POZ Platform®

Enabling Improvements of Multiple Drug Modalities

Small Molecules

New / improved
small molecule drugs

RNA

Optimized targeting &
reduced immunogenicity

ADCs

Improved delivery of
cancer-killing toxins

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August 2024
Non confidential

Forward Looking Statements

This presentation contains forward-looking statements that are based on management's beliefs and assumptions and on information currently available to management. In some cases, you can identify forward-looking statements by the following words: "may," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements involve risks, uncertainties and other factors that may cause actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this presentation, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. Forward-looking statements in this presentation include, but are not limited to, statements about: the potential attributes and benefits of our product candidates; the format, timing and objectives of our product development activities and clinical trials; the timing and outcome of regulatory interactions, including whether activities meet the criteria to serve as registrational; the ability to compete with other companies currently marketing or engaged in the development of treatments for relevant indications; the size and growth potential of the markets for product candidates and ability to serve those markets; the rate and degree of market acceptance of product candidates, if approved; the sufficiency of our cash resources; and our Serina investor webcast. We cannot assure you that the forward-looking statements in this presentation will prove to be accurate. Furthermore, if the forward-looking statements prove to be inaccurate, the inaccuracy may be material. Actual performance and results may differ materially from those projected or suggested in the forward-looking statements due to various risks and uncertainties, including, among others: clinical trial results may not be favorable; uncertainties inherent in the product development process (including with respect to the timing of results and whether such results will be predictive of future results); our ability to recruit and enroll suitable patients in our clinical trials, including the effectiveness of mitigation measures; whether and when, if at all, our product candidates will receive approval from the FDA or other regulatory authorities, and for which, if any, indications; competition from other biotechnology companies; uncertainties regarding intellectual property protection; and other risks identified in our SEC filings, including those under the heading "Risk Factors" in our Form S-4/A Registration Statement filed with the SEC on February 7, 2024 and our subsequent SEC filings. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. The forward-looking statements in this presentation represent our views as of the date of this presentation. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this presentation.

Serina Therapeutics

Proven record of drug development and commercialization

- Founders pioneered PEGylation at Shearwater Polymers; $150B in cumulative sales across 32 FDA-approved PEGylated drugs
- Serina is focused on developing the gold standard therapeutic polymer platform for small molecules, RNA and ADCs
- Lead program SER-252 will enter the clinic in 2025 as a de-risked novel treatment for advanced Parkinson's disease
- Partnered with Pfizer in the RNA vaccine fields
- Key investor led fundings at Biohaven and Medivation with combined exit value of $25B

Presentation Overview

1 Benefits of POZ Platform

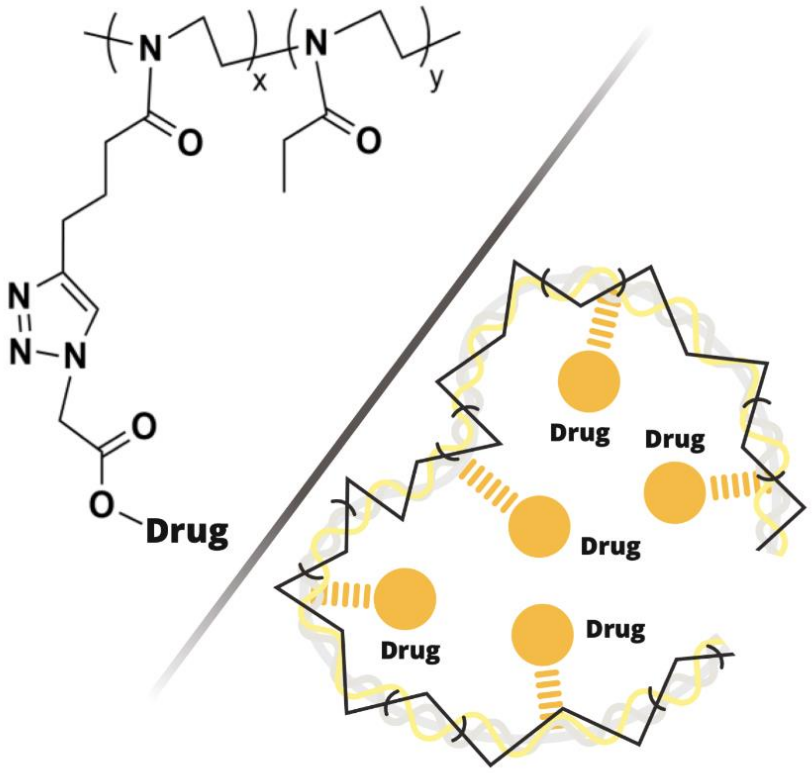
2 SER-252 (POZ-Apomorphine) – Potential best-in-class treatment for Advanced Parkinson's Disease

3 RNA – Broad partnering opportunity across vaccines and therapeutics

4 Milestones and Summary

POZ delivers multiple key improvements across multiple modalities

POZ (poly 2-oxazoline) is engineered to address the limitations of other biocompatible polymers



