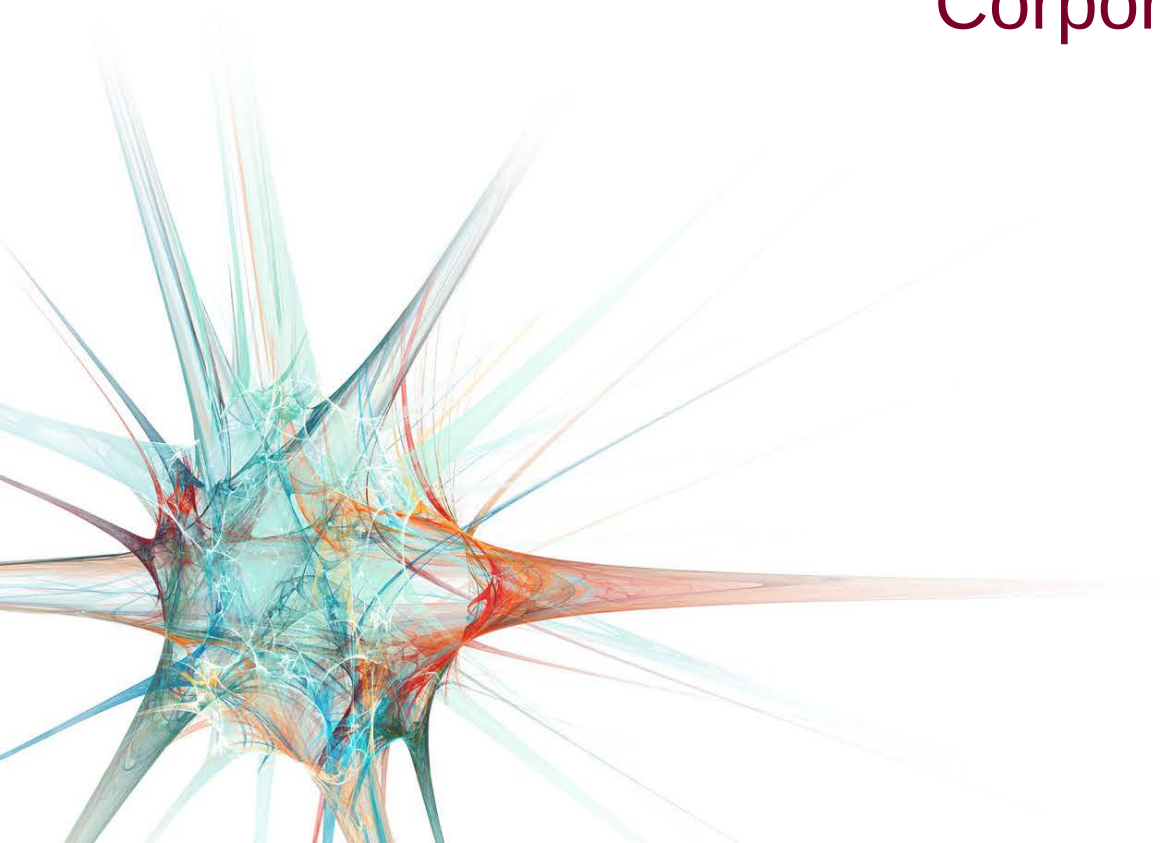
Intra-Cellular THERAPIES

Corporate Presentation

October 2018



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, 2017 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

Intra-Cellular Therapies, Inc. (ITCI)

- Focus on advancements in the treatment of CNS disorders
  - Lead program: Lumateperone (ITI-007)
    - For the treatment of schizophrenia
      - NDA submitted in September 2018
      - Fast track designation granted in late 2017
    - Other Phase 3 programs:
      - Bipolar depression
      - Agitation associated with dementia, including Alzheimer's disease
  - Leader in the field of PDE1 inhibitors
    - ITI-214 being developed for the treatment of Parkinson's disease and heart failure
- Founded in 2002, leveraging technology from the lab of Nobel Laureate Dr. Paul Greengard
- Located in New York City
- Well-capitalized
  - $403.8 million in cash, cash equivalents and investment securities at 06/30/2018

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ITCI Therapeutic Pipeline

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Schizophrenia Is A Common Disabling Neuropsychiatric Disease

Schizophrenia affects approximately **1%** of the global population[1]

2.2 million adults in the United States have schizophrenia[1]

~**100,000** people are newly diagnosed with schizophrenia each year in the United States[1]

