Equator Therapeutics

The first drug to burn fat through natural heat production

Jonah Sinick, CEO
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Executive Summary

The first drug to stimulate natural heat production by the body.

Activates heat production by the cell powerplant mitochondria.

Will allow patients to burn 2lb/week & reverse obesity.

Potential to defeat epidemics of metabolic disorders: type 2 diabetes, fatty liver disease & polycystic ovary syndrome.

Equator Therapeutics

Inc. Leadership

Jonah Sinick, PHD

CEO

(Formerly)

Yuriy Kirichok, PhD

Scientific Founder

Kirichok Lab @UCSF

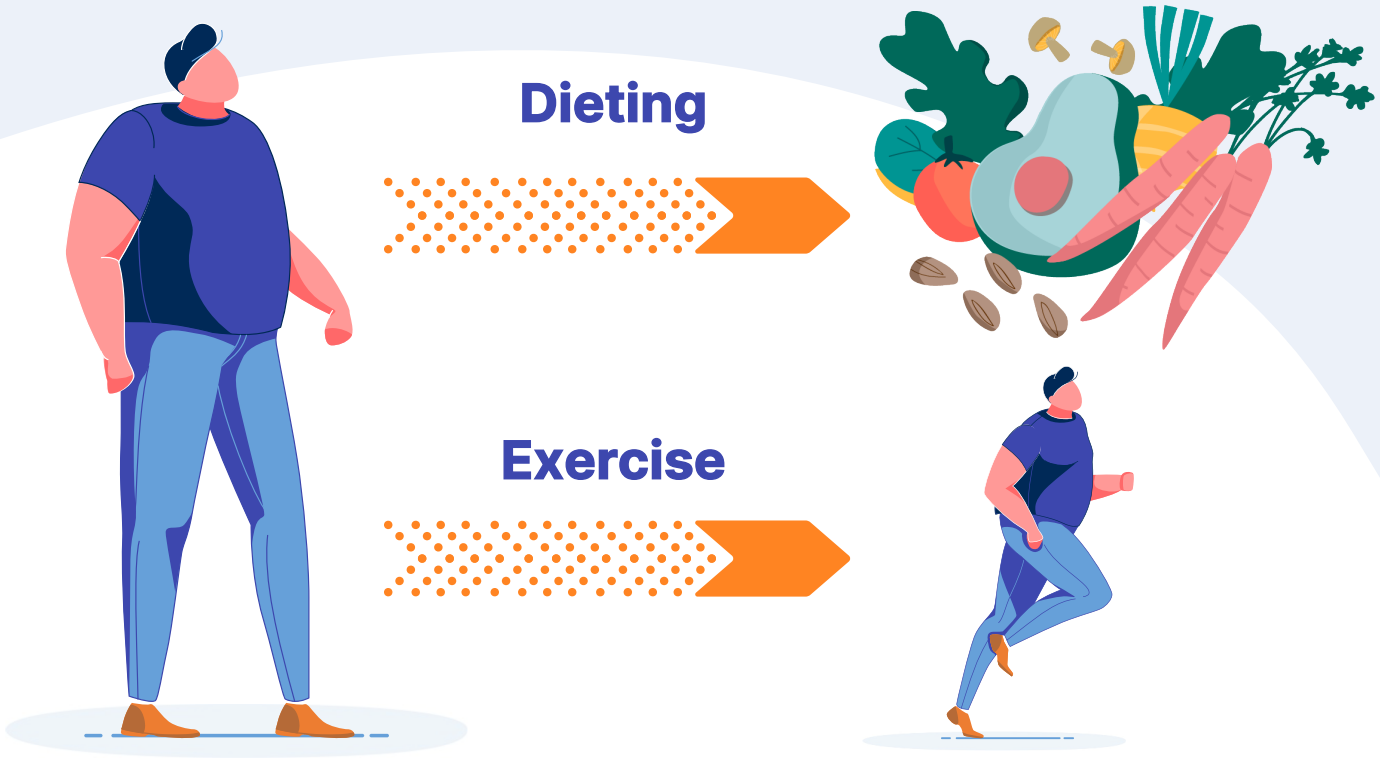
Katherine Widdowson, PhD

Medicinal Chemist

(Formerly)

Losing weight is an unresolved problem for 50% of Americans!

For most Americans, attempting dieting and exercise has not resulted in sustained weight loss.