1. **Does not elicit an immune response**
2. **Enables greater drug loading**
3. **Enables continuous delivery with controlled release**
4. **Safe metabolism, clearance and accumulation profiles**
5. **Cost-effective, safe synthesis and room temp stable**

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SER-252 (POZ-Apomorphine)

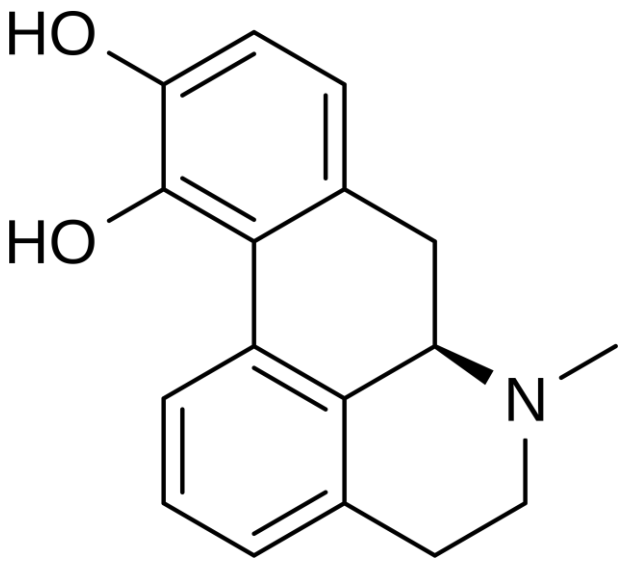
Continuous Dopaminergic Stimulation (CDS) with Best-in-class Potential for Treatment of Advanced Parkinson's Disease

10M
people in the world are currently living with Parkinson's disease

Every 9 mins
A person is diagnosed with Parkinson's disease in the US alone

50+ years
With no major clinical advances – Levadopa standard of care since 1967

POZ Apomorphine: Redefining Treatment Paradigms for Advanced PD



- Apomorphine is a strong pan-receptor dopamine agonist
- Similar to levodopa in terms of efficacy, but not dependent on the patient having intact presynaptic machinery to convert levodopa to dopamine and **may be more appropriate than levodopa for advanced patients**
- Approvals in the US are limited to rescue indications due to its **short half life and serious adverse local administration site reactions**

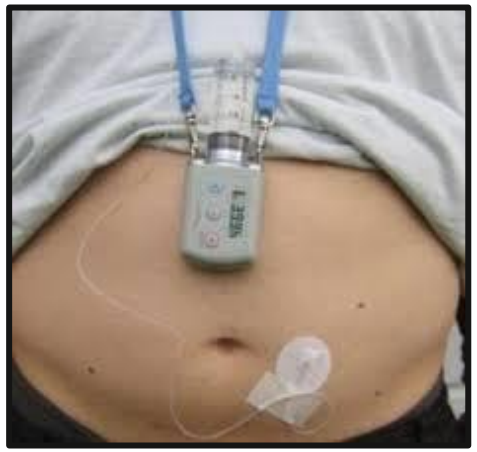
POZ Enables Continuous Delivery of Apomorphine:

- **No need for electronic infusion pump**
- **No adverse skin reactions**

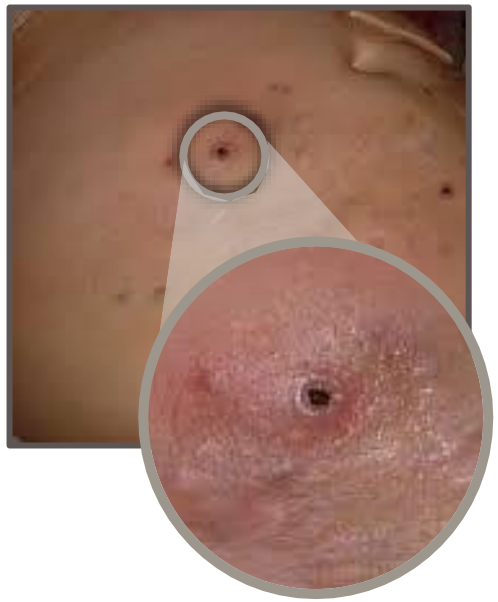
POZ Apomorphine: Addressing Skin Reaction Challenges

No adverse skin reactions in NHPs

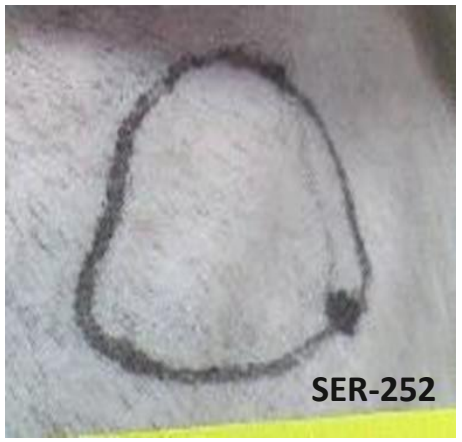
Supernus' APO-go TOLEDO Study: 31% of 82 Patients had Moderate to Severe Local Site Issues



