

Adamis Pharmaceuticals Corporation

A biotech company focused on treating millions of
patients struggling with addiction and pain



ADAMIS
Pharmaceuticals Corporation

July 2023

Safe Harbor Statement

This presentation contains "forward-looking statements" as that term is defined under the Private Securities Litigation Reform Act of 1995 (PSLRA), including statements regarding expectations, beliefs or intentions relating to the Company's business, financial position, technologies, products, product candidates, current or planned clinical trials or research and development activities, regulatory matters, strategies, goals, prospects, expectations for growth, future expenses or liabilities, liquidity needs, expenses, profit, cash flow, balance sheet items, or any other statements concerning our future operations and activities. These forward-looking statements are made based upon current expectations and information available to the Company as of the date of this presentation. They are subject to risks and uncertainties, known and unknown, that could cause actual results to differ materially from those expressed or implied in such statements, including, but not limited to: the commercial success of our products; regulatory actions taken by the FDA or other federal or state agencies; results of pending and future clinical trials; clinical and manufacturing activities; our dependence on third parties to conduct nonclinical and clinical studies, supply raw materials, and manufacture the Company's products and product candidates; developments in current or future legal proceedings; our ability to forecast financial results; the Company's ability to raise additional capital; and other risks and uncertainties more fully described in filings with the SEC, including the factors referenced in the "Risk Factors" section of the Company's most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, and other reports filed with the SEC, which are all available at <http://www.sec.gov>.

In addition, many forward-looking statements concerning our anticipated future activities assume access to sufficient funding to support the Company's continued operations and such planned activities. There are no assurances that the Company will have adequate financial resources to fund its future activities and obligations. This presentation also contains estimates and other data based on publications and research, surveys and studies. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. The Company has not independently verified the data generated by third parties and, accordingly, cannot guarantee their accuracy or completeness. This presentation includes products that are under clinical investigation, which have not yet been approved for marketing by the FDA. They are currently limited by federal law to investigational use, and no representation is made as to their safety or effectiveness for the purposes for which they are being investigated. You should not place undue reliance on any forward-looking statements, which speak only as of the date of this presentation. Except as required by law, the Company does not undertake to update forward-looking statements in this presentation to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking information. The Company intends that all forward-looking statements be subject to the safe-harbor provisions of the PSLRA, to the extent applicable.

This presentation highlights some information about us. Because it is a summary that has been prepared solely for informational purposes, it does not contain all of the information that you should consider before investing in the Company. The Company has filed a registration statement on Form S-1 (File No. 333-273233), including a preliminary prospectus, with the SEC for the offering to which this communication relates. The registration statement has not yet become effective. Before you invest, you should read the preliminary prospectus, [Link](#), when available the final prospectus relating to the offering, and other documents that the Company has filed with the SEC for more complete information about the issuer and this offering. You may obtain these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, you may request the prospectus from Maxim Group LLC, 300 Park Avenue, 16th Floor, New York, NY 10022 by calling 212-895-3745. Neither the SEC nor any other regulatory body has approved or disapproved of our securities or passed upon the accuracy or adequacy of this presentation. Any representation to the contrary is a criminal offense.





EBOO VERSI, MD PhD



20+ years of pharmaceutical experience

- Large (Lilly, Pfizer, Astellas) and small companies (Odyssey, Plethora, Auxilium, Mt. Cook)
- Medical lead at Pfizer – team that created the overactive bladder market
- Planned and executed clinical studies for multiple approved products

Education and academic career

- Oxford University BA, MA, DPhil (PhD)
- Cambridge University MB BChir (MD)
- London University – Residency, Fellowship and Attending
 - Kings College Hospital
 - Royal London Hospital
 - St. Thomas' & Guys Hospitals
- Harvard Medical School – Associate Professor
 - Chief of service Brigham & Women's Hospital
- Authored over 100 scientific publications



Recent merger with DMK Pharmaceuticals

- New leadership (CEO) has brought a change in direction and strategy
- Lead commercial product and lead development program uniquely position the Company to play a significant role in addressing the worsening opioid crisis in the U.S.
- Consequently, will shift focus to developing treatments for opioid use disorder and other related addictions

Laser focus on revenue generation & growth to drive stockholder value

- Increase US sales of ZIMHI® our lead commercial product
- White House and congressional initiatives to lift barriers to purchase ZIMHI with federal grants
- Partnerships ex-US for ZIMHI
- Out-license assets that are not core to the addiction treatment business
- Continue to obtain non-dilutive government grants (NIH) for development programs