Average annual health expenditure per capita due to obesity

$650B

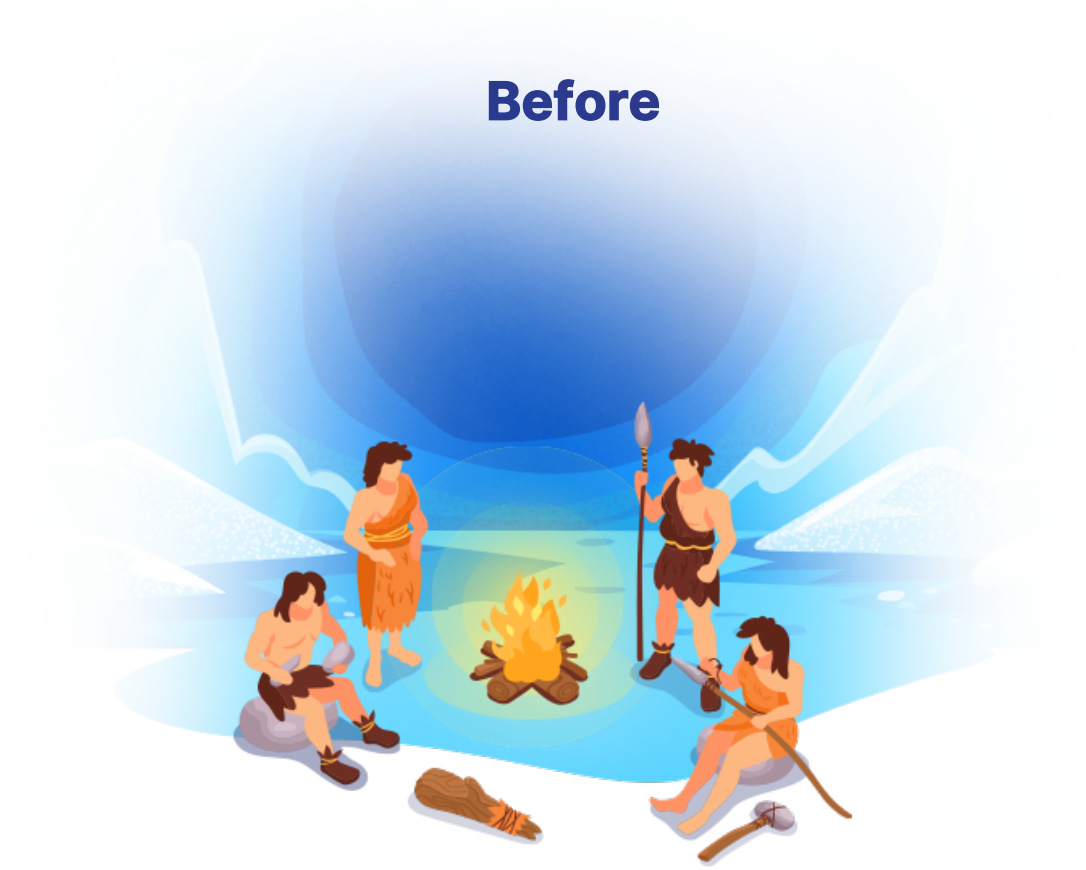
Expenditure per capita

14%

of total health expenditure

A forgotten way to lose weight

Before



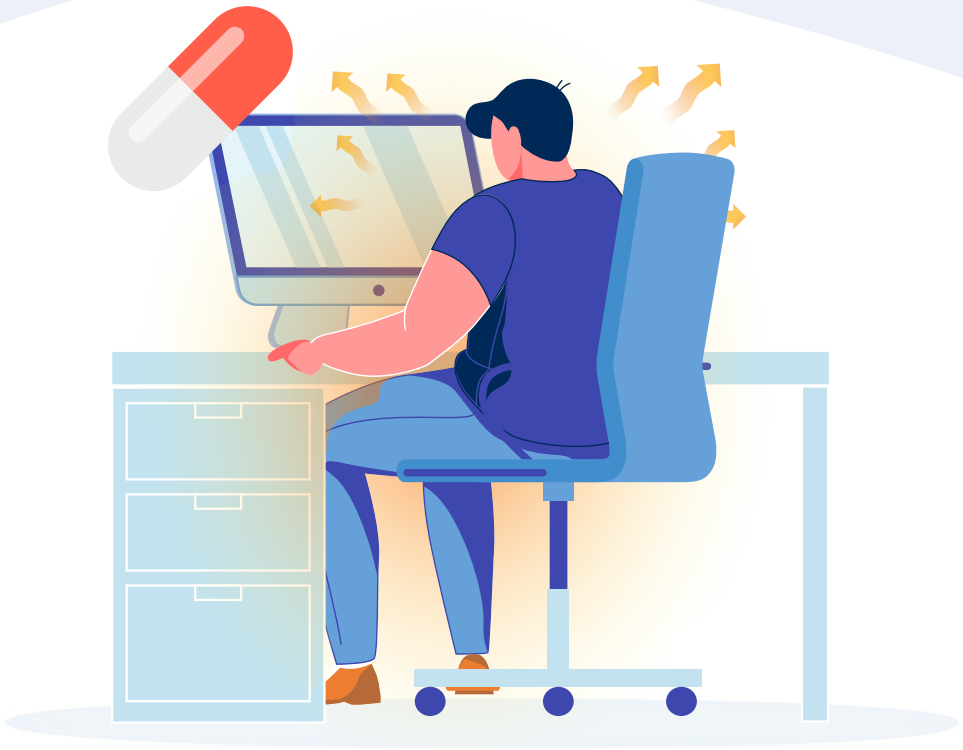
Our body naturally burns calories to keep us warm.
This mechanism reduces body weight.

Now

It is hardly active in
modern living conditions.

We are targeting a novel mechanism to activate natural heat production