Economic Burden of schizophrenia exceeds **$154 Billion** in the U.S.[2]

- It is estimated that only about one-third of patients with schizophrenia can work regularly.[4,5]
- Onset in early adulthood leads to life-long disability and economic burden

1. Schizophrenia facts and statistics. Schizophrenia.com website. Accessed October 2, 2018. 2. Cloutier M, et al. *J Clin Psychiatry*. 2016;77(6):764-771. 3. Chong HY, et al. *Neuropsychiatr Dis Treat*. 2016;12:357-373.. 4. Albus M. *Pharmacopsychiatry*. 2012;45(suppl 1):S31-S35. 5. Bellack AS, et al. *Schizophr Bull*. 2007;33(3):805-822. 6. Kockaya G, et al. *Health*. 2010;2(10):1174-1178.

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Lumateperone is Designed to Address Unmet Needs in Schizophrenia

- Existing therapies have significant adverse events including extrapyramidal symptoms, akathisia, metabolic disturbances, weight gain and cardiovascular dysfunction
  - Impact quality of life
  - Lead to poor adherence with 74% of US patients discontinuing medication within 18 months (CATIE Study, 2005)
- Only positive symptoms are effectively treated by existing drugs; negative symptoms and depression are not effectively treated
- Social function is not improved

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

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

	nM Ki
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 D_2 Modulator (DPPM)

D_2 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.

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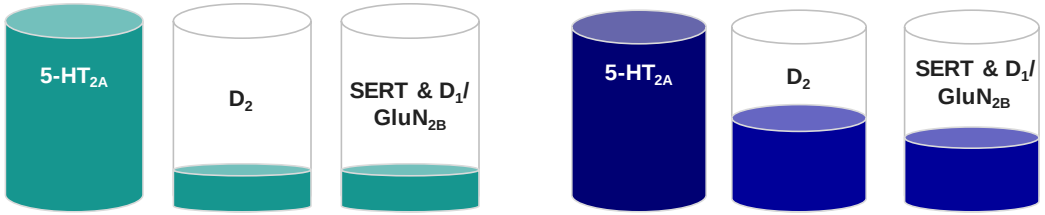
Lumateperone: Differentiated Pharmacology Provides Opportunities to Treat Multiple CNS Disorders

Broad separation between 5-HT_{2A} and other target affinities allows for full saturation of 5-HT_{2A} while adding only as much D_2, D_1/$GluN_{2B}$ (glutamate), and SERT as needed



ITI-007 10 mg **ITI-007 60 mg**

LOWER DOSES (1-10 mg)	HIGHER DOSES (40-60 mg)
Behavioral and Psychiatric Disturbances in AD and PD	**Schizophrenia**
Sleep Disturbances Associated With Neurologic and Psychiatric Disorders	**Bipolar I and II Disorder (Depressive Episodes)**
Behavioral Disturbances Associated With Autism Spectrum Disorder	**Bipolar I Disorder (Manic Episodes)**
Sleep Maintenance Insomnia	**Major Depressive Disorder (MDD)**

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Lumateperone Schizophrenia Program Overview

- Lumateperone (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
- NDA submitted in September 2018
- Received Fast Track designation

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 4-week treatment period: - ITI-007 (60 mg or 120 mg) - Risperidone 4 mg or - Placebo	N=450 4-week treatment period: - ITI-007 (60 mg or 40 mg) or - Placebo	N=696 6-week treatment period: - 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; ICH guidelines met incl. 100 pts treated for 1-year**

[1]Lieberman et al., Biological Psychiatry. 2016 June; 79:952–961.

Acute Controlled Studies Demonstrate Safety Profile Similar to Placebo on Key Parameters And Superiority Over Risperidone

