

# A commercial-stage pharma company, developing drugs through cutting-edge drug delivery technologies

March 2025

amorphOX®

WE SUPPORT



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# Orexo in brief

30 years of experience developing improved pharmaceuticals based on proprietary drug delivery technologies.

Addresses unmet needs within **opioid use disorder (OUD)** and other areas where our **technologies can contribute to improving drugs.**



**Strong cash generation from lead product**

SEK m

**5.600**

Total net revenue since US launch in 2013






The next-generation drug delivery technology, **AmorphOX<sup>1</sup>**, provides improved stability and prolonged shelf life for sensitive small and large molecules.

**Own commercial platform in the US**, incl. the lead pharma product Zubsolv® & the digital support program MODIA® – both for patients suffering from OUD.



<sup>1</sup> AmorphOX follows the first-generation drug delivery technology – the sublingual, which is the backbone in the commercial stage drugs Abstral®, Edluar® and Zubsolv

# Commercial products and development pipeline

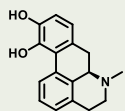
	Product or Project/Indication/Technology	Partners	Exploratory	Preclinical	Clinical development phases	Registration	Approved and/or Launched			
							US	EU	RoW	
Commercial	Zubsolv® Opioid Use Disorder (OUD) / Sublingual platform		[Progress bar]							
	Abstral® Breakthrough Cancer Pain / Sublingual platform		[Progress bar]							
	Edluar® Insomnia / Sublingual platform		[Progress bar]							
R&D	OX124 Naloxone, Opioid Overdose / <b>amorphOX®</b>		[Progress bar]							
	OX125 Nalmefene, Opioid Overdose / <b>amorphOX®</b>		[Progress bar]							
	OX640 Adrenaline, Anaphylaxis / <b>amorphOX®</b>		[Progress bar]							
	Others (Small and large molecules) / <b>amorphOX®</b>		[Progress bar]							

# The scalable AmorphOX<sup>®</sup> platform takes Orexo beyond the OUD treatment area

Examples of both internal and partnered projects

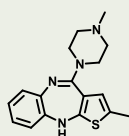
## Small molecules

### Apomorphine



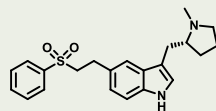
0.2% after 24 months

### Olanzapine



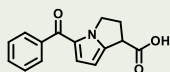
0.2% after 6 months

### Eletriptan



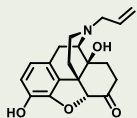
0.5% after 12 months

### Ketorolac



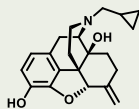
0.8% after 6 months

### Naloxone



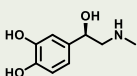
≤0.1% after 24 months

### Nalmefene



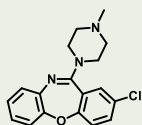
≤0.1% after 15 months

### Epinephrine



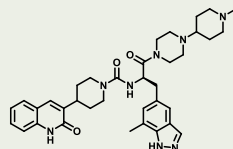
0.1% after 24 months

### Loxapine



0.3% after 24 months

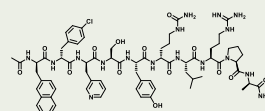
### Zavegepant



≤0.1% after 9 months

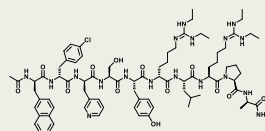
## Peptides

### Cetorelix



0.6% after 12 months

### Ganirelix



0.74% after 12 months

## Biologics

### Enzyme



Retained activity after 1 month (40°C)

### Virus like particle



Retained activity after processing

### Attenuated Virus



Retained titer levels, resilient to freeze thaw cycles

### Covid Spike protein



Retained activity after 3 months (40°C)

### Immuno-modulator



99% purity after 1 month (50°C)



Chemical degradation after accelerated stability studies in **40°C/75% RH**

# Commercial

Robust commercial  
platform targeting OUD regions



# Committed to improve the life of patients suffering from OUD

## The unmet need in the US

**5.9 m**

are dependent on opioids<sup>1</sup>

**2.3 m**

are undergoing treatment<sup>1</sup>

**64,000**

the number of fatal overdoses  
caused by opioids annually<sup>2</sup>

**USD 1,500 bn**

The societal cost of the US opioid crisis<sup>3</sup>

## Our approach

### Medication-Assisted treatment (MAT)



**zubsolv**  
(buprenorphine and naloxone) 8

### Digital support program



### Rescue medication



OX124 in registration phase (FDA)



<sup>1</sup> SAMHSA Key Substance Use and Mental Health Indicators in the United States: Results from the 2023 National Survey on Drug Use and Health.