The drug will increase heat production to that of a standing person



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2 lb / week
weight loss

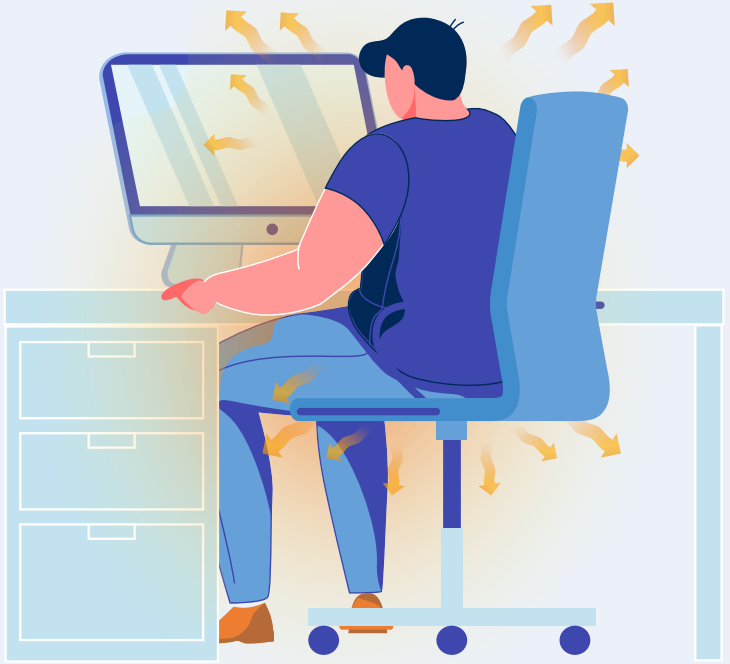
How to lose 2lb/week

Method 1: Run 2 hr/day

Unattainable for most obese patients

Method 2: Take our drug daily

Easily attained by obese patients
Facilitates transition to exercise



How will our drug work?

