Corporate Presentation

Intra-Cellular THERAPIES

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, 2018 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)

- Founded in 2002, leveraging technology to study intracellular signaling from the lab of Nobel Laureate Dr. Paul Greengard
- Focus on advancements in the treatment of CNS disorders
  - Lead program: Lumateperone (ITI-007)
    - For the treatment of schizophrenia
      - NDA under FDA review, PDUFA target action date December 27, 2019
    - For the treatment of bipolar depression
  - Leader in the field of PDE1 inhibitors
    - Parkinson's disease
    - Heart failure
- Well-capitalized
  - $285.3 million in cash, cash equivalents and investment securities at 6/30/2019

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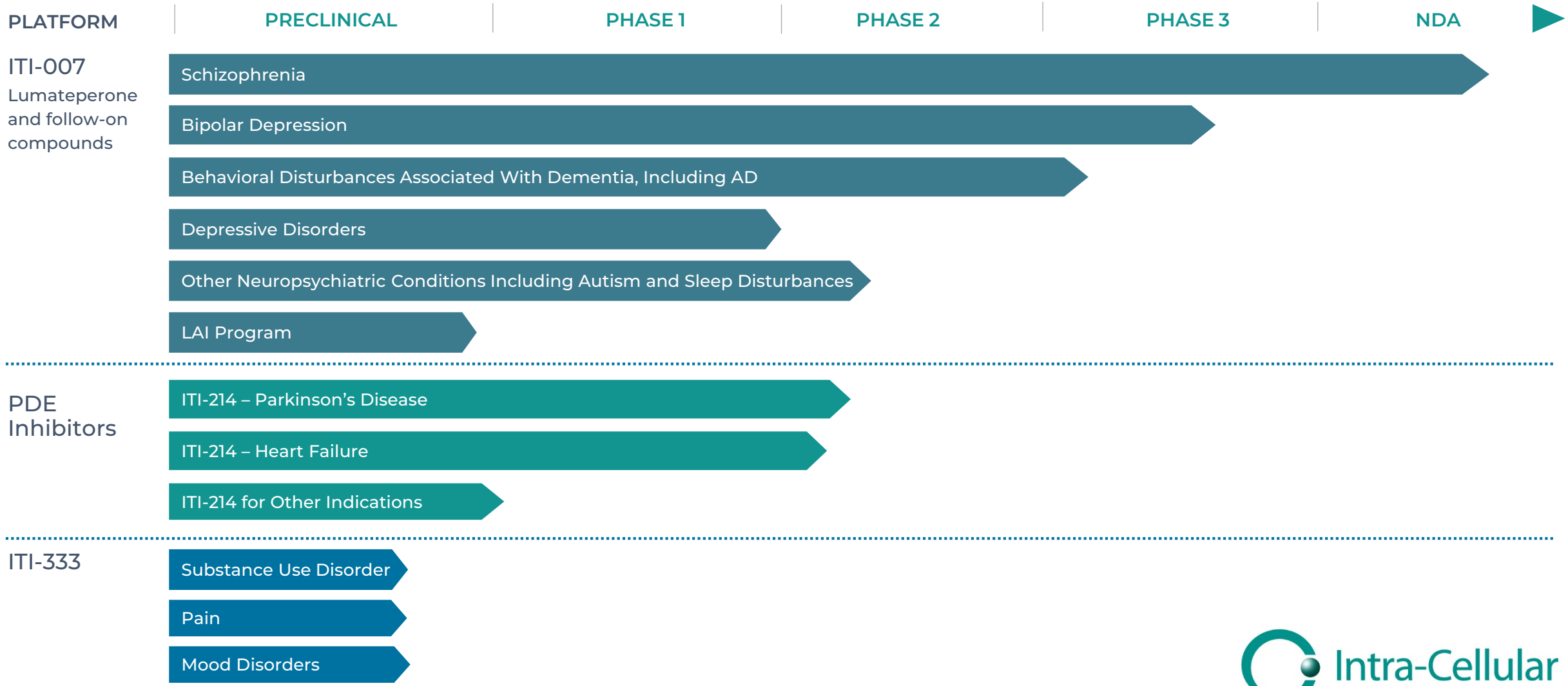
ITCI Therapeutic Pipeline



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

	K_i (nM)
5-HT_{2A}	0.5
D_2	32
D_1	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 D_1

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

PHARMACOLOGY PREDICTS ROBUST EFFICACY ACROSS A BROAD RANGE OF SYMPTOM DOMAINS

AND PREDICTS HIGHLY FAVORABLE SAFETY/TOLERABILITY PROFILE

Dopamine Phosphoprotein D_2 Modulator (DPPM)

D_2 pre-synaptic partial agonist and post-synaptic antagonist

- Antipsychotic efficacy for positive symptoms
- Reduced agitation

Serotonin Reuptake Inhibitor

- Antidepressant activity

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Snyder GL, et al. *Psychopharmacology (Berl).* 2015;232(3):605-621.

Schizophrenia Is a Common Disabling Neuropsychiatric Disease

Schizophrenia affects ~1% of the global population[1]

2.4 million adults in the United States have schizophrenia[2]

Onset in early adulthood leads to life-long disability

- It is estimated that only about one-third of patients with schizophrenia can work regularly[3]

1. National Alliance on Mental Illness. https://www.nami.org/Learn-More/Mental-Health-Conditions/Schizophrenia. Accessed Aug 6, 2019.
2. National Institutes of Health. https://report.nih.gov/nihfactsheets/ViewFactSheet.aspx?csid=67. Accessed Aug 6, 2019.
3. Bellack AS, et al. Schizophr Bull. 2007;33(3):805-822.