FDA-approved for emergency treatment of opioid overdoses

- ZIMHI (naloxone) Injection 5mg dose

Development pipeline

- DPI-125 for the treatment and prevention of opioid use disorder (OUD)
- NIH-funded screening of our library of ~750 compounds to identify a lead for treating alcohol use disorder
- Mining our library for novel compounds to treat OUD and as back ups or for life cycle management

Assets for out-licensing and other revenue opportunities

- Resume sales of SYMJEPI®, for emergency treatment of severe allergic reactions
- Several identified development products for the treatment of Parkinson's, bladder, autoimmune and other neuro-based diseases
- Screen library of compounds to identify out-licensing opportunities for additional revenue



ZIMHI

(5 mg/.5 mL naloxone) Injection



An opioid antagonist indicated for emergency treatment of opioid overdose

- 90% of U.S. opioid overdose deaths are now caused by poisoning with potent synthetic opioids such as fentanyl ¹
 - Every minute counts to prevent death or brain damage
 - Treatment with Narcan® can be slow and require several doses ²
 - ZIMHI's fast absorption and high dose/concentration can offer a 'one and done' solution
- U.S. naloxone market is currently ~\$500M annually ³
 - Market grew ~15% in 2022 ³
 - Intranasal Narcan (and generics) had >90% share in 2022 ³

¹ <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

² Strauss et al 2023

³ Bloomberg Intelligence Drug Explorer 2022

ZIMHI Competitive Advantages vs. Narcan

Greater bioavailability of naloxone vs. Narcan and the intranasal generics

- Longer effective duration of action to counter fentanyl¹

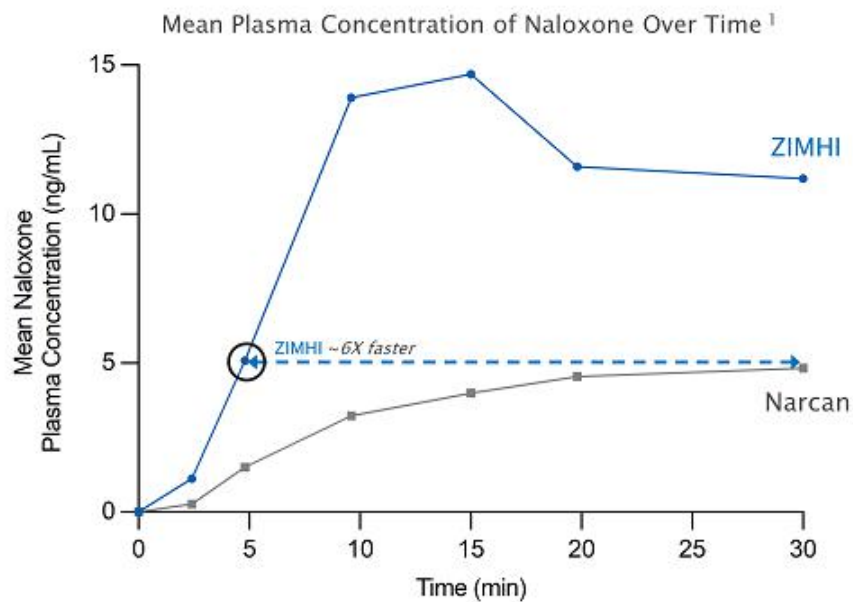
Faster & Stronger – more rapidly lowering fentanyl receptor occupancy

- Achieves naloxone blood levels ~6x faster

Nasal delivery has limitations – Narcan and similar intranasal products have limited absorption likely compounded by hypotension in overdose patients

ZIMHI via the intramuscular route should provide **more prolonged effect to reverse fentanyl overdose/poisoning**

- Decreased mortality and morbidity (brain damage)



¹ Pharmacokinetic data from the approved package inserts for both Narcan and ZIMHI; not from head-to-head studies

Death due to respiratory depression ¹

- The more potent the opioid, the more profound the potential for respiratory depression
- Fentanyl and its analogues are the most potent opioids
- Reversal of fentanyl induced respiratory depression requires higher blood levels of naloxone

