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## INDUSTRY OVERVIEW

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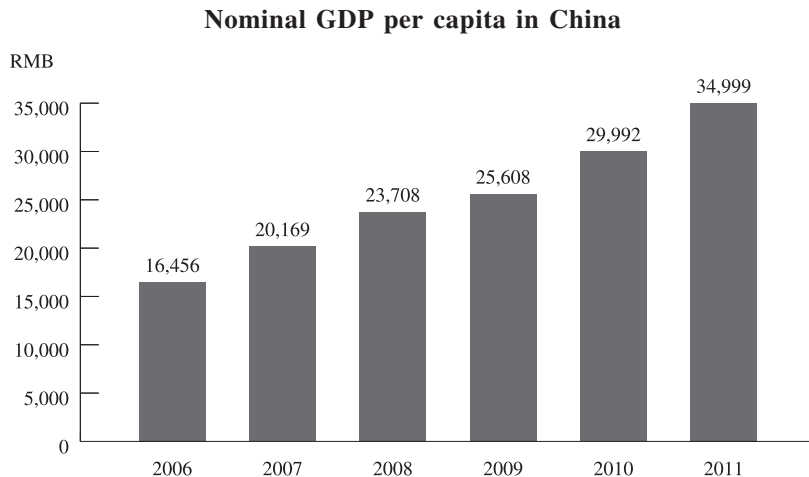
### OVERVIEW

The PRC healthcare industry has been experiencing rapid and significant growth in recent years, driven by a combination of favourable socioeconomic factors, including active PRC government support, increasing disposable income and health awareness, an increasing aging population and increased life expectancy, increasing coverage of social medical insurance and increasing access to healthcare in rural areas in China. We expect these factors to continually present significant growth potential for each of our business segments.

### Primary Growth Drivers of the PRC Healthcare Industry

#### *Increasing disposable income and health awareness*

The PRC economy is one of the world's fastest growing economies. China has recently surpassed Japan to become the second largest economy in the world. According to China National Bureau of Statistics, the nominal GDP of China grew at a CAGR of 16.9% from 2006 to 2011, and its per capita nominal GDP grew from RMB16,456 in 2006 to approximately RMB34,999 in 2011, representing a CAGR of 16.3%. The following chart illustrates the growth of China's per capita nominal GDP in the periods indicated:



Source: China National Bureau of Statistics

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Economic growth and increase in per capita GDP have resulted in a higher level of disposable income in the corresponding period. According to China National Bureau of Statistics, the average per capita annual disposable income of China's urban residents increased from RMB11,759.5 in 2006 to RMB21,810.0 in 2011, representing a CAGR of approximately 13.1%, and the average per capita annual net income of China's rural residents increased from approximately RMB3,587 in 2006 to RMB6,977 in 2011, representing a CAGR of approximately 14.2%.

With rising living standards and increasing disposable income, the general public in China has become more health-conscious and is able to afford more healthcare products and services. These developments have resulted in a higher level of spending on healthcare by both Chinese urban and rural residents in terms of absolute expenditure levels. According to China National Bureau of Statistics, consumer expenditures on healthcare in China's urban areas increased from approximately RMB600.9 per person in 2005 to approximately RMB872.0 per person in 2010 representing a CAGR of approximately 7.7%.

### ***Aging population, increased life expectancy and lifestyle changes***

The aging population of China is expected to drive demand for healthcare products and services in China. According to China National Bureau of Statistics, the proportion of the population aged 65 or above in China has increased from approximately 7.7%, or approximately 100.6 million people, in 2005, to 8.9%, or approximately 118.9 million people, in 2010. The growth trend of China's population aged 65 and above is expected to continue. Rising life expectancy is also expected to contribute to the growth of China's aging population, both as an absolute number and as a percentage of the total population. Over the past 25 years, there has been an increase in the prevalence of diseases in China associated with increased life expectancy, including, for example, cancer, metabolic diseases, and cardiovascular diseases. There also has been an increase in the prevalence of diseases related to lifestyles, such as diabetes, as the social and economic developments have resulted in significant changes in the lifestyles of the general public in China, including, for example, dietary patterns, consumption of tobacco and alcohol, physical exercise and work schedule. These trends are expected to drive up the demands for relevant drugs, medical products and services in China.

### ***Active PRC government support***

As part of its Eleventh Five-Year Plan (2006–2010) for the National Economic and Social Development of the PRC (中華人民共和國國民經濟和社會發展第十一個五年規劃綱要), the PRC government has actively supported the domestic healthcare industry by providing a number of incentives and endorsing a series of programs, including increased funding for building hospitals, research centers and other healthcare facilities, enacting healthcare reforms and standards and subsidizing healthcare services for citizens. In its Twelfth Five-Year Plan (2011–2015) for the National Economic and Social Development of the PRC (中華人民共和國國民經濟和社會發展第十二個五年規劃綱要), the PRC government has reiterated its policies to actively promote and support the development of the PRC healthcare industry and increase spending on healthcare programs from 2011 to 2015. In particular, it intends to improve the social medical insurance program, increase benefits under such program, continue to implement the essential drugs program, as well as increase the number of community healthcare centers and clinics, which will significantly bolster the PRC healthcare market. In 2009, the PRC government announced that it planned to invest RMB850.0 billion between 2009 and 2011 to implement a series of programs under the healthcare reform plan. These programs included the expansion of the coverage of the social medical insurance, the adoption of the national essential drugs program and the expansion of community healthcare centers and clinics. These programs were aimed at lowering the cost of healthcare to the

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general public in China, reducing patient congestion at hospitals and increasing the availability and accessibility of healthcare services. In August 2012, the Ministry of Finance announced that actual spending between 2009 and 2011 for these healthcare reform plans amounted to RMB1,522.8 billion.