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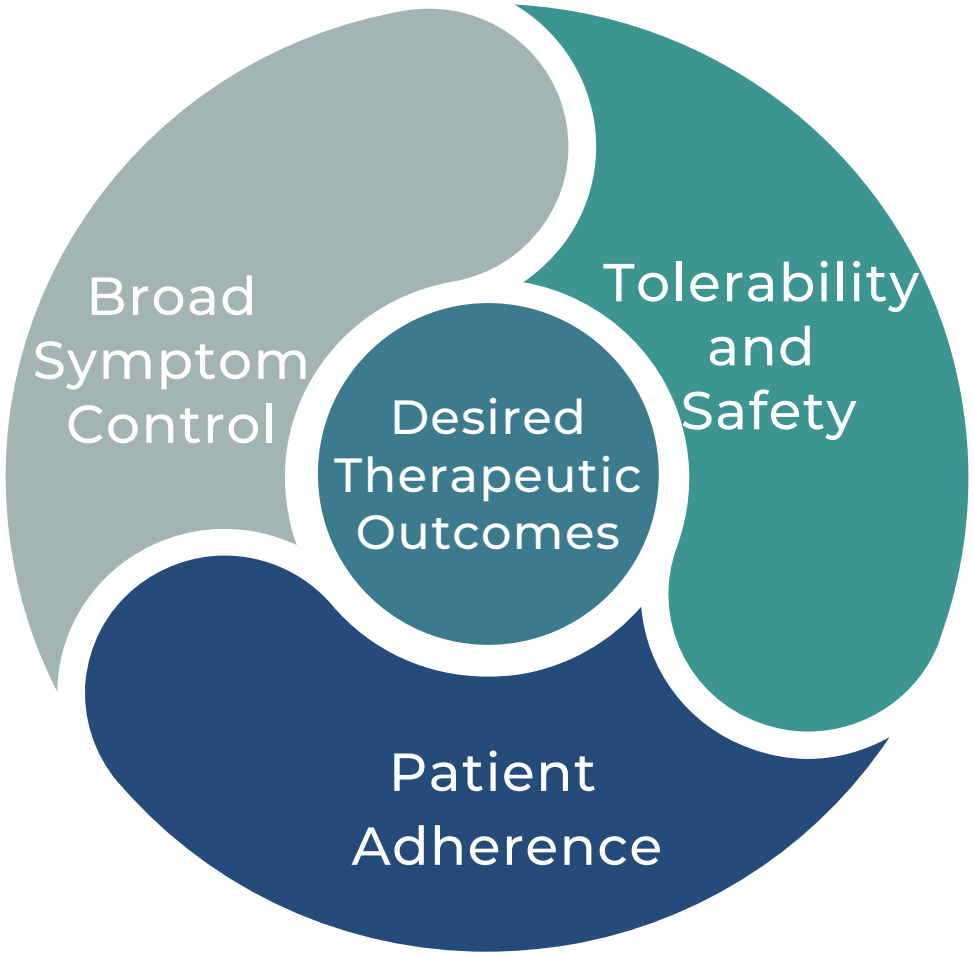
Lumateperone Is Designed to Address Unmet Needs in Schizophrenia

- Available treatment options fail to adequately control the broad spectrum of symptoms
- Antipsychotics are associated with a host of side effects
  - Weight gain and metabolic disturbances
  - Hyperprolactinemia
  - Movement disorders
- These side effects drive poor medication adherence, thus reducing effectiveness of therapy
- Side effects also contribute to excessive premature mortality



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Lumateperone Schizophrenia Program Overview

- Lumateperone 42 mg (ITI-007 60 mg*) met primary efficacy endpoint in 2 entirely U.S. based studies
- Well-tolerated with a safety profile similar to placebo in all studies
- Statistically significant safety and tolerability benefits for lumateperone over risperidone
- Once daily oral dosing with no need for titration to 42 mg
- NDA under FDA review, PDUFA target action date December 27, 2019

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]
4-week treatment period
N=335
- luma (42 mg or 84 mg)
- Risperidone 4 mg or
- Placebo

ITI-007-301
4-week treatment period
N=450
- luma (42 mg or 28 mg) or
- Placebo

ITI-007-302
6-week treatment period
N=696
- luma (42 mg or 14 mg)
- Risperidone 4 mg or
- Placebo

