delusions or of a few well-formed delusions that occasionally interfere with thinking, social relations or behavior.
High	5	Moderate Severe	Presence of numerous well-formed delusions that are tenaciously held and occasionally interfere with thinking, social relations, or behavior.
	6	Severe	Presence of a stable set of delusions which are crystallized, possibly systematized, tenaciously held, and clearly interfere with thinking, social relations, or behavior.
	7	Extreme	Presence of a stable set of delusions which are either highly systematized or very numerous, and which dominate major facets of the patient's life. This frequently results in inappropriate and irresponsible action, which may even jeopardize the safety of the patient or others.

FIG. 1D

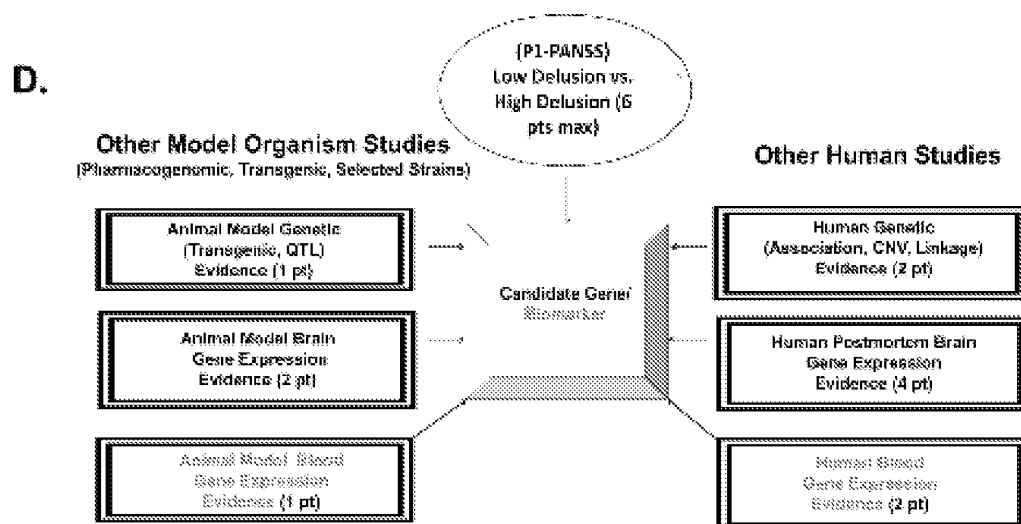


FIG. 1E

E.

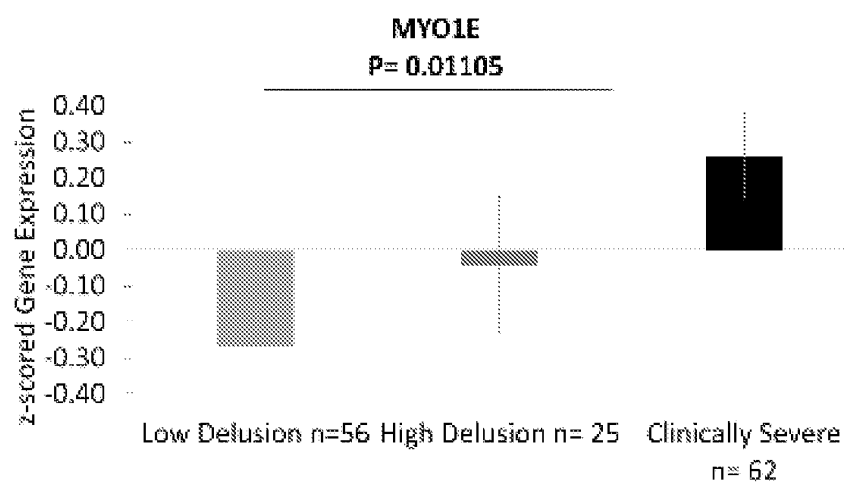
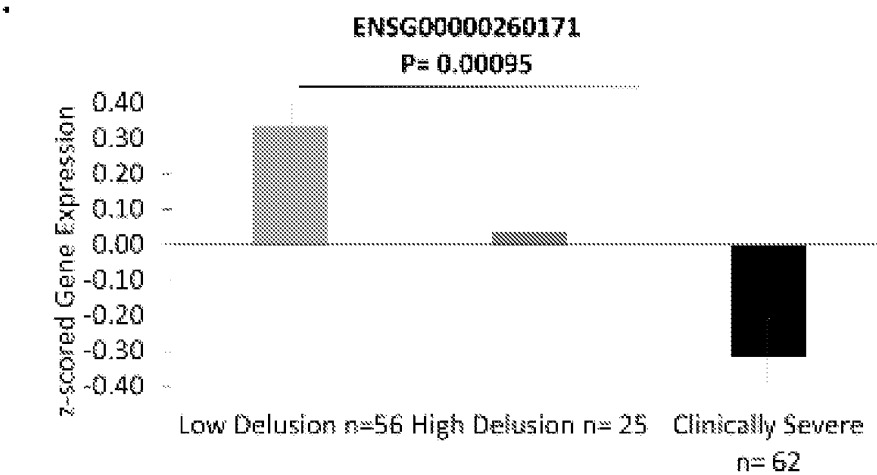