New data for fentanyl overdose reversal

- Results of FDA funded study conducted by [Dr. Albert Dahan](#) compared recovery from fentanyl with 1, 2 or 4 doses of Narcan (generic equivalent) ²
 - For the most effective recovery, 4 doses should be administered within 2.5 minutes (this is off-label use)
 - This data is currently in press to be published soon
- Adamis' independent PK study suggests that a single dose of ZIMHI would be more effective than the standard of care ³
- Planned head-to-head study of ZIMHI against Narcan (generic equivalent) as follow up to FDA funded study to attempt to demonstrate superiority in fentanyl overdose reversal



¹ Represents opinion of the speaker—based statements in the scientific literature

² FDA presentation at the Reagan-Udall meeting

³ Represents opinion of the speaker, not based on any specific study

Why Higher Dose is Necessary

Anecdotal data from first responders facing the prevalence of fentanyl poisonings

"Prescription strength ZIMHI is the best remedy available for opioid overdose. If we had had some in the house when our son Sammy died, he would still be with us" – *Samuel P. Chapman, Director – Parents for Safer Children*¹

".....but with fentanyl, we are needing to use about 3 doses [NARCAN] to achieve a recovery" – *David B. Rausch, Director of the Tennessee Bureau of Investigation*¹

"He wasn't waking up, so I gave him a third [NARCAN]..." – *Law enforcement perspective*:¹
<https://healthandjusticejournal.biomedcentral.com/articles/10.1186/s40352-022-00172-y>

"...it can take three to four doses [of NARCAN] to revive somebody because the strength of the fentanyl that people are using right now" – *Scott Kerman, Blanchet House Executive Director*¹

"It has become apparent that many overdoses require much higher initial doses to reverse...as high as 10–12mg of naloxone"^{1,2}

"In Indiana, Ohio, and Michigan, we are seeing a lot more synthetic drugs and a need for repeat dosing. We are using naloxone more and more...for these super high potent derivatives, Narcan just isn't enough."^{1,2}



¹ Represents the opinion or observations of individuals and not based on any studies or systematic tests
² From Adamis sponsored third-party market research

Already launched strategic government relations campaign to facilitate market access

- First win: Invited to private White House meeting with Director of National Drug Policy, Advisor to the President, Assistant Secretaries for HHS and SAMSA in June 2023 – goals and outcomes discussed include:
 - Implementing naloxone saturation policy
 - Increasing grant funding to states to purchase more naloxone
 - Creating guideline templates to roll out to states and municipalities to remove barriers to naloxone access
 - Director may issue a directive to mandate removal of barriers to naloxone access when using Federal funds ¹
- Interactions with Capital Hill
 - Met with 12 congressional offices, Senators and House members of both parties to explain the cost savings and potential to reduce mortality with ZIMHI based on scientific data
 - The value proposition of ZIMHI was well received by all offices visited
 - **HR 4007, introduced with bipartisan support, would remove barriers to naloxone access that currently favor NARCAN**

New targeted publicity campaigns to make purchasers aware of the value of ZIMHI

- Leverage completed FDA funded study demonstrating need for higher doses of naloxone to treat fentanyl overdoses
- Disseminate survey data on number of Narcan doses needed to achieve recovery
- Publicize head-to-head data (ZIMHI vs Narcan/generic), when available ²



¹ There is no assurance that any of these measures will actually be implemented
² Assuming favorable results from this study

Development Candidate

DPI-125 Targets the Opioid Crisis



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Opioid Crisis: Treatment and Prevention

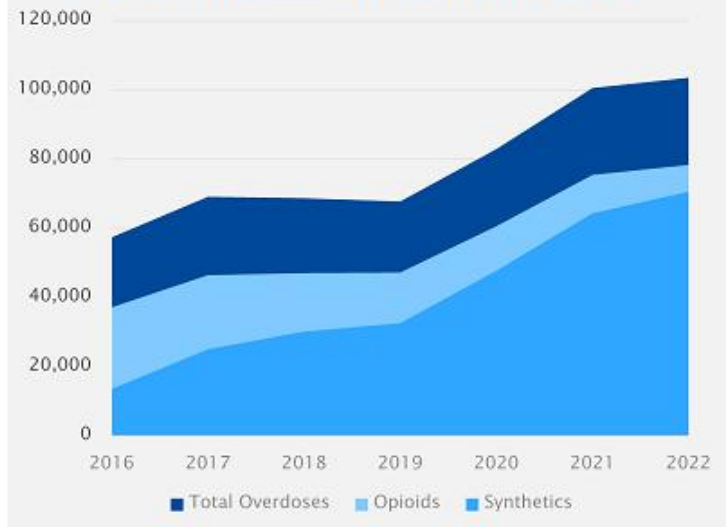
Opioid use is a worsening health crisis

- Every 7 minutes a person dies in the US of an opioid overdose¹
- According to the CDC: ~1.6 million Americans report suffering from opioid use disorder (OUD)²
- Rx options include methadone, buprenorphine and naltrexone (all old), but 87% do not receive evidence-based medical treatment³