<sup>2</sup> Center of Disease Control and Prevention. <sup>3</sup> US Joint Economic Committee, data refers to 2020.

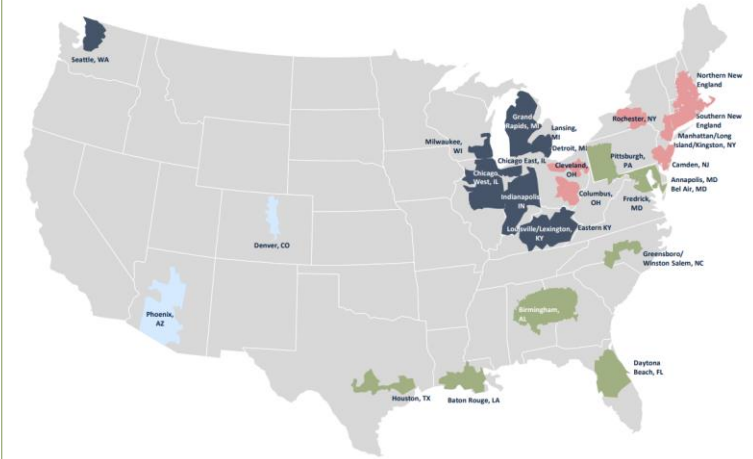
# Zubsolv® with a robust commercial platform targeting OUD regions

## Differentiated position

- ✓ Broadest range of doses allowing precise titration & individualized dosing
- ✓ Sole promoted daily MAT brand with no generic alternatives
- ✓ Treatment consistency and dose range appeal to physicians
- ✓ Patient preference vs Suboxone tablet and film formulations.<sup>1</sup>

## Broad commercial infrastructure

- ✓ Sales territories in nearly all large metropolitan areas
- ✓ Sales territories optimized based on market size, growth and market access
- ✓ Market access team covering all established payers
- ✓ Medical Affairs team of experienced physician, pharmacist and psychologist.



# 98 %

Ratio of patients in the **Commercial payer segment** that can get Zubsolv reimbursed

# 50 %

Ratio of patients in the **Public payer segment** that can get Zubsolv reimbursed

