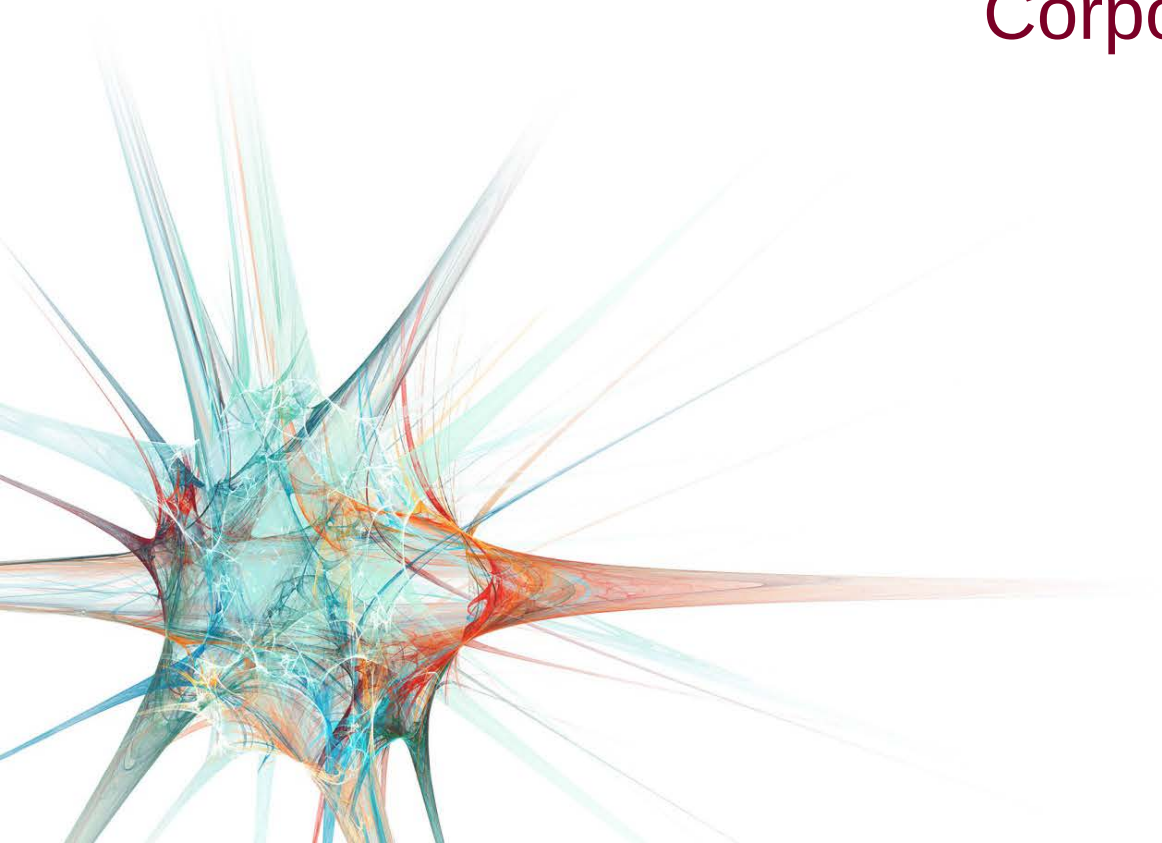
Intra-Cellular THERAPIES

Corporate Presentation

March 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
- Founded in 2002, leveraging technology from the lab of Nobel Laureate Dr. Paul Greengard
- Located in New York City
- Well-capitalized
  - $384.1 million in cash at 12/31/2016