FIG. 1F

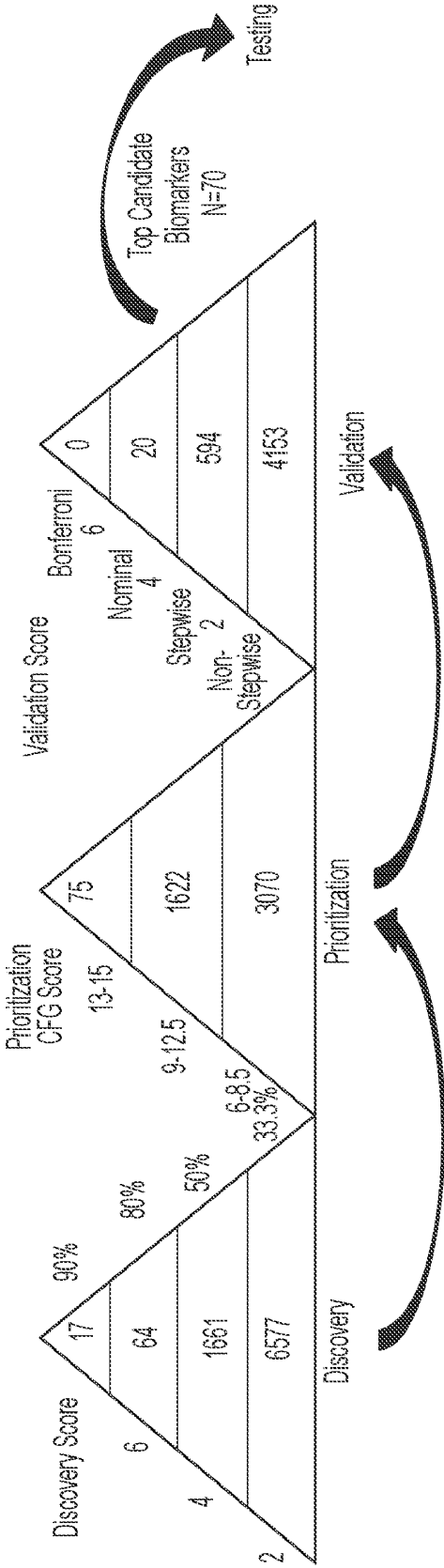


FIG. 1G

A. Figure 1 Cohorts used in study depicting flow of discovery, prioritization, validation, and testing of biomarkers

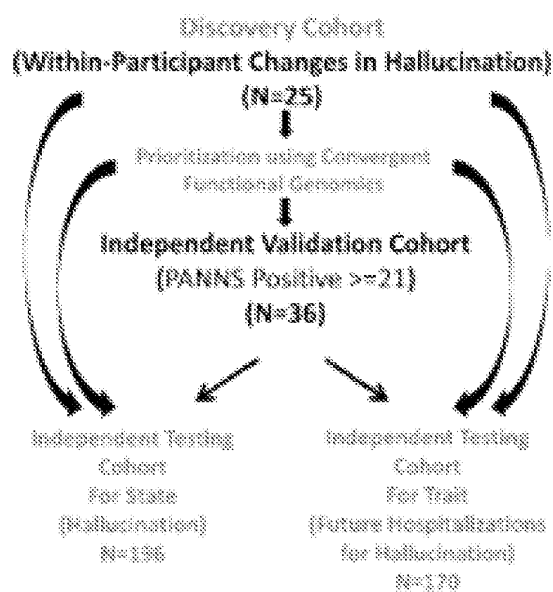


FIG. 1H

B. Discovery Cohort:

20 male and 5 female psychiatric participants who have at least one switch between a Low Hallucination state visit and a High Hallucination state visit.

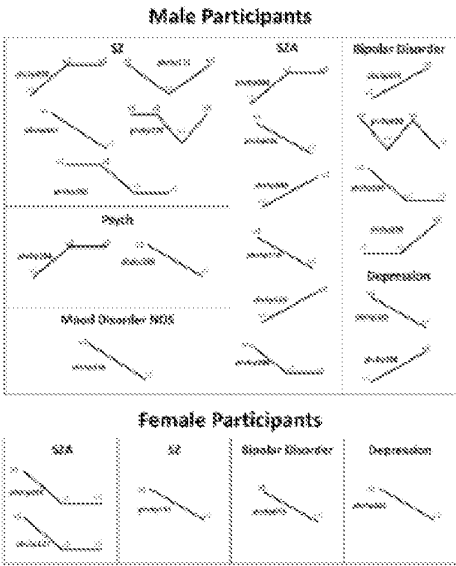


FIG. 1I

C.

Nonverbal communication as part of administration of the Positive and Negative Symptom Scale (PANSS)

Nonverbal Communication		Definition
None	Score	
	1	Absent: Definition does not apply
	2	Mild: Nonverbal gestures; may be visible upon inspection of facial items
	3	Mild: One or two clearly focused but infrequent nonverbal gestures, or clear pattern of negative affective responses which do not result in detection of thinking or behavior
High	4	Moderate: Nonverbal actions occur frequently but not continuously and the patient's thinking and behavior are affected only to a minor extent
	5	Moderate: Nonverbal actions are frequent, may include some form (or forms) involving mobility, and/or (s) of nonverbal thinking and/or behavior. Patient may have frequent occurrences of these responses and respond to them consistently and/or occasionally, rapidly as well
	6	Severe: Nonverbal actions are present almost continuously, causing major disruption of thinking and behavior. Patient reacts there as real perceptions, and thinking is impeded by frequent consistent and verbal responses to them
	7	Extreme: Patient is almost totally preoccupied with nonverbal actions, which virtually dominate thinking and behavior. Nonverbal actions are possible for rapid detection responses and provide verbal and nonverbal responses, including consistent or consistent nonverbal actions

FIG. 1J

D.