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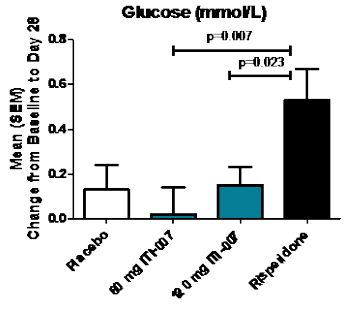
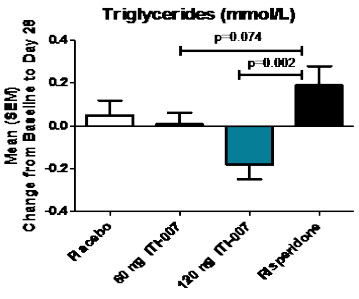
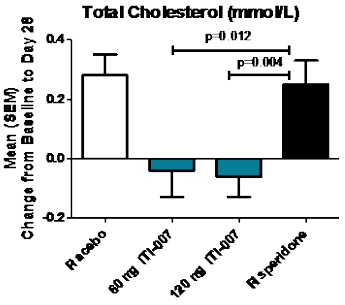
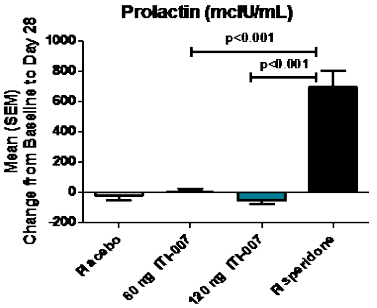
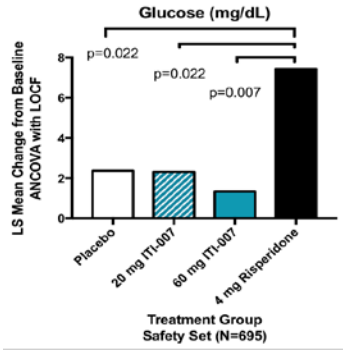
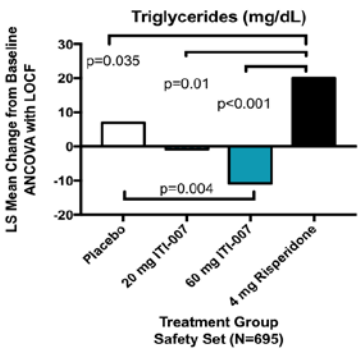
