

DMK Pharmaceuticals Corporation

Focused on reducing deaths and addiction

January 2024



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.

Experienced Management Team



EBOO VERSI
M.D., Ph.D.
CEO

New management team installed in Oct 2023

Dr. Versi appointed CEO in May 2023

- Large (Lilly, Pfizer, Astellas) and small companies (Odyssey, Plethora, Auxilium, Mt. Cook)
- Medical lead at Pfizer – team that created the overactive bladder market
 - Current OAB market >\$5B
- Planned and executed clinical studies for multiple approved products
- Authored over 100 scientific publications and inventor of several patents



Seth Cohen,
MBA,
CFO

Mr. Cohen appointed CFO in October 2023

- 30+ Years in financial management, including multiple CFO roles in public, private equity-backed and private corporations
- Former trustee for City of New York's public pension systems, \$100+ billion in assets



New Corporate Strategy – Addiction and Pain Treatment

New Management in October 2023

- Change in direction and strategy: Treatment of substance use disorder.
 - Focus on opioid crisis by commercializing ZIMHI® and developing DPI-125 with non-dilutive funding
- Business development activities to monetize non-core assets

Laser focus on revenue generation & growth to drive stockholder value

- Increase U.S. sales of ZIMHI® our lead commercial product
 - White House and congressional initiatives to lift barriers to purchase ZIMHI with federal grants
 - Partnerships in US & ex-U.S. for ZIMHI
- Out-license SYMJEPI® and other assets that are not core to the addiction business
- Execute NIH funded program and continue to obtain non-dilutive government grants for development and discovery (~750 NCE) programs

