

# INVESTING IN CHINA'S BIOTECH REVOLUTION

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*2<sup>nd</sup> September 2019*

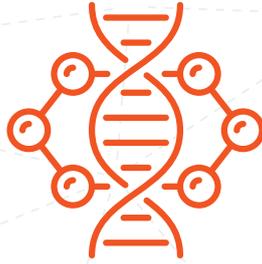
**GLOBAL X**  
by Mirae Asset



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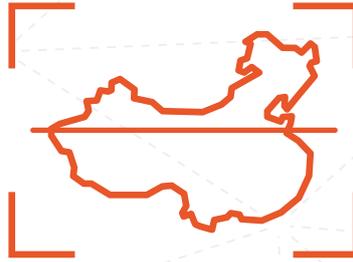
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## WHAT IS BIOTECHNOLOGY?

Biotechnology is the science and business of using biological materials, such as proteins, antibodies, genes, and cells to develop new drugs and treatments.

Humans have been harnessing the power of organisms for thousands of years – bread-making is an early example – but recent advances in genome sequencing and bioinformatics have revolutionised our understanding of biosciences and may present the first legitimate possibility of treating illnesses once thought incurable or fatal.

Take genetic mutations, for example. The World Health Organisation estimates that mutations in a single gene are responsible for over 10,000 human different diseases<sup>1</sup>, which are likely to become the first that can be treated through genomics.



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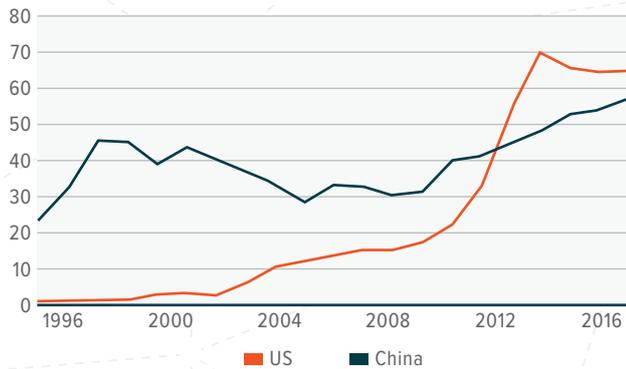
## OPPORTUNITIES IN CHINA

In China, the healthcare market remains highly underpenetrated in comparison with global peers. But with an ageing population, rising affluence, and the incidence of non-communicable diseases like cancer and diabetes well above the world average, it is on the cusp of enormous growth.

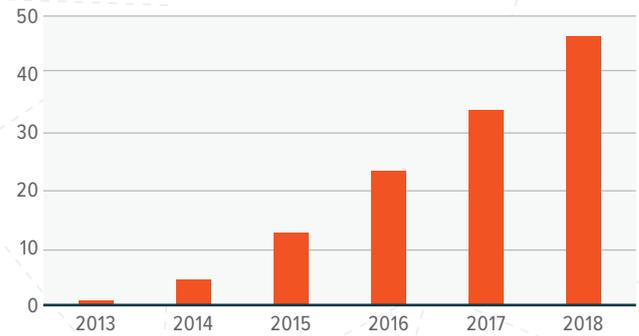
Grand View Research forecasts that the global genomics market will be worth about USD22 billion by 2020, with a growth rate of 10% a year. In China, biotech accounts for only 12% of the country's total drug market, compared with the global average of 25%. Yet the country already has the second-largest genomics market (and second-largest pharmaceuticals market) in the world, and its set to overtake the US to become the biggest in the next few years.

Frost & Sullivan estimates that China will have the world's fastest-growing biotech industry by 2021, with an annual expansion rate of 16.4% over the next five years. In 2017, the total value of domestic and international Chinese biotech initial public offerings reached a record USD2.8 billion. Venture capital and private-equity investment in healthcare has also been ramping up quickly. Healthcare capital investment grew at a CAGR of 132% between 2013 and 2017, while domestic venture capital invested a record USD17.4 billion in the biotech sector in 2018.

## NUMBER OF PATENTS



## RAMPING UP VC / PE HEALTHCARE CAPITAL



Source: ChinaBio, Credit Suisse Research

In the longer term, China's biotech business has the potential to go global, either by out-licensing molecules to overseas markets or by developing assets in the US, EU and elsewhere. In 2018, Chinese biotech companies made 164 cross-border licensing deals, more than double the 2013 figure, according to China Bio<sup>2</sup>. China is currently pursuing trials for one-quarter of its innovative assets overseas.

The country's increasing dominance is also reflected in the numbers of biotechnology patents granted, rising from more than 1,000 (12% of the global total) in 2006 to more than 6,000 (27% of the global total) in 2016. In 2012, China even surpassed the US in this area.

China's government has listed biotechnology as one of the ten key sectors for development under its "Made in China 2025" industrial strategy. To support the development of the industry, the government is improving the country's regulatory framework, reforming the drug-approval process and providing clearer guidance for biosimilar developers.

There are risks, of course. The sector requires heavy investment in R&D, and those investments are not guaranteed to lead to commercially successful products. A promising company's prospects are also vulnerable to changes in the regulatory environment, intensifying competition and the rapidly evolving nature of technological progress.

Intellectual property remains a concern, too. Many biotech companies are dependent upon the ability to use and enforce intellectual property rights and patents, and even if enforcement is effective, the expiry of rights and patents can have adverse financial consequences for those companies.

Investors can gain exposure to early-stage biotech innovation in the sector via private equity, new IPOs, recently listed Chinese biotech companies on domestic and overseas bourses, and through legacy Chinese pharmaceutical companies moving into biologics.

The **Global X China Biotech ETF** offers a broad and diversified exposure to the strong positive tailwinds of this fast-growing area of the market. The fund features biotech companies that are benefiting from the 'Made in China 2025' strategy, which has identified the industry as a key sector for development. As a pioneering offering in this space, this is an early opportunity to capitalise on one of the most promising disruptive trends in the Chinese economy.

<sup>1</sup>World Health Organisation, accessed on Sep 2019. <sup>2</sup>Financial Times, as of 25 Jun 2019.

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Investment involves risk. Past performance is not indicative of future performance. It cannot be guaranteed that the performance of the Fund will generate a return and there may be circumstances where no return is generated or the amount invested is lost. Before making any investment decision, investors should read the Prospectus for details and the risk factors. Investors should ensure they fully understand the risks associated with the Fund and should also consider their own investment objective and risk tolerance level. Investors are advised to seek independent professional advice before making any investment.

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