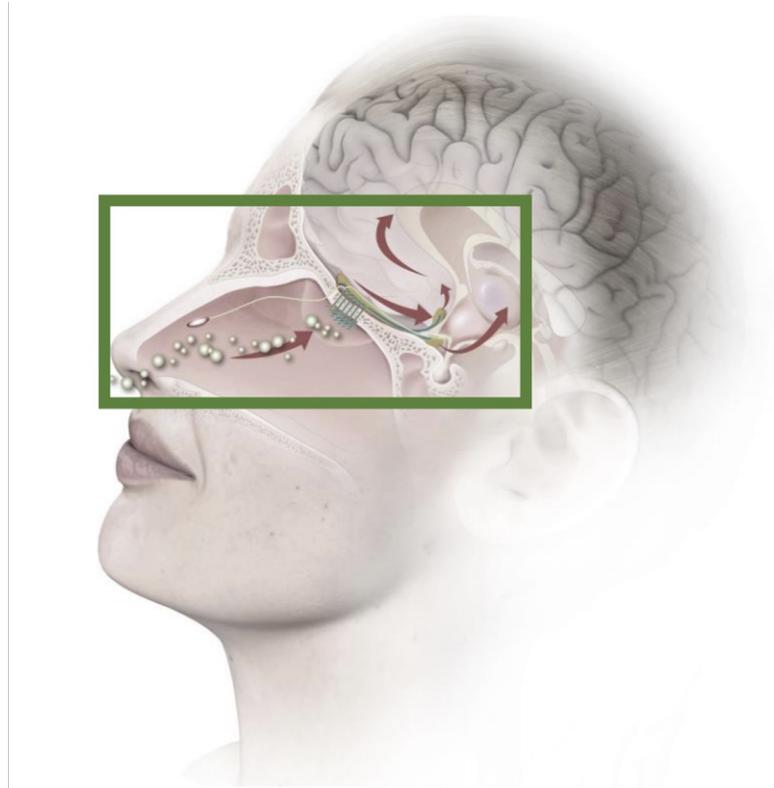


olfera

Olfactory drugs to cure brain diseases

Parnian Lak, Ph.D. CEO

From hijacked pathway → healing pathway



The olfactory system

Unlock • Deliver • Regenerate

We develop **olfactory drugs** for efficient brain delivery and regeneration



**Olfactory
drugs**

For targeted **delivery** and **regeneration**

olfera



OChip

Human nose to brain cell culture model

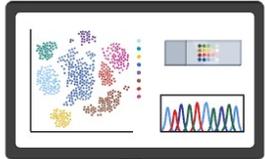
Unlock • Deliver • Regenerate

Why now

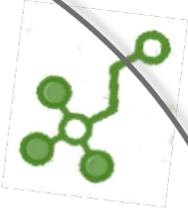
- Growing aging population → rising Parkinson's, Alzheimer's
- >90% brain drug discovery efforts fail
 - Human-irrelevant models + slow diseases
 - Blood Brain Barrier blocks delivery
- COVID exposed the olfactory gateway



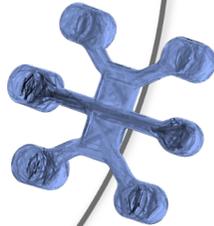
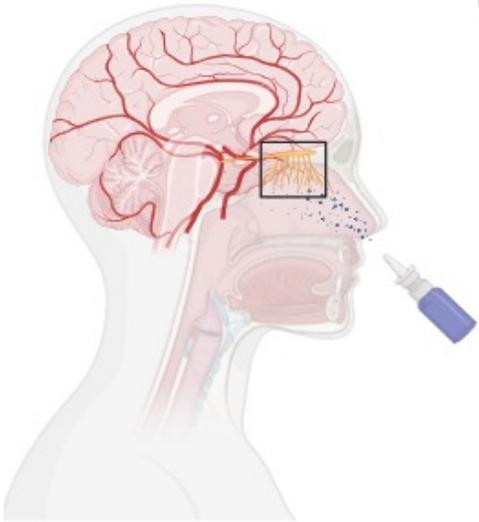
Design olfactory drugs