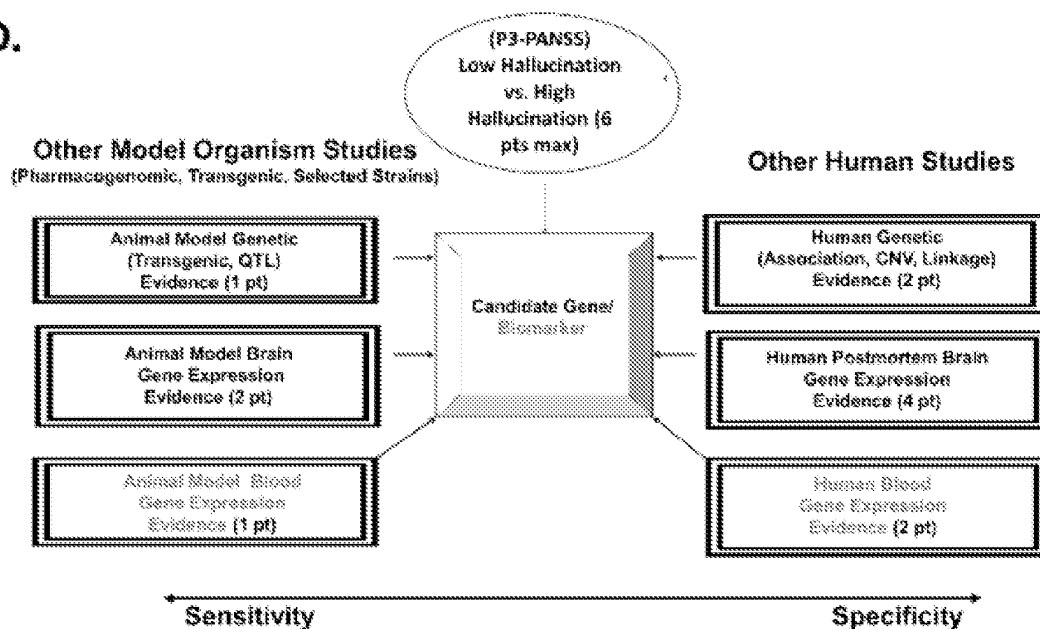


FIG. 1K

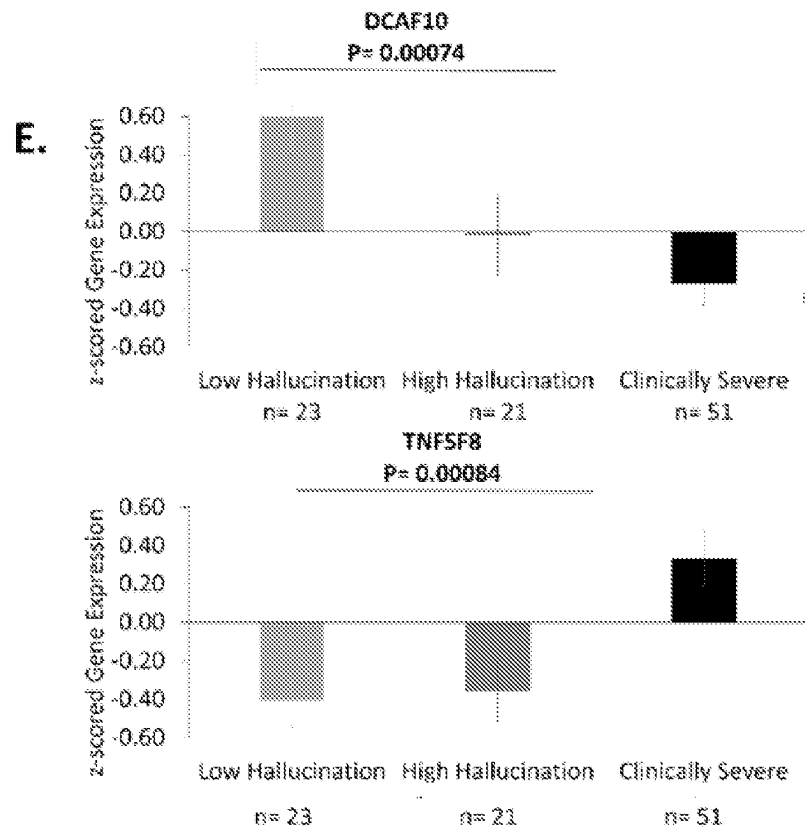