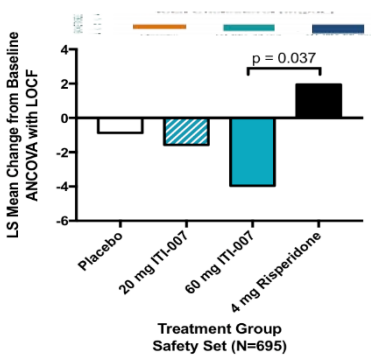
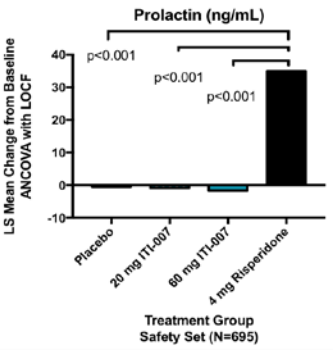
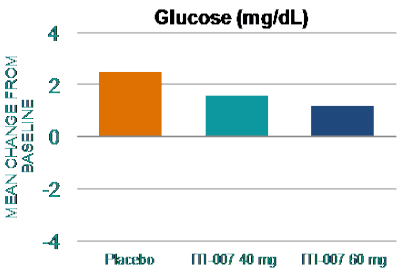
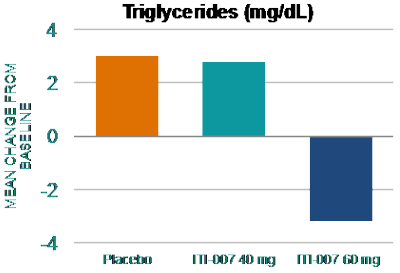
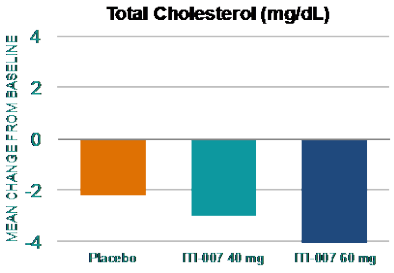
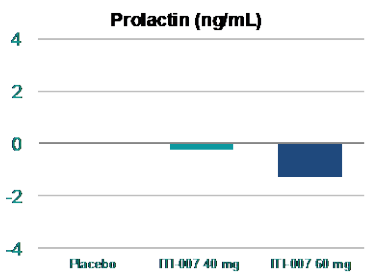
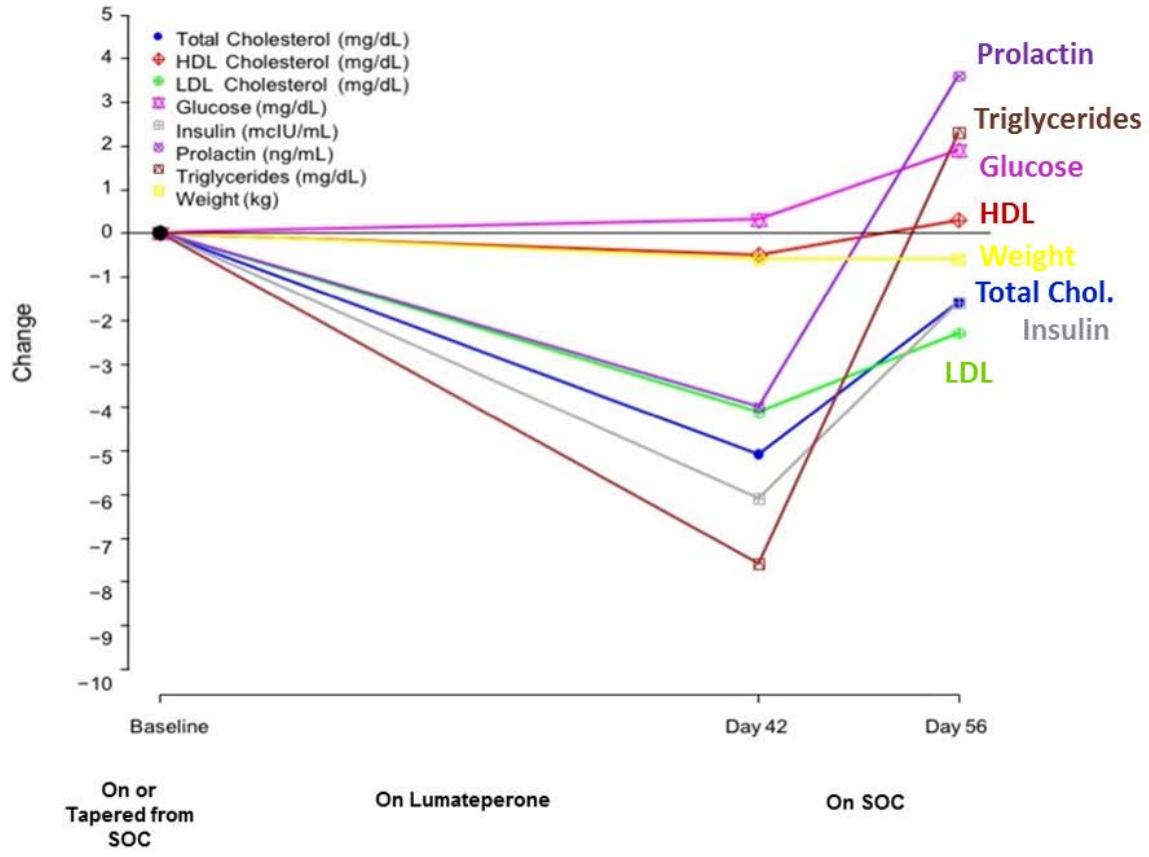
STUDY 005				
STUDY 302				
STUDY 301				

