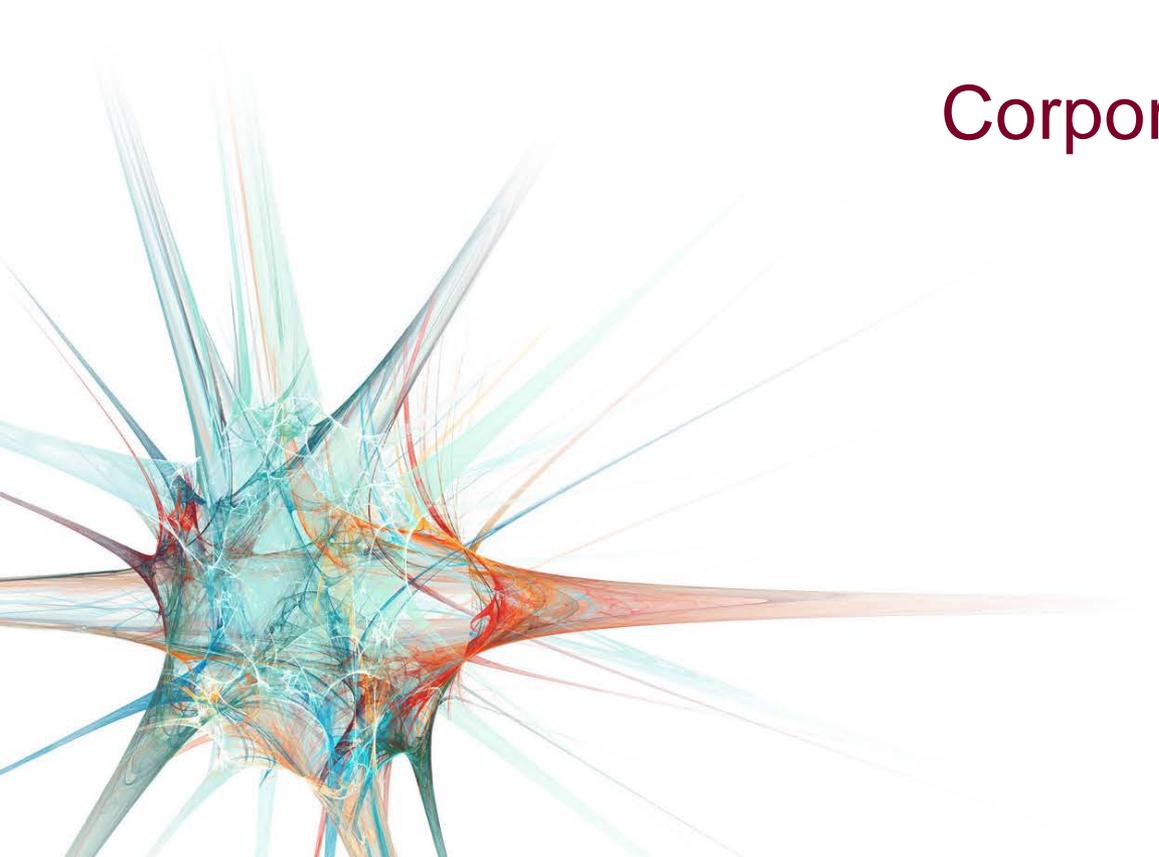




Corporate Presentation

November 2017



Safe Harbor Statement

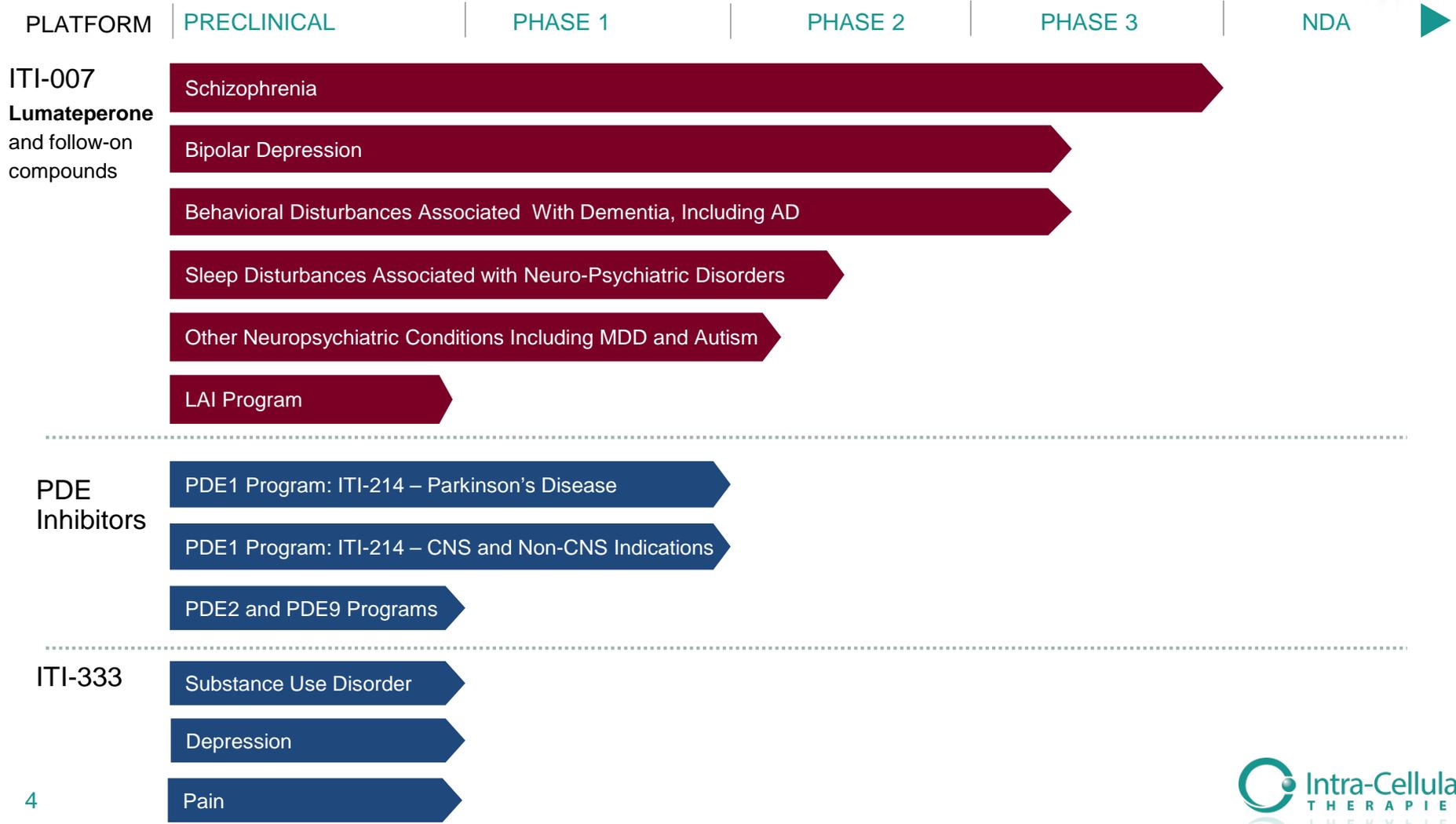
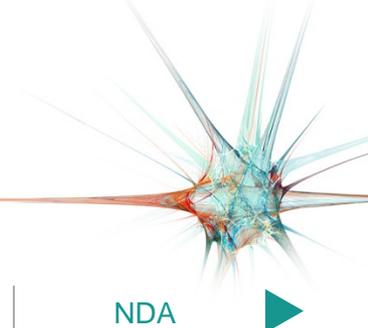
This presentation contains “**forward-looking statements**” within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements concern our product candidates, our development efforts, our collaborations, our technology, our intellectual property, our financial condition, our plans and our development programs. These statements involve risks, uncertainties and assumptions, and are based on the current estimates and assumptions of the management of Intra-Cellular Therapies, Inc. (the “Company” or “ITCI”) as of the date of this presentation and are subject to uncertainty and changes. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements include, among others, those set forth in our Annual Report on Form 10-K for the year ended **December 31, 2016** filed with the Securities and Exchange Commission, as well as any updates to those risk factors filed from time to time in our periodic and current reports. All statements contained in this presentation are made only as of the date of this presentation, and the Company undertakes no duty to update this information unless required by law.

Intra-Cellular Therapies, Inc. (ITCI)

- Focus on advancements in the treatment of CNS disorders
 - Lead program: Lumateperone (ITI-007)
 - Phase 3 program in schizophrenia
 - Phase 3 programs ongoing:
 - Bipolar depression
 - Agitation associated with dementia, including Alzheimer's disease
 - Leader in field of PDE1 inhibitor development
 - Lead drug candidate ITI-214 being developed for the treatment of Parkinson's disease and other CNS and non-CNS disorders
- Founded in 2002, leveraging technology from the lab of Nobel Laureate Dr. Paul Greengard
- Located in New York City
- Well-capitalized
 - \$328.1 million in cash, cash equivalents and investment securities at 09/30/2017 (In October 2017, the Company raised net proceeds of \$162 million in a public offering of its common stock)



