Forward Looking Statements

Certain statements contained in this presentation or in other documents of Relmada Therapeutics (the “Company”), along with certain statements that may be made by management of the Company orally in presenting this material, may contain “forward-looking statements.” These statements can be identified by the fact that they do not relate strictly to historic or current facts. They use words such as “estimate,” “expect,” “intend,” “believe,” “plan,” “anticipate,” “projected” and other words and terms of similar meaning in connection with any discussion of future operating or financial performance or condition. These statements are based upon the current beliefs and expectations of the Company’s management and are subject to significant risks and uncertainties. Statements regarding future action, future performance and/or future results including, without limitation, those relating to the timing for completion, and results of, scheduled or additional clinical trials and the FDA’s or other regulatory review and/or approval and commercial launch and sales results (if any) of the Company’s formulations and products and regulatory filings related to the same may differ from those set forth in the forward-looking statements. Peak sales and market size estimates have been determined on the basis of market research and comparable product analysis, but no assurances can be given that such sales levels will be achieved, if at all, or that such market size estimates will prove accurate.

Because actual results are affected by these and other potential risks, contingencies and uncertainties, the Company cautions investors that actual results may differ materially from those expressed or implied in any forward-looking statement. It is not possible to predict or identify all such risks, contingencies and uncertainties. The Company identifies some of these factors in its Securities and Exchange Commission (“SEC”) filings on Forms 10-K, 10-Q and 8-K, and investors are advised to consult the Company’s filings for a more complete listing of risk factors, contingencies and uncertainties effecting the Company and its business and financial performance.

The Company assumes no obligation to update forward-looking statements as circumstances change. Investors are advised to consult further disclosures that the Company makes or has made on related subjects in the Company’s Form 10-K, 10-Q and 8-K reports.
Company Highlights

- Robust portfolio of four drugs in development that address unmet needs in the largest drug prescription market in the world: the treatment of pain

- Three products combine proven drug candidates with novel delivery methods to create new drugs with new indications, while the fourth is a new entity

- A low cost, low risk drug development strategy that provides the ability to bring products to market faster for three of our four products

- A risk balanced, therapeutically focused product portfolio mitigates development risk while promising significant upside

- Highly experienced drug development leadership and world class scientific advisors provide the expertise to efficiently advance product development
Experienced Senior Management
An impressive track record developing and commercializing successful drugs

Sergio Traversa, PharmD
Chief Executive Officer
Eli Lilly, Johnson & Johnson, ING Barings, Mehta & Isaly, Merlin BioMed, Rx Capital

Douglas Beck, CPA
Chief Financial Officer
Lev Pharmaceuticals, iBio Inc.

Michael Becker
Senior VP, Finance & Corp Dev
Cytogen Corp, VioQuest Pharma, Kidder Peabody, Kemper Securities, Wayne Hummer Investments

Richard Mangano, Ph.D.
Senior VP, Clinical Dev
Hoffman-La Roche, Lederle Laboratories, Wyeth, Adolor

Lisa Nolan, Ph.D.
Senior VP, Business Dev
Zeneca, Elan, SkyePharma
Scientific Advisors
Internationally recognized expertise from world-class scientific advisors

Gavril Pasternak, MD, PhD
- Anne Burnett Tandy Chair in Neurology
- Laboratory Head, Molecular Pharmacology and Chemistry Program
- Memorial Sloan Kettering Cancer Institute
- Professor of Neurology & Neuroscience, Pharmacology and Psychiatry at the Weill Medical School of Cornell University

Andrew Rice, MD, FRCA
- Professor of Pain Research at Imperial College of London
- Director of the London Pain Consortium
- Steering Committee Member of EUROPAIN
- Secretary of the International Association for the Study of Pain

Eric C. Strain, MD
- Professor of Psychiatry, Johns Hopkins University School of Medicine
- Director, Behavioral Pharmacology Research Unit
- Director, Johns Hopkins Substance Abuse Treatment and Research