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

- The study evaluated stable patients with schizophrenia in an outpatient setting similar to common clinical practice
- The study assessed:
  - the impact of switching to lumateperone (ITI-007 60 mg) from standard-of-care (SOC) antipsychotics
  - 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.
- 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
  - greater improvements seen in subgroups of patients with comorbid symptoms of depression or prominent negative symptoms

In Open Label Safety Switching Study, Key Cardiometabolic Parameters Improved on Lumateperone and Worsened Again After Switch Back to SOC (N=302)

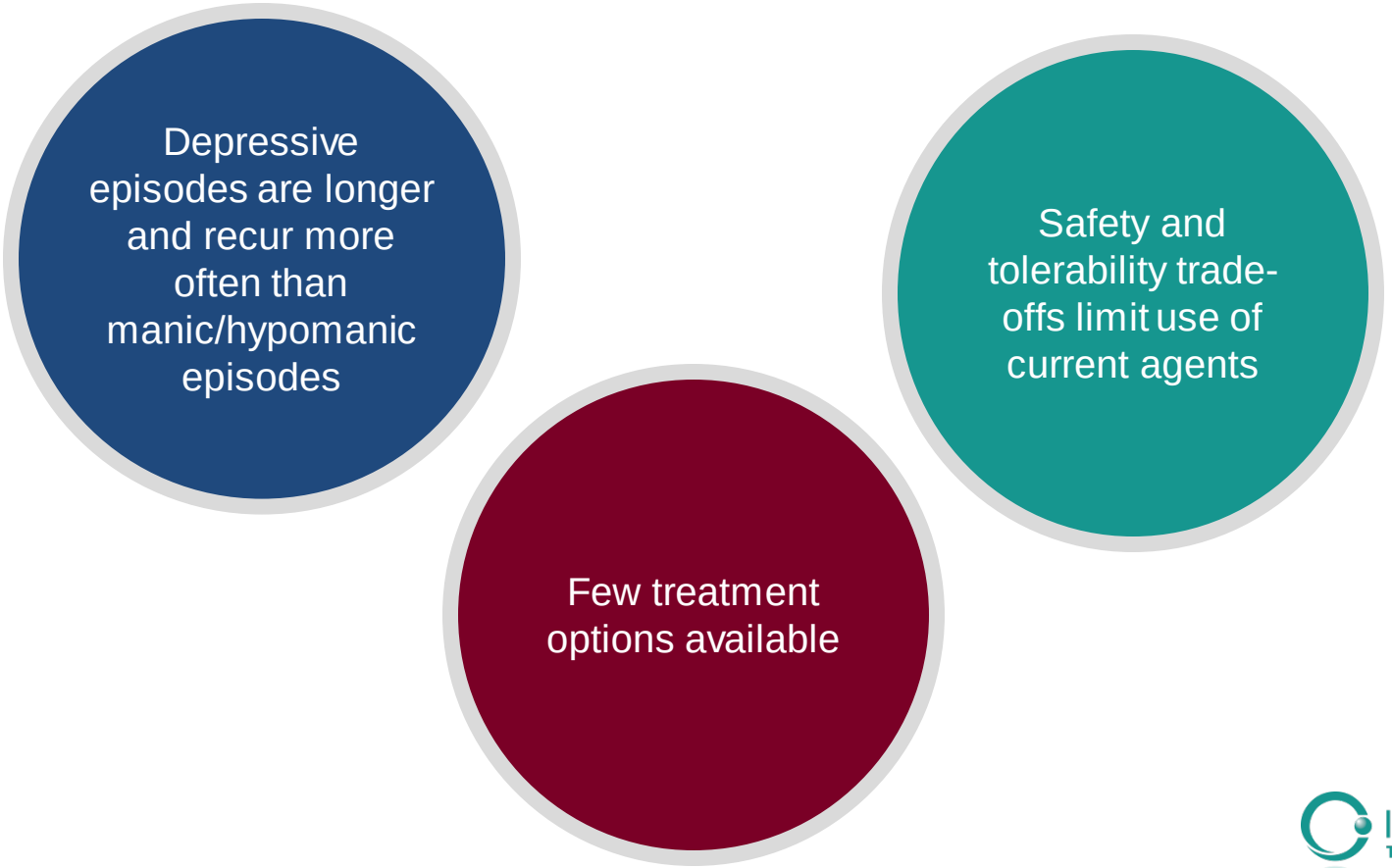


Summary: Lumateperone Efficacy and Safety in Schizophrenia

- Two large, well-controlled positive studies and supportive data from a third study collectively provide evidence of the efficacy and safety of lumateperone (ITI-007 60 mg) for the treatment of schizophrenia
- In all three studies, lumateperone was well-tolerated with a safety profile similar to placebo
- In the 2 studies with risperidone as the active control, lumateperone was statistically significantly better than risperidone on key safety and tolerability parameters
- In open label safety switching study, key cardiometabolic parameters improved on lumateperone and worsened again after switch back to SOC

Lumateperone: Advancing Treatments in Bipolar Depression

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



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Lumateperone for the Treatment of Bipolar Depression and Other Depressive Disorders

- In previous studies depressed schizophrenia patients experienced robust improvements in depressive symptoms
- Well-tolerated with a safety profile similar to placebo in all studies completed to date
- Recent preclinical data support potential for rapid-acting antidepressant effects

- Bipolar depression Phase 3 clinical program includes
  - Two monotherapy studies
  - One adjunctive study (lithium or valproate)
- Clinical program in depressive disorders expected to begin in 2H 2018