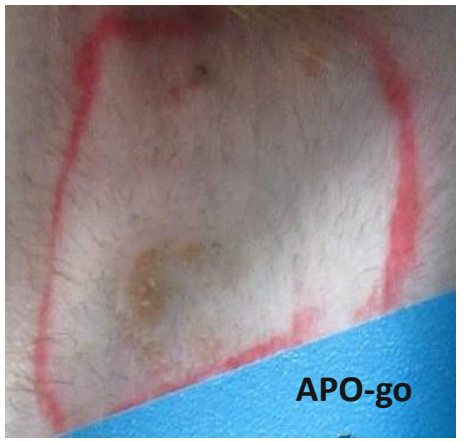
SPN-830 (APO-go)



PK studies testing eight doses of SER-252 at 15 mg/kg over the course of a month showed no skin reactions



No skin reactions at any time point - biopsy of injection site revealed no inflammation

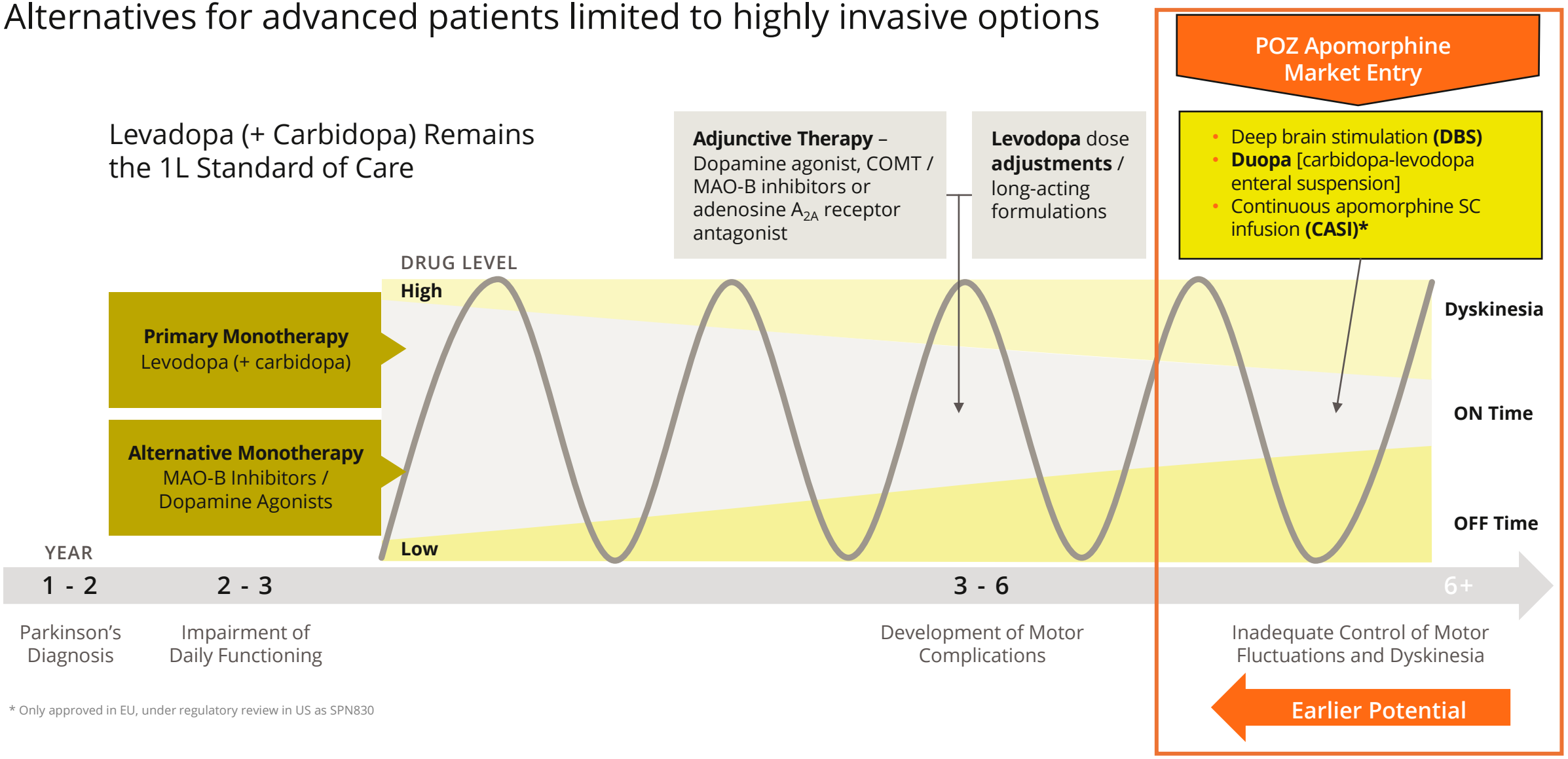


APO-go caused draining skin abscesses in all treated monkeys

POZ releases free apomorphine only in vascular circulation, not in the sub-q compartment