Opioid Crisis: A National Emergency

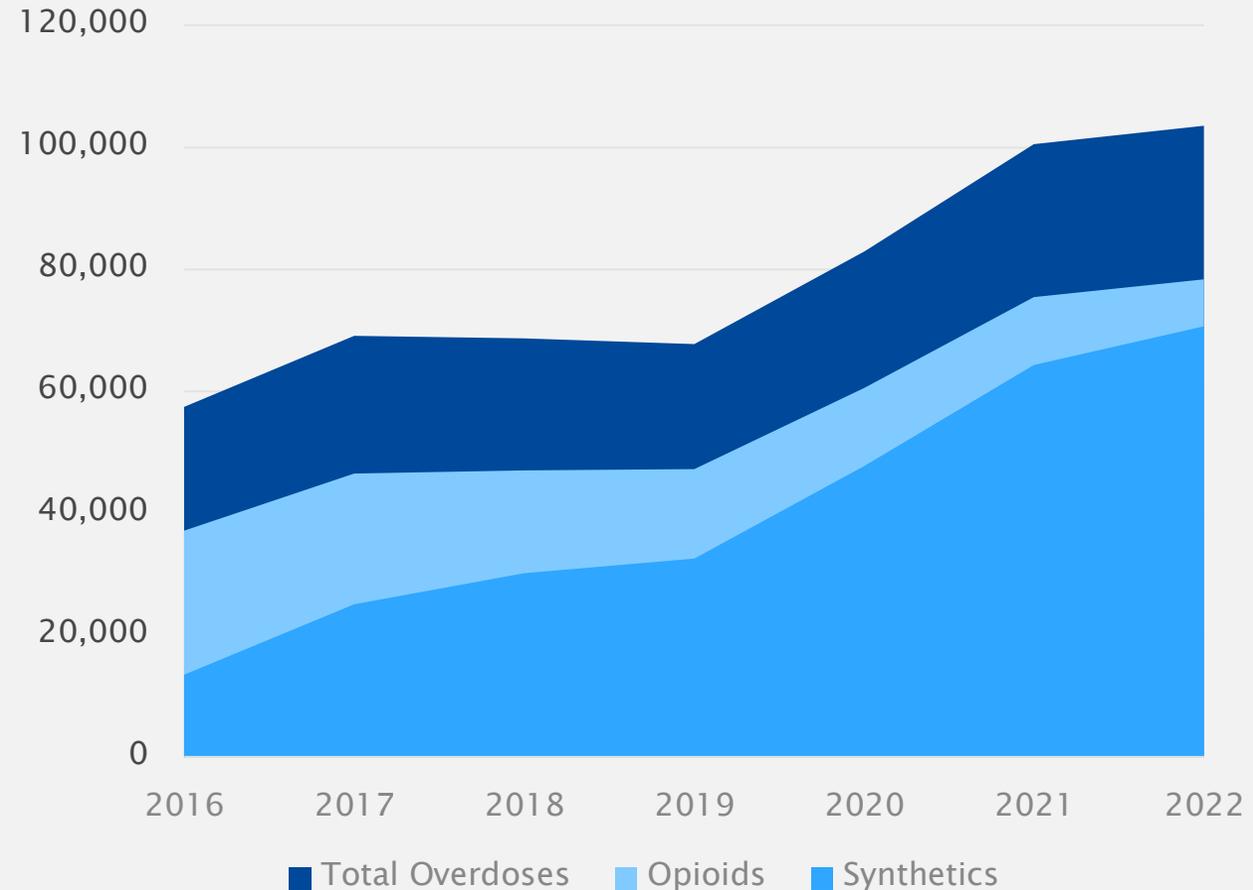
Lethal fentanyl imports are increasing

- Every 7 minutes a person dies in the U.S. of an opioid overdose
- Unsuspecting non-opioid users are being poisoned by recreation drugs spiked with fentanyl
- According to the CDC: ~1.6 million Americans report suffering from opioid use disorder (OUD)

Treatment goals

- Intranasal naloxone treatments are less effective against fentanyl
- Intramuscular naloxone treatments are needed to counteract fentanyl poisoning or overdose: **ZIMHI**
- To treat and prevent addiction, a balanced physiological approach that mimics the body's own endorphins is needed: **DPI-125**

U.S. Drug Overdose Deaths by Drug Class



Lead Products Overview

Our mission: To prevent deaths due to poisoning, overdose, and addiction

ZIMHI (naloxone): To rapidly reverse fentanyl overdose

- Market in US and Canada exceeds **\$725M** with **CAGR of 10.1%** to 2032
 - Significant market potential, with only two competitors
- Intramuscular results in more rapid increase in blood levels than intranasal delivery
 - More rapid, sustained effect needing fewer administrations: cost effective.

DPI-125 transdermal system for treatment opioid use disorder

- US market **>\$3B** addressed by old Rx solutions with limitations of access, efficacy, and safety
 - NIH-sponsored studies show equal efficacy to treat withdrawal symptoms, with improved safety observed in pre-clinical studies
- Opportunity to expand into treatment of acute moderate to severe pain globally
 - Global pain market **>\$22B**

Additional portfolio candidates

- Indicated for urology (clinical stage) and Parkinson's disease and other disorders
 - Opportunities for out-license revenues

Commercial Product Opportunity

ZIMHI

(Intramuscular 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 fentanyl¹
 - Every minute counts to prevent death or brain damage
 - Treatment with Narcan® can be slow and require several doses²
 - ZIMHI's fast absorption and high dose/concentration may offer a 'one and done' solution
- U.S. naloxone market is changing
 - Intranasal Narcan (and generics) had >90% share in 2022³
 - Now OTC leaving a vacuum in first responder space