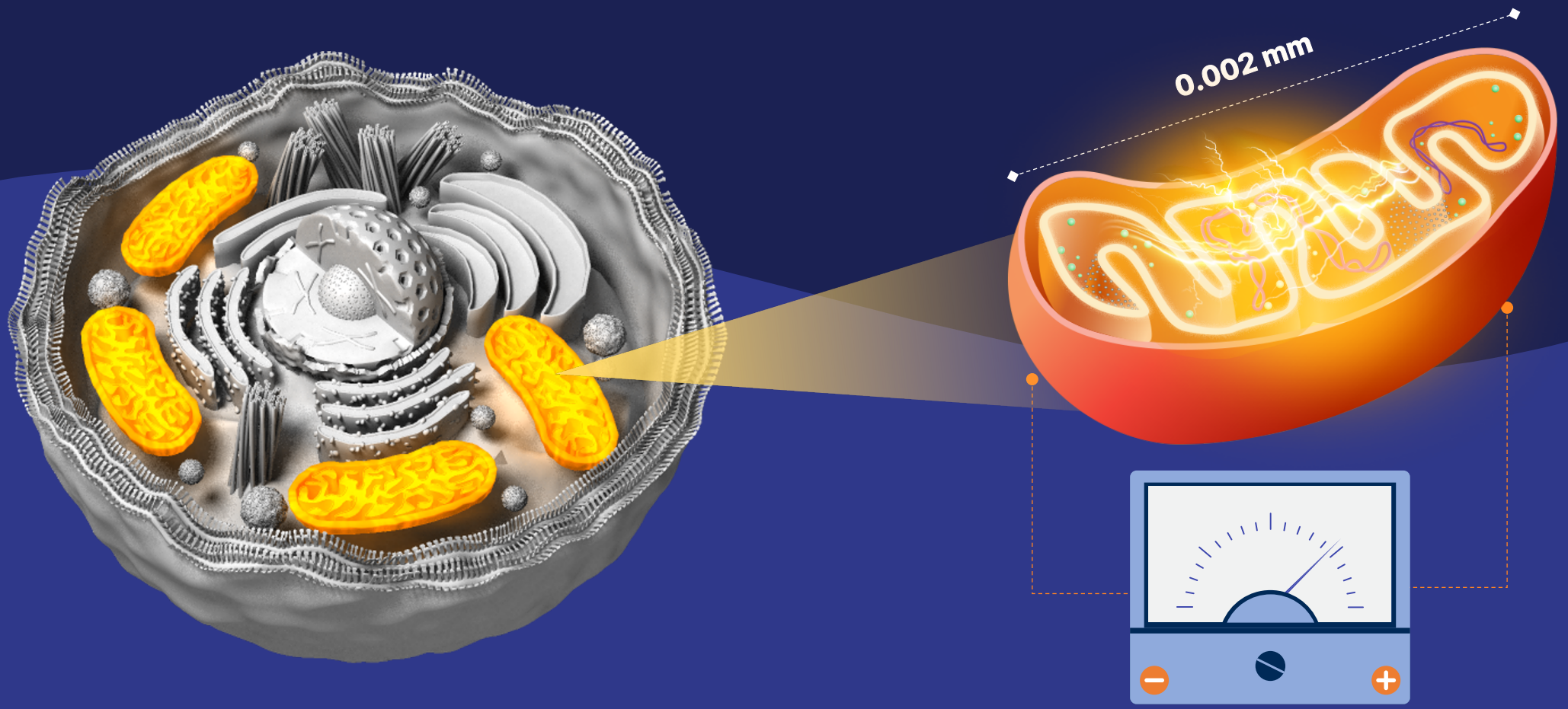
Stimulate heat production by the cellular powerplant – mitochondria.

Mitochondria burn nutrients to generate heat.

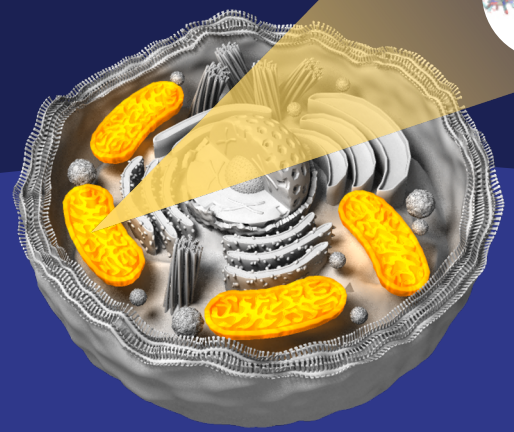
Mitochondria run on electricity.

Our drug will activate currents responsible for heat production in mitochondria.

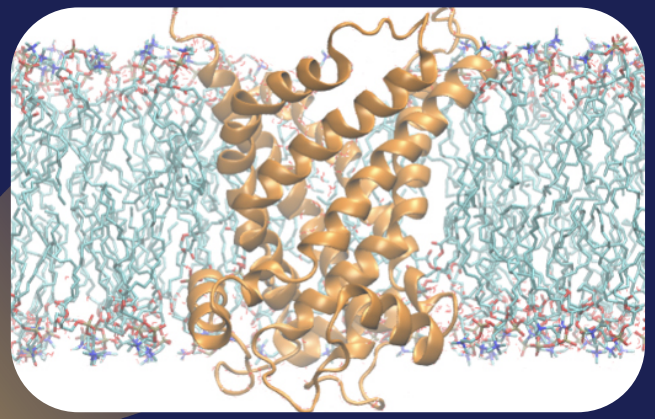
Uniquely ours:
Measuring mitochondrial electricity