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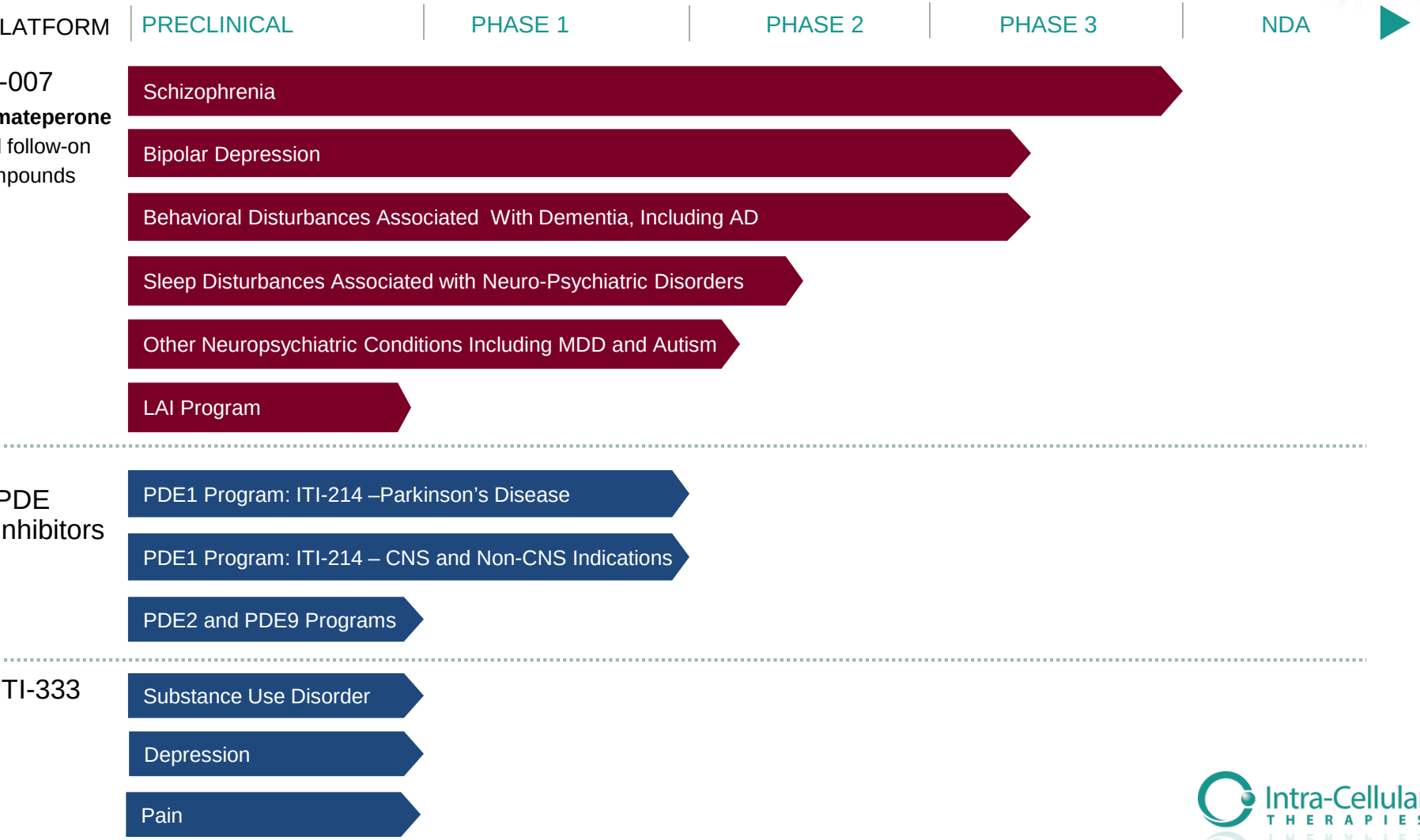
ITCI Therapeutic Pipeline



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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

D_1/$GluN_{2B}$ Modulation

- Antipsychotic efficacy for negative and positive symptoms
- Improved cognition and affect

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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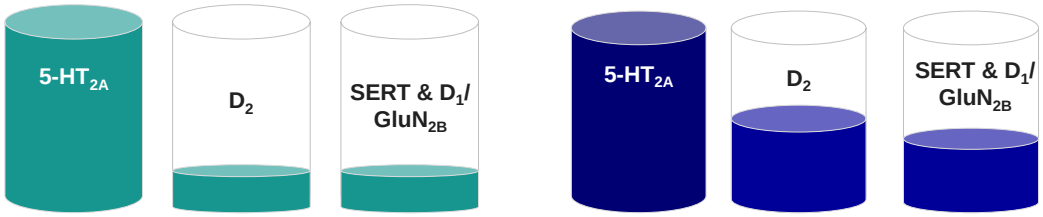
Lumateperone: Differentiated Pharmacology Provides Opportunities to Treat Multiple CNS Disorders

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)	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		