Open-Label Safety Switching Study - lumateperone 42 mg

First Part
6-week treatment duration
N=302

Second Part
Long-term treatment

ICH guidelines met
300 pts for 6 mos., 100 for 1 yr

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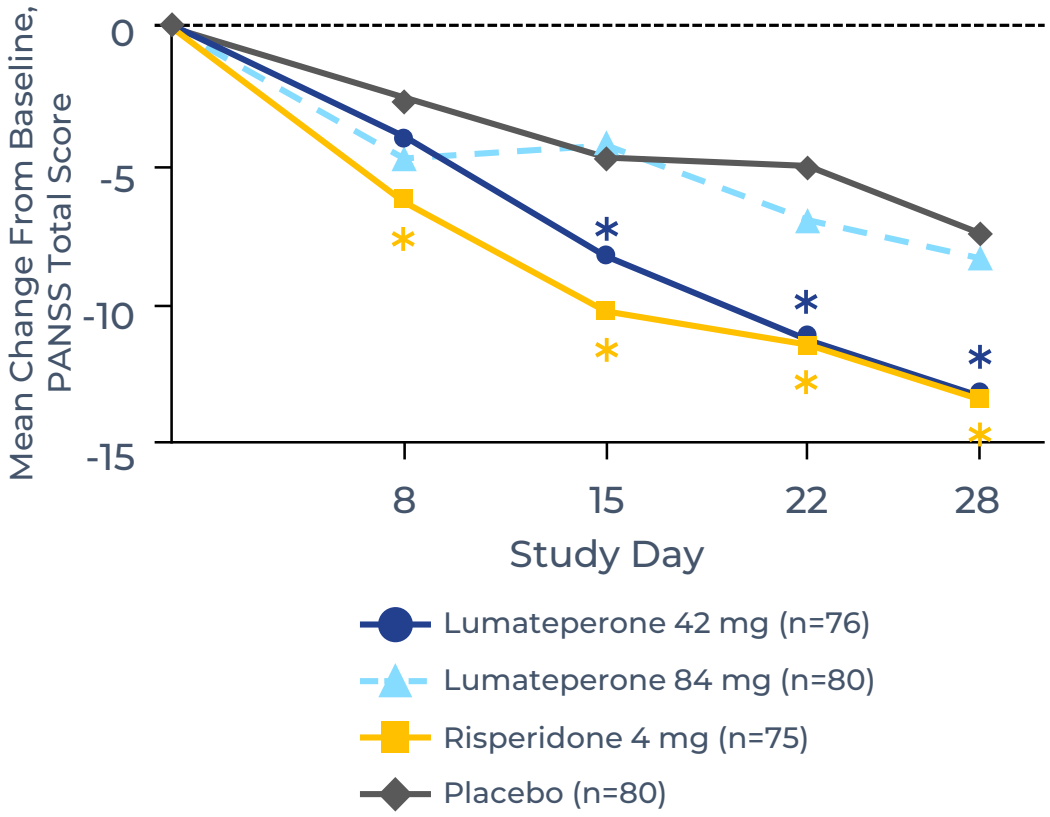
1. *Lieberman JA et al., Biological Psychiatry. 2016;79(12):952-961*
2. **60 mg lumateperone = 42 mg free base*

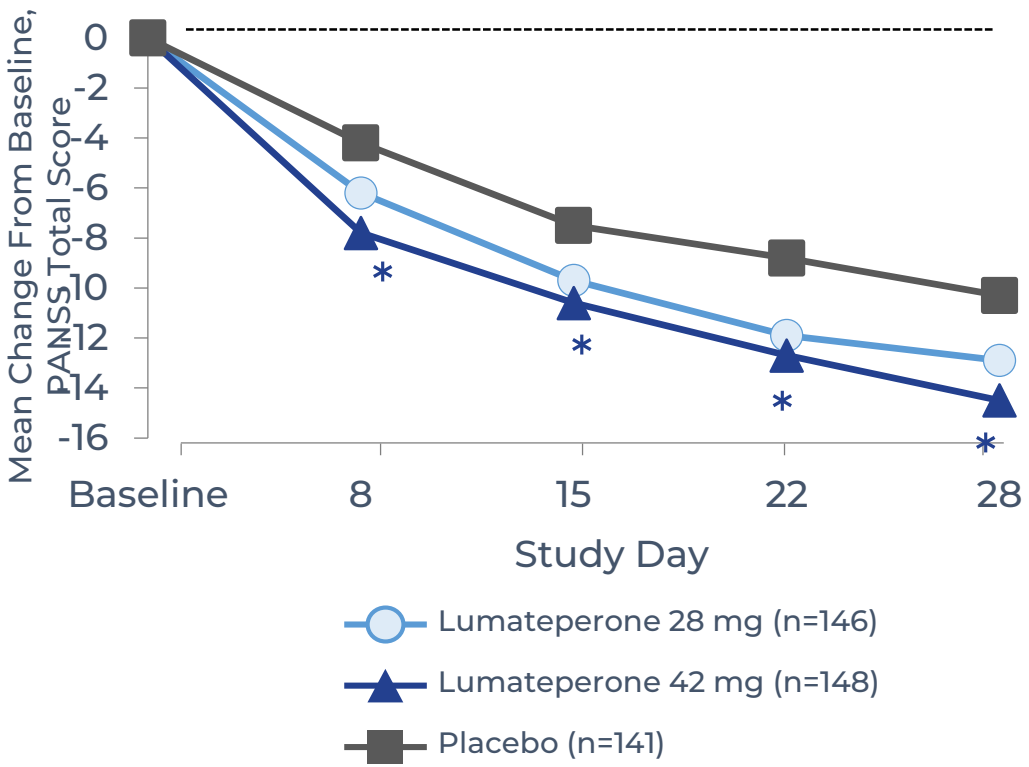
Lumateperone 42 mg Met Primary Endpoint in 2 Positive Large Schizophrenia Studies

ITI-007-005

ITI-007-301

Mean Change From Baseline in PANSS Total Score





*$P<.05$ vs placebo.