FIG. 1L

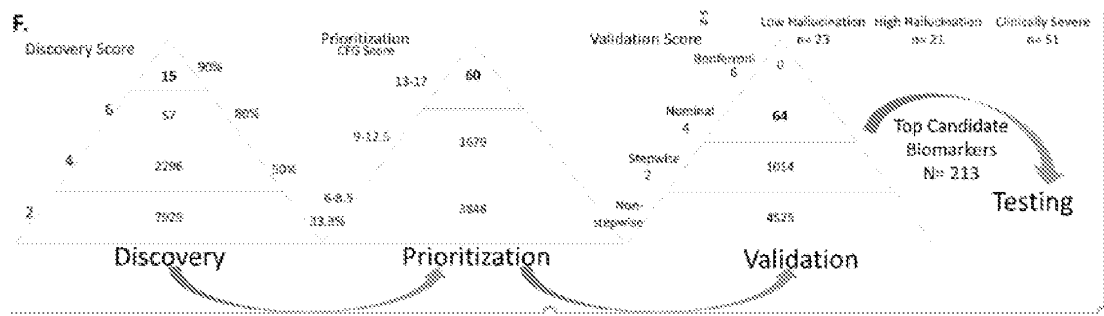


FIG. 2A

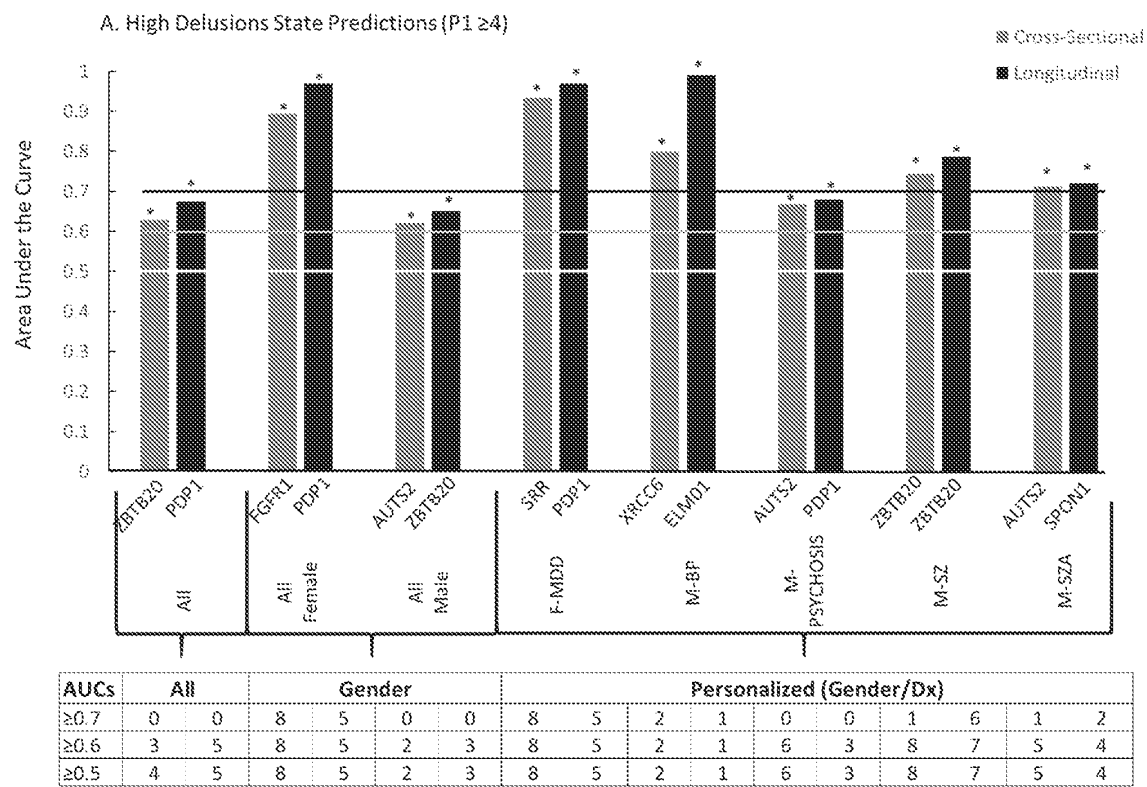


FIG. 2B

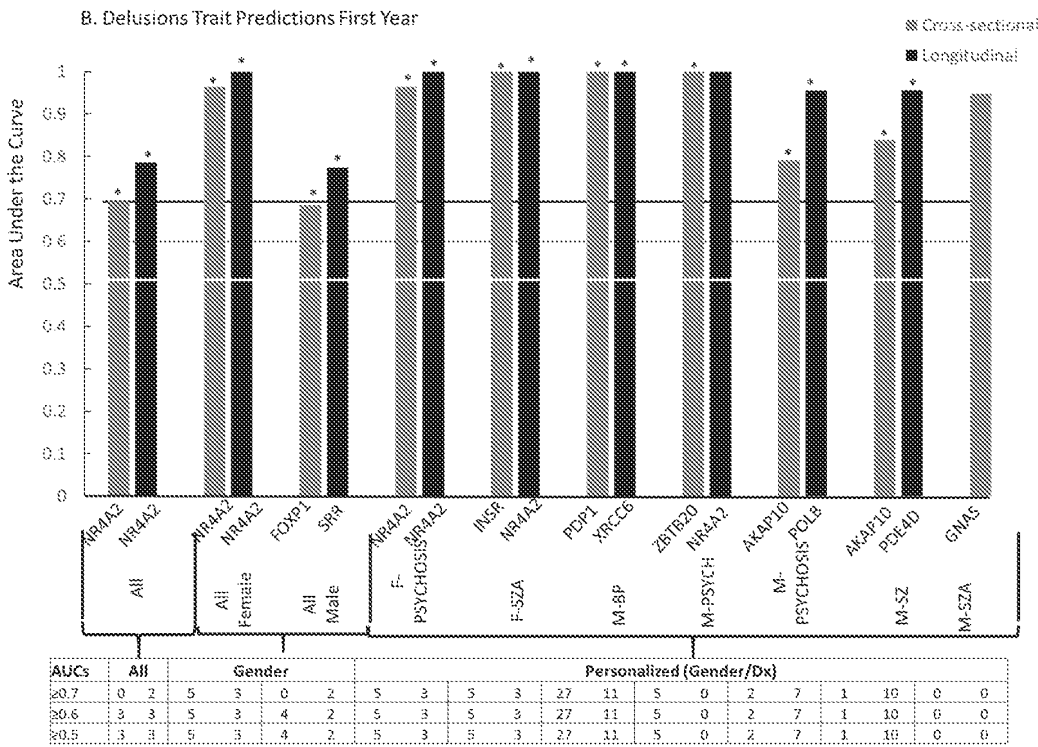


FIG. 2C

