Can we figure out how to get new drugs to the market faster?

Have you heard the oft-repeated "fact" that it takes at least 10 years from initial discovery for a new drug to enter the marketplace? Take it with a grain of salt. The drug development journey is closer to 30 years.

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Studies of innovation in areas such as computing and aeronautics show that the maturity of a new technology is the single biggest predictor of product success. That makes sense. When a discovery is made, scientists often have only a rudimentary understanding of what they've discovered.

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We developed a mathematical model that applies this concept to biomedical science and drug development. It examines the thousands of research publications that characteristically follow an initial scientific discovery, recognizes patterns in the progress of this research, and measures the maturation of this research over time. Our work shows that biomedical research follows a predictable pattern of growth and maturation, and that few new medicines are successfully developed before this research passes a critical established point.

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While most efforts to accelerate the emergence of new medicines focus on expediting the penultimate stages of testing in humans and passing FDA review, our work suggests that paying more attention to the longest stage — the time required for the underlying technologies to mature — will pay off.

Read full, original post: 30 years is too long to wait for new medicines. There are ways to speed up drug development