PANSS=Positive and Negative Syndrome Scale

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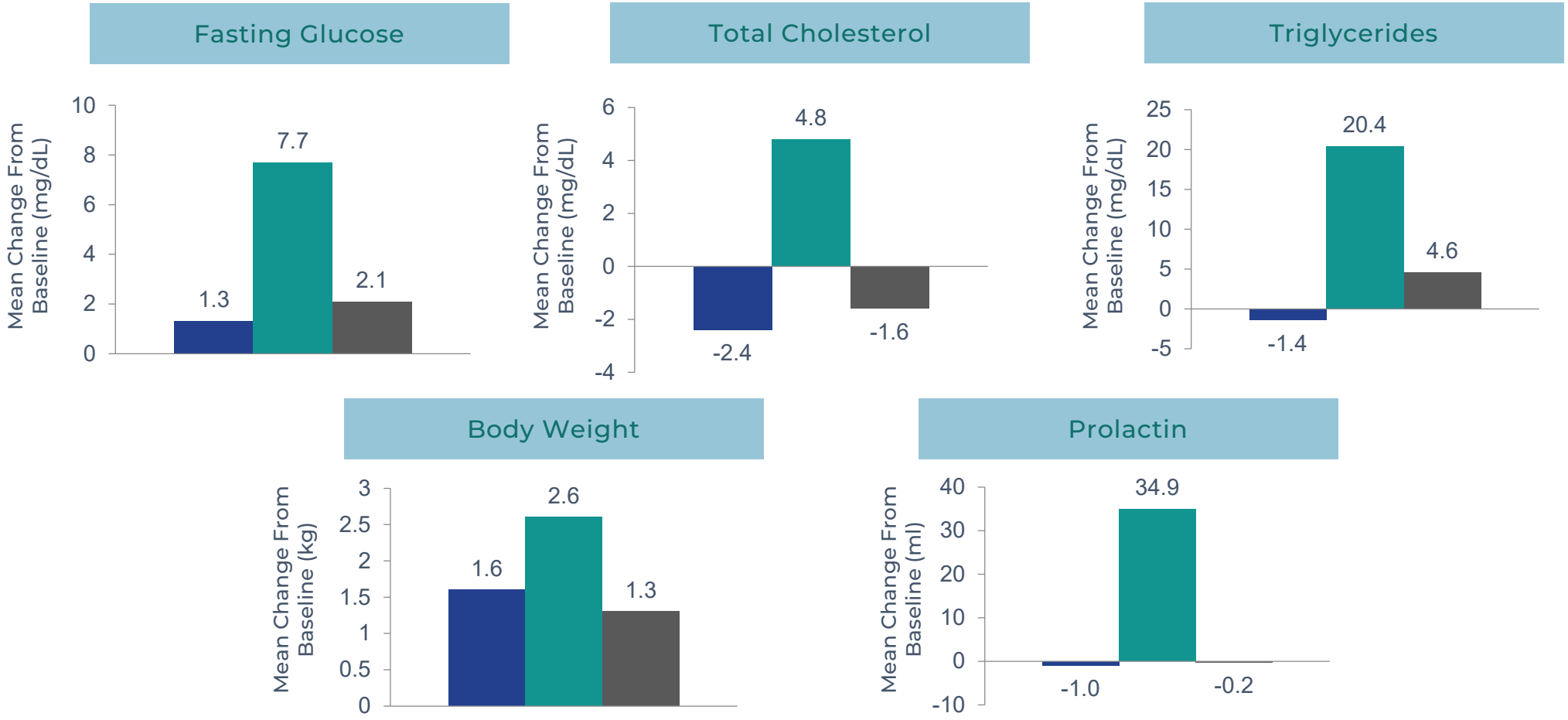
Pooled Data from 3 Acute Controlled Studies Demonstrated the Favorable Safety Profile of Lumateperone: Similar to Placebo and Superior to Risperidone on Key Safety Parameters



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Lumateperone Profile Confirmed in Open-Label Safety Switching Study (Study 303) in Patients With Stable Schizophrenia Symptoms

- The study evaluated the safety of lumateperone 42 mg in stable patients with schizophrenia in an outpatient setting similar to common clinical practice
- Part 1: 6-week treatment duration assessed:
  - The impact of switching to lumateperone from SOC antipsychotics (with no dose titration necessary for lumateperone)
  - The impact of switching back to SOC from lumateperone
- Part 2: Up to 1-year treatment duration assessed:
  - The long-term impact of switching to lumateperone from SOC antipsychotics (with no dose titration necessary for lumateperone)

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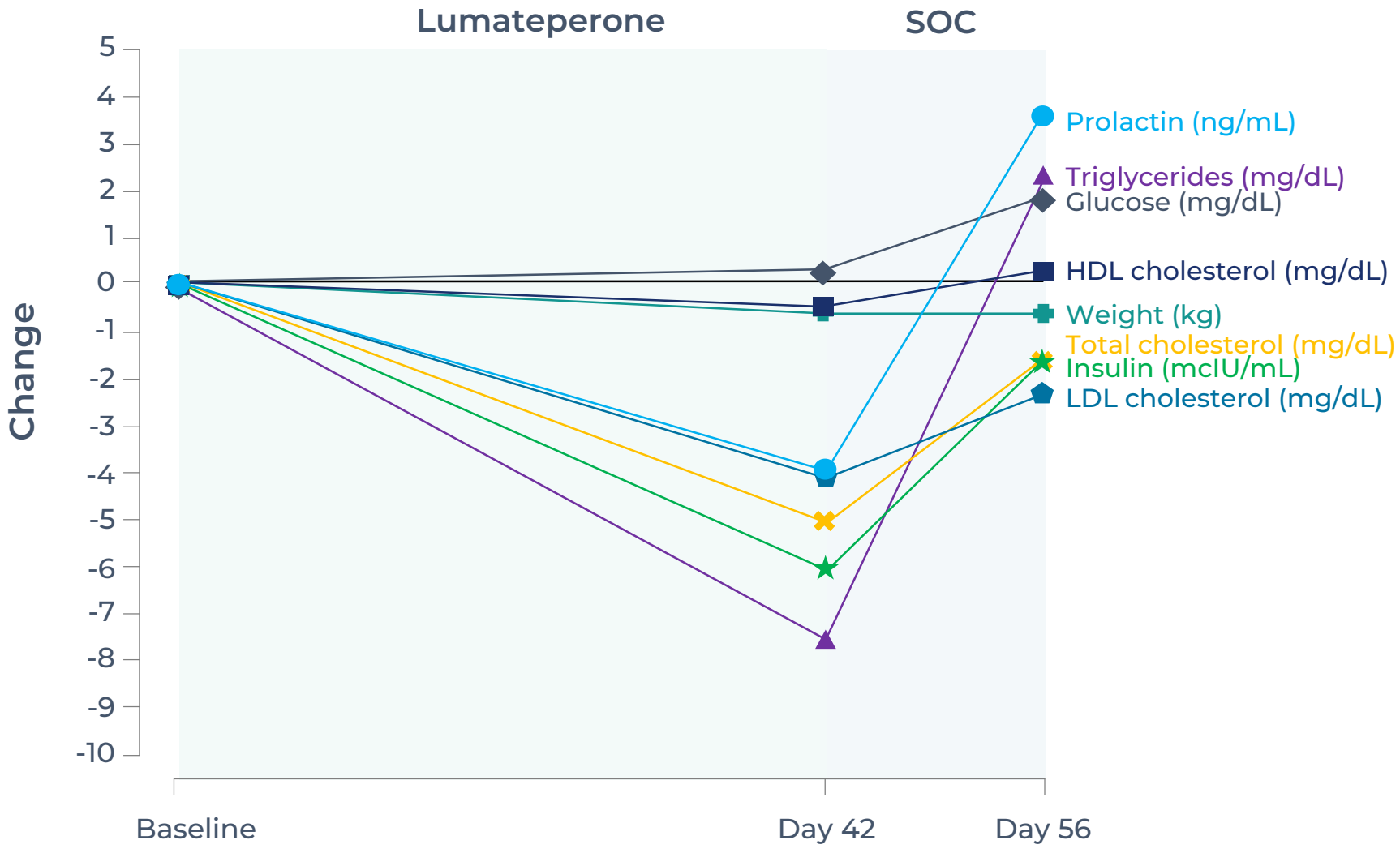
PART 1: 6-Week Open-Label Safety Switching Study, Key Cardiometabolic Parameters Improved on Lumateperone and Worsened Again After Switch Back to SOC (N=302)