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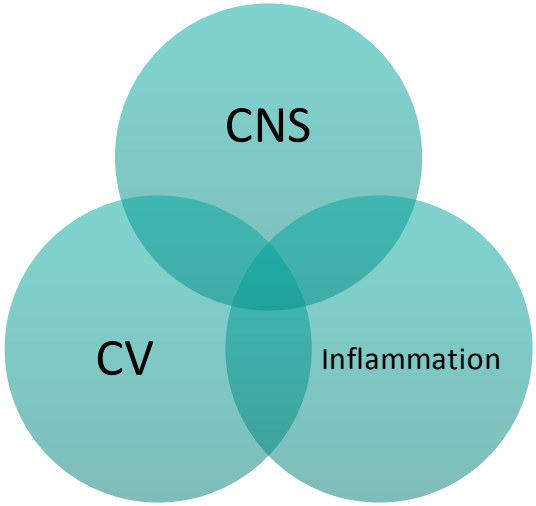
Lumateperone for the Treatment of Agitation in Alzheimer's Disease

- **Large Market Potential**
  - 44.4 million people worldwide with AD
  - >50% with behavioral disturbances
  - Agitation is a leading cause of early institutionalization
  - Affects patients, relatives, and caregivers
- **Unmet Need**
  - Currently no approved agents
- **Low dose lumateperone targeted to reduce agitation, including aggression**
- **Potential benefit across a wide range of behavioral disturbances**
  - Improved sleep & restored circadian rhythms
  - Antidepressant and anxiolytic efficacy/reduced emotional distress
  - Antipsychotic efficacy
- **Phase 1/2 study demonstrated a favorable safety profile in geriatric subjects and patients with dementia**
- **Clinical Development Plan**
  - Phase 3 clinical trial in the treatment of agitation in patients with dementia ongoing

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

- PDE1 enzymes are highly active across a variety of neurological and cardiovascular diseases
- Our PDE1 inhibitors are designed to reestablish normal function in these disease states
  - Inhibitors of PDE1 block the breakdown of second messenger cyclic nucleotides (cAMP, cGMP) potentiating downstream intracellular signaling
- In four completed Phase I studies, ITI-214 was generally well tolerated with a favorable safety profile



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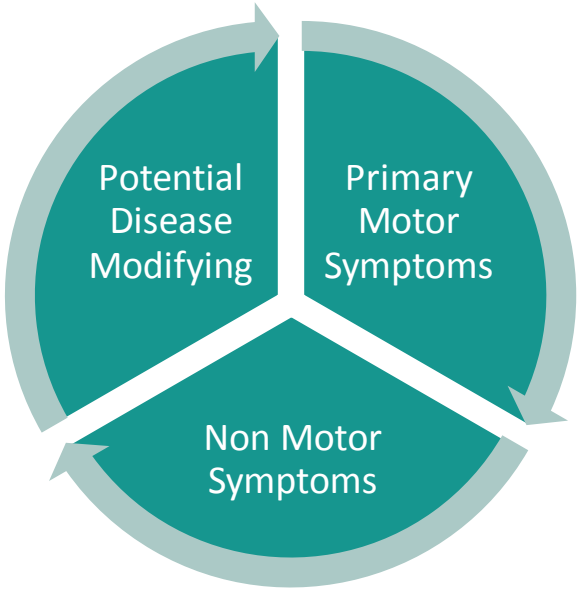
ITI-214 for the Treatment of Parkinson's Disease (PD)

- **Large Market Potential**
  - Over 2.2 million patients in the US and Europe
  - Progressive neurodegenerative disorder with motor and non-motor symptoms
- **Unmet Need**
  - Dopamine replacement therapies (L-DOPA as gold standard) address motor symptoms, but are insufficient as disease progresses and have limiting side effects
  - Effective treatments to address non-motor symptoms are lacking

ITI-214 as a multi-pronged approach to the treatment of PD



- Clinical Development Plan
  - Phase 1/2 clinical trial of ITI-214 in patients with PD to evaluate safety and tolerability is complete
  - Results to be presented later this year