Market concerns

- Prescription and illicit opioids target the mu opioid receptor, which provides potent pain relief
- However, binding only to the mu receptor can lead to addiction and death
- A balanced physiological approach that mimics the body's own endorphins is needed

US Drug Overdose Deaths by Drug Class⁴



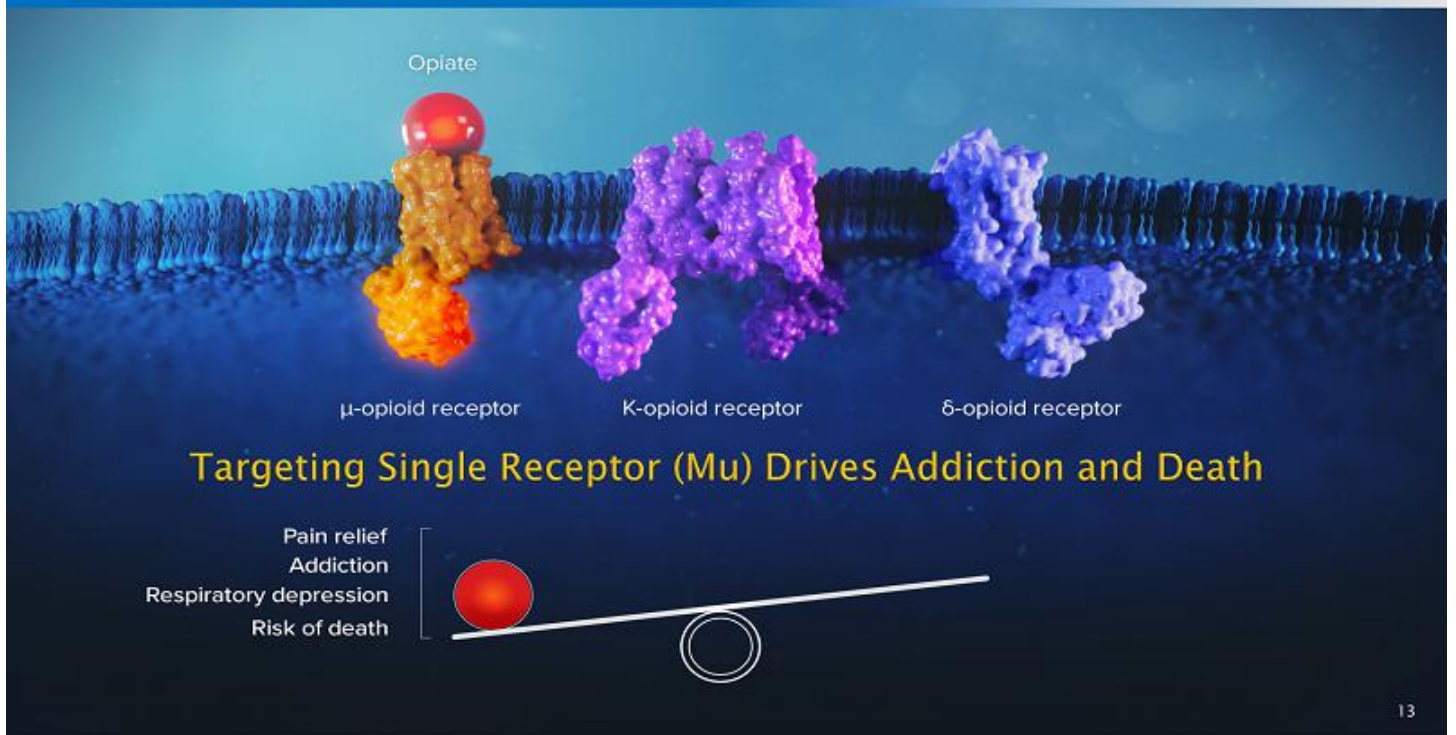
¹ www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