Michael Thase, MD
- Professor of Psychiatry, School of Medicine University of Pennsylvania
- Chief, Division of Mood and Anxiety Disorders Treatment & Research
- Member American College of Psychiatrists and American College of Neuropsychopharmacology

Robert H. Dworkin, PhD
- Professor of Anesthesiology, Neurology, Oncology, and Psychiatry
- University of Rochester School of Medicine and Dentistry
- Director, ACTTION, FDA-academic partnership on analgesics
Pain: Largest U.S. Public Health Crisis

328 Million Prescriptions and $13 Billion in Sales

Prevalence

100M Persistent Pain
- Annual Healthcare & Productivity Cost: $560-630 Billion

80M Cardiovascular Disease
- Annual Healthcare & Productivity Cost: $309 Billion

29M Cancer
- Annual Healthcare & Productivity Cost: $127 Billion

14M Diabetes
- Annual Healthcare & Productivity Cost: $243 Billion

1 Institute of Medicine 2011: Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research
2 The Heart Foundation (http://www.theheartfoundation.org/heart-disease-facts/heart-disease-statistics/)
4 American Diabetes Association (http://www.diabetes.org/diabetes-basics/statistics/)
5 IMS Health; 2014 data
Unsatisfied Market
Better pain drugs are needed

51% of chronic pain patients currently using opioids say they have “only a little” or “no control” over their pain.

23% of patients report that opioids are “very effective” in controlling chronic pain.

Source: Voice of Chronic Pain – A National Study Conducted for the American Pain Foundation
## Portfolio Covers Entire Chronic Pain Spectrum

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* Includes generics
** Peak sales
Source: IMS Health, Company Annual Report
Robust Product Portfolio

Significant value creation possible in 12-24 months due to accelerated development timelines

<table>
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<th>Product</th>
<th>Description</th>
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<tr>
<td>d-Methadone REL-1017</td>
<td>Novel NMDA antagonist for the treatment of neuropathic pain</td>
</tr>
<tr>
<td>LevoCap ER REL-1015</td>
<td>Extended release, abuse resistant form of broad spectrum opioid levorphanol</td>
</tr>
<tr>
<td>BuTab ER REL-1028</td>
<td>First traditional oral tablet form of buprenorphine</td>
</tr>
<tr>
<td>MepiGel REL-1021</td>
<td>Topical gel dosage form of local anesthetic mepivacaine</td>
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Projected stage of development in 12-24 months
d-Methadone

Novel NMDA antagonist for the treatment of neuropathic pain
d-Methadone – Benefits, Advantages, Features

Neuropathic pain represents a large market opportunity ready for a new effective entry

• d-Methadone is a novel drug
  – Noncompetitive N-methyl-D-aspartate (NMDA) antagonist
  – Potential new treatment for estimated 5 million people suffering from neuropathic pain
  – Created by separating methadone's two isomers
  – Leverages research by Cornell University
  – Virtually exempt from opioid activity and related side effects at studied doses

• Racemic methadone is widely known synthetic opioid
  – Used to treat both drug addiction and pain
  – Poor safety and tolerability due to opioid side effects
d-Methadone – Proof of Concept

• Upregulation of NMDA plays important role in neuropathic pain

• Inhibition of NMDA produces strong analgesia in neuropathic pain states
  – Example: low dose ketamine\(^1\)
  – Severe side effects limit use of ketamine
    • Psychedelic symptoms (hallucinations, memory defects, panic attacks), nausea/vomiting, somnolence, cardiovascular stimulation

• d-Methadone is well-tolerated NMDA antagonist
  – Administered at doses several fold higher than conventionally used with racemic methadone in opioid naïve patients