Patient Journey Inevitably Leads to Inadequate Control

Alternatives for advanced patients limited to highly invasive options



* Only approved in EU, under regulatory review in US as SPN830

Market Opportunity for Advanced Parkinson's Therapies

US

Advanced PD prevalent patients
150,000

Inadequately controlled on orals, Advanced-therapy eligible
75,000

~50%
Not controlled

EU + UK

Advanced PD prevalent patients
210,000

Inadequately controlled on orals, Advanced-therapy eligible
105,000

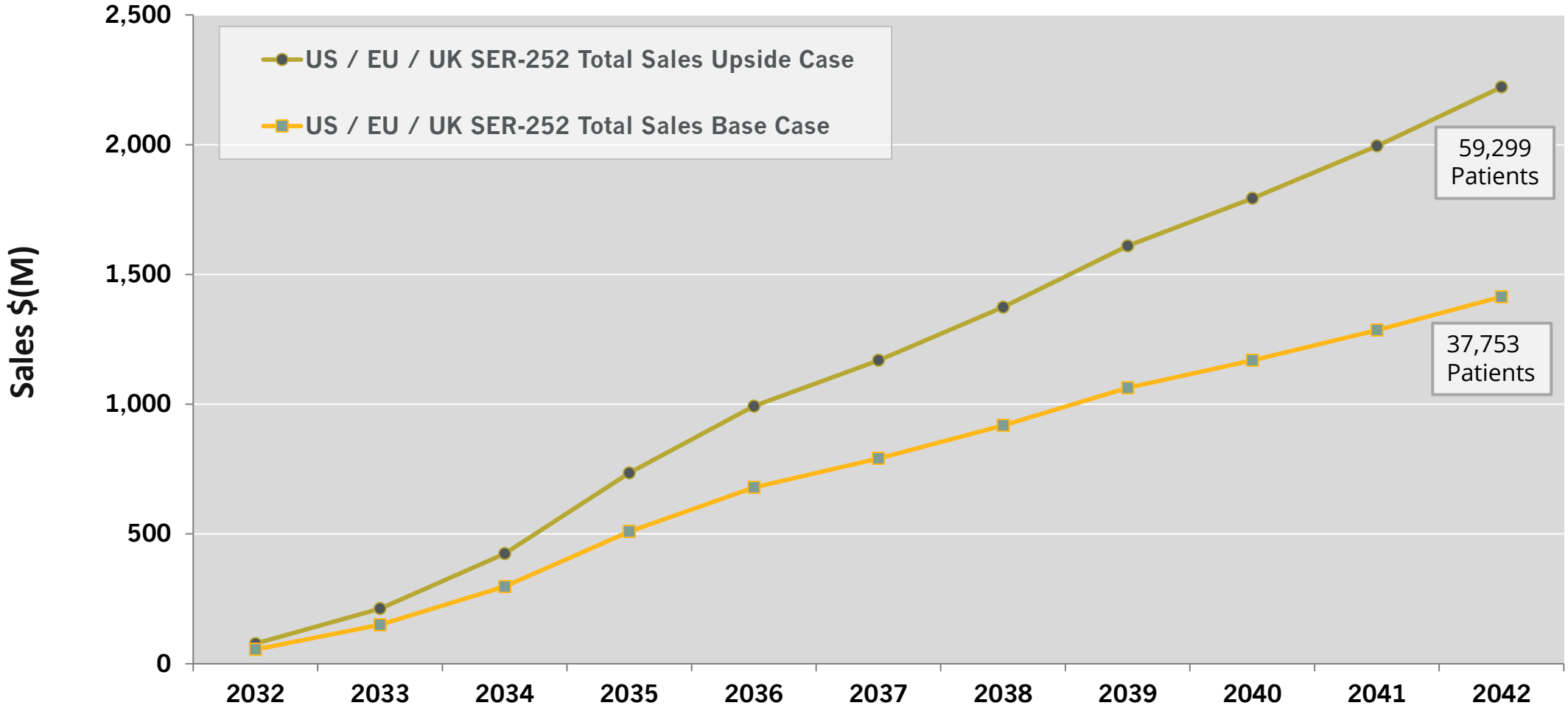
180,000
Growing 1.5% per year

Major Market Patients Inadequately Controlled

1. Parkinson's Foundation, accessed Mar 2024
2. Roche Pharma Day Epidemiological Data 2022
3. Various Analyst Reports from Oct 2019, Feb 2020, Dec 2023, Feb 2024
4. Based on Globe Life Sciences Primary Research

POZ Apomorphine has Blockbuster Potential

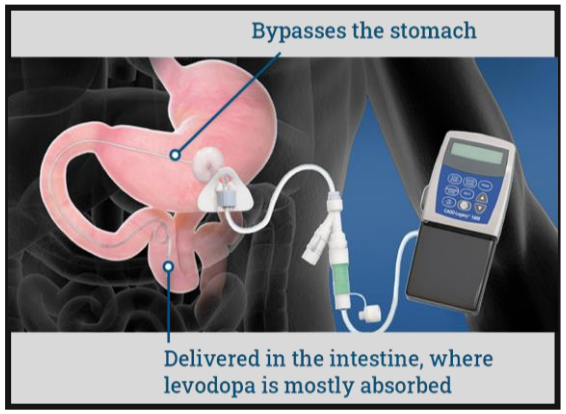
$1.4B to $2.2B Peak Sales Opportunity (US / EU / UK)