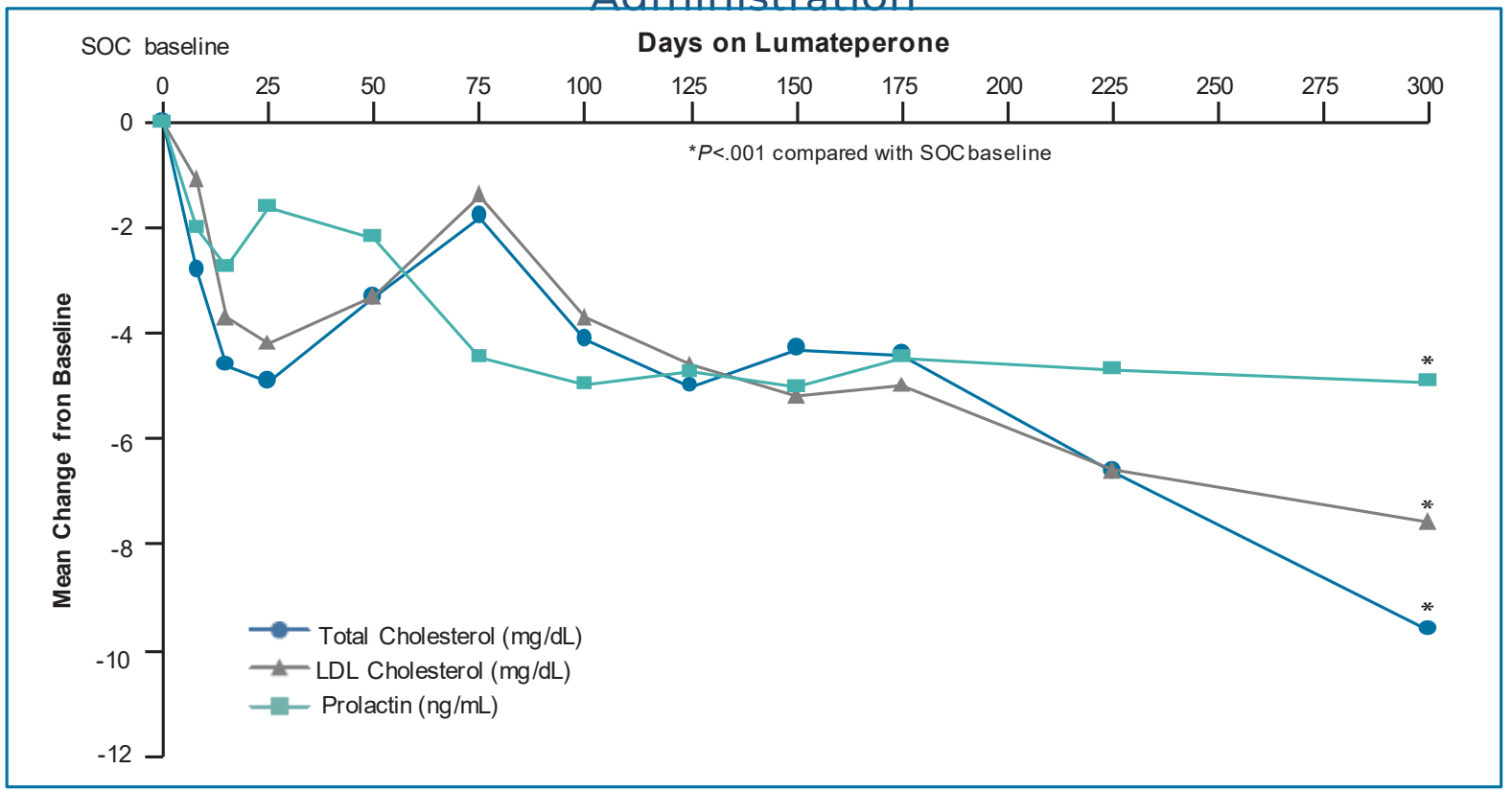


- Lumateperone was generally well tolerated with a favorable safety profile
- Statistically significant improvements from SOC baseline were observed in body weight, cardiometabolic, endocrine parameters over 6 weeks of treatment with lumateperone
- When switched back to SOC medication, worsened again

HDL, high-density lipoprotein; LDL, low-density lipoprotein; SOC, standard of care. ITI Data on File.