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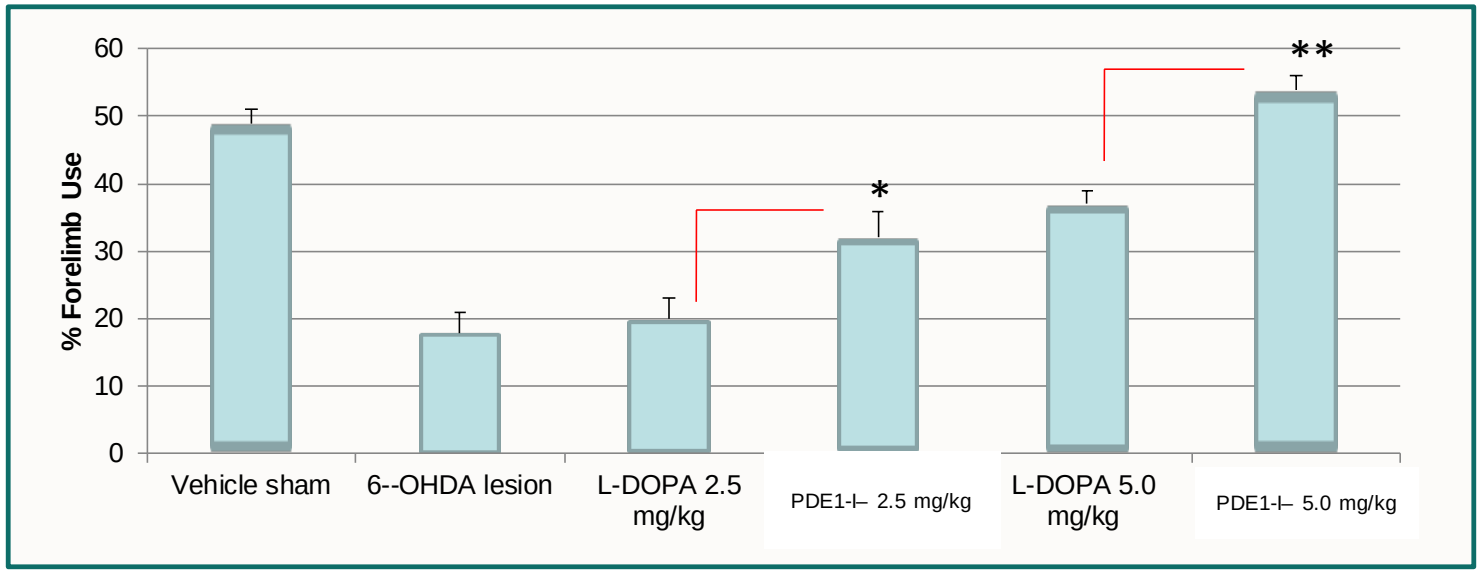
PDE1 Inhibitors Improve Motor Symptoms in Models of PD by Enhancing Dopamine Signaling

Preclinical evidence shows that PDE1 inhibitors restore affected limb use in animal models of PD



- Stand-alone treatment in early PD may be possible where sufficient endogenous dopamine is available to support synaptic activity
- L-DOPA & DA agonist sparing as disease progresses to prolong utility of DA replacement strategies and reduce side effects
- Additional preclinical data indicate improved cognition and enhanced wakefulness by PDE1 inhibition, without psychomotor stimulation

