RISK **BioPhysical Therapeutics** REWARD

A drug to slow aging has been a desperate want of man since the start of history. For cosmetic, medical (aging is a drive of many different diseases), lifestyle/longevity, and lifespan want. For this, some billionaires might pay anything they can afford. A lower price could confer mass-market adoption. So, there is little "market risk" to this investment. The risk is "technical risk": does the company presently have a drug that can slow aging? Reducing this technical risk could make the company worth $billions. Possibly achieved by spending $25k to synthesize the company's designed, patented drug. Then testing, over five months, if it slows the aging of human tissue *ex vivo*. Performed, for free, by Altos Labs (a start-up seeded with $3B, valued more than that, upon its intent of searching for an anti-aging drug). Aim to spend $225k total to do other tests in parallel. E.g., testing the drug's anticancer activity (already demonstrated, as predicted, *in vitro*) in mice. In success, very valuable: e.g., Flexus Biosciences sold a cancer drug candidate, with anticancer activity only shown in mice, to BMS for $800M in cash. Flexus would have received more if this drug had passed clinical trials performed by BMS, but it didn't.

How likely is it that the company presently has an anti-aging drug? The company has already shown that it can discover new fundamental biology, discovering how mammals metabolically generate heat. And a drug to inhibit it (working in mice). No one believed this before the company showed it. So, the company has already been contrarian and right. Genetically **in mice, slightly reducing metabolic heat generation (reducing metabolic rate) greatly extends lifespan**. Shown in mice: the drug (dose-dependently) reduces metabolic heat generation (reducing metabolic rate). Combining the last two sentences predicts that this drug can greatly extend lifespan.

If most believe that an anti-aging drug will work, there is little to no investment opportunity. Because this belief gets priced in, making the company worth at least $billions. Widespread scepticism is required. As Peter Thiel famously asks founders: "What important truth do very few people agree with you on?"

The company is raising at a $4.5M valuation (implied by pre-money safe cap value). Its market might be everyone (using frequently) because everyone gets old, and no one wants to. Cosmetic applications are close to market because cosmetics don't require animal or human trials. Asymmetrical upside: investing now might lose 1x. But not investing now might lose >1000x. E.g., 10,000x. Wherein "now" is an operative word because much value creation is expected from this (small) financing round. By it showing that this drug can (at least) slow aging. Small capital risked for incredibly large capital reward.