

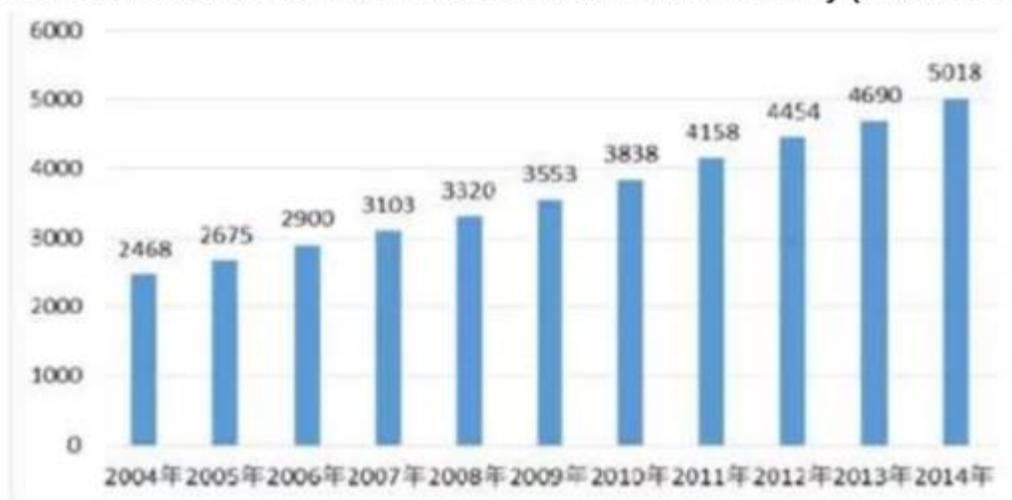
Several Key Factors about China Medical Device Industry

[China medical device](#) industry enjoyed double and triple digit growth in certain sectors. The average sales volume increased 12 times from \$28B in 2001 to \$330B in 2013. The growth will continue for years to come due to the large gap and differences between China medical device industry and the developed countries.

First, the ratio of drug to device is a common predictor for medical device growth. In 2014, the global ratio of drug to medical device was 1:0.7. The ration for developed countries was 1:1.02. But the ratio in China is only 1: 0.19, many times lower than the developed countries. In real dollar value, the ratio between drug and device in China was \$205B, and that of medical device was \$39B. In 2014 the pharmaceutical industry grew 12.5%, 4.2% higher than that of the all the other industries combined. Medical device manufacturing industry sales reached \$32.9B, 8.7% of the drug industry.

Secondly, China domestic medical device Industry is very fragmented and unstable. It tends to be lower end focused and lacks innovation and high IP entry barrier as compared with developed countries. But the increasing healthcare needs contrasted with low level of medical devices domestic development will continue to stimulate the growth of medical device in China.

2004-2014 Sales Volume of Global Medical Device Industry (\$100million)



The compound average annual growth rate in the global medical device market was 7.3% in 2014. Even during the economic recession in 2008 and 2009, the growth rate was still 6.99% and 7.02% respectively. On the other hand, China enjoyed more than

25% compound growth rate from 2004-2014, significantly higher than the worldwide growth rate, around 7%-8%. In 2014, the sales medical devices in China was worth \$30.8B, 7% of the global sales volume.

Thirdly, compared in GDP percentage in 2014, the healthcare expenditure in China is about 5.56%, lower than average percentage of higher income countries of 8.10%, even lower than that of the lower income countries of 6.20% according to Shangpu Consulting.

Due to increasing aging population in China at an average of 3.28% growth rate from 2001 to 2020, about 60 million people enters into the senior group each year. Senior healthcare expenditure is usually 3 to 5 times higher than the average population.

On the supply side of the medical device industry, there are 16,169 medical device manufacturers in China. They are very small, fragmented and at the low end of the value chain. According to the Statistic Bureau of China, the number of medical device manufacturers with medical device three classes registrations (I, II, III) have been growing very slowly from 12,600 to 15,700. The number of CFDA approved domestic devices reached 93,592 whereas the number of imported medical devices with CFDA approval is at 34,655.

The need for reliable and safe and accurate, basic medical device needs such as respiratory and anesthesiology are the priorities. Domestic innovation in large capital equipment, medical consumables and significant new drug development are receiving priorities in government funding and regulatory approval process. As a result, the more advanced start-ups and entrepreneurs from the China can find attractive homes in China.