1. Globe Life Sciences Primary Research

Emerging Products Have Significant QoL Limitations

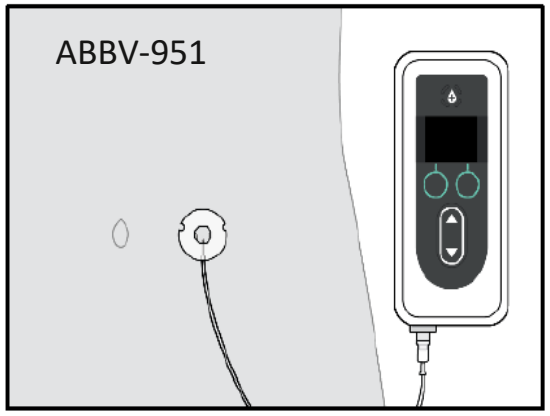
All Rely on Electronic Infusion Devices That Must Be Worn Daily / Continuously



Duopa (Abbvie)

levodopa / carbidopa requires surgical placement of an intestinal port, patient wears a pump and 5 lb. gel pack

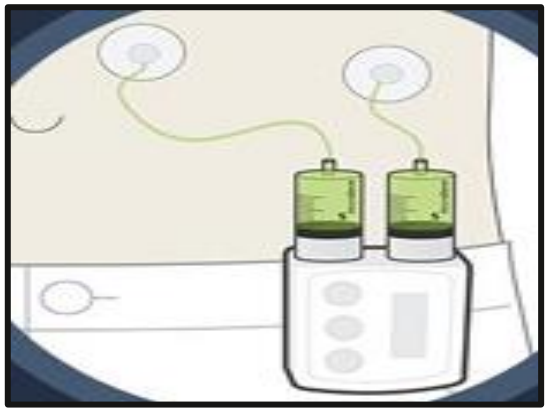
Duopa did $471M in 2023 sales (75% of which is ex US) despite an invasive product profile



Produopa (Abbvie)

foslevodopa / foscarbidopa is designed to infuse the drugs via an electronic pump worn continuously 24 x 7

Marketing authorization in EU + UK in 2023, analysts anticipate 2024 FDA approval



ND-0612 (Mitsubishi)

levodopa / carbidopa, like ABBV-951, the drugs are infused via an electronic pump worn continuously 24 x 7

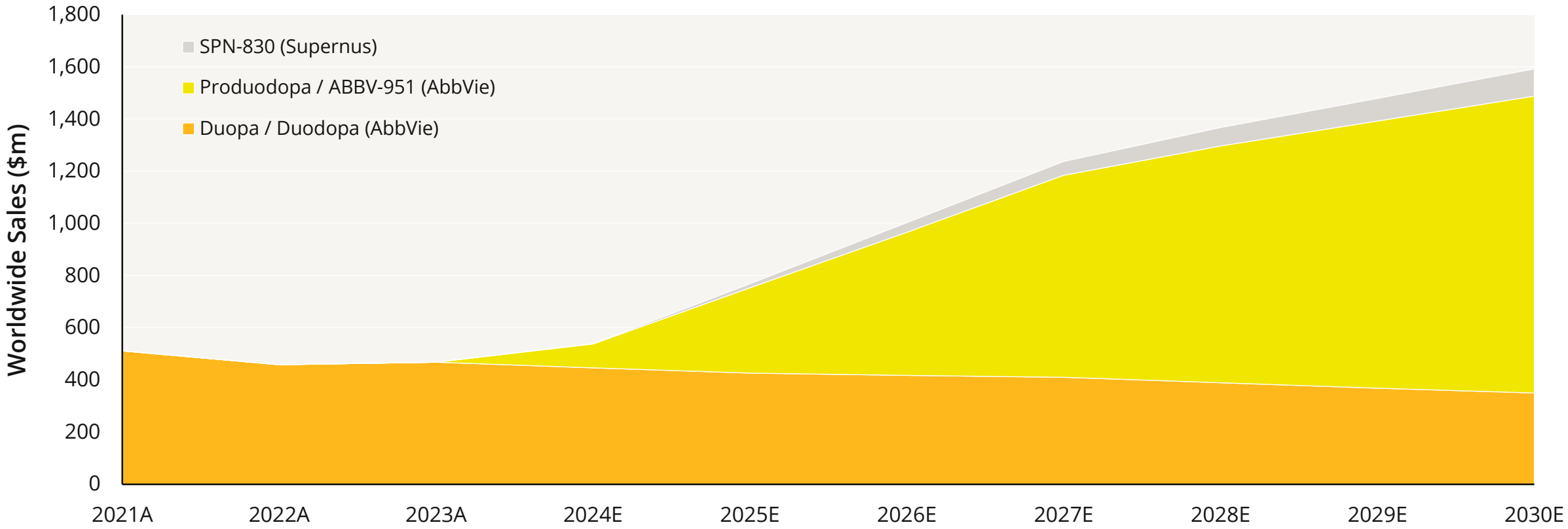
Phase 3 trial results published March 2024, analysts anticipate FDA approval 2024/25

