accenture

NEW SCIENCE-BILLIONS TO MILLIONS

VIDEO TRANSCRIPT

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We all celebrated as the global scientific community collaborated to produce several COVID-19 vaccines in record-breaking time. The impossible really became possible as old ways of operating became new ways of discovering, developing and commercializing treatments.

While the biopharma industry has been hesitant to evolve its business model, we now have a new economic environment where increased public scrutiny and profitability pressures have become the catalyst the industry needs to drive more opportunities to make the impossible, possible.

It really all starts with New Science.

While New Science continues to drive exceptional growth and deliver more precise and effective treatments, it is unfortunately much more expensive. The cost of bringing a successful treatment to market lies between $2.6 and $6.7 billion US dollars.

When you combine New Science's higher costs to develop with fewer people that it will treat, you have an affordability issue. Add in the growing pressure to reduce costs from governments, people and corporations and you have a new economic reality that is challenging profitability fundamentally. But what if biopharma companies could improve the way treatments are discovered and developed while lowering costs, bringing them down from billions to millions?

We've already witnessed a shift into this direction. The impossible became possible with the development and commercialization strategies and operations that quickly produced multiple COVID-19 vaccines in record time.

During this period, virtual clinical trials grew by over 50 percent in 2020 and are estimated to triple next year. Virtual trials are often faster and less expensive. So what are the steps biopharma companies need to take to rebalance the treatment-cost equation?

For research, we identified five key levers. Four of which directly impact the R&D side of the
business

These are greater adoption of:

1. Data-led drug discovery
2. Efficiencies of New Science
3. Virtual, hybrid and decentralized clinical trials
4. Regulatory innovation

Data-led drug discovery is primarily influenced by advanced biomarker discovery capabilities with deep learning and predictive models.
These exciting capabilities will revolutionize the way research is done.

They improve disease understanding to better and faster identify, validate, and optimize targets that have a lower risk of failing during development.

The efficiencies of New Science include a greater likelihood of regulatory approval, smaller patient cohorts and overall economic efficiencies.

For example, New Science has a higher Probability of Technical and Regulatory Success (PTRS) and lower clinical trial costs from smaller populations. We estimated this amount to about $134 million dollars savings per treatment.
Virtual, hybrid or decentralized clinical trials leverage in silico and digital twin capabilities to speed and improve how they are being conducted.
We looked at about 100 new clinical trials across 30 countries and found that virtual components improved patient enrollment, retention and time to trial completion saving an average of US$146 million US dollars per treatment.
Regulatory innovation creates opportunities to

- leverage more efficient protocols
- find new ways to balance safety/risk treatment profiles
- allow for the different time frames for approval for different treatments

The opportunity to do things differently – *to do things better* – in R&D have never been more profound or necessary. In R&D, let's make the impossible possible.