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Lumateperone: Unique Pharmacology

Mediators of Efficacy	ITI-007	Clozapine	Rexulti®	Vraylar™	Latuda®	Abilify®	Geodon®	Risperdal®	Seroquel®	Zyprexa®
5-HT_{2A} Antagonism	●	●	●	●	●	●	●	●	◑	●
D_2/5-HT_{2A} Affinity Ratio	**59**	20	0.6	0.03	0.8	0.2	18	12	2	12
D_2 Receptor	Pre-synaptic partial agonist & post-synaptic antagonist	Pre- & post-synaptic antagonist	Pre- & post-synaptic partial agonist	Pre- & post-synaptic partial agonist (D_2, D_3)	Pre- & post-synaptic antagonist	Pre- & post-synaptic partial agonist	Pre- & post-synaptic antagonist	Pre- & post-synaptic antagonist	Pre- & post-synaptic antagonist	Pre- & post-synaptic antagonist
SERT	●	NO	NO	NO	NO	◑	NO	NO	NO	NO
Indirect Glutamate (D_1/$GluN_{2B}$)	●	●	NO	NO	NO	NO	NO	NO	NO	NO
Side Effects Mediators										
H_1 Antagonism	NO	●	●	●	NO	●	●	●	●	●
Muscarinic Antagonism	NO	●	NO	NO	NO	NO	NO	NO	●	●

● = Strong Affinity ◑ = Weak Affinity

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Lumateperone is Designed to Address Unmet Needs in Schizophrenia

- Affects approximately 1% of the world's population with over 2.5 million adults in the US

- 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

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Poor Drug Adherence Impacts Patient Outcomes and Healthcare Costs

Poor adherence to antipsychotics is associated with higher risk of relapse, rehospitalization and increased hospitalization costs[4]

- Adherence to antipsychotic medication remains low and non-adherent patients are:[1-5]

~ 2x

More likely to be hospitalized for a mental health reason

~ 2x

More likely to visit the ER for a mental health reason

~ 2-3x

More likely to relapse

Overall, schizophrenia has tremendous impact on payers and society

- Results in over $32B of direct healthcare costs and an additional $45B of other costs[6]

Improved drug adherence can reduce rates of relapse and hospitalizations, a key driver in direct healthcare costs among patients with schizophrenia

References: 1. Ascher-Svanum, et al. *BMC Psychiatry* 2010; 10:2. **2.** DiBonaventura, et al. *BMC Psychiatry* 2012; 12:20. **3.** Panish, et al. *JPHSR* 2013; 4: 29-39. **4.** Sun, et al. *Curr Med Res Opin* 2007, 23: 2305-2312. **5.** Patel, et al. *Pharmacy & Therapeutics* 2014; 39: 638-645. **6.** Kockaya, et al. *Health* 2010; 2: 1174-1178.

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Lumateperone Schizophrenia Program Overview

- ITI-007 60 mg met primary endpoint in 2 Positive Studies
- Well-tolerated with a safety profile similar to placebo after once daily administration in the morning in all studies to date
- Studies which included risperidone as an active control demonstrated statistically significant and clinically meaningful safety & tolerability advantages over risperidone

3 Large Randomized, Double-Blind Trials		
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) - Placebo	N=696 6-week treatment period: - ITI-007 (60 mg or 20 mg) - Risperidone 4 mg or - Placebo

