



Ordaos provides efficient, generative, AI-driven, mini-protein design, to help pharmaceutical companies de-risk drug development and leap-frog time-to-market.

Business Summary: Ordaos founded with a revolutionary idea – drug discovery doesn't have to rely on serendipity or be strangled by currently known science. We formed Ordaos to custom design mini-proteins (50-200aa), previously only imagined, and accelerate the drug discovery and development process. Recent AI breakthroughs such as enhanced natural language algorithms, distributed cloud computational power and a generative learning engine enable Ordaos to go beyond small molecule design to rapidly design, test, and optimize novel therapeutic proteins, *all in silico*, and maximize the speed and the probability of success in subsequent clinical development phases. Through these innovations, we deliver an early drug discovery cycle that takes *minutes*, not months.

Customer Opportunity: The current paradigm of traditional wet lab-driven drug discovery, with its 10-year, \$2 Billion cost per drug, is not keeping up with an ever-growing unmet medical need. This process is slow and ineffective, producing tremendously toxic treatments that do not always work. Our *in silico future* uses the power of our partner's ingenuity, historical data and our 3rd generation AI technology to create a less risky, more efficient drug discovery engine.

Products/Services: Our team created a powerful, AI-driven protein design engine that generates and optimizes therapeutic proteins against disease targets to save lives sooner. The system, *Apollo*, simultaneously optimizes for potency, immunogenicity, and specificity *in silico*. Ordaos' approach cuts a minimum of 2 years off the traditional process - adding revenue-generating patent life. We partner with innovative biotech and pharma companies to rapidly design small proteins. We chose this bigger challenge, mini-proteins for its higher potential disease impact

Management Team: Ordaos was founded by our Chief Executive Officer, David Longo, ALM, an inspired leader with a decade of entrepreneurship experience and an education focused on AI and mathematics, and Ulo Palm, MD, PhD, MBA, an industry veteran with 30 years of experience in clinical drug discovery and development including Allergan, Novartis, and Schering Plough.



An ardent entrepreneur educated in mathematics, artificial intelligence, biotechnology, entrepreneurship, and the arts, David has built a toolset perfectly fit for breakthrough pharmaceutical endeavors. He is obsessed with company culture and breaking down interdisciplinary silos to create a gestalt of expertise.



Transformative executive with 30 years of drug development experience in leading pharmaceutical companies. Before joining Ordaos, Dr. Palm was Head of Digital Sciences at Allergan, developing and implementing an AI and Machine Learning strategy for R&D. Recognized by CenterWatch as one of 20 innovators changing the face of the clinical trials industry. Served as the past Corporate Secretary of Transcelerate Biopharma, the largest R&D focused collaboration of the global pharmaceutical industry.

Team and Advisory Council: Our diverse team of 20 brilliant individuals includes 17 full time employees and 7 PhDs such as GSK veterans, quantum physicists, and AI scientists with deep protein backgrounds. And we've tested our team's, and the system's, efficacy through successful engagements with academic clients, such as Harvard and NYU Langone, as well as industry partners, such as the publicly traded Vyant Bio and private research group Cellaria, resulting in initial revenue and results sparking quotes like "You accomplished in four days what previously took us two years to accomplish."¹ In addition, we designed an advisory council of industry veterans across oncology, finance, regulatory, portfolio management, biostatistics, and AI to optimize our path to success.

Target Market: Successful therapeutics in our initial target market, HER2+ represent a \$6 billion opportunity in the \$250 billion global oncology market. Through initial partnerships, we've developed a pipeline consisting of HER2+ breast cancer, SARS-CoV-2, and AML / MDS, with more on the way.

Business Model: By maximizing co-development and out-licensing agreements with pharma partners, we can generate revenue (via up-front, milestone and royalty payments) of up to \$500MM per computational design and validation program. Our scalable model relies on the power of *reinforcement learning* AI to design more effective *de-novo* therapeutics, with fewer side-effects – drugs that previously existed only in our dreams. Investors benefit both from our powerful partnerships and shortened time to market.

Competitors: The Computational Therapeutic Design space Ordaos competes in is predominantly focused on small molecule design through companies such as Atomwise et.al. Ordaos competes in the emergent sub space of Computational Biologics Design that includes only a handful of companies such as Generate Biosciences. Our deep clinical drug discovery expertise and our laser-sharp focus on small protein binders in oncology and chronic inflammatory disease makes us unrivalled.

Fundraising: We are raising \$2MM in a round, closing shortly, and will soon begin a \$20MM raise. We will use these funds to further enrich our *in silico* engine, develop *in vitro* operations, fund patent registration, hire more protein therapeutic design and oncology specialists, and enter IND and Phase I of our therapeutic development by Q2 2022.

Advisory Council:



Thomas Bock, MD, MBA
CEO, Notable Labs
Prev. HeriX, Alexion,
Celgene, Novartis Oncology



Bulent Kiziltan, PhD
Head, Causal & Predictive Analytics,
AI Innovation Lab, Novartis
Prev. Sharp Focus, Aetna, MIT,
Harvard



Prem Narang, PhD, FCP
Fmr. Executive Director,
DRA Oncology, Novartis



Lixia Wang, PhD
SVP, Data Science, Atreca
Prev. Intercept, Novartis,
Merck



Probi Kapur, MBA
SVP Finance, Amerisource
Bergen Corporation
Prev. Allergan, Daichi-Sankyo,
Schering Plough, Merck



James Wescott, MBA
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