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

Greater bioavailability of ZIMHI versus intranasal naloxone products

- Longer effective duration of action to counter fentanyl induced deaths

Faster and Stronger: More rapidly lowers fentanyl receptor occupancy

- Achieves naloxone blood levels ~6x faster than NARCAN

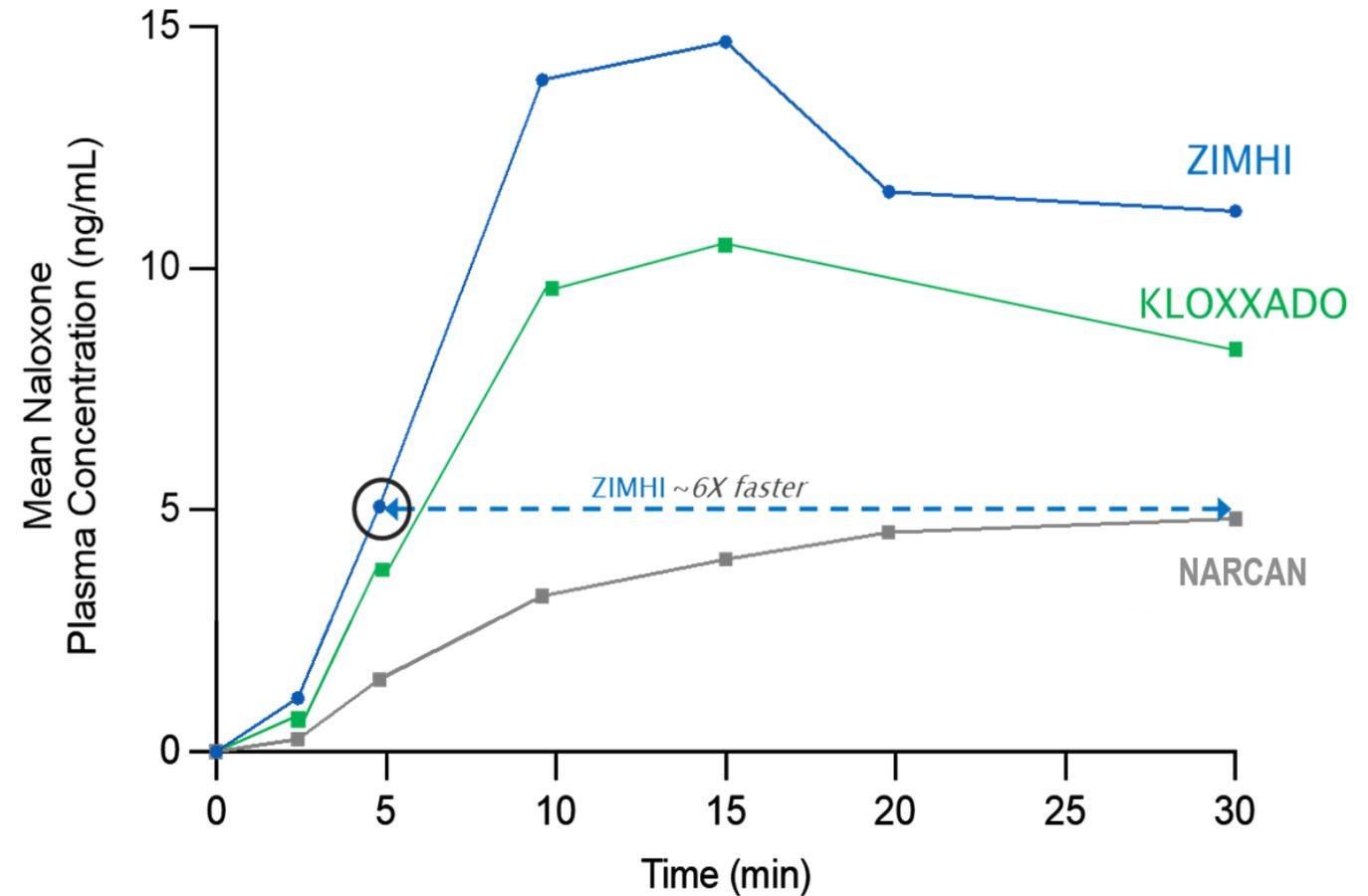
Nasal delivery has limitations

- NARCAN, KLOXXADDO and other intranasal products have limited absorption likely compounded by hypotension in overdose patients

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

- Decreased mortality and morbidity (brain damage)

Mean Plasma Concentration of Naloxone Over Time ¹



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

Fentanyl Recovery Depends on Optimal Naloxone Dosing

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
- DMK's independent PK study suggests that a single dose of ZIMHI would be more effective than the standard of care ³
- Currently a head-to-head study of ZIMHI against Narcan (generic equivalent) as follow up to FDA funded study (Dr. Dahan) is being performed to attempt to demonstrate superiority in fentanyl overdose reversal

Higher Dose Availability of Naloxone is Necessary

Anecdotal data from patients and 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}

Accelerate ZIMHI Sales with Data and Awareness

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 SAMHSA 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 19 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



ADAMIS

Pharmaceuticals Corporation

Opioid Crisis: Treatment and Prevention

Opioid use is a worsening health crisis

- **Every 7 minutes** a person dies in the U.S. of an opioid overdose ¹
- 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 treatment ³