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

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

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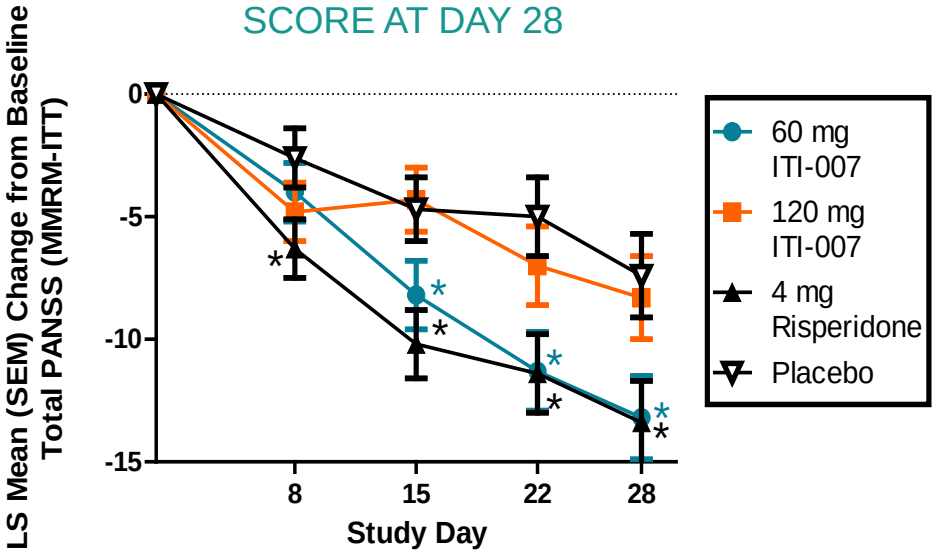
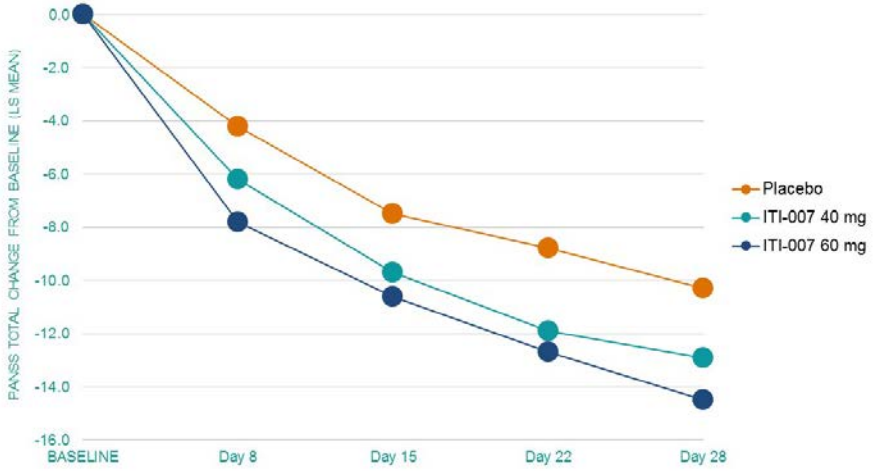
ITI-007 60 mg Met Primary Endpoint in 2 Positive Large Schizophrenia Studies

ITI-007-005
POSITIVE AND NEGATIVE SYNDROME SCALE (PANSS) TOTAL SCORE AT DAY 28



* p ≤ 0.05 versus Placebo

ITI-007-301
POSITIVE AND NEGATIVE SYNDROME SCALE (PANSS) TOTAL SCORE AT DAY 28



Note: No titration was required for either dose.
**P*<0.05; 60 mg relative to placebo.