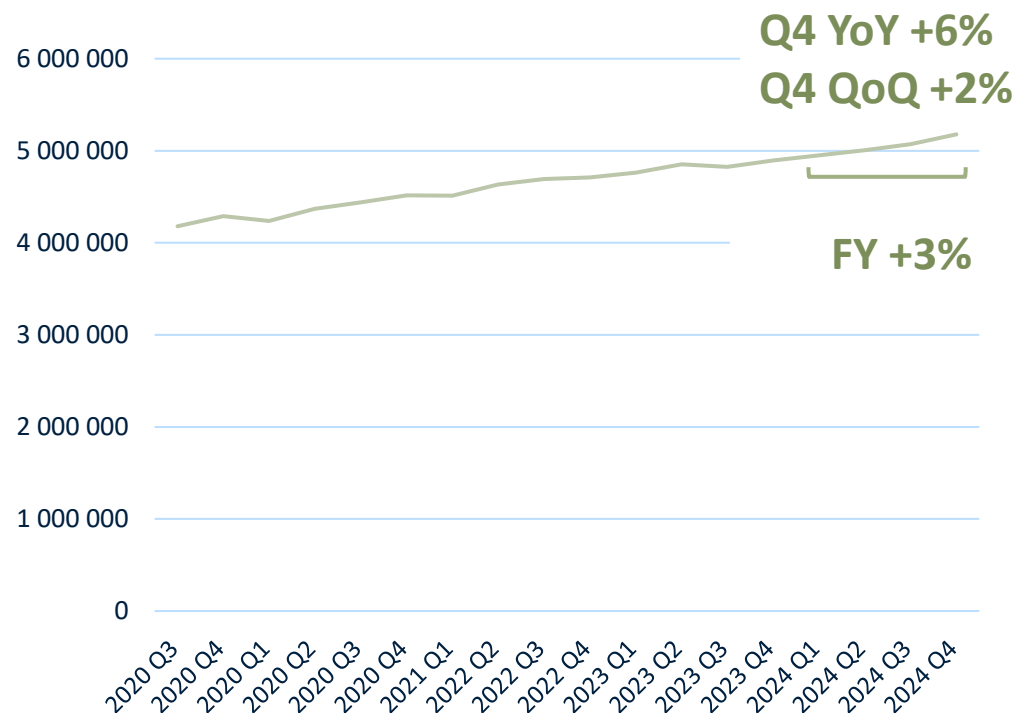


<sup>1</sup> Orexo ISTART study comparing Zubsolv to Suboxone tablets



# Slightly accelerating market growth & stabilized Zubsolv<sup>®</sup> development

**Market development (NTRx)**



## Q4 2024: Market development by segment

- Commercial growth YoY +19% and Medicare +9%
- Continued but slowing decline in Medicaid -2% YoY
- Medicaid remain the largest market segment with 37% of patients followed by Commercial with 34%

## Q4 2024: Zubsolv development

- QoQ +1% and 0% YoY
- Growth in Public segment, both Medicaid & Medicare

**SEK 578<sub>m</sub>**

**Net revenues 2024  
Zubsolv**

**SEK 177<sub>m</sub>**

**EBITDA 2024  
US Commercial**

<sup>1</sup> Based on IQVIA prescription data and include both retail and non-retail volumes. Note weekly prescription data is volatile and is influenced by public holidays, weather and changes to reimbursement.

# US market drivers support continued growth for Zubsolv<sup>®</sup> and upcoming OX124 launch

- New legislation (Mainstreaming Addiction Treatment Act, 2023) aimed to increase access to treatment long-term removing restrictions for prescription of MAT
- New funding from opioid litigation of an accumulated value of USD 57 billion to curb the opioid crisis.
- Strong growth in the profitable Commercial payer segment improve access to branded products like Zubsolv where 98 % of patients with a private insurance can get Zubsolv<sup>®</sup> reimbursed.
- Continued focus on improving access to opioid overdose rescue medication and need for new alternatives to curb high number for deaths due to fentanyl.

**2-5 %**

**US bup/nal market**  
expected growth in 2025<sup>1</sup>

**10 %**

**US naloxone market**  
expected growth (CAGR)  
2023-2032<sup>2</sup>

# Settlement reached with Sun Pharmaceuticals after over 4 years of Zubsolv® IP litigation

- The agreement resolves the patent litigation initiated by Orexo in 2020 after Sun filed an ANDA to market generic Zubsolv in the US before Orexo's patent expiration.
  - Allows Sun to enter the US market with its generic versions of Zubsolv in September 2030.
  - Does not implicate Zubsolv's patent protection incl. ten US patents ranging from 2027 to 2032.
- Eliminated the short-term risk of failing in the Federal Court of Appeals and losing Zubsolv exclusivity.





# AmorphOX<sup>®</sup>

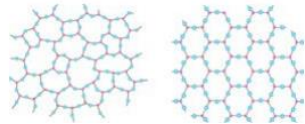
The next-generation drug delivery technology unlocks a broad range of new opportunities in the development of innovative drugs

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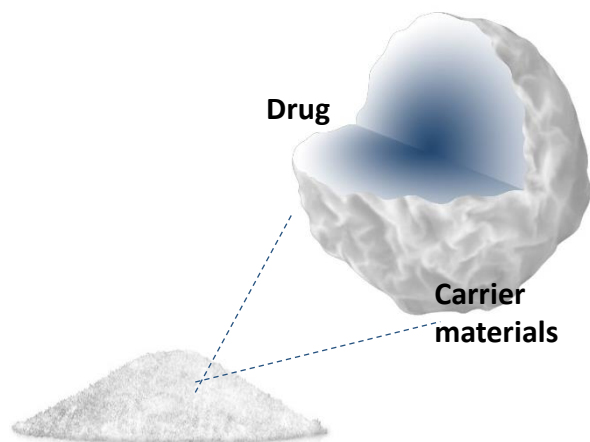
# AmorphOX<sup>®</sup> is a unique drug delivery technology

## The challenge

Amorphous materials, commonly used in drug development, are rapidly absorbed but tend to be unstable limiting routes of administration, distribution and storage



## The solution – AmorphOX, a powder-based technology



## AmorphOX unique strengths

### 1 AmorphOX unique properties ensure physical and chemical stability

- ✓ Withstands high and low temperatures
- ✓ Stability maintained over time

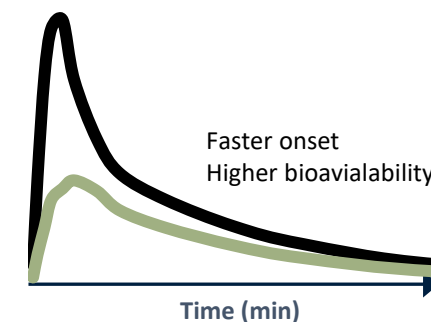
Examples: Chemical degradation after accelerated stability studies at 40°C/75% RH