ITCI Therapeutic Pipeline

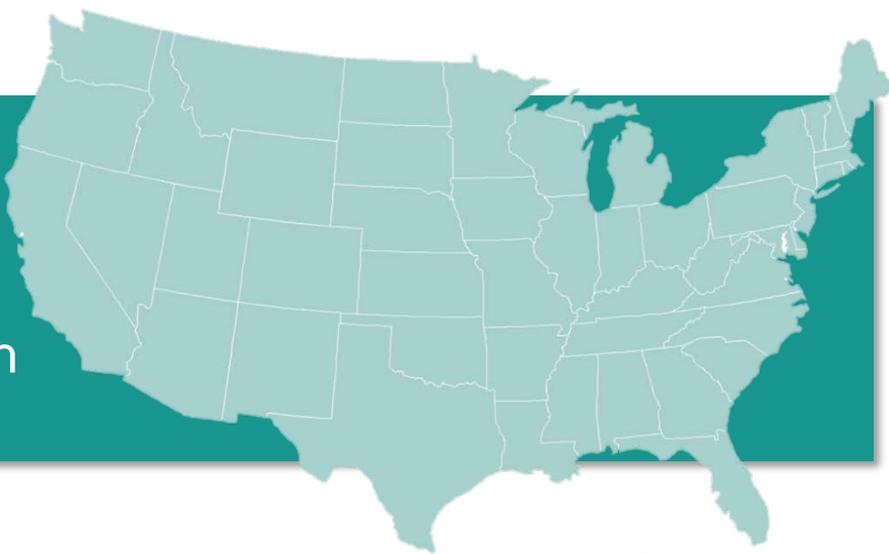


Schizophrenia, A Common Disabling Neuropsychiatric Disease



- Schizophrenia affects approximately **1%** of the global population¹
- Schizophrenia is one of the 25 leading causes of disability worldwide²

- **2.2 million** adults in the United States have schizophrenia¹
- **~100,000** people are newly diagnosed with schizophrenia each year in the United States¹