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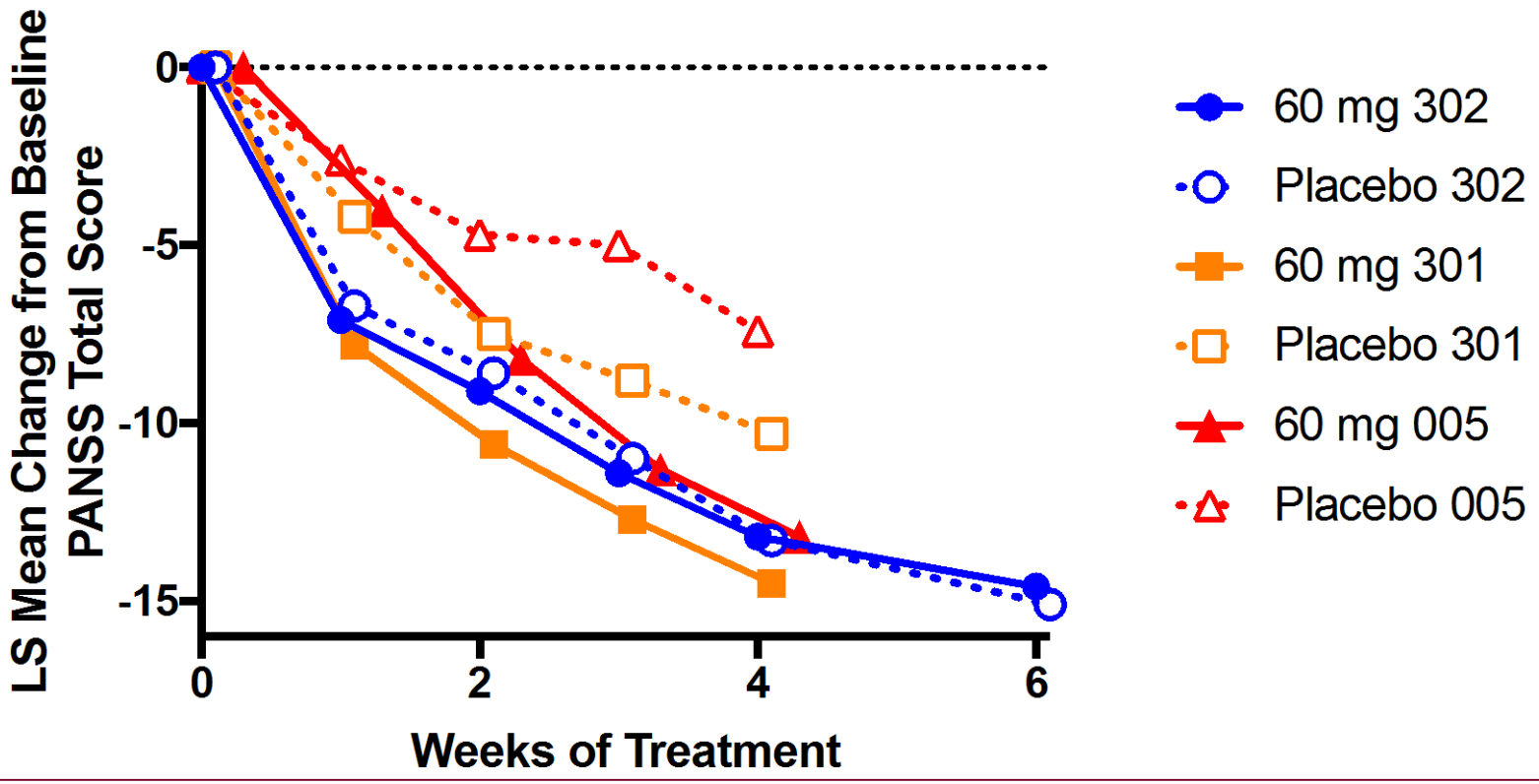
ITI-007 60 mg Improves Symptoms of Schizophrenia With the Same Magnitude and Trajectory Across All 3 Efficacy Studies



In all 3 studies ITI-007 60 mg improved symptoms of schizophrenia with a similar trajectory and magnitude of improvement, but the placebo response increased and separation was not observed in the third study. Nonetheless, in pooled analyses of all 3 studies, ITI-007 60 mg statistically significantly separated from placebo on the primary endpoint