² <https://www.cdc.gov/stopoverdose/stigma/index.html>

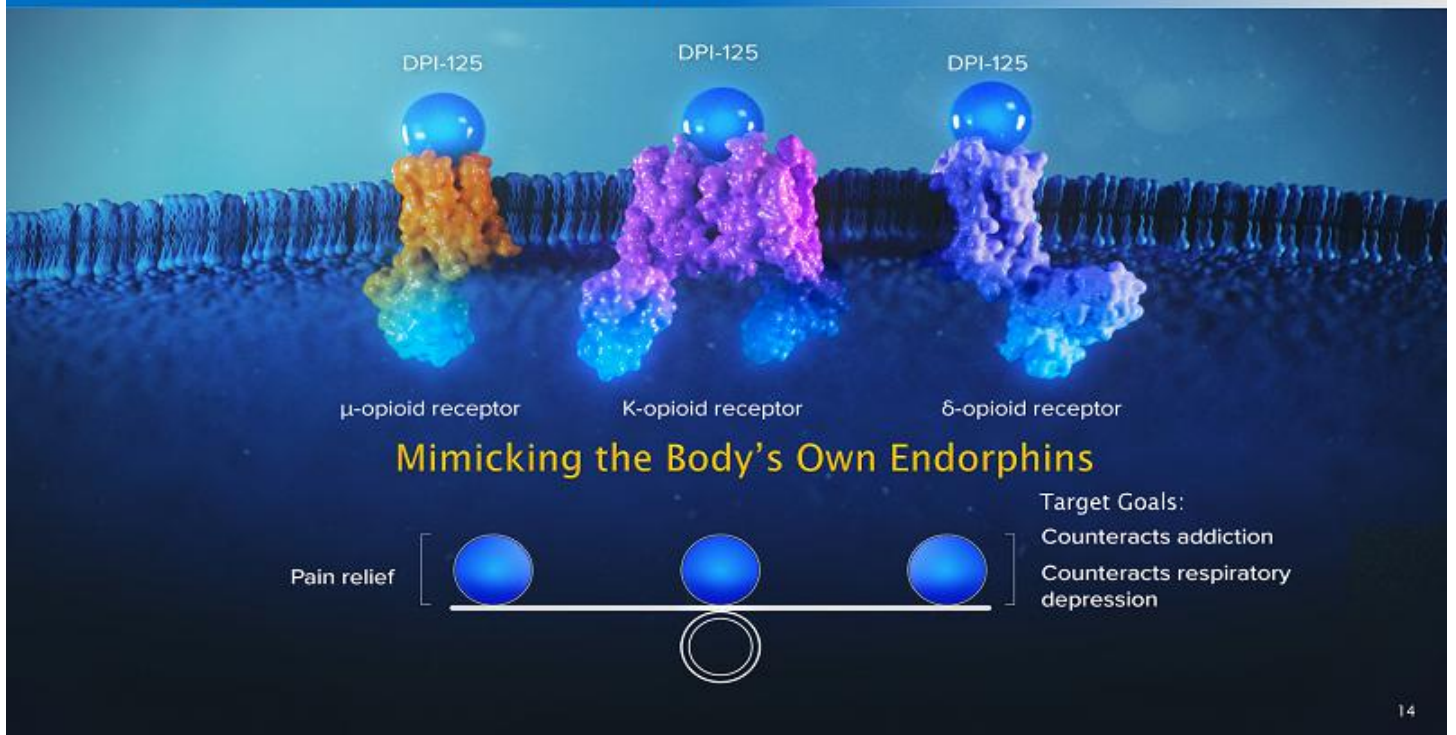
³ <https://www.sciencedirect.com/science/article/pii/S0955395922002031>

⁴ US Centers for Disease Control and Prevention

Opioid Crisis Caused by Imbalance



DPI-125 Takes a Balanced Approach



Combating Opioid Addiction

Our lead compound could offer the solution ¹

- DPI-125 binds to all 3 opioid receptors (delta, mu, kappa)
- Animal studies have shown efficacy and safety in terms of respiratory depression and addiction ²

An alternative treatment for OUD

- DPI-125 is expected to allow for rapid stabilization of patients, without inducing opioid withdrawal
- An effective, safer alternative could get a more favorable drug schedule
- Could expand the current utilization (~13%) and grow the >\$3 billion OUD treatment market ³
- Potential to reduce the OUD crisis with a safer, effective, non-dependent pain treatment



Overdose deaths in San Francisco are largely be driven by fentanyl, an opioid about 50 times more potent than heroin, and often in combination with other substances such as methamphetamine.