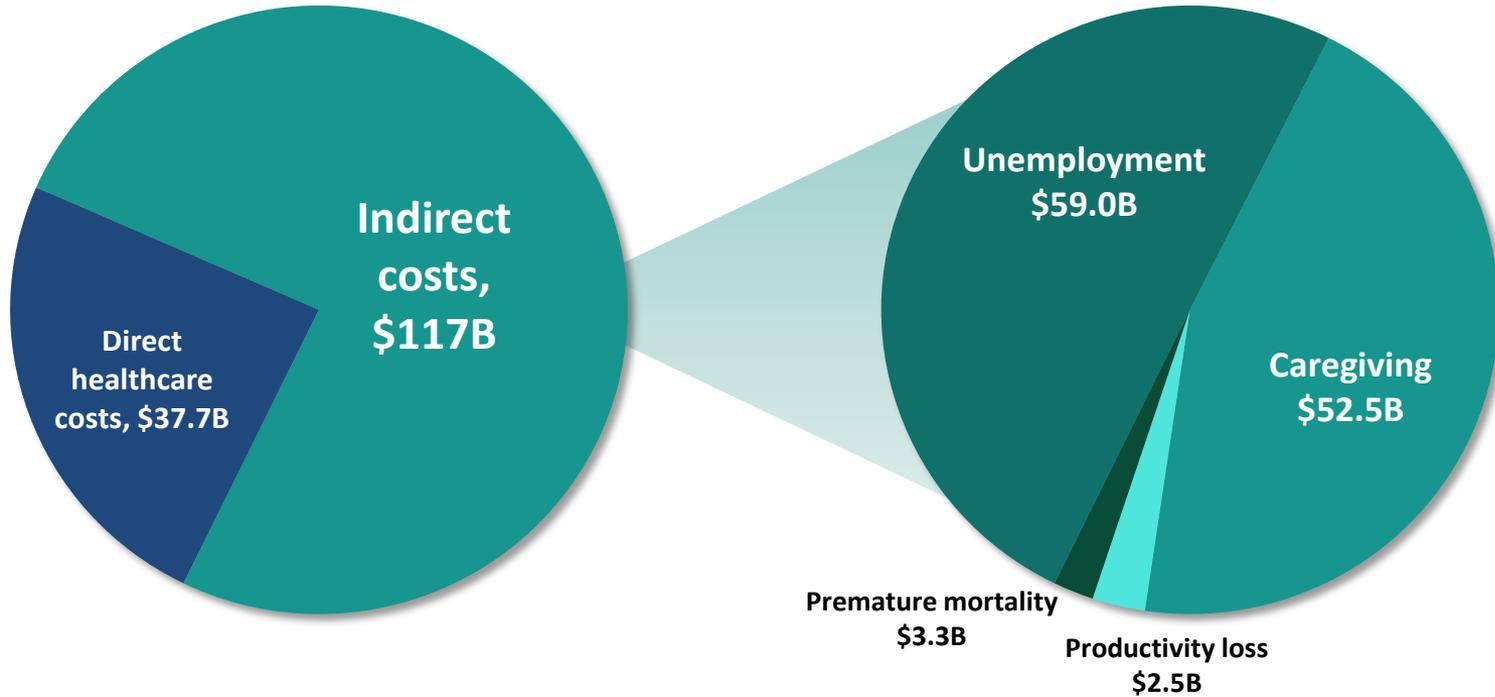


1. Schizophrenia facts and statistics. Schizophrenia.com Web site. Accessed April 9, 2017.

2. Chong HY, et al. *Neuropsychiatr Dis Treat*. 2016;12:357-373.

Economic Burden of Schizophrenia Exceeds \$154 Billion in the United States

Schizophrenia: Direct and Indirect Costs¹

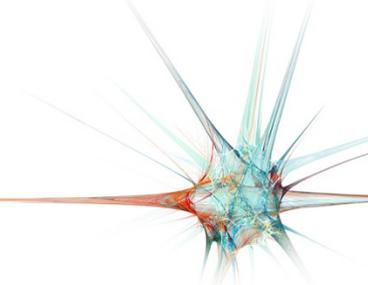


It is estimated that only about one-third of patients with schizophrenia can work regularly.^{2,3}

Costs of schizophrenia exceed many common conditions, including stroke, hypertension, breast/cervical cancers⁴

1. Cloutier M, et al. *J Clin Psychiatry*. 2016;77(6):764-771.
2. Albus M. *Pharmacopsychiatry*. 2012;45(suppl 1):S31-S35
3. Bellack AS, et al. *Schizophr Bull*. 2007;33(3):805-822.
4. Kockaya G, et al. *Health*. 2010;2(10):1174-1178.

Lumateperone is Designed to Address Unmet Needs in Schizophrenia



- Unmet medical needs still persist for the treatment of schizophrenia
 - Poor adherence to existing medications is common
 - 74% of US patients discontinue medication within 18 months (CATIE Study, 2005)
 - Only positive symptoms are effectively treated by existing drugs
 - Social function is not improved
 - Negative symptoms and depression are not effectively treated
 - Incidence of extrapyramidal symptoms, akathisia, metabolic and cardiovascular dysfunction impact quality of life

We believe the unique pharmacology of lumateperone can translate into an advancement in the treatment of schizophrenia as a single, stand-alone drug therapy

Lumateperone: Novel, First-in-Class Molecule With an MOA That Predicts Clinical Benefits Across CNS Disorders

	<u>nM Ki</u>
5HT-2A	0.5
D2	32
D1	52
SERT	62

5-HT_{2A} Receptor Antagonist

- Improves sleep quality
- Reduces anxiety and hostility
- Enhances antipsychotic and antidepressant activity

Glutamatergic Phosphoprotein Modulator

NMDA & AMPA Enhancement via D1

- Efficacy for negative and positive symptoms
- Improved cognition
- Rapid-acting antidepressant activity

Dopamine Phosphoprotein D₂ Modulator (DPPM)

D₂ Pre-synaptic partial agonist and post-synaptic antagonist

- Antipsychotic efficacy for positive symptoms
- Reduced agitation

PHARMACOLOGY PREDICTS ROBUST EFFICACY ACROSS A BROAD RANGE OF SYMPTOM DOMAINS

AND PREDICTS HIGHLY FAVORABLE SAFETY/TOLERABILITY PROFILE

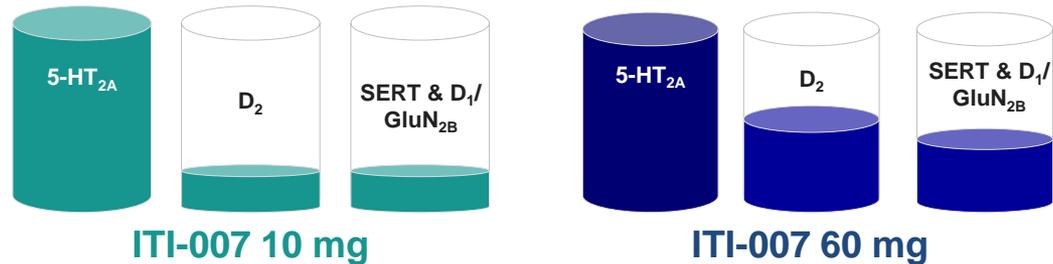
Serotonin Reuptake Inhibitor

- Antidepressant activity

Snyder GL et al. (2015). Functional profile of a novel modulator of serotonin, dopamine, and glutamate neurotransmission. *Psychopharmacology (Berl)* 232(3):605-21.