# d-Methadone Next Steps

Multiple development milestone potential in next 12-24 months

<table>
<thead>
<tr>
<th>H1 2015</th>
<th>H2 2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Complete Phase I single dose study in ~56 patients</td>
<td>• Complete Phase I multi dose study in ~20 patients</td>
<td>• Start Phase II in +200 patients</td>
</tr>
<tr>
<td></td>
<td>• FDA meeting</td>
<td>• Report Phase II interim results</td>
</tr>
</tbody>
</table>
LevoCap ER

Extended release, abuse resistant form of broad spectrum opioid levorphanol
LevoCap ER – Benefits, Advantages, Features

LevoCap ER will compete in the $8.5 billion opioid market if approved

• LevoCap ER is an extended release, abuse deterrent formulation of levorphanol

• Levorphanol is a unique, broad spectrum opioid with additional “non-opioid” mechanisms of action
  – Can treat both pain from damage to body tissue (nociceptive) and nerve damage (neuropathic)
  – Virtually unknown by medical community
  – Limited clinical data and use

• ~90% of patients take multiple medicines to treat severe pain, including opioids, antidepressants, anticonvulsants, etc.¹

¹ ORC International – Product Profile Evaluation among 150 physicians specializing in pain management
Levorphanol’s Broad Spectrum Activity

Levorphanol’s multi-modal mechanism of action provides for a more robust efficacy profile and potentially could be used alone for patients who take multiple drugs.

**Opioid Mechanism**

- **Traditional Mu Opioid Receptors**
  \[ K_i = 0.13 \text{ nM} \]

- **Delta Opioid Receptor**
  \[ K_i = 17 \text{ nM} \]

- **Kappa Opioid Receptor**
  \[ K_i = 4.7 \text{ nM} \]

**Non-Opioid Mechanism**

- **Serotonin Reuptake Inhibitor**
  \[ \text{IC50} \quad 5HT: 52 \text{ nM} \]

- **Norepinephrine Reuptake Inhibitor**
  \[ \text{IC50} \quad NE: 2.1 \text{ uM} \]

- **NMDA**
  \[ K_i = 0.48 \text{ uM} \]

\[ = \text{Binding profile} \]

Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs) affect the nerve cells in the brain and inhibit the reuse of specific neurotransmitters to enhance inhibition of pain signaling.

Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs) affect the nerve cells in the brain and inhibit the reuse of specific neurotransmitters to enhance inhibition of pain signaling.

N-methyl-D-aspartate (NMDA) is implicated in central sensitization pathway responsible for chronic pain.
# LevoCap ER Next Steps

Multiple development milestone potential in next 12-24 months

<table>
<thead>
<tr>
<th>H1 2015</th>
<th>H2 2015</th>
<th>2016</th>
</tr>
</thead>
</table>
| ✓ Obtain regulatory approval from Health Canada to start clinical trial | • FDA end of Phase II meeting  
  • Start Phase III       | • Continue Phase 3       |

* Pending feedback from FDA meeting
BuTab ER

First oral tablet form of buprenorphine for treating both pain and addiction
BuTab ER – Benefits, Advantages, Features

The first form of buprenorphine in a tablet for use in pain and treating addiction

• Buprenorphine is a partial opioid agonist with two indications: addiction and pain
  – More than $1.6 billion in annual revenue
  – Only schedule III opioid under Controlled Substances Act

• No “traditional oral tablet” available for buprenorphine
  – Historically suffers from poor oral bioavailability due to first-pass metabolism in gut and liver
  – Commercially available only in intravenous (Buprenex), sublingual/buccal (Suboxone®, Bunavail™, Zubsolv®), and transdermal patch (Butrans®) formulations

• BuTab ER is an extended release, enteric coated formulation of buprenorphine
  – Coating is designed to bypass upper GI mucosa metabolism of buprenorphine by CYP3A4 enzyme to increase oral bioavailability
BuTab ER – Proof of Concept

1. Positive single dose bioavailability of oral buprenorphine demonstrated in dogs

2. Inhibition of CYP3A4 enzyme with steroid budesonide
   - Poor oral drug bioavailability due to cytochrome P450 (CYP)-mediated first-pass metabolism
     • Sub-family enzyme CYP3A4 is responsible for metabolism of >50% of marketed drugs
   - Inhibiting enzyme demonstrated dramatically improved bioavailability of the steroid budesonide