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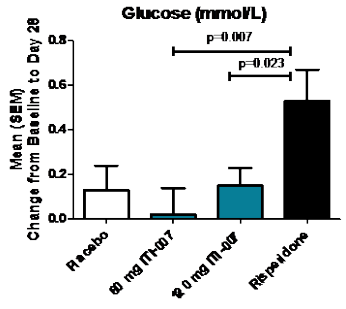
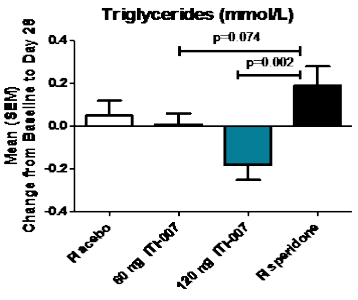
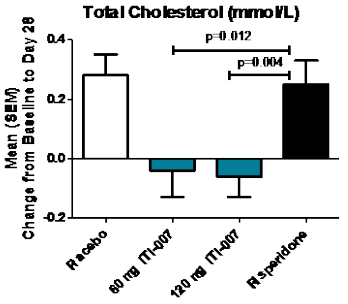
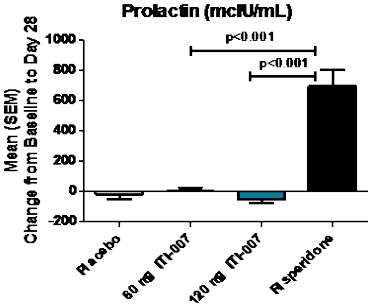
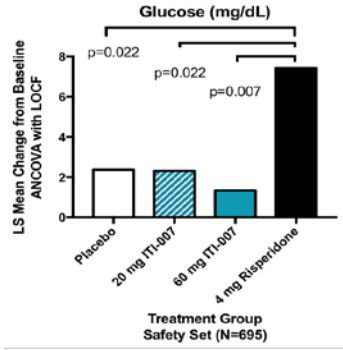
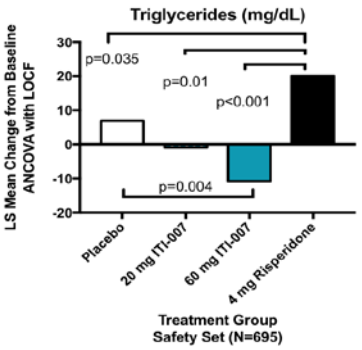
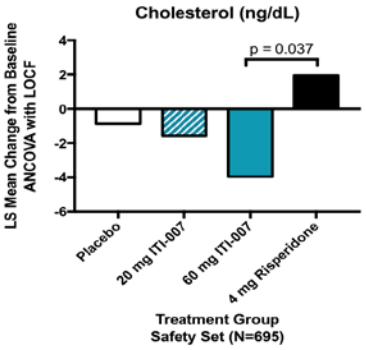
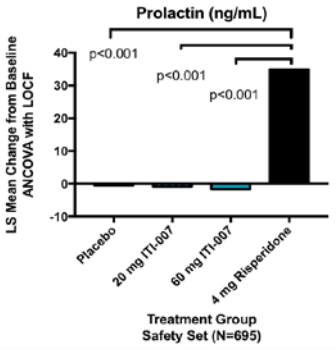
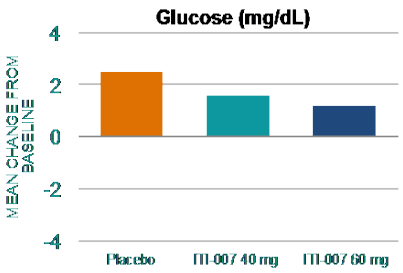
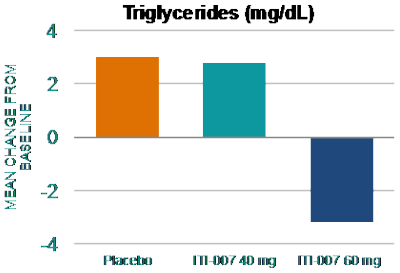
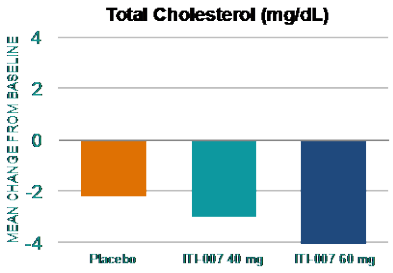
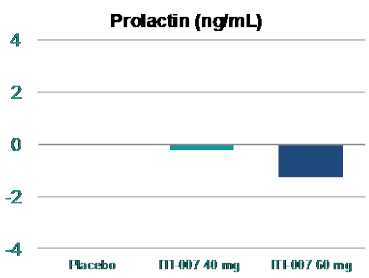
Consistent Safety Profile Similar to Placebo on Key Parameters And Superiority over Risperidone

	Glucose	Triglycerides	Cholesterol	Prolactin
Study 005				
Study 302				
Study 301				

Safety Overview; Across All Studies

- Most frequent adverse events with once daily oral administration in the morning were predominantly mild somnolence and sedation
- Discontinuation rates due to AEs were low for lumateperone and similar to placebo
- Lumateperone demonstrated a superior safety profile to risperidone

