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The Enigma of Erooms law and the wall street math stifling Alzheimers drug discovery

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As the prevalence of Alzheimer???s disease (AD) grows, so do the costs it imposes on society. Yet, despite a significant number of drugs showing promise in animal models, progress is being stifled by a breakdown in the ROI model at the clinical stage of drug discovery. For complex diseases like Alzheimer's, research progress depends on the trial and error of real-world Phase 1 & 2 clinical trials. Due to the high cost of these trials, this stage of drug discovery depends on industry-led investment. The average cost of developing a new drug, per billion US dollars spent on R&D, has doubled roughly every nine years since 1950. That means, adjusted for inflation, it costs 80 times more to develop a new drug today than it did in 1950! The observation of this trend was coined Eroom???s Law by industry analyst Jack Scannell in 2012, writing in Nature Reviews Drug Discovery. The current ROI from internal R&D in the pharmaceutical industry is an average 3.7%. For Alzheimer's, this model has broken down altogether and has led most major pharmaceuticals to downsize or close their Alzheimer???s research divisions. A structural solution to the current financial model is needed if we are to make progress to a cure. InvestAcure???s Public Benefit Corporation model offers one such solution, by transitioning investment leadership from the current Venture Capital model to micro-investment by those impacted by the disease.

With no available cure, Alzheimer’s is the seventh leading cause of global deaths and the third leading cause of death in high-income countries.

The theme of the Abu Dhabi conference is "Making a Move on Dementia: New Answers to Old Questions." The annual summit brings together researchers from the region and from around the world focused on groundbreaking research to slow, reverse, or prevent dementia and Alzheimer's disease.

Max Tokarsky's keynote presentation is titled "The Enigma of Eroom's Law and The Wall Street Math Stifling Alzheimer's Drug Discovery."

The business model for turning science into drugs and treatments that companies can sell has been steadily eroding. The average cost of developing a new drug, per billion U.S. dollars spent on R&D, has doubled roughly every nine years since 1950. That means, adjusted for inflation, it costs 80 times more to develop a new drug today than it did in 1950. The observation of this trend was coined Eroom's Law by industry analyst Jack Scannell in 2012, writing in "Nature Reviews Drug Discovery."

Does it make sense for millions to die waiting for a cure due to considerations of profit?

Even as increased government and charitable funding has led to major advances in basic research, the Eroom's Law trend is greatly stifling progress, because as a society we depend on profit-driven drug companies to develop scientific breakthroughs into life-saving drugs and medical treatments.

While companies can make a lot of money with a successful Alzheimer's drug, investing tens of millions to test each possibility without a clear end in sight is increasingly becoming unprofitable. Science relies on trial and error, and making a profit for investors relies on predictable risk; the two are oftentimes incompatible.

The Common Need Investment (CNI) model being developed by InvestAcure offers an innovative alternative. With CNI, investments made in a company are based on its pursuit of essential work valued by the investors above financial profit or loss. There is a ‘Common Need’ to see Alzheimer’s cured. Even if a small percentage of those who share that need invest their spare change in companies working on a cure, that would result in billions in new investment.

Each spare change investor would directly own shares in these companies. With millions of spare change investors participating, ownership of drug companies would transition from profit-driven investors to spare change investors for whom cure is a priority over profit.

To realize this goal, the company is building a spare change investment platform to enable those impacted by Alzheimer's to partner in the search for a cure by rounding-up day-to-day transactions and investing the spare change in clinical stage pharmaceuticals working on promising drugs.