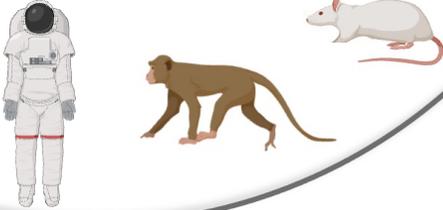
Synthesize olfactory drugs



Olfera platform

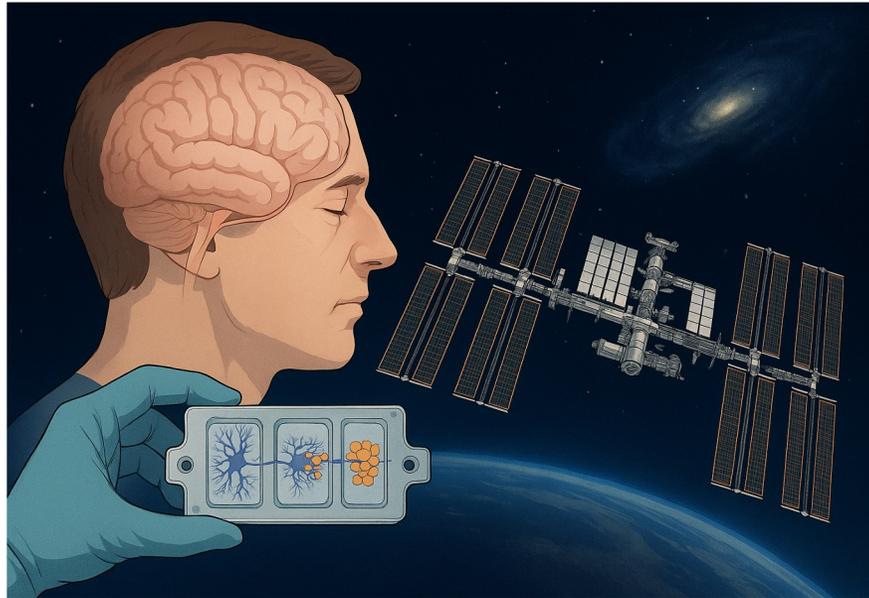


Test olfactory drugs, high throughput



Unlock • Deliver • Regenerate

Human OChip at International Space Station for **Parkinson's** drug discovery



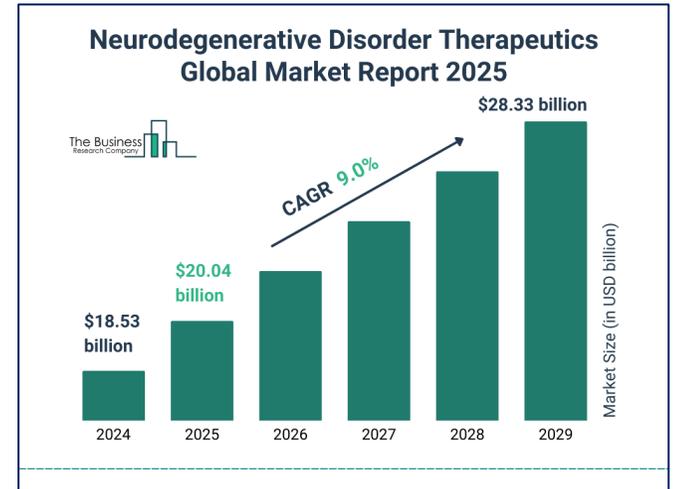
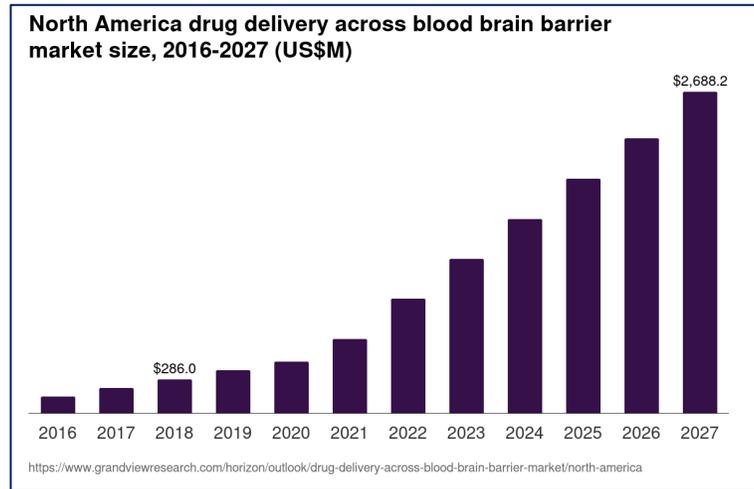
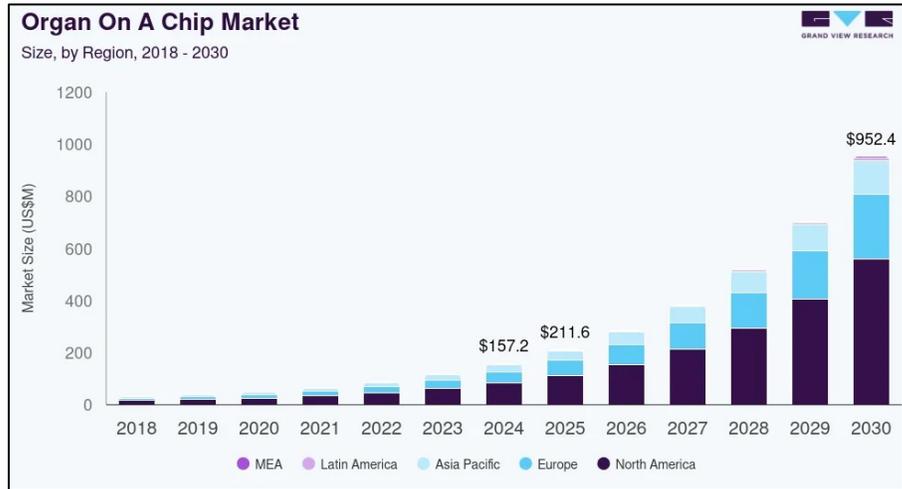
Why space?