1. Competitive Products Rely on Infusion Devices That Must Be Worn Daily / Continuously

Analysts Project Large Market Emerging for CDS

Despite Highly Invasive Product Profiles

Global Actual and Forecast Sales of Infusion Treatments for Parkinson's Disease[1]



1. Source: Evaluate Pharma, accessed Mar 2024

POZ Apomorphine is Partnered with Enable Injections

enFuse® technology[1] fully enables SER-252 best-in-class product potential

Compact device with no tubing involved

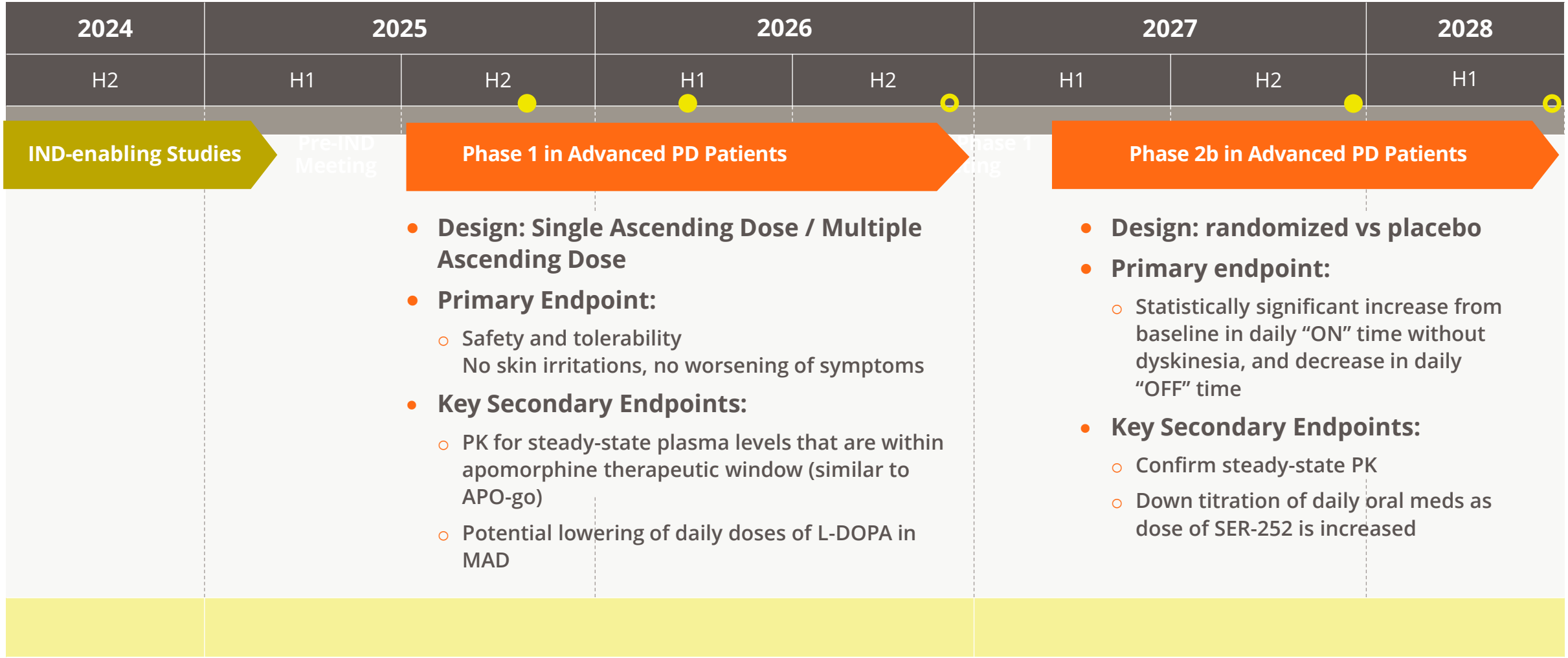
No need for healthcare provider to administer

- Vial of SER-252 is pushed on to the port
- Automatically filters solution and loads the device in less than one minute
- Push button starts injection and pops up when injection is complete – no programming required
- The needle is never seen

Highly Differentiated TPP: Wearable on-body 2x per week for 10 to 20 minutes - versus invasive, continuously worn electronic pump / tubing set

1. Approved in the United States in combination with a specific drug, for more information: https://enableinjections.com/our-products