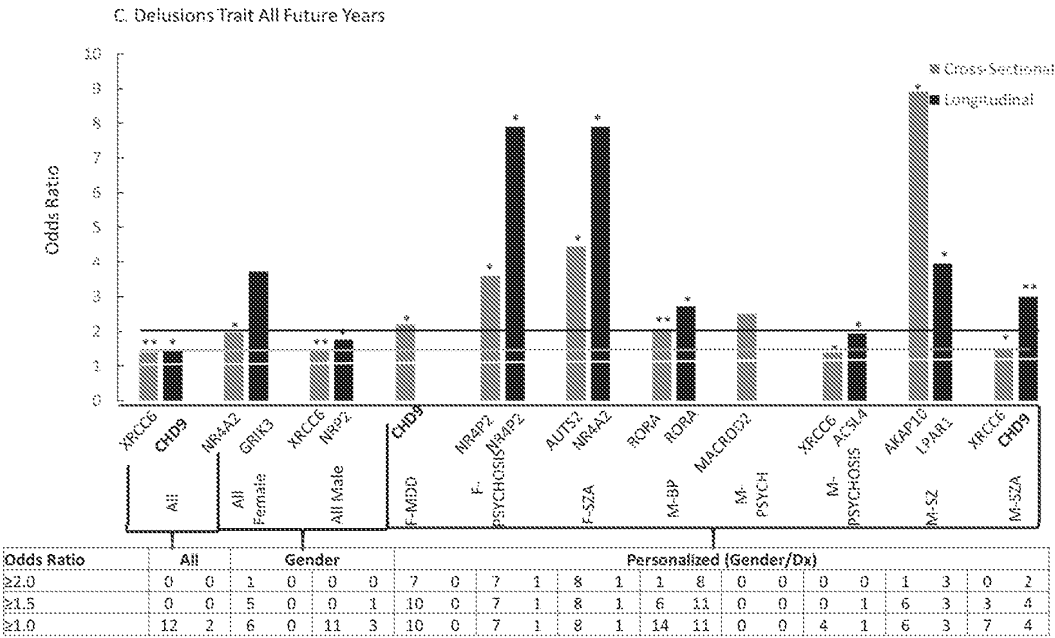


FIG. 2D

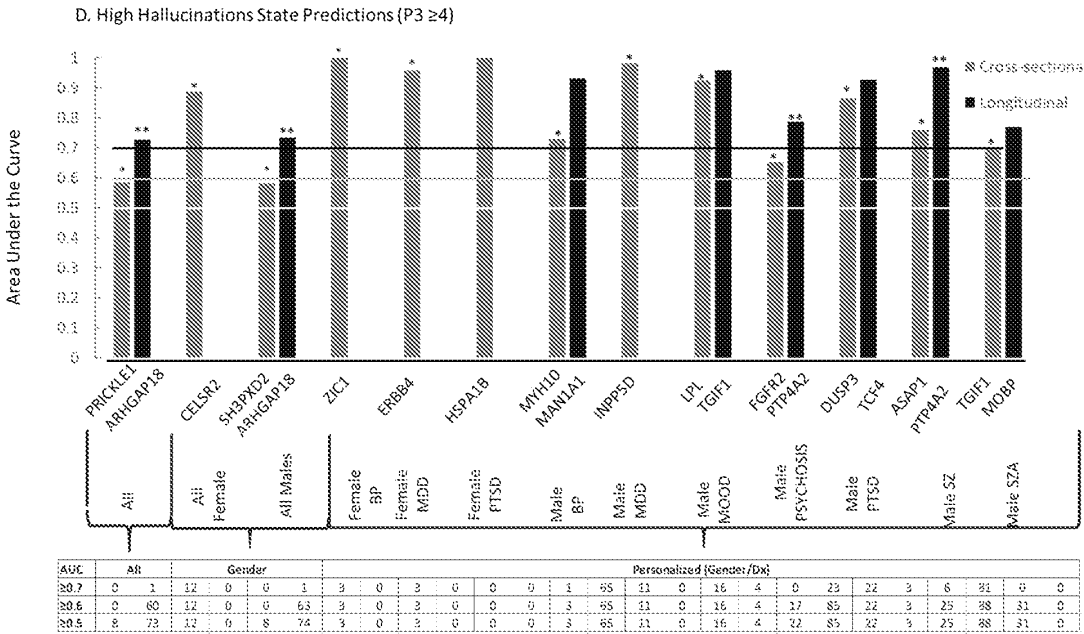
