The enigma of Eroom’s law and the Wall Street math stifling Alzheimer’s drug discovery

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As the prevalence of Alzheimer’s disease (AD) grows, so does the costs it imposes on the society. Yet, despite a significant number of drugs showing promise in animal models, progress is being stifled by a breakdown in the return on investment (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 clinical research, 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 as a whole 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.

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