SER-252 Development Plan



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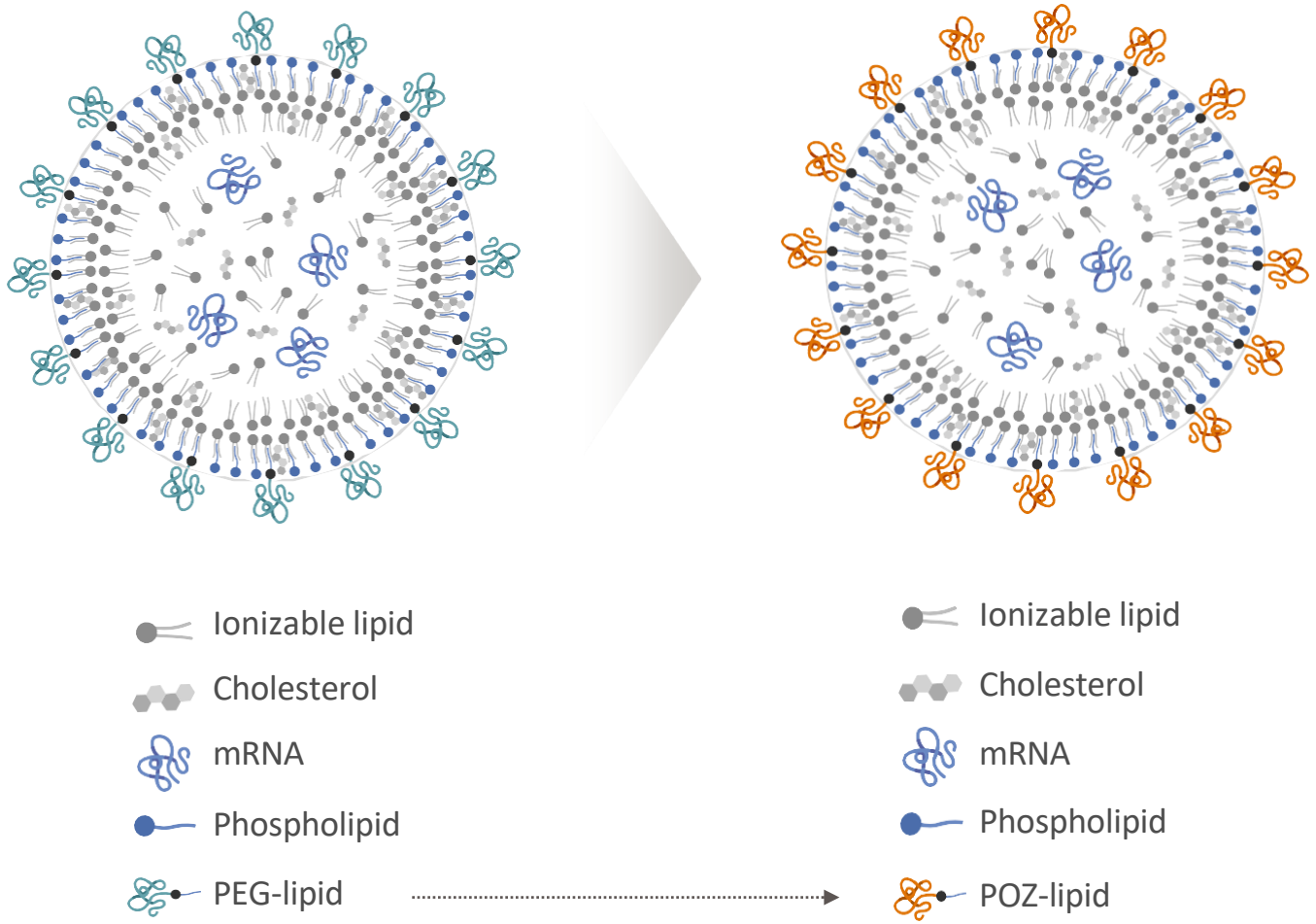
RNA

Broad Partnering Opportunity Across Vaccines & Therapeutics

First License Deal Executed Q4 2023 (Pfizer)