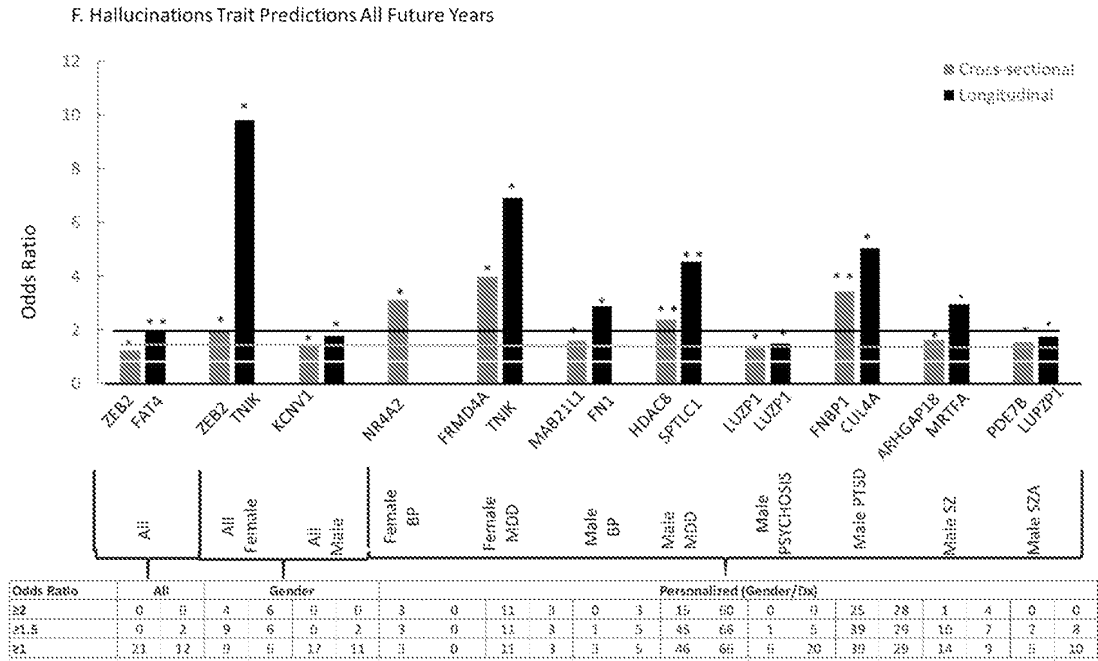
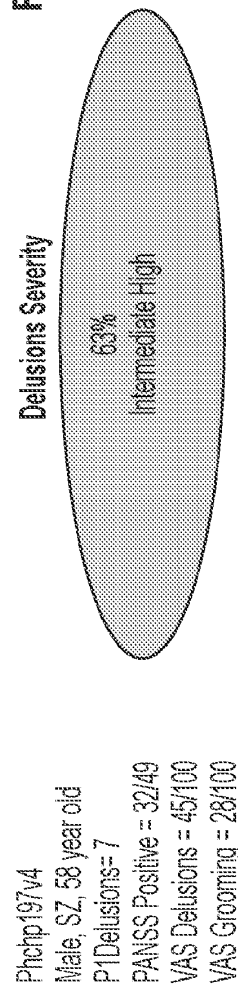