Lumateperone: Differentiated Pharmacology Provides Opportunities to Treat Multiple CNS Disorders

Broad separation between 5-HT_{2A} and other target affinities allows for full saturation of 5-HT_{2A} while adding only as much D₂, D₁/GluN_{2B} (glutamate), and SERT as needed



LOWER DOSES (1-10 mg)	HIGHER DOSES (40-60 mg)	TO BE DETERMINED
Behavioral Disturbances in Dementia	Schizophrenia	Major Depressive Disorder
Sleep Disturbances Associated With Neurologic and Psychiatric Disorders	Bipolar I and II Disorder (Depressive Episodes)	Adjunctive MDD
Sleep and Behavioral Disturbances Associated With Autism Spectrum Disorder	Bipolar I Disorder (Manic Episodes)	Post-traumatic Stress Disorder
Sleep Maintenance Insomnia		General Anxiety Disorder
Parkinson's Disease		

Lumateperone Schizophrenia Program Overview

- ITI-007 60 mg met primary endpoint in 2 entirely U.S.-based studies
- Well-tolerated with a safety profile similar to placebo in all studies
- Once daily oral dosing with no need for titration to 60 mg
- Two studies with risperidone as active control showed statistically significant safety & tolerability benefits for lumateperone over risperidone
- Similar efficacy as risperidone on primary endpoint in Study 005
- Anticipated NDA filing by mid 2018

3 Large Randomized, Double-Blind Trials

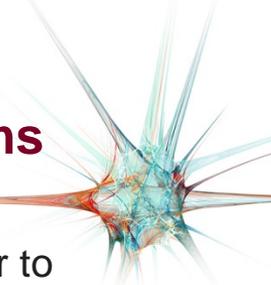
Primary outcome measure: change from baseline on Positive and Negative Syndrome Scale (PANSS) Total Score

ITI-007-005 ¹	ITI-007-301	ITI-007-302
N=335	N=450	N=696
4-week treatment period:	4-week treatment period:	6-week treatment period:
<ul style="list-style-type: none">- ITI-007 (60 mg or 120 mg)- Risperidone 4 mg or- Placebo	<ul style="list-style-type: none">- ITI-007 (60 mg or 40 mg)- Placebo	<ul style="list-style-type: none">- ITI-007 (60 mg or 20 mg)- Risperidone 4 mg or- Placebo

Open-Label Safety Switching Study with ITI-007 60 mg

- First Part (N=302) 6-week treatment duration - Completed
- Second Part with 1-year treatment duration - Ongoing

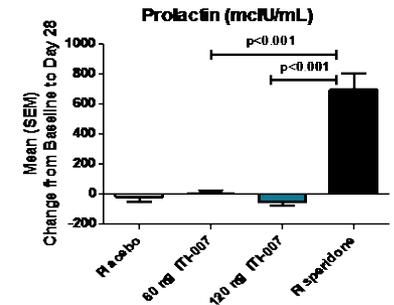
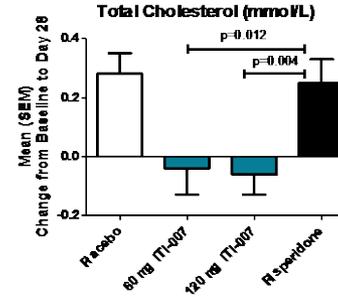
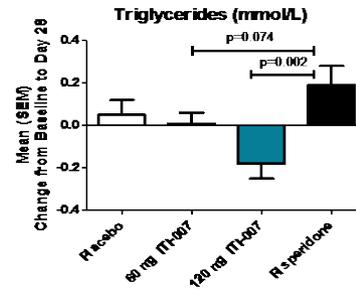
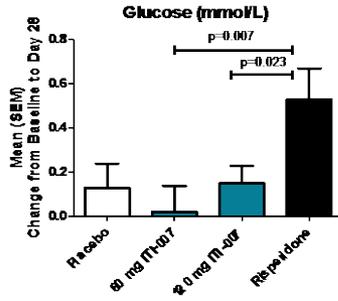
Lumateperone Profile Confirmed in a 6-Week Open-label Safety Switching Study in Patients with Stable Schizophrenia Symptoms