- Microgravity accelerates tissue aging

Translational data → Faster, cheaper go/no go → Success in clinical trials

Opportunity

- **Unlock** with OChip
- **Deliver** with Olfactory drugs
- **Regenerate**



✓ *\$100B neurological drug market*

Competition

Brain on Chips



Nasal brain drug delivery formulations



Parkinson's therapeutics



olfera

The first primary human brain model + microgravity

Translational

Olfactory chemistry

Efficient, strong IP

Natural, regenerative pathway

First-in-class

Current programs

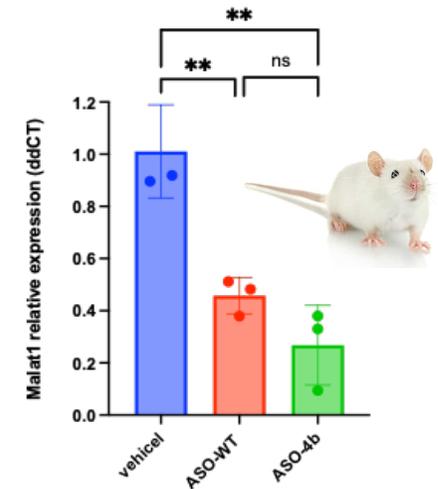
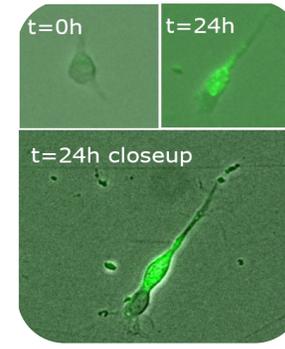
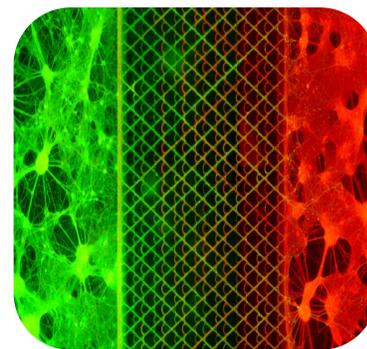
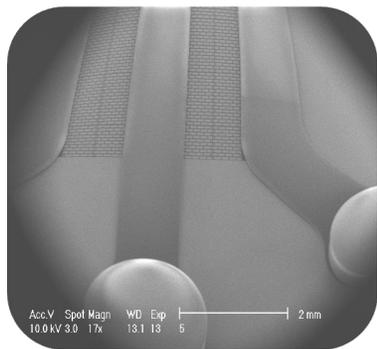
Indication	Modality	Development	Stage
Parkinson's disease	Antisense oligonucleotide prodrugs	In-house	Animal studies
Alzheimer's disease	Peptide olfactory prodrugs	In-house	Animal studies
Major Depressive Disorder	Small molecule olfactory drugs & prodrugs	In-house	Library synthesis
Neurological disease	Gene therapy olfactory prodrugs	With Pharma	Testing on OChip

Traction

- Raised \$2 M



- OChip is in a funded pilot collaboration with one of the top 5 global Pharma companies



Unlock • Deliver • Regenerate

Team



Parnian Lak, PharmD, PhD
CEO (FT)



Jerry Yang, MD, MS
Neuropharmacologist (FT)