<b>Small molecules</b> Ephinephrine 0.3% after 24 months	
<b>Peptides</b> Cetrorelix 0.6% after 12 months	
<b>Biologics</b> Protein (spike protein) Retained activity after 3 months (40°C)	

### 2 AmorphOX is validated in multiple clinical trials

- ✓ OX124 – high-dose rescue medication (naloxone)
- ✓ OX125 – overdose rescue medication (nalmefen)
- ✓ OX640 – adrenal product for anaphylaxis

Plasma concentration from clinical trial

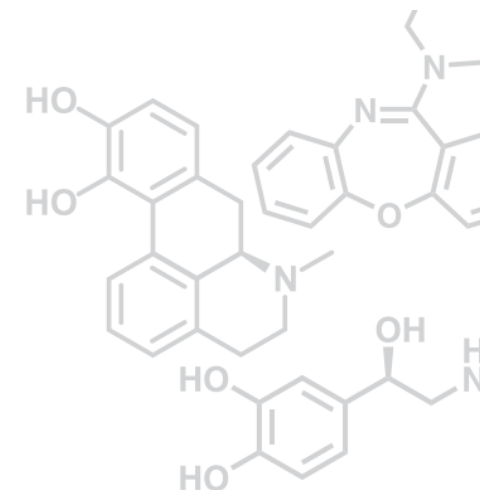


■ AmorphOX ■ Traditional liquid

### 3 AmorphOX is a versatile platform

Improves:

- ✓ Small molecules
- ✓ Peptides
- ✓ Biologics



# OX124 (registration phase) – high dose rescue medication for opioid overdose with naloxone

- Large health issue in the US with >64.000 deaths from opioid overdoses annually<sup>1</sup>
- OX124 is based on AmorphOX® and designed to treat overdoses caused by synthetic opioids representing >90% of the opioid overdoses
- Formulations of OX124 clinically differentiated to market leader and generic versions of market leader
- **NDA filed with the FDA in 2023 and ongoing work to address FDA requests for additional data related to the commercial manufacturing and device.**

Global overdose rescue market size 2022 (USD)<sup>2</sup>

1,483  
m

Projected global annual growth<sup>3</sup>

11  
%

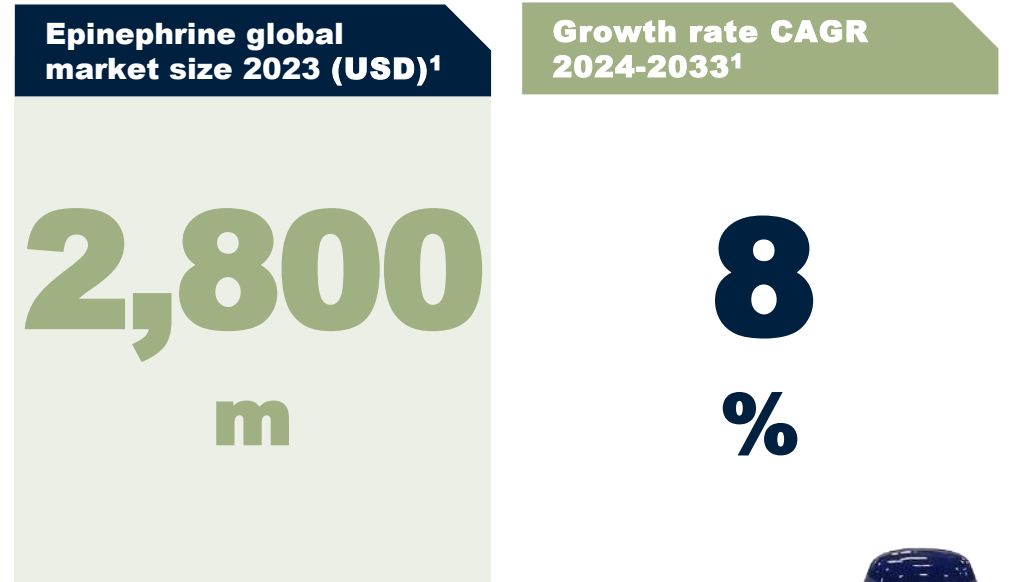


<sup>1</sup> Center of Disease Control and prevention. <sup>2</sup> <https://www.coherentmarketinsights.com/market-insight/naloxone-market-1804>. <sup>3</sup> Custom market insights.  
Note: images are prototypes and not final packages

# OX640 (clinical phase) – emergency treatment of allergic reactions, incl. anaphylaxis

- First line treatment today: intramuscular auto-injectors. In 2024 the first nasal product was approved in the US and EU which can pave the way for transformative shift
- If approved OX640 can have the following differentiating properties
  - Superior absorption and exposure
  - Fast acting
  - Longer shelf life
  - Less restrictive storage requirements
  - Improved dose conformity.
- Partnering process initiated for global commercialization.