PART 2: Long-Term Safety Study, Key Cardiometabolic Parameters Improved on Lumateperone

Lumateperone Exhibited a Favorable Cardiometabolic Profile with Long-Term Administration



Other metabolic parameters showed minimal to no changes with long-term treatment

LDL, low-density lipoprotein; SOC, standard of care.

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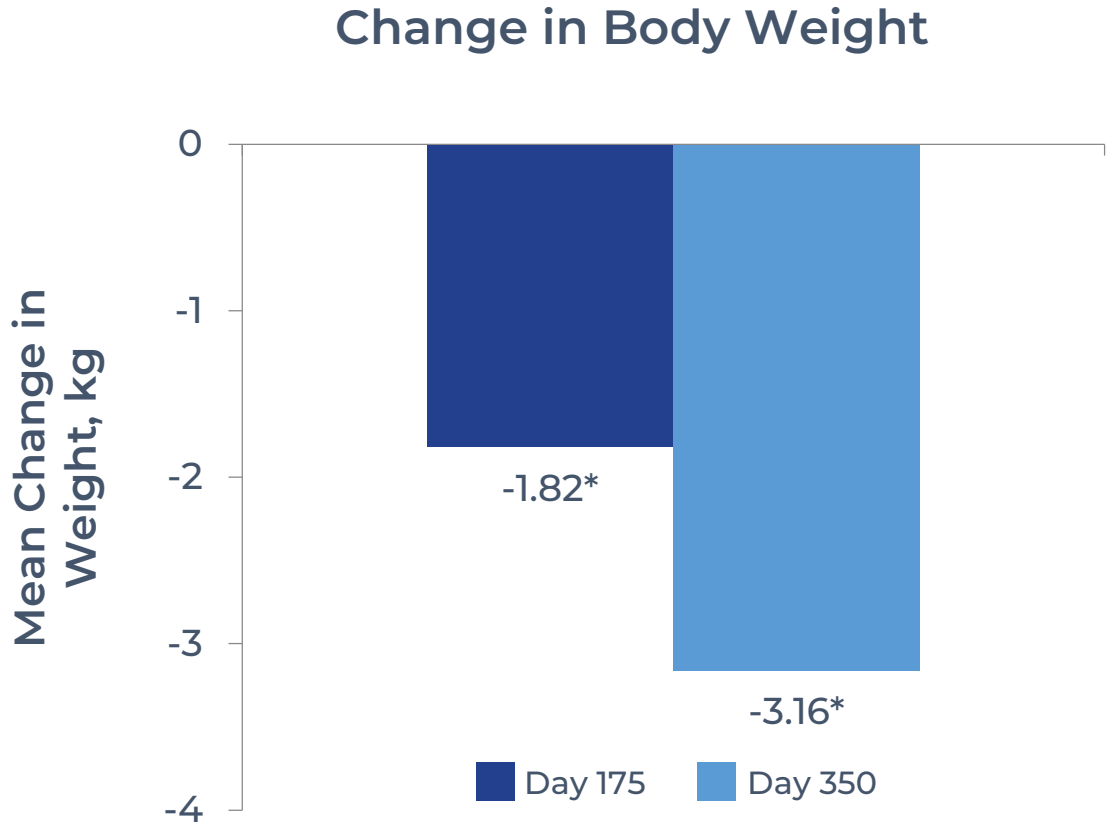
Long-Term Safety Study Demonstrated Weight Decreased on Lumateperone



Patients With Significant Change in Weight (≥7%) at Any Time During the Study	
Weight decrease	24%
Weight increase	8%

*P<.01 compared to SOC baseline.

Results meeting ICH guidelines for long-term safety presented at ACNP 2018 on 329 patients treated for at least 6 months and 108 patients treated for 1 year. At baseline, the mean body weight was 92.5 kg.

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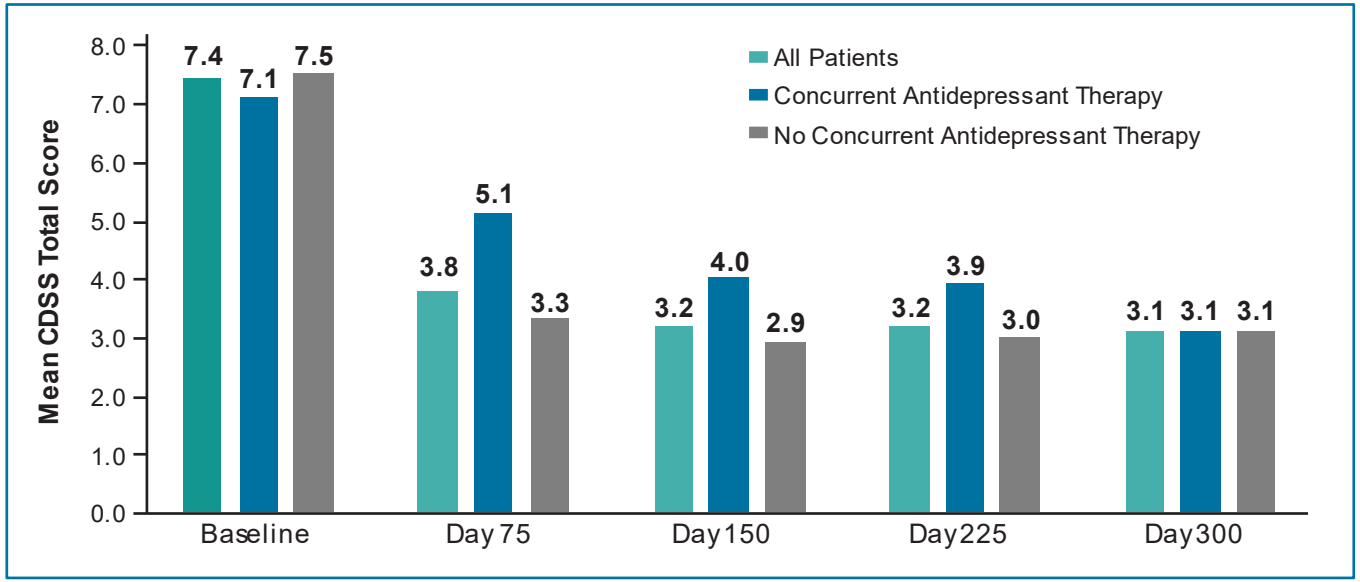
In Long-Term Safety Study in Patients with Co-morbid Depression Lumateperone Improved Depression Symptoms