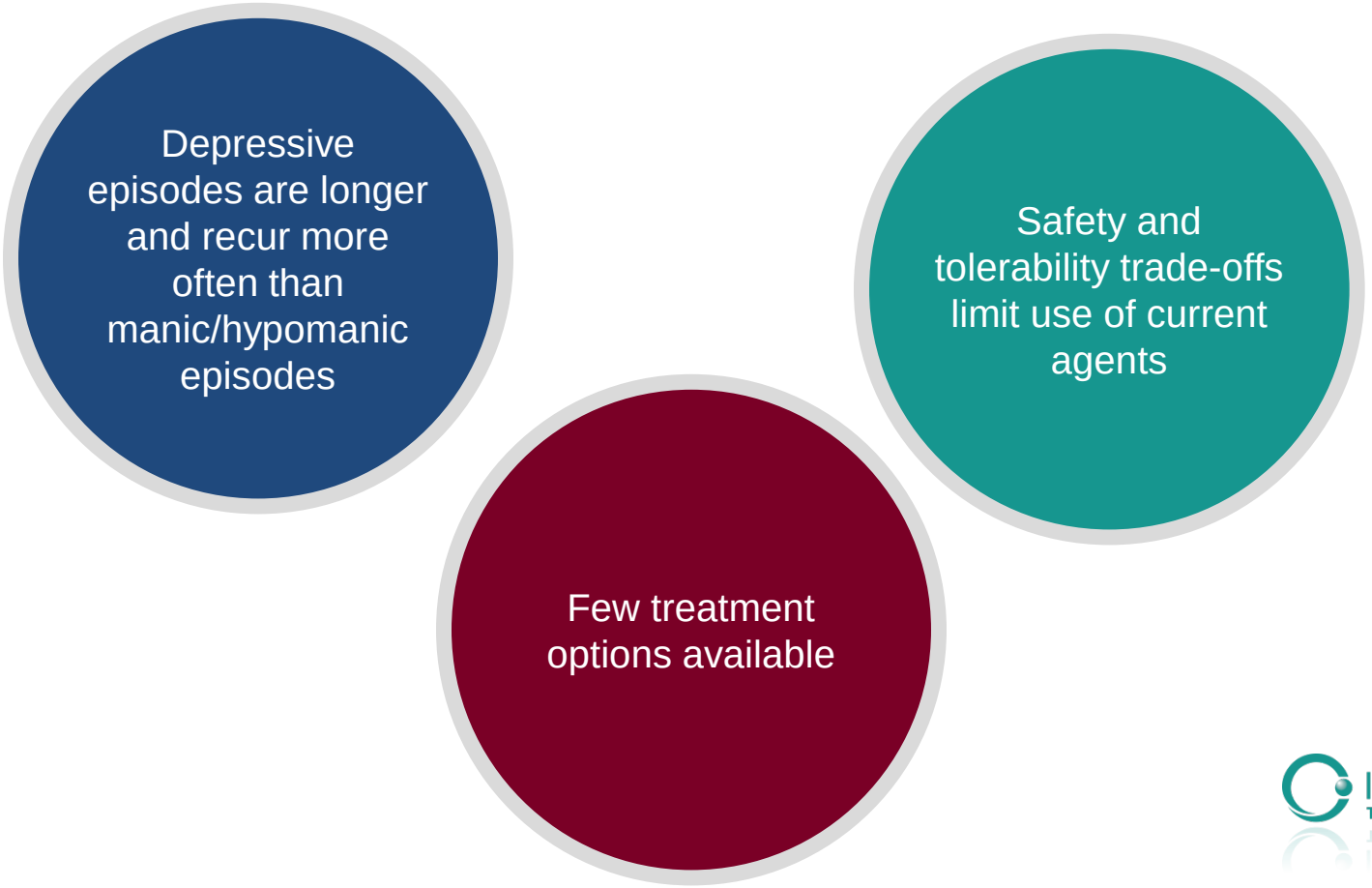
	KEY MEASURE	SIGNIFICANT INCREASE FROM PLACEBO
Motoric	Akathisia	**No**
	Other movement disturbances (EPS, dystonia)	**No**
Weight	Weight gain	**No**
Metabolic	Cholesterol	**No**
	Triglycerides	**No**
	Glucose	**No**
	Insulin	**No**
Endocrine	Prolactin	**No**
Cardiovascular	QTc intervals	**No**
	Heart rate	**No**
	Other ECG	**No**

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 all three studies, lumateperone was well-tolerated with a safety profile 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

