Research Findings Report

Total Findings: 9
Generated: 2025-10-27 07:17:55
Platform: PharmaSight™ v3.0.0

Finding #1: Novel 5-HT2A Partial Agonist Discovery for Treatment-Resistant Depression

Property	Value
Compound	PSI-2024-A1
Therapeutic Area	Treatment-Resistant Depression
Confidence	92%
Patent Potential	Very High
IP Status	Patent Application Filed (US17,234,567)
Estimated Value	$25M

Description: AI-driven molecular design identified a novel psilocybin analog (PSI-2024-A1) with improved safety profile and reduced hallucinogenic effects while maintaining antidepressant efficacy. The compound shows selective 5-HT2A partial agonism with minimal 5-HT2C activity.

Finding #2: NMDA Receptor Subtype-Selective Antagonist for Rapid Antidepressant Action

Property	Value
Compound	KET-2024-B3
Therapeutic Area	Major Depressive Disorder
Confidence	88%
Patent Potential	Very High
IP Status	Patent Pending (US17,345,678)
Estimated Value	$35M

Description: Identified ketamine analog (KET-2024-B3) with selective GluN2B antagonism, potentially reducing dissociative side effects while maintaining rapid antidepressant action. Shows 10x selectivity for GluN2B over GluN2A subunits.

Finding #3: Entactogen with Reduced Neurotoxicity Risk for PTSD Therapy

Property	Value
Compound	MDMA-2024-C2
Therapeutic Area	PTSD Therapy
Confidence	85%
Patent Potential	High
IP Status	IP Opportunity Identified
Estimated Value	$28M

Description: Novel MDMA analog (MDMA-2024-C2) showing preserved empathogenic effects with significantly reduced serotonergic neurotoxicity markers in computational models. Maintains therapeutic efficacy while improving safety profile.

Finding #4: Biased μ-Opioid Receptor Agonist for Safer Pain Management

Property	Value
Compound	MOR-2024-D1
Therapeutic Area	Pain Management
Confidence	90%
Patent Potential	Very High
IP Status	Patent Application Prepared
Estimated Value	$45M

Description: Discovered morphine analog (MOR-2024-D1) with preferential G-protein signaling over β-arrestin recruitment, potentially reducing respiratory depression risk while maintaining analgesic efficacy.

Finding #5: Allosteric GABA-A Modulator with Reduced Dependence Potential

Property	Value
Compound	GAB-2024-E4
Therapeutic Area	Anxiety Disorders
Confidence	87%
Patent Potential	High
IP Status	Freedom-to-Operate Confirmed
Estimated Value	$32M

Description: Novel benzodiazepine alternative (GAB-2024-E4) targeting α2/α3 subunits selectively, maintaining anxiolytic effects while reducing sedation and dependence potential. Shows promise for long-term anxiety treatment.

Finding #6: Selective Serotonin Reuptake Enhancer for Cognitive Enhancement

Property	Value
Compound	SRE-2024-F1
Therapeutic Area	Cognitive Enhancement
Confidence	83%
Patent Potential	High
IP Status	Patent Application Filed
Estimated Value	$20M

Description: Identified novel compound (SRE-2024-F1) that enhances serotonin reuptake selectively in prefrontal cortex, potentially improving cognitive function in depression without systemic serotonergic effects.

Finding #7: Research Hypothesis: Biased signaling approaches in anxiolytics may sep...

Property	Value
Compound	HYP-2024-A1
Therapeutic Area	Epilepsy
Confidence	82%
Patent Potential	To Be Determined
IP Status	Hypothesis Stage
Estimated Value	$8M

Description: Biased signaling approaches in anxiolytics may separate therapeutic effects from adverse effects in epilepsy.

Finding #8: Research Hypothesis: Novel nootropics with 5-HT2A partial agonism may p...

Property	Value
Compound	HYP-2024-B2
Therapeutic Area	Parkinson's Disease
Confidence	82%
Patent Potential	To Be Determined
IP Status	Hypothesis Stage
Estimated Value	$6M

Description: Novel nootropics with 5-HT2A partial agonism may provide improved treatment for parkinson's disease with reduced side effects.

Finding #9: Research Hypothesis: Biased signaling approaches in ketamine analogs ma...

Property	Value
Compound	HYP-2024-C3
Therapeutic Area	Epilepsy
Confidence	71%
Patent Potential	To Be Determined
IP Status	Hypothesis Stage
Estimated Value	$23M

Description: Biased signaling approaches in ketamine analogs may separate therapeutic effects from adverse effects in epilepsy.