CDSS Total Score Over Time in Schizophrenia Patients with Comorbid Depression at Baseline[a]



[a]In patients with CDSS score >5 at baseline and post-baseline CDSS assessments (n = 55)
CDSS, Calgary Depression Scale for Schizophrenia

- CDSS scores decreased by ~60% from 7.4 at baseline to 3.1 at Day 300
- Response (≥50% reduction from baseline in CDSS Total score) was achieved by 60% of patients by Day 75 and maintained through Day 300
- Improvements in depression symptoms were seen in seen patients who were taking antidepressant therapy and patients who were not on antidepressants

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Summary: Lumateperone Schizophrenia Program

- Program includes 2 large, well-controlled positive studies and supportive data from a third study
- In all 3 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
- Long-term safety study confirmed the favorable cardiometabolic safety profile demonstrated in short-term studies. Weight loss seen in short-term studies continued over long-term treatment

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Our Commercial Leadership Team Has Extensive Biopharma Experience

- Mark Neumann, EVP, Chief Commercial Officer
- John Bardi, SVP, Market Access, Policy & Government Affairs
- Debra Marchese, VP, Marketing
- George Rodriguez, VP, Sales
- Jennifer Rinaldo, VP, Strategy & Commercial Development

Bristol-Myers Squibb · AMGEN · Allergan · AstraZeneca · Otsuka · NOVARTIS · Lexicon pharmaceuticals · gsk · Lilly

135+ combined years of experience

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Bipolar Depression Is a Common Psychiatric Condition

- Bipolar disorder has a 12-month prevalence of 2.8% in US adults[1]
  - Affects ~6 million adult Americans[2]
  - Bipolar depression (BPD) is the predominant presentation
  - Depressive episodes are longer and recur more often than manic/hypomanic episodes

- Unmet need
  - Few approved treatments available for bipolar depression
  - Only one treatment approved for Bipolar II patients with depressive episodes
  - Safety and tolerability trade-off limits use of existing agents

1. National Institute of Mental Health. Bipolar Disorder. https://www.nimh.nih.gov/health/statistics/bipolar-disorder.shtml#part_155458. Accessed Aug 6, 2019.
2. Depression and Bipolar Support Alliance. https://www.dbsalliance.org/education/bipolar-disorder/bipolar-disorder-statistics/. Accessed Aug 6, 2019.

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Lumateperone Bipolar Depression Program Overview

- Study 404 met its primary endpoint for improvement on MADRS compared with placebo ($p<0.0001$; effect size = 0.56)
- Study 404 also met its key secondary objective (CGI-BP-S; $p<0.001$; effect size = 0.46)
- Study 404 benefits were statistically significant in both Bipolar I and Bipolar II patients
- In Study 401, lumateperone did not separate from placebo. A high placebo response was observed in the trial.
- Favorable safety and tolerability profile observed in both trials, consistent with prior lumateperone trials.

3 Large Randomized, Double-Blind Trials

Primary outcome measure: change from baseline on Montgomery-Åsberg Depression Rating Scale (MADRS) Total Score

ITI-007-404 - Global

Monotherapy
6-week treatment period
N=381

- luma 42 mg or
- Placebo

ITI-007-401 – US-only

Monotherapy
6-week treatment period
N=554

- luma (42 mg or 28 mg) or
- Placebo

ITI-007-402-ongoing

Adjunctive
6-week treatment period
N=696

- luma (42 mg or 28 mg) or
- Placebo

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Study 404: Lumateperone Met Primary Endpoint - Change From Baseline to Day 43 in MADRS Total Score

Change From Baseline to Day 43 in MADRS Total Score

Treatment Group	Baseline Mean	LS Mean Change at Day 43	p value	Effect Size
Lumateperone 42 mg N=188	30.7	-16.7	<.0001	-0.56
Placebo N=188	30.2	-12.1	-	-

- Lumateperone 42 mg also met key secondary endpoint: the CGI-BP-S Total Score ($p<0.001$; effect size = 0.46)
  - CGI component that specifically assesses depression (CGI-BP-S Depression Score; $p<0.001$; effect size = 0.50)
- Statistically significant benefits on responder rates and remission rates, demonstrating the clinical meaningfulness of the primary outcome.
- Statistically significant improvement versus placebo on the MADRS in Bipolar I and Bipolar II
- Study 404 benefits were statistically significant in both subgroups : US and Ex-US