POZ-LNPs enable RNA products with reduced reactogenicity

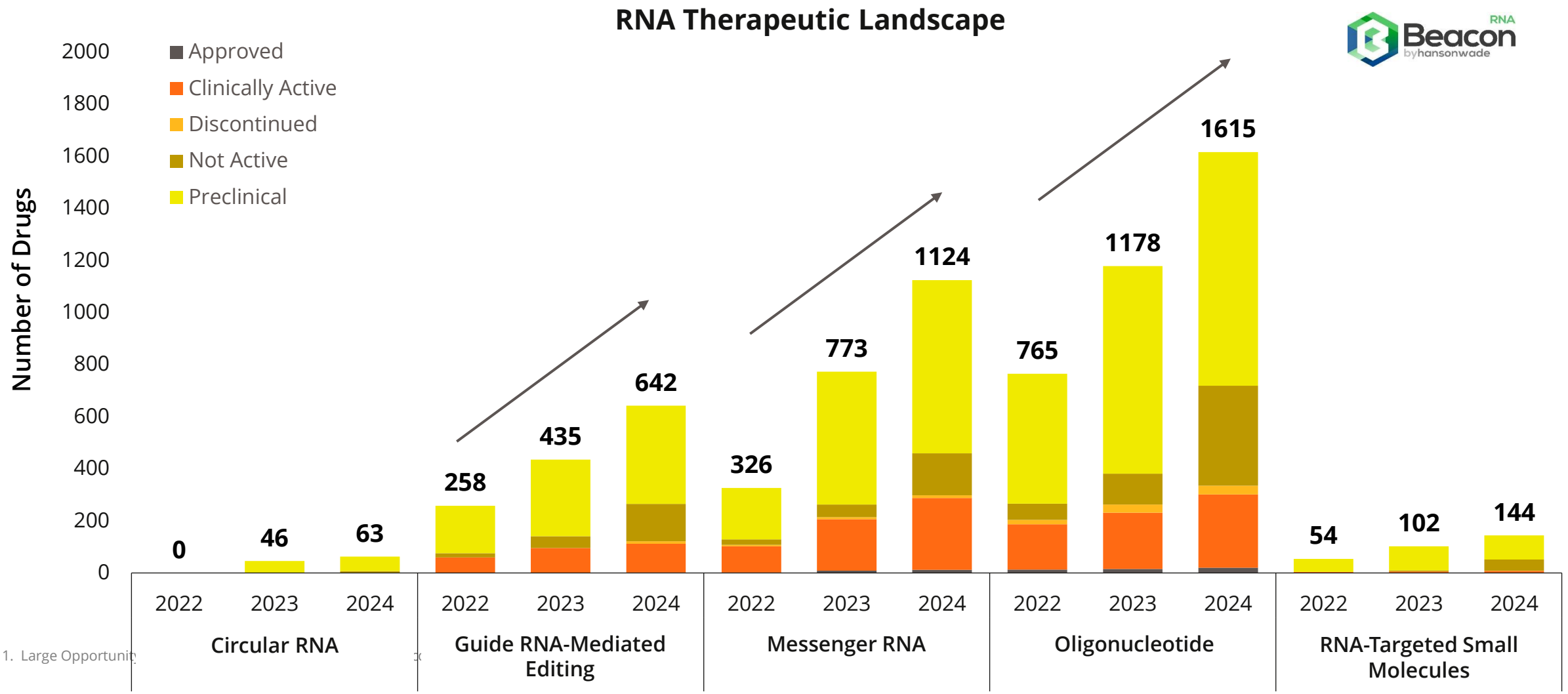


- Collaborations with pharma partners to develop LNPs that **replace PEG-LNPs with POZ-LNPs**.
- COVID-19 RNA vaccines - substantial population exhibited **anti-PEG antibodies linked to unwanted reactogenicity** and subsequent reduced uptake.

License with Pfizer executed 4Q 2023

- **Non-exclusive / single target / in one field**
- **Pharma and biotech companies seeking alternative to PEG for LNP/RNA delivery**

Rapid Growth in LNP-delivered Drugs



1. Large Opportunity

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Milestones & Summary

Small Molecule Pipeline

Drug Candidate	Indication	Research	Preclinical	Phase 1	Phase 2	Phase 3
SER-252 (POZ-apomorphine)	Advanced Parkinson's	IND-enabling studies				
SER-2xx (POZ-cannabinoids)	Undisclosed indications	Proof of concept				
SER-2xx	Cardiovascular disease	Proof of concept				

Platform Partnering Programs

Drug Candidate	Indication	Research	Preclinical	Phase 1	Phase 2	Phase 3
POZ-RNA	RNA therapeutics	R&D with partners				
POZ-ADCs	Oncology	Proof of concept				

Value-Driving Milestones

Product Development

- 2Q 2025 – IND filing with FDA
- 2Q 2025 – FDA allowance for Phase 1 trial of SER-252 in Advanced Parkinson's
- 3Q 2025 – Initiation of Phase 1 trial of SER-252 in Advanced Parkinson's Disease
- 4Q 2025 – Interim SER-252 Ph 1 readout (injection site reaction)
- 1H 2026 – Interim SER-252 Ph 1 clinical data readout
- 4Q 2026 – Final SER-252 Ph 1 clinical data readout

Platform

- H1 2025 – Preclinical proof-of-concept for POZ platform improvement of ADCs

Partnerships

- 2025/26 – Multiple partnerships across POZ platform in RNA and ADCs

Lead Asset with Attractive Risk/Reward Profile

Modest capital requirements to reach potentially highly accretive value inflection points

SER 252 – POZ Apomorphine

- **Large unmet patient need –** commercial market **> $1.4B to $2.2B** peak annual sales
- **Modest clinical risk –** Apomorphine is a known active drug with US (rescue therapy) and EU (rescue and infusion) approvals
- **Highly differentiated TPP enabled by novel device partnership**
  - 2x per week dosing via SC injection
    - 15 – 20 mins on body (vs. continuously worn, e-pump driven infusion)
  - With no adverse skin reaction at local site administration
- **Ph1 trial design provides early efficacy readout in actual advanced patients**
  - Early readout on adverse skin reactions
  - Interim readout 1H 2026 = key value infection point

Creating Multiple Shots on Goal

POZ platform enables new/improved small molecules, RNA delivery, and ADC optimization

Untapped opportunity to identify promising small molecules for 'POZylation'

- **Wholly owned / partnered / co-developed opportunities**

Multiple preclinical assets identified to address large unmet medical needs

Near term partnering opportunities - RNA delivery/targeting & ADC optimization

Proven team driving POZ as a standard enabling technology for multiple modalities