## Positive data from two clinical studies



<sup>1</sup> <https://www.precedenceresearch.com/epinephrine-market#:~:text=The%20global%20epinephrine%20market%20size,forecast%20period>  
Note: images are prototypes and not final packages

# Financial & legal





# Improving profitability and removing uncertainties

Income statement SEK m	Oct-Dec 2024	Oct-Dec 2023	FY 2024	FY 2023
<b>Net revenue (NR)</b>	<b>160.3</b>	<b>166.0</b>	<b>590.0</b>	<b>638.8</b>
<i>of which US Commercial (Zubsolv®)</i>	<i>152.1</i>	<i>151.3</i>	<i>560.3</i>	<i>577.7</i>
<b>Gross Profit</b>	<b>138.0</b>	<b>145.9</b>	<b>517.9</b>	<b>550.0</b>
<b>OPEX</b>	<b>-235.9</b>	<b>-154.5</b>	<b>-658.2</b>	<b>-659.5</b>
<b>EBIT</b>	<b>-98.0</b>	<b>-8.6</b>	<b>-140.3</b>	<b>-109.5</b>
<b>EBITDA</b>	<b>28.9</b>	<b>12.4</b>	<b>48.9</b>	<b>-32.5</b>
<b>Liquid funds</b>	<b>123.3</b>	<b>171.0</b>	<b>123.3</b>	<b>171.0</b>

## 2024 – the best EBITDA result since 2019

- ✓ Positive EBITDA both full year, SEK +48.9 m (-32,5) and in Q4, SEK +28.9 m (12.4) explained by reduced OPEX
- ✓ Zubsolv® revenue stable YoY in both SEK and USD, but significant growth from Q3 in line with expectations
- ✓ Lower Abstral® RoW royalties based on lower sales following agreements for individual countries expire
- ✓ Non-recurring items affecting OPEX mainly due to write-down of SEK 99.2 m DMHP<sup>1</sup> intangible assets
- ✓ Internal transaction between Orexo AB (parent company) and Biolipox (fully owned subsidiary) related to Zubsolv worth ~SEK 1.1 b in Q4

<sup>1</sup> Digital Mental Health Programs, Deprexis and Vorvida. <sup>2</sup> Mainly related to costs referring to the US government agency investigation.

# Legal update

## Subpoena issued by the US authorities

- On July 14, 2020, Orexo became aware of an investigation by the US authorities which is ongoing
- Based on communications from the US authorities, the company believes it refers to certain historic marketing messaging campaigns
- Orexo, as of this date, is not aware of any filed civil or criminal case related to the investigation
- Orexo's position to the government has been that its investigation concerns have no merit, but Orexo is also seeking to negotiate a settlement of the matter.



# The value story

# Several potential value triggers near term

## 1 Zubsolv® value potential after removing IP litigation threat

- Stabilizing sales and profit contributions from Orexo US
  - 2024: SEK 578 m net revenue and SEK 177 m EBITDA contribution
- Continued market growth and currently driven by the more attractive commercial segment
- IP maintained until September 2032, with first entrant potentially late 2030 following settlement with Sun
- Settlement with Sun increase strategic flexibility for US operations.

## 2 Partnering around AmorphOX® drug delivery technology

- OX640 for treatment of anaphylaxis is open for partnering now following two successful clinical trials
- On-going partnerships in exploratory phase in vaccines and protein-based products e.g. Abera
- Partnering with other pharma companies to co-develop new products based on AmorphOX.

## 3 OX124 resubmitted to FDA and launch in the US

- OX124 filing completed and accepted by FDA except for additional data requests related to the Instructions for Use and the final commercial product
  - New Instructions for Use successfully tested in July 2024
  - Additional testing of final commercial product prepared and waiting for delivery of critical component
- Low risk to the final approval since all questions are of technical nature and will be solved.



# Thanks

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