Zara Patel, MD
Chief Medical Advisor



Kelvin Cooper, PhD
Chief Medicinal Chemist



Lee Spraggon, PhD
Cell Biology Lead



Mike Prince
Advisor



Sandeepa Dey, PhD
Advisor



Brian Kopec, PhD
Advisor



Unlock • Deliver • Regenerate

Intellectual property: Patent portfolio

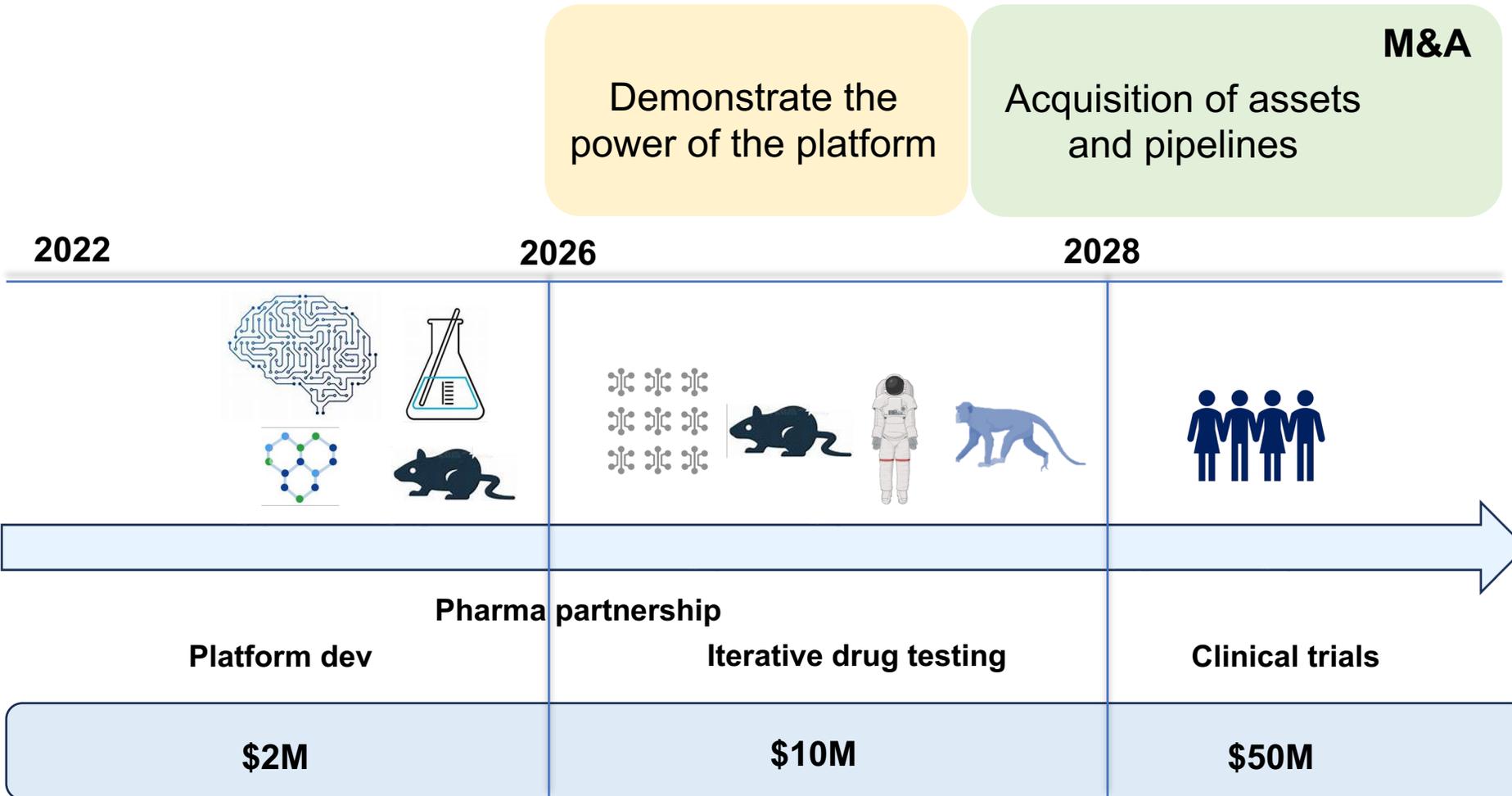


Device and Method of Use
OChip



Composition of Matter
Olfactory drugs

Roadmap

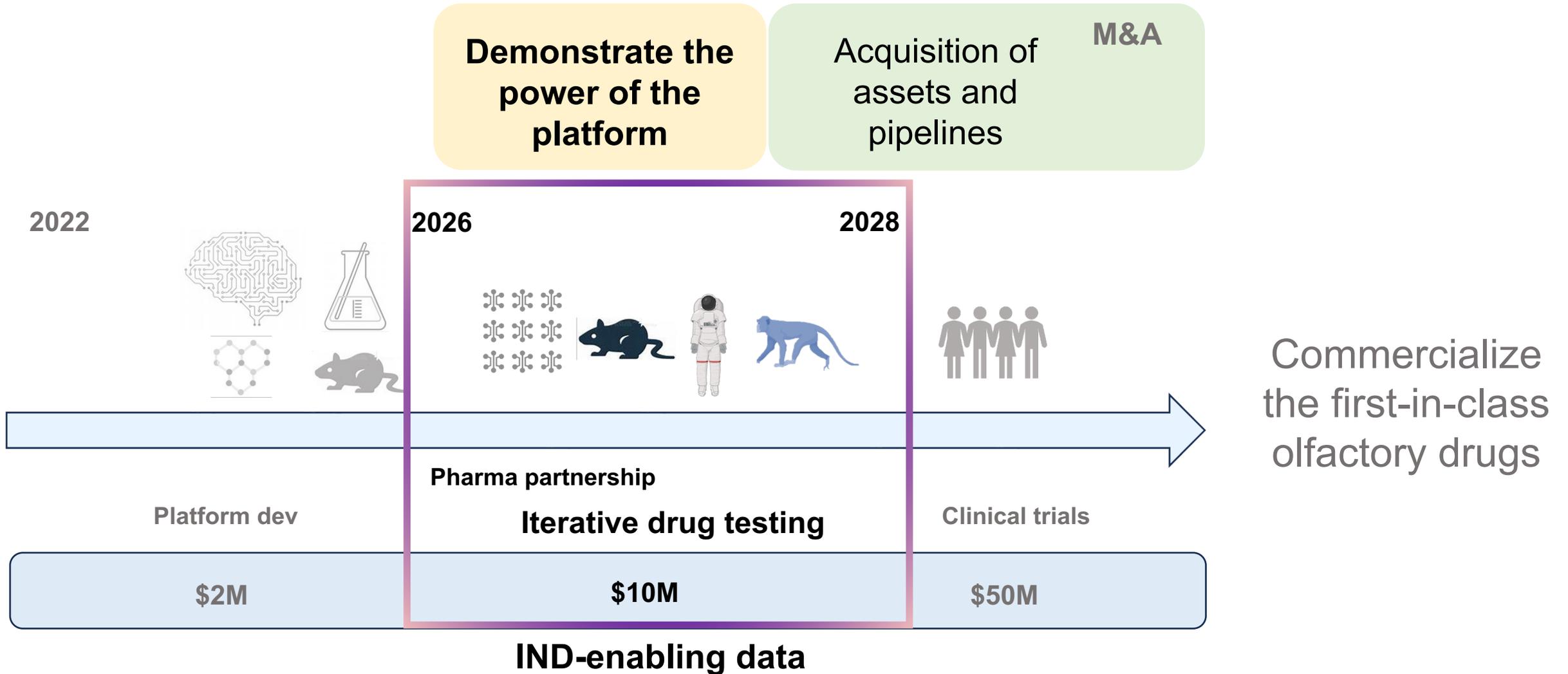


Demonstrate the power of the platform

Acquisition of assets and pipelines **M&A**

Commercialize the first-in-class olfactory drugs

Roadmap



Platform with Assets

<p>Key Activities</p> <ul style="list-style-type: none"> • Developing new drugs • Developing OChip 	<p>Key Partners</p> <ul style="list-style-type: none"> • Pharma • ISS 	<p>Value Propositions</p> <ul style="list-style-type: none"> • BBB bypass for drug delivery • Predictive human model • First-in-class drugs
<p>Differentiators</p> <ul style="list-style-type: none"> • Niche space • Unique platform with several therapeutic assets 	<p>Revenue Streams</p> <ul style="list-style-type: none"> • Paid pilots • Out-licensing platform and assets • Asset commercialization revenue 	<p>Use of Funds</p> <ul style="list-style-type: none"> • R&D, Lab ops • CRO • Space ops • IP/regulatory

Exit: Acquisition of assets (OChip & data) and pipelines (Olfactory drugs)

Building a better future

- **Unlock** the potential of the olfactory pathway
- **Deliver** what can't cross the blood brain barrier
- **Regenerate** brain circuits that can recover