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



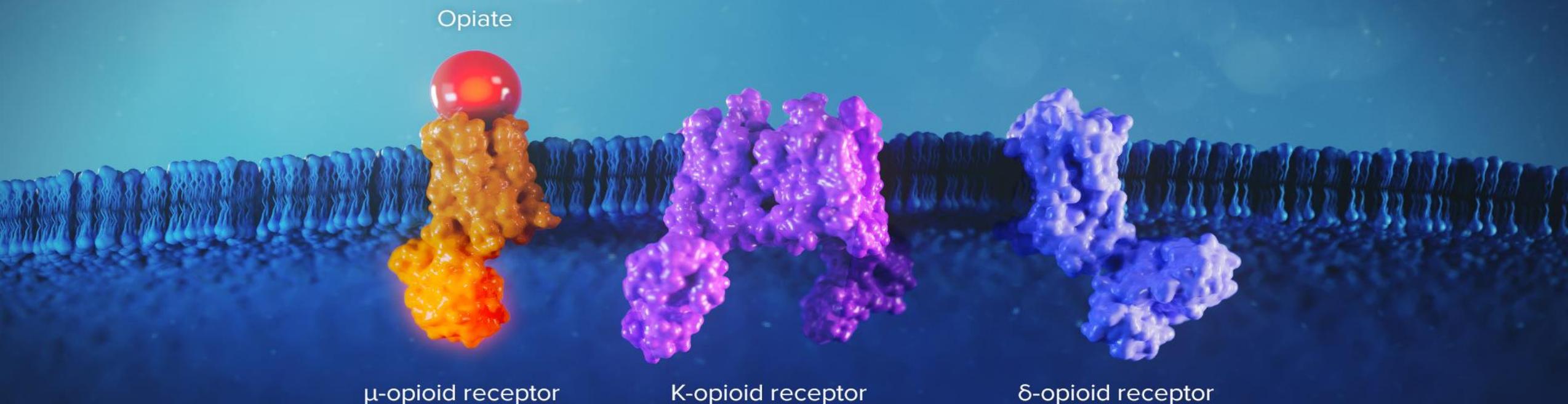
¹ www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

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

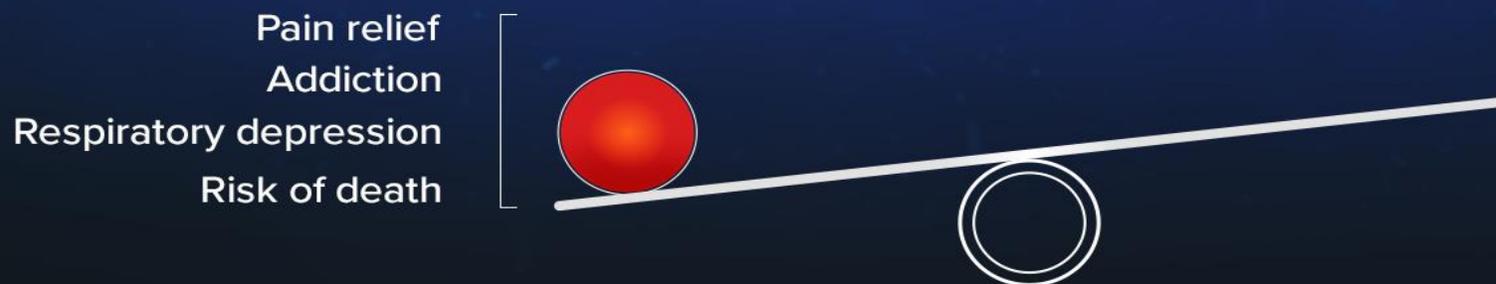
³ <https://www.sciencedirect.com/science/article/pii/S0955395922002031>