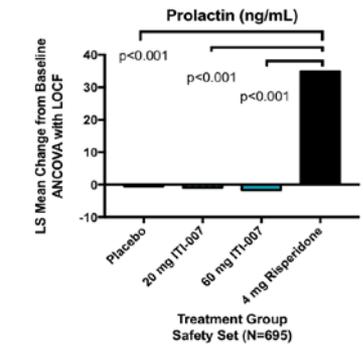
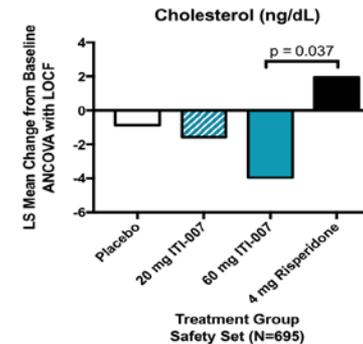
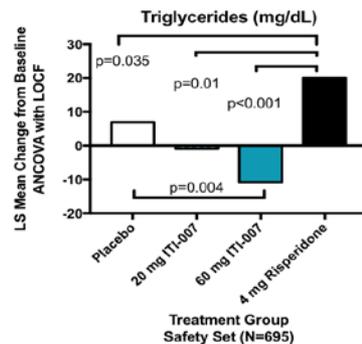
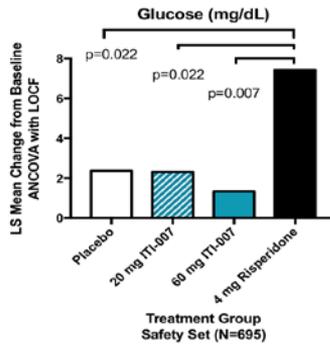
- The study evaluates stable patients with schizophrenia in an outpatient setting similar to common clinical practice
- The study assesses both the impact of switching to lumateperone (ITI-007 60 mg) from standard-of-care (SOC) antipsychotics as well as the impact of switching back to SOC from lumateperone (no dose titration necessary for lumateperone)
- Lumateperone was generally well tolerated with a favorable safety profile (most frequent drug-related AE was somnolence occurring in 6.6% of patients receiving lumateperone dosed daily in the evening)
- Statistically significant improvements from SOC baseline were observed in body weight, cardiometabolic and endocrine parameters over 6 weeks of treatment with lumateperone and worsened again when switched back to SOC medication
- Symptoms of schizophrenia did not worsen upon switch to lumateperone from SOC; rather statistically significant improvement from baseline was observed in PANSS mean total score (with greater improvements seen in subgroups of patients with comorbid symptoms of depression or prominent negative symptoms)
- The second part of the study, the Company's long-term safety study in schizophrenia, is enrolling patients for up to 1-year treatment duration with lumateperone following switch from SOC

Consistent Safety Profile Similar to Placebo on Key Parameters And Superiority over Risperidone

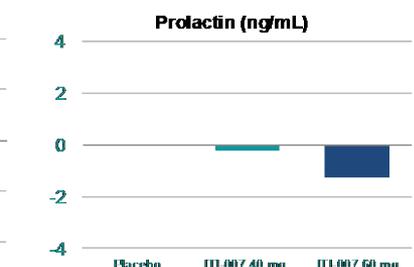
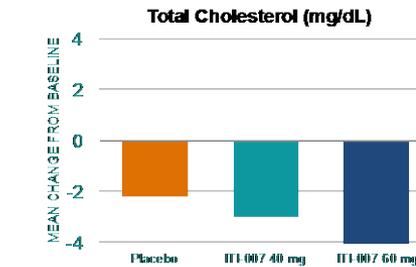
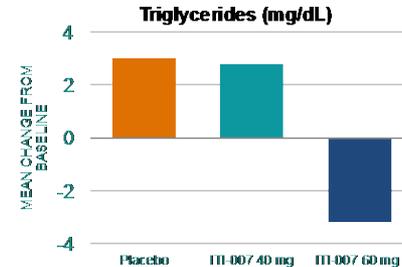
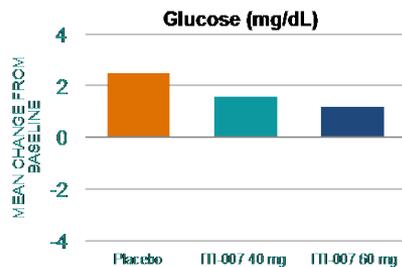
STUDY 005