# BuTab ER Next Steps

Multiple development milestone potential in next 12-24 months

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<th>H1 2015</th>
<th>H2 2015</th>
<th>2016</th>
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<tbody>
<tr>
<td>✓ Obtain regulatory approval from Health Canada to start clinical trial</td>
<td>✓ Start Phase 1 in ~30 patients</td>
<td>• Complete proof-of-concept Phase I</td>
<td>• NDA filing for opioid dependence</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Start Phase III for pain</td>
</tr>
</tbody>
</table>
MepiGel

Topical gel dosage form of the local anesthetic mepivacaine for the treatment of neuropathic pain
MepiGel – Benefits, Advantages, Features

MepiGel will compete with Lidoderm® patch and its $948 million in peak sales if approved

• MepiGel is the first topical gel dosage form of local anesthetic mepivacaine, which has intrinsic vasoconstrictor attributes
  – Reduces rate at which drug is cleared away from skin
  – Better efficacy may last longer due to greater skin penetration/retention
  – More convenient application for patient

• Two Orphan Drug designations
  1. Management of PHN
  2. Treatment of painful HIV-associated neuropathy

• Limited number of treatments available for neuropathic pain
  – Topical 5% lidocaine patch (Lidoderm®) provides only modest pain relief in patients with postherpetic neuralgia; reached peak sales of $948 million
    • 2010 UK Nat’l Instit of Health and Clinical Excellence (NICE) guideline cites “lack of evidence for efficacy for treating neuropathic pain” and 3rd line
  – Patches have poor adhesion to hands, feet, and hairy skin
MepiGel Next Steps

Multiple development milestone potential in next 12-24 months

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<td>• File Clinical Trial Application (CTA)</td>
<td></td>
<td>• Complete Phase I in ~20 patients</td>
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MILESTONES & COMMERCIAL OPPORTUNITY
# Financial Snapshot

<table>
<thead>
<tr>
<th></th>
<th>Ticker</th>
<th>RLMD (OTCQB)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash &amp; Equivalents</strong></td>
<td>(as of 3/31/15)</td>
<td>~$27 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Operating Expenses</strong></td>
<td>(three months ended 3/31/15)</td>
<td>$4.5 million</td>
</tr>
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<tr>
<td><strong>Common Shares Outstanding</strong></td>
<td>(as of 5/15/15)</td>
<td>53.7 million</td>
</tr>
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<tr>
<td><strong>52-Week Stock Price Range</strong></td>
<td></td>
<td>$1.50 to $4.00</td>
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<td></td>
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<tr>
<td><strong>Average Daily Volume</strong></td>
<td>(prior 3-month)</td>
<td>~100,000</td>
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Near-term Value Drivers

Multiple development milestone potential in next 12-24 months

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<tr>
<td><strong>REL-1015</strong></td>
<td></td>
<td>• Start Phase III*</td>
<td>III</td>
</tr>
</tbody>
</table>
| **BuTab ER**     | ✅ Obtain regulatory approval to start clinical trial  
| **REL-1028**     | ✅ Start Phase I                                                       | • Complete proof-of-concept Phase I                                    | • NDA filing (or  
|                  |                                                                        |                                                                       | start Phase III  |
| **MepiGel**      | • File CTA                                                             |                                                                       | • Complete Phase  |
| **REL-1021**     |                                                                        |                                                                       | I                |
| **Corporate**    |                                                                        | • Uplisting to National Exchange                                        | • Addition to Russell Index |

* Pending feedback from FDA meeting
Commercial Opportunity

Multi-billion established markets for chronic pain therapy

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** Peak sales
Source: IMS Health, Company Annual Report
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Innovations in Pain Medicine™

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Email: info@relmada.com