⁴ U.S. Centers for Disease Control and Prevention

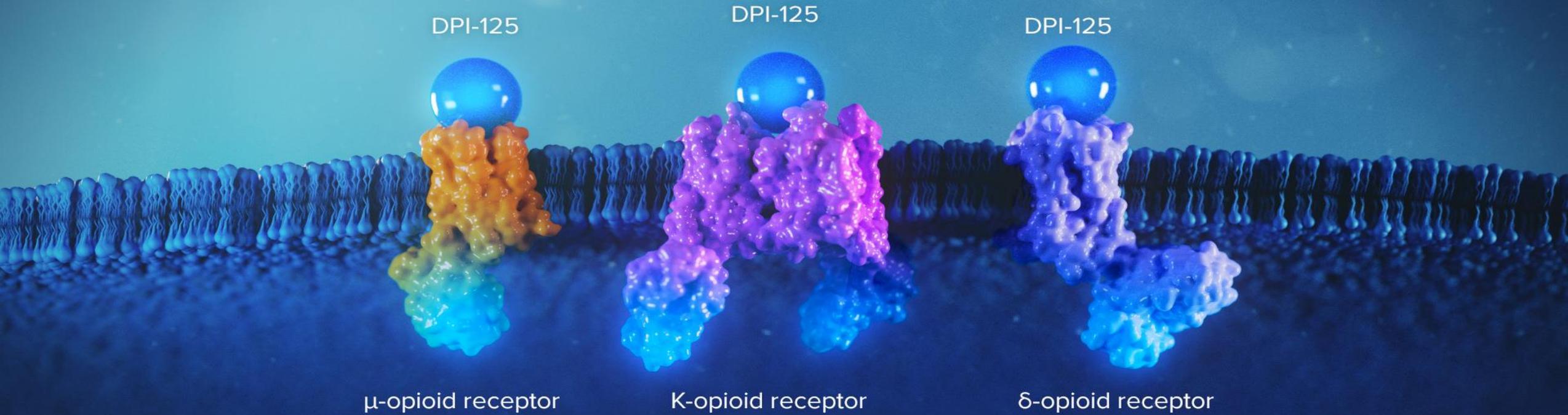
Opioid Crisis Caused by Imbalance



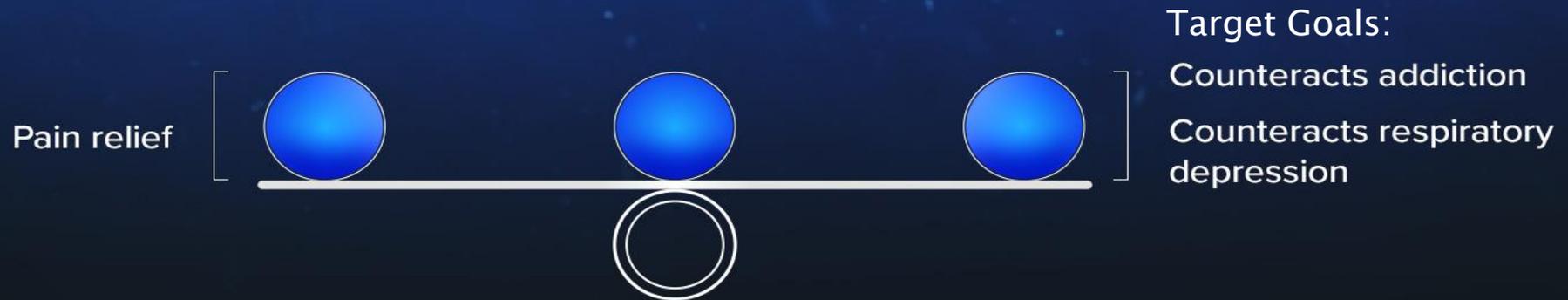
Targeting Single Receptor (Mu) Drives Addiction and Death



DPI-125 Takes a Balanced Approach



Mimicking the Body's Own Endorphins



DPI-125: Combating Opioid Addiction

New solution: DPI-125¹

- Clinical stage asset
- Animal studies have shown efficacy and safety in terms of respiratory depression and addiction with potent analgesia²

Alternative treatment for OUD and pain

- Current options methadone and buprenorphine (>40 years old) but they work and yet only ~13% get this medical treatment
 - They are addictive, are difficult to access (drug scheduling) and patients have to undergo withdrawal symptoms.
- DPI-125 is not expected to have these issues so could significantly grow the >\$3 billion OUD treatment market³
 - Potential to reduce the OUD crisis **by prevention** with a safer, effective, non-dependent pain treatment (100 million Americans: \$22B market)



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. ⁴

Preventing OUD

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 pain²

- 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), may be a safer and less addictive option



Strategic Priorities: FY 2024

Execute new partnership to sell ZIMHI

- Focus on first responders by selling to government entities, hospitals and other institutions
- Expand into Canada

Fund product pipeline via non-dilutive funding (grants)

- DMK previously received NIH funding, we have an active grant to explore portfolio for a novel treatment of alcohol use disorder and have just applied for a \$11.7m follow up grant to further develop DPI-125

Divest SYMJEPI

- Low-cost, EpiPen-like product does not fit with current product mix but has value as intellectual property
- Currently evaluating US and ex-US companies to either sell or out-license

DMK Investor Contact:

Investors@dmkpharma.com