STUDY 302



STUDY 301



Summary: Lumateperone Efficacy and Safety in Schizophrenia

- Two large, well-controlled positive studies and supportive data from a third study collectively provide evidence of the efficacy and safety of ITI-007 60 mg for the treatment of schizophrenia
- In all 3 studies, ITI-007 60 mg improved symptoms of schizophrenia with the same magnitude of change from baseline in the primary endpoint, the PANSS total score
- In Study 301, ITI-007 40 mg also demonstrated statistically significant separation from placebo on the CGI-S and PANSS positive subscale, though not formally tested against placebo since it did not separate on the primary endpoint
- In all three studies, lumateperone was well-tolerated with a safety profile similar to placebo (discontinuation rates due to AEs were low for lumateperone and similar to placebo)
 - No clinically significant differences with lumateperone from placebo in akathisia, extrapyramidal symptoms, prolactin, body weight, glucose, insulin, and lipids
- In the 2 studies with risperidone as the active control (Study 302 and 005), lumateperone was statistically significantly better than risperidone on several important key safety and tolerability parameters including prolactin, glucose and lipid measurements
- In a 6-week open-label switching study switching to lumateperone from SOC; lumateperone was generally well tolerated with a favorable safety profile, and demonstrated significant improvement across a wide range of parameters compared to SOC baseline

Lumateperone: Advancing Treatments in Bipolar Depression (BPD)

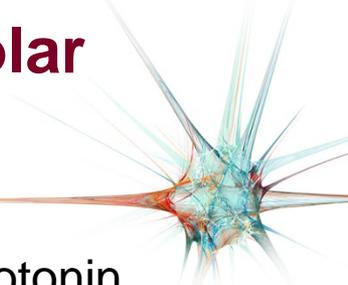
Bipolar disorder is a highly prevalent disease (2.6% 12-month prevalence in US adults; NIMH) with bipolar depression being the predominant clinical presentation

Depressive episodes are longer and recur more often than manic/hypomanic episodes

Safety and tolerability trade-offs limit use of current agents

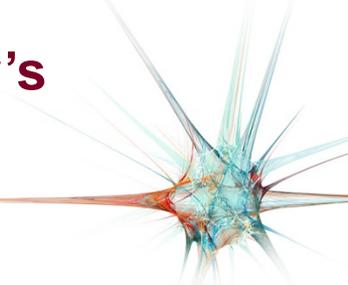
Few treatment options available

Lumateperone (ITI-007) for the Treatment of Bipolar Depression and Other Depressive Disorders



- First-in-class investigational agent simultaneously modulates serotonin, dopamine, and glutamate
- Enhancement of glutamatergic neurotransmission in PFC via both NMDA and AMPA receptors downstream from D1 receptor activation could predict a rapid and potent antidepressant effect
- Recent data also suggests positive regulation of protein phosphorylation in the mTOR pathway consistent with a rapid-acting antidepressant effect
- Comorbidly depressed schizophrenia patients experienced robust improvements in depressive symptoms as demonstrated in prespecified subgroup analyses in studies examining acute and stable patients
- Well-tolerated with a safety profile similar to placebo in all studies completed to date
- Phase 3 clinical program includes:
 - A monotherapy study
 - An adjunctive study (lithium and valproate)
 - A global monotherapy study

Behavioral Disturbances in Dementia, Including Alzheimer's Disease: Large Market With Significant Unmet Needs

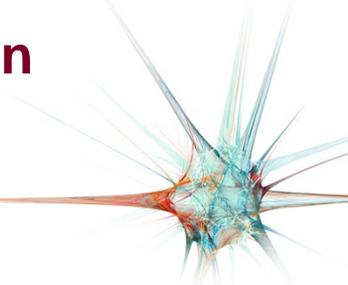


- Large potential market
 - 44.4 million patients worldwide
 - >50% with behavioral disturbances
 - Leading cause of early institutionalization
 - Affects patients, relatives, and caregivers
- Currently no approved agents
- Our Phase 1/2 study demonstrated ITI-007 was well tolerated with a favorable safety profile at all doses (7.5 mg – 30 mg)
- Phase 3 clinical trial in the treatment of agitation in patients with dementia ongoing

Potential benefit of lumateperone at low doses

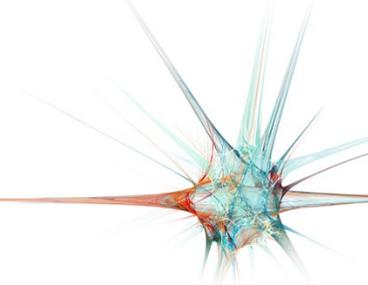
- Reduced behavioral disturbances, eg, agitation (incl. aggression)
- Improved sleep maintenance
- Antidepressant and anxiolytic efficacy/reduced emotional distress
- Antipsychotic efficacy

PDE1 Inhibition: Novel Approach to Intracellular Modulation of Cellular Signaling with Broad Therapeutic Potential