Our Science:
Illuminating how mitochondria produce heat



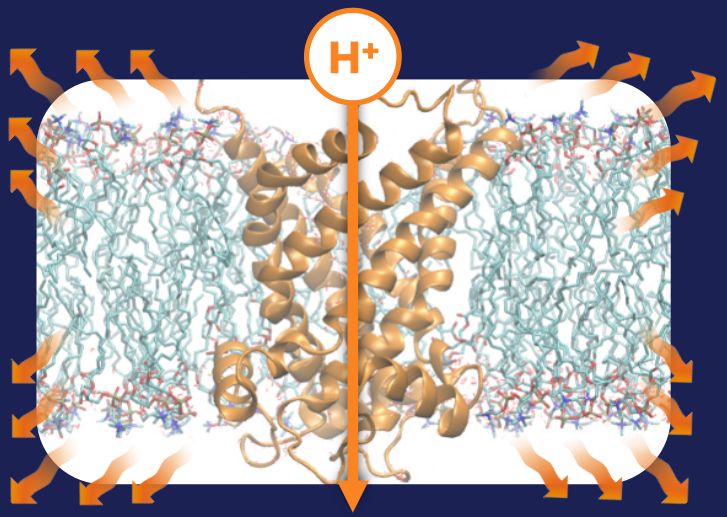
Before:



No H^+ current

Long chain fatty acids

After:



With H^+ current

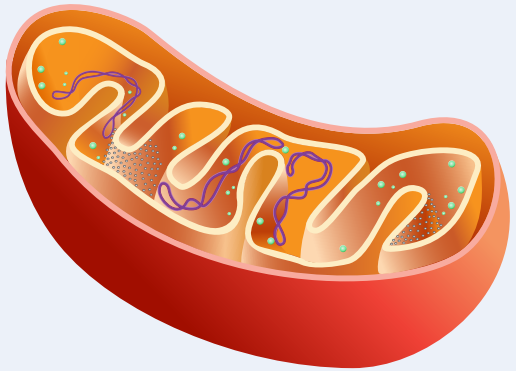
nature

Bertholet et al, *Nature* 2019

Our drug will mimic exercise by having a similar effect on mitochondria

Food calories

Mitochondria



Exercise

Heat

Promotes longevity by

- Boosting metabolism
- Creating new mitochondria
- Prevents oxidative damage

Our progress

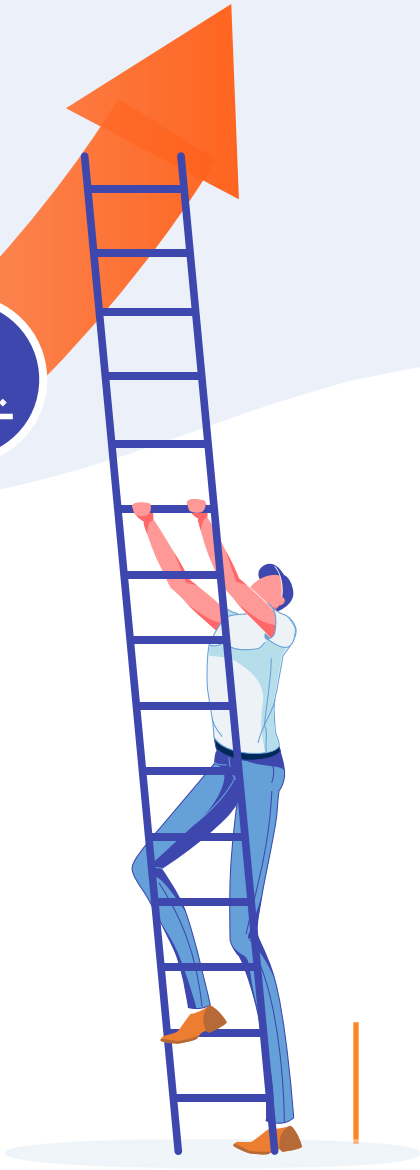
Company founded
August 2019

First funding from YC
January 2020

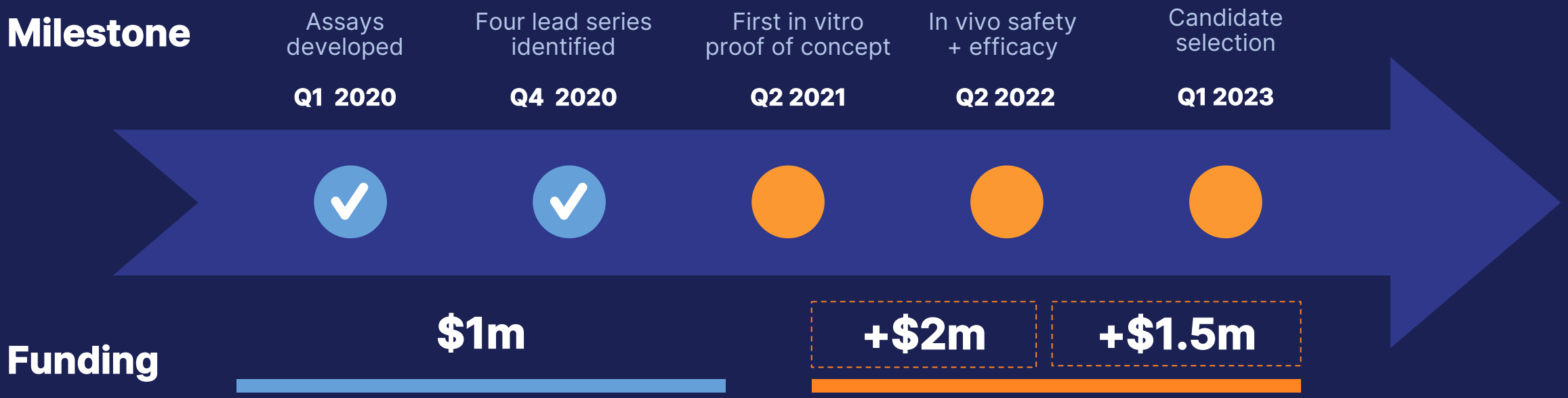
HTS Assays developed
August 2020

Screen of 20k compounds completed
November 2020

Lead series validated
January 2021



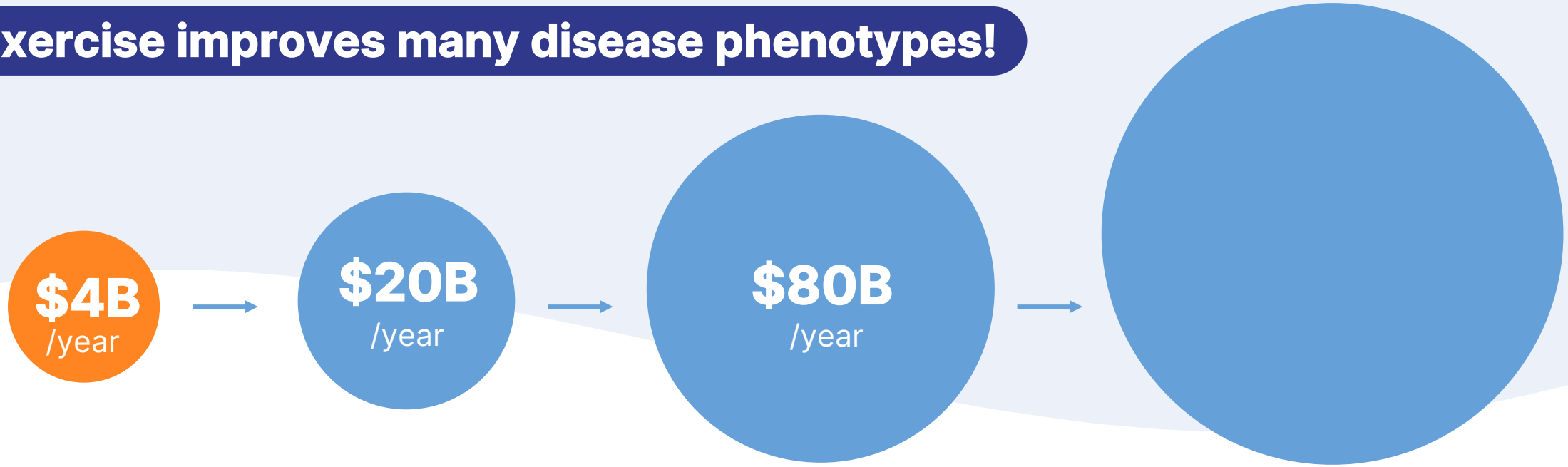
Our timeline to candidate selection



Commercial potential

Targeting large markets of patients with **complex diseases** with a **simple mechanism**

Exercise improves many disease phenotypes!



Thank you!