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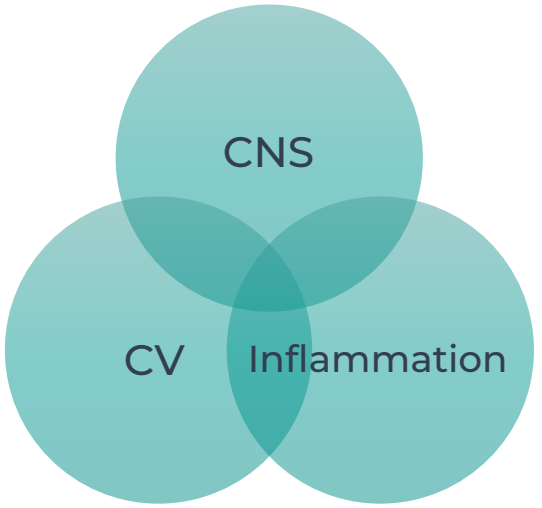
PDE1 Inhibition: Novel Approach to Modulation of Intracellular Signaling With Broad Therapeutic Potential

- 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 cyclic nucleotides (cAMP, cGMP) potentiating downstream intracellular signaling
- ITI-214, our lead PDE1 inhibitor molecule, is being developed for the treatment of Parkinson's disease and heart failure



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

- Over 2.2 million patients in the US and Europe[1,2]
- Unmet need
  - Progressive neurodegenerative disorder with motor and non-motor symptoms
  - Dopamine replacement therapies (L-DOPA as gold standard) address motor symptoms, but are insufficient and have limiting side effects
  - Effects of dopamine replacement therapies wear off over time as disease progresses
- ITI-214 is a multi-pronged approach to the treatment of PD
  - PDE1 inhibition/ITI-214 enhances intracellular dopamine signaling pathways in the brain
  - ITI-214 may be neuroprotective and has potential disease-modifying effects

1. Parkinson's Foundation. https://www.parkinson.org/Understanding-Parkinsons/Statistics. Accessed Aug 6, 2019.
2. European Parkinson's Disease Association. http://ec.europa.eu/research/horizon2020/pdf/contributions/post/european_organisations/european_parkinson%27s_disease_association_-_epda.pdf. Accessed Aug 6, 2019.

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ITI-214 Phase 1/2 Results in PD

- A Phase 1/2, placebo-controlled, multiple ascending dose cohort study in patients with mild to moderate PD maintained on stable (concomitant) PD medication
- ITI-214 was shown to have a favorable safety profile and was generally well tolerated
  - Across a broad range of doses (1 mg to 90 mg)
  - Without promoting or worsening motor complications
- Clinical signs consistent with reductions in motor symptoms and motor complications
  - Signals of motor improvement seen in Part III and Part IV of the MDS-UPDRS
  - Reduced dyskinesia symptoms seen in UDysRS and increase in “ON” time without dyskinesia (Hauser Patient Motor Diary)
  - Several patients experienced profound improvements

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

- Heart failure affects approximately 5.8 million people and has a mortality rate of ~50% within 5 years[1]

- Preclinical data have 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 A_{2B} receptor signaling pathways

- Ongoing translational study: a randomized, double-blind, placebo-controlled study of escalating single doses of ITI-214 in patients with systolic heart failure
  - Study evaluates contractility and pharmacodynamic parameters
  - Clinical conduct for the second cohort, 30 mg, is ongoing; no safety concerns have been identified

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1. Bui AL, et al. *Nat Rev Cardiol.* 2011;8: 30-41.

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

- Opioid crisis is a public health emergency
  - Nearly 12 million people in the United States misused opioids in the previous year[1]
  - 130+ people a day die from opioid-related drug overdoses[2]

- ITI-333 profile
  - Acts as a partial agonist at mu opioid receptors (MOP) receptors and has high affinity at 5-HT2A, and D1 receptors
  - Exhibits potent morphine-like analgesia in animal models, yet attenuates several morphine-mediated behaviors (eg, does not cause respiratory depression or loss of GI motility)
  - No safety concerns have been noted with ITI-333 in animal models

	K_i (nM)
5-HT_{2A}	8.3
D_1	50
Mu Opioid	11

1. Substance Abuse and Mental Health Services Administration. (2017). Key substance use and mental health indicators in the United States: Results from the 2016 National Survey on Drug Use and Health (HHS Publication No. SMA 17-5044, NSDUH Series H-52). https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.pdf. Accessed Aug 6, 2019.
2. U.S. Department of Health and Human Services. https://www.hhs.gov/opioids/ . Accessed Aug 6, 2019.

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Management Team

Sharon Mates, PhD	Founder, Chairman, President & Chief Executive Officer
Robert Davis, PhD	Senior Vice President, Chief Scientific Officer
Suresh Durgam, MD	Senior Vice President, Late Stage Clinical Development and Medical Affairs
Michael I. Halstead	Executive Vice President and General Counsel
Larry Hineline	Senior Vice President Finance & Chief Financial Officer
Mark Neumann	Executive Vice President & Chief Commercial Officer
Michael Olchaskey, PharmD	Senior Vice President, Head of Regulatory Affairs
Juan Sanchez, MD.	Vice President, Corporate Communications and Investor Relations
Andrew Satlin, MD	Executive Vice President & Chief Medical Officer
Kimberly Vanover, PhD	Senior Vice President, Early Stage Clinical Development and Translational Medicine

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Key Financial Metrics

KEY METRICS	
Total Cash, Cash Equivalents, and Investments*	$285.3 million
Total Debt*	$0.0 million
Common Shares Outstanding*	55,186,745
Stock Options/Restricted Stock Units Outstanding*	7,971,604

*As of June 30, 2019 (unaudited).

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