- PDE1 inhibitors have minimal effect on normal function only acting when cells are stimulated - “on-demand” effects
- PDE1 enzymes are highly active in pathological or disease states and our PDE1 inhibitors are designed to reestablish normal function in these disease states
- Inhibitors of PDE1 block the breakdown of cyclic nucleotides (cAMP, cGMP) potentiating downstream intracellular signaling
- The MOA of PDE1 inhibitors suggest therapeutic potential across a variety of neurological and cardiovascular diseases
- Within our PDE1 portfolio, ITI-214 is the most advanced with four Phase 1 studies completed
- In all studies, ITI-214 was generally well tolerated with a favorable safety profile
- Initiating a clinical program with ITI-214 in patients with Parkinson’s disease

ITI-214: Therapeutic Potential in Parkinson's Disease



● Large Market Potential

- Over 1.0 million and 1.2 million patients in the US and Europe, respectively
- Progressive neurodegenerative disorder with motor and non-motor symptoms

● Unmet Need

- Dopamine replacement therapies (L-DOPA as gold standard) address early motor symptoms, but are insufficient as disease progresses and have limiting side effects
- Effective treatments to address non-motor symptoms are lacking

● Potential Role for ITI-214

- As monotherapy to provide motor and non-motor benefit in early stages of disease
- To potentiate L-DOPA and other dopamine replacement therapies for better motor symptom control while inhibiting dyskinesia
- To address non-motor symptoms such as excessive daytime sleepiness, cognitive impairment and other non-motor symptoms

● Clinical Development Plan

- Initiating a Phase 1/2 clinical trial of ITI-214 in patients with Parkinson's disease to evaluate safety and tolerability
- Explore motor and non-motor symptom benefit (e.g. excessive daytime sleepiness, mood and cognition)

ITI-333 Potential For Treating Multiple Disorders Including Mood Disorders, Substance Use Disorders and Pain



Receptor or Transporter	Ki (nM)
Serotonin 5-HT _{2A}	8.3
Dopamine D ₁	50
Mu opioid	11

- Mechanism of action with high affinity at serotonin 5-HT_{2A}, dopamine D₁ and mu opiate receptors, with little or no activity at other receptors
- Unique pharmacological profile may translate into clinical utility to address symptoms associated with mood disorders, substance use disorder and pain

Key Financial Information



KEY METRICS

Total Cash, Cash Equivalents, and Investments^{(1) (2)} \$328.1 million

Total Debt⁽¹⁾ \$0.0 million

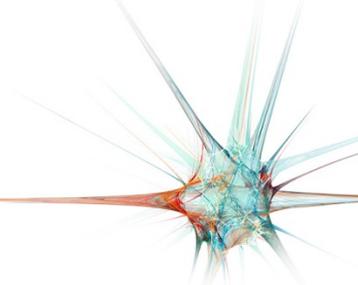
Common Shares Outstanding^{(1) (2)} 43,427,344

Stock Options / Restricted Stock Units Outstanding⁽¹⁾ 4,219,143

(1) As of September 30, 2017 (unaudited)

(2) In October 2017, the Company completed a follow on public offering resulting in net proceeds of approximately \$162 million from the sale 11,129,032 shares of its common stock

Management Team



Sharon Mates, PhD, Founder, Chairman, President & Chief Executive Officer

Andrew Satlin, MD, Executive Vice President & Chief Medical Officer

Michael I. Halstead, Senior Vice President and General Counsel

Kimberly Vanover, PhD, Senior Vice President of Clinical Development

Robert Davis, PhD, Senior Vice President, Chief Scientific Officer

Larry Hineline, Vice President of Finance & Chief Financial Officer

Juan Sanchez, MD, Vice President of Corporate Communications and Investor Relations

Board of Directors



Sharon Mates, PhD, Chairman, Founder, President & Chief Executive Officer, Intra-Cellular Therapies

Christopher Alafi, PhD, General Partner, Alafi Capital

Richard Lerner, MD, Institute Professor & Former President, The Scripps Research Institute

Joel Marcus, JD, CPA, Chairman, Founder, President & Chief Executive Officer, Alexandria Real Estate Equities (NYSE: ARE)

Rory B. Riggs, MBA, Co-Founder and Chairman, Royalty Pharma; Founder and CEO, Syntax Analytics; Managing Member, New Ventures; Managing Member, Balfour

Robert L. Van Nostrand, CPA, Chairman, Yield10 Bioscience; Board Member, Achillion Pharmaceuticals and Enumeral Biomedical Holdings; Former CFO, OSI Pharmaceuticals



Intra-Cellular
T H E R A P I E S