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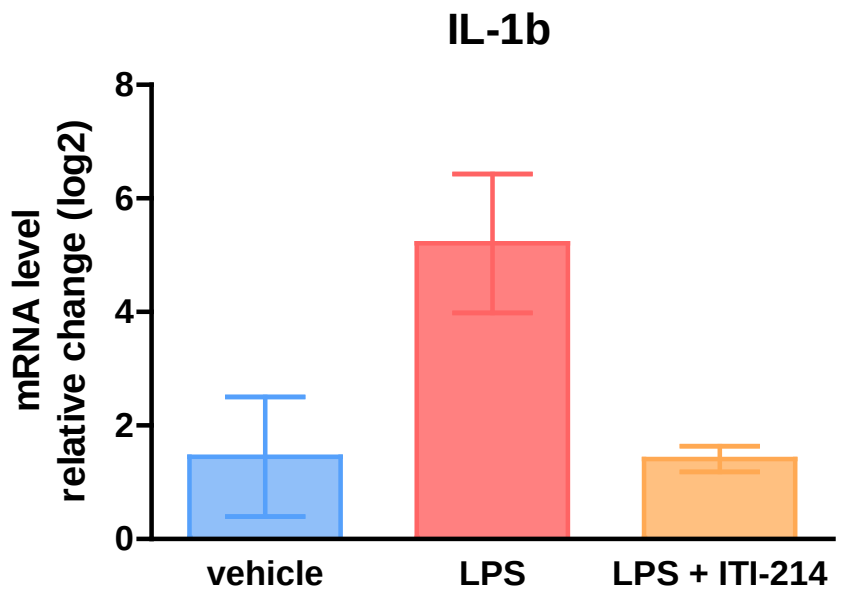
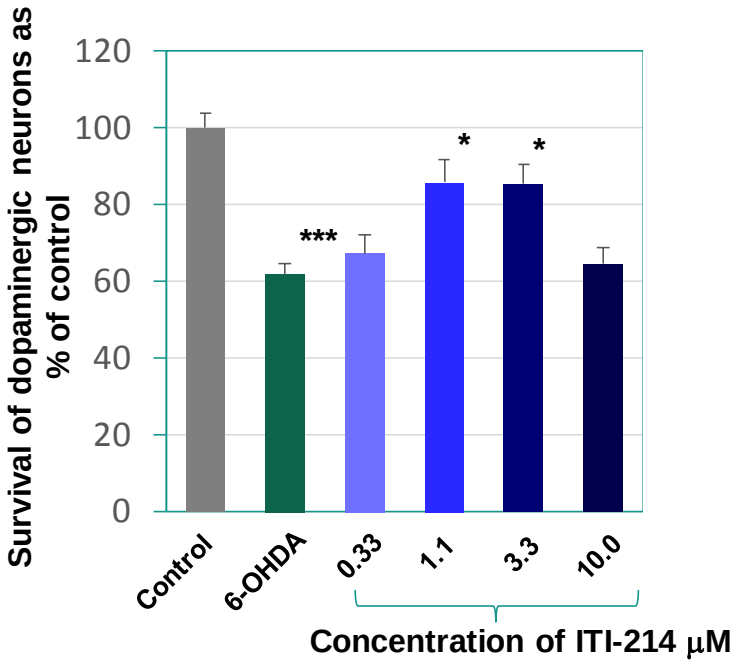
ITI-214 Prevents Neuroinflammation and is Neuroprotective

ITI-214 prevents increases in pro-inflammatory cytokines, such as IL-1ß in microglia



In animals with lesions in the part of the brain where dopamine neurons are lost in PD, ITI-214 improves dopamine neuron survival



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ITI-214: Represents A Novel Mechanism of Action for The Treatment of Heart Failure

- **Medical Need**
  - Heart failure (HF) affects approximately 5.7 million people and has a mortality rate of ~50% within 5 years
  - Need for approaches that improve heart function acutely and with longer exposure, also counter maladaptive remodeling of the ventricle

- **Preclinical Data Has Shown Beneficial Effects on Cardiac Function**
  - PDE-1 inhibition increases cardiac contractility and cardiac output
  - Potential for attenuation or reversal of cardiac remodeling
  - ITI-214 acts by a novel mechanism of action that involves modulation of adenosine A2B receptor signaling pathways

- **A randomized, double-blind, placebo-controlled study of escalating single doses of ITI-214 in patients with systolic HF is ongoing**

ITI-333 For Treatment of Substance Use Disorders, Pain, and Mood Disorders

- The opioid crisis
  - Nearly 12 million people in the United States misused opioids in the previous year
  - 130+ people a day die from opioid-related drug overdoses

- ITI-333 Profile

Receptor or Transporter	Ki (nM)
Serotonin 5-HT_{2A}	8.3
Dopamine D_1	50
Mu opioid (MOP)	11

  - High affinity at serotonin 5-HT2A, dopamine D1 and mu opiate receptors (MOP), acting as a partial agonist at MOP receptors
  - Exhibits potent morphine-like analgesia in animal models, yet attenuates several morphine mediated behaviors (e.g., does not cause respiratory depression or GI loss of motility)
  - No safety concerns have been noted with ITI-333 in animal models

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Key Financial Information

KEY METRICS	
Total Cash, Cash Equivalents, and Investments(1)	$403.8 million
Total Debt(1)	$0.0 million
Common Shares Outstanding(1)	54,700,580
Stock Options / Restricted Stock Units Outstanding(1)	5,457,379

(1) As of June 30, 2018 (unaudited)

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Management Team

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

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

Suresh Durgam, MD, Senior Vice President, Medical Affairs and Late Stage Clinical Development

Kimberly Vanover, PhD, Senior Vice President, Translational Medicine and Early Stage Clinical Development

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

Michael Olchaskey, PhD, Senior Vice President, Regulatory Affairs

Michael I. Halstead, Senior Vice President and General Counsel

Larry Hineline, Vice President of Finance & Chief Financial Officer

Jennifer Rinaldo, Vice President, Commercial Development

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

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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

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