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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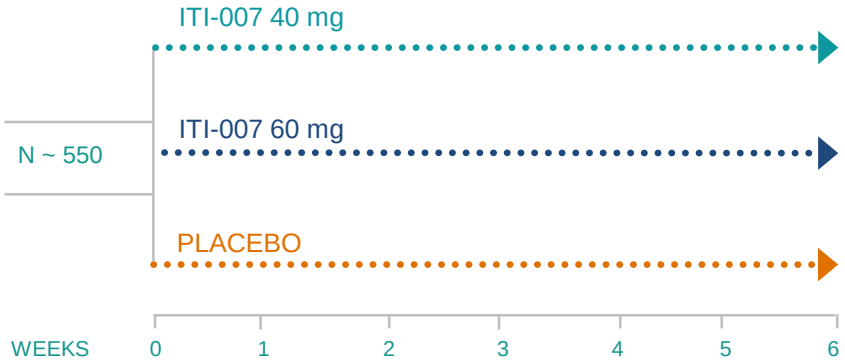
Lumateperone: Phase 3 Clinical Program in Bipolar Depression

MONOTHERAPY STUDY

ADJUNCTIVE STUDY (LITHIUM OR VALPROATE)



STRATEGY:

Seeking approval for both monotherapy and adjunctive therapy in bipolar I and bipolar II patients

PRIMARY ENDPOINT:

Change from baseline in Montgomery-Asberg Depression Rating Scale (MADRS)

* A THIRD TRIAL CONDUCTED GLOBALLY IS PLANNED

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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 safe and well tolerated 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

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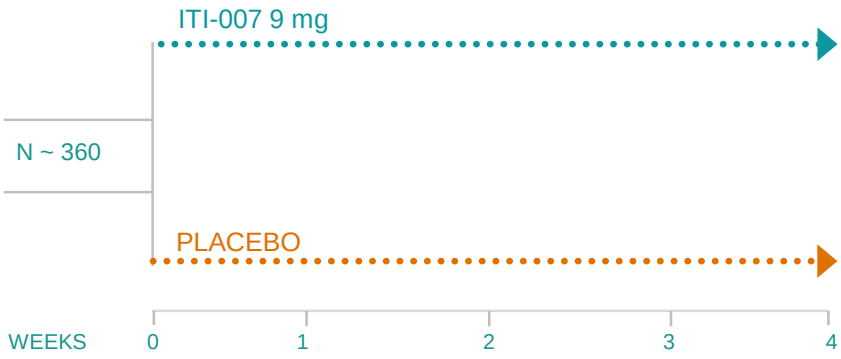
Lumateperone: Phase 3 Clinical Trial in Agitation in Patients with Dementia including Alzheimer's Disease

ITI-007-201



PRIMARY OUTCOME MEASURE:

Change from baseline — Cohen-Mansfield Agitation Inventory

KEY SECONDARY ENDPOINT:

Clinical Global Impression of Disease Severity (CGI-S)

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

- Inhibitors of PDE1 block the breakdown of cyclic nucleotides (cAMP, cGMP) potentiating downstream intracellular signaling
- PDE1 enzymes are highly active in pathological or disease states and our PDE1 inhibitors are designed to reestablish normal function in these disease states
- PDE1 inhibitors have minimal effect on normal function only acting when cells are stimulated - “on-demand” effects
- 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 safe and generally well tolerated
- 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 to establish safety and tolerability of ITI-214 in this patient population as well to evaluate motor and non-motor exploratory endpoints (e.g. excessive daytime sleepiness and cognition)

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Key Financial Information

KEY METRICS	
Total Net Cash, Cash Equivalents, and Investments(1)	$384.1 million
Total Debt(1)	$0.0 million
Common Shares Outstanding(1)	43,292,906
Stock Options Outstanding(1)	3,101,032

(1) As of December 31, 2016 (audited)

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Management Team

Sharon Mates, PhD, Founder, Chairman & Chief Executive 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

Allen A. Fienberg, PhD, Founder & Vice President of Business Development

Cedric O'Gorman, MD, MBA, Vice President of Medical Affairs

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

Ashish Dugar, PhD, MBA, Vice President of Commercial Development

Lawrence P. Wennogle, PhD, Vice President of Drug Discovery

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Board of Directors

Sharon Mates, PhD, Chairman, Founder & 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, Metabolix; Board Member, Achillion Pharmaceuticals; Former CFO, OSI Pharmaceuticals

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