¹ Assuming adequate funding to develop the product, successful trial results, FDA approval, and subject to market factors, competitive factors and other risks and uncertainties

² Company's interpretation of the data from rodent and non-human primate studies

³ Bloomberg Intelligence Drug Explorer 2022

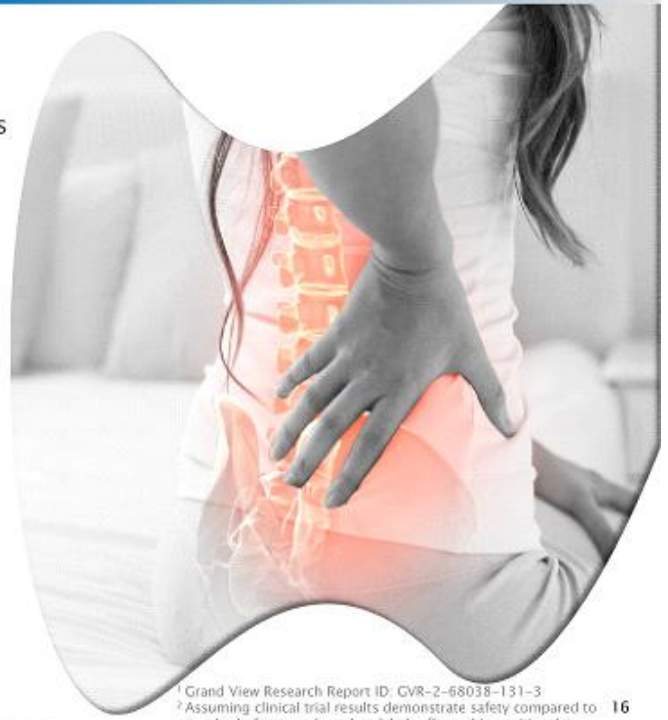
[SF Examiner, Overdose deaths in S.F. decline but one community hit hardest by crisis, Nov. 22](#)

100 million Americans suffer with pain

- The global prescription market for opioids in 2021 was greater than \$22 billion ¹
- For many, the treatment of pain, using currently marketed, single-receptor opioids was the root cause for their cycle of addiction

DPI-125 may also offer a safer treatment for acute and chronic pain ²

- Animal models have demonstrated DPI-125 to be a powerful analgesic
- However, mimicking the body's natural endorphins by binding to all three receptors (delta, mu & kappa), it may be a safer and less addictive option



¹ Grand View Research Report ID: GVR-2-68038-131-3
² Assuming clinical trial results demonstrate safety compared to standard of care and product label reflects this positive data

DPI-125 Planned Development Timelines ¹

We anticipate performing the following studies to pursue indications for the treatment of OUD and acute pain relief simultaneously

Given the urgent need for effective widely available OUD treatments, we anticipate FDA will confer Breakthrough, Fast Track and Priority Review status resulting in these accelerated timelines: ²

2023/Q4: Manufacture of transdermal system for DPI-125

2024/Q1: Results of safety study from respiratory depression compared to fentanyl in humans

2024/Q2: Results of transdermal patch PK study in humans

2024/Q3: Results of abuse liability study compared to current treatments for OUD and pain relief

2025: Proof-of-Concept study results of post surgical pain treatment

Proof-of-Concept study results of OUD treatment



¹ Assuming adequate funding, FDA approval of the plan and no unexpected events. There is no assurance that we will be able to any of the above milestones or goals or that any future studies will be successful
² There is no assurance that the FDA will approve these future applications

Key Value Drivers ¹

Merger with DMK

- New leadership, clinical-stage programs and library of novel small molecules

Accelerating ZIMHI sales

- Additional data, marketing and sales efforts

Advancing development pipeline

- News flow of development milestones for DPI-125
- Multiple potential blockbuster treatments for substance use disorders, acute and chronic pain, and other indications

Out-licensing opportunities

- Treatments for anaphylaxis, Parkinson's, bladder and autoimmune and other neuro-based diseases

Partnerships for ZIMHI ex-US

- Canada and Europe are potential markets covered by patent portfolio



¹ There are no assurances that any of these value drivers will be achieved as they are subject future activities and are subject to several uncertainties and risks

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