FIG. 2F



[illegible]

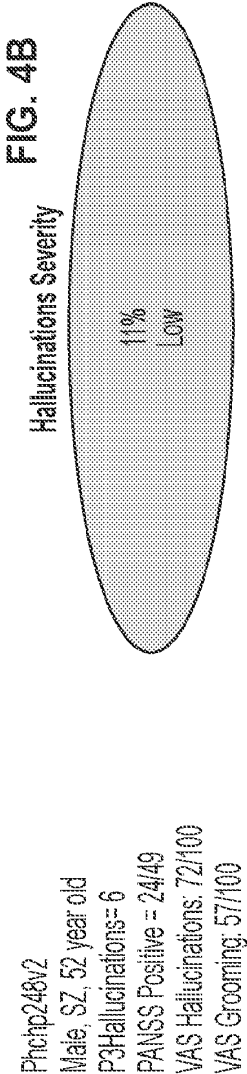
FIG. 4A



By categories			
Current (State)	All	Gender	Gender/Dx
			
	PDP1 SPON1 ZBTB20SPON1 PDP1		ZBTB20 DISC1 MEF2C
Short-Term Risk (First Year Hospitalizations with Delusions)	All	Gender	Gender/Dx
			
	AUTS2 CHD9 NR4A2	AUTS2 NR4A2 SRR	MEF2C PDE4D POLB
Long-Term Risk (All Future Hospitalizations with Delusions)	All	Gender	Gender/Dx
			
	CHD9 ACSL4 NRP2	NRP2 GNAS RORA ACSL4 AUTS2 LPAR1	

List of Suggested Existing Psychiatric Medications:

Drugs	Percentile
Clozapine	33
Risperidone	25
Fluoxetine	25
Lithium	8
Valproic Acid	8
Omega 3 Fatty Acids	8



By categories			
Current (State)	All  PRL ARHGAP18 PTP4A2	Gender  PRL ARHGAP18 ARHGAP18 PTP4A2 ARHGAP18 ARHGAP18	Low Score - 11%
Short- Term Risk (First Year Hospitalizations with Hallucinations)	All  RTN4 CUL4A LAMA4	Gender/Dx  RTN4 RTN4 ENPP2 MRTFA LUZP1 NFATC2IP	Low Risk - 6%
Long- Term Risk (All Future Hospitalizations with Hallucinations)	All  DLG1 FAT4 DST	Gender/Dx  FAT4 ENPP2 DST MRTFA LPL ZEB2	Intermediate Low Risk - 33%

List of Suggested Existing Psychiatric Medications:

Drugs	Percentile
Clozapine	50
Citalopram	20
Olanzapine	10
Omega 3 Fatty Acids	10