### *Increasing coverage of social medical insurance in China*

The social medical insurance programs run by the PRC government primarily consist of three programs: the Urban Worker Program, a mandatory scheme covering urban workers; the Urban Resident Program, a mandatory program that covers the rest of the urban residents not covered by the Urban Worker Program; and the New Rural Co-Op Insurance, a mandatory scheme that provides medical coverage for the rural population. Of these three schemes, the funds of the latter two schemes are mainly subsidized by the PRC government while the individuals covered under such schemes only bear a small amount of fund contribution. As at the end of 2011, the social medical insurance programs collectively covered over 95% of the PRC population.

In order to maximize the effectiveness of the social medical insurance programs, the PRC government has expanded both the coverage and the benefits under the social medical insurance programs. Under the new insurance programs, the maximum amount of benefits to be paid will reach six times of average local annual salary, annual disposable income per capita and annual net income per capita under the Urban Worker Program, Urban Resident Program and the New Rural Co-Op Insurance Program respectively. The PRC government subsidizes the insurance costs, and the amount of such subsidy for New Rural Co-Op Insurance Program and Urban Resident Program has increased from RMB120 per person in 2010 to RMB200 per person in 2011 and is expected to further increase to RMB360 in 2015.

### *Increasing access to healthcare in rural areas*

At the fifth meeting of the tenth National People's Congress meeting held in March 2007, the PRC government announced its goal to accelerate the reform and development of healthcare services in the PRC and to focus on building a basic healthcare system that covers not only urban but also rural areas. The PRC government's plans include providing expanded healthcare services for its rural citizens and establishing general community healthcare service centers that would provide basic medical treatments and pharmaceutical services, as well as upgrading existing class-two hospitals and state-owned medical facilities. The public healthcare service centers would be established in rural areas according to the apportionment of the PRC government based on demand and population.

In addition, the PRC government has actively promoted the implementation of the New Rural Co-Op Insurance, which seeks to reduce the overburdened healthcare service expenses to the individual residents in vast rural areas of China. The program extends to cover approximately 2,716 counties in the PRC, which account for 95% of the total number of counties in the PRC. In addition, the program covers approximately 835 million rural residents, which account for approximately 96.3% of the total population engaged in farming and other agricultural activities in China in 2010.

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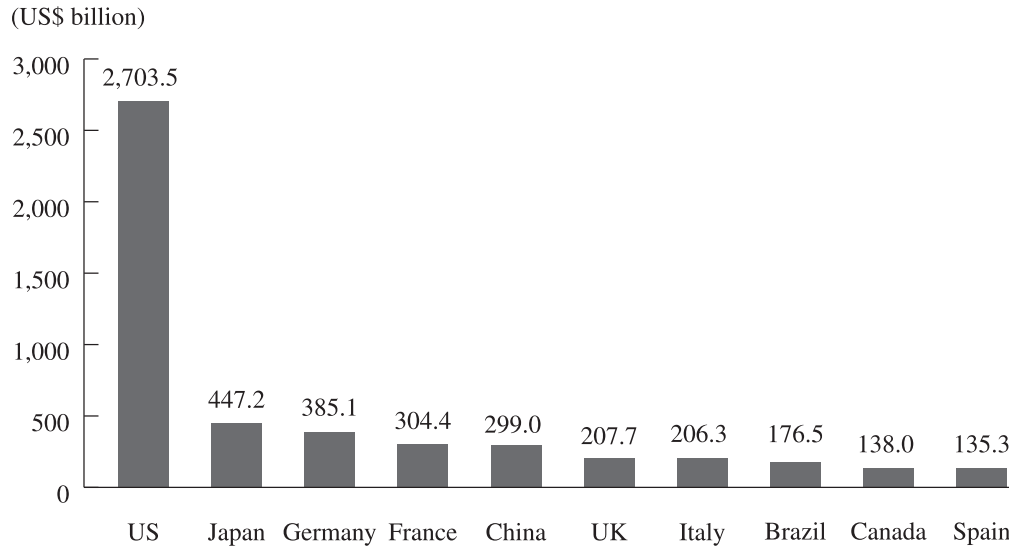
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### Healthcare Spending in China

According to the statistics of Frost & Sullivan, China ranked fifth globally in terms of healthcare expenditures in 2011. Healthcare expenditures in China experienced significant growth, increasing from US\$123.5 billion in 2006 to US\$299.0 billion in 2011, representing a CAGR of 19.3%. The following chart sets forth the total expenditures of the top ten healthcare markets in 2011.

**Total healthcare expenditure in 2011**



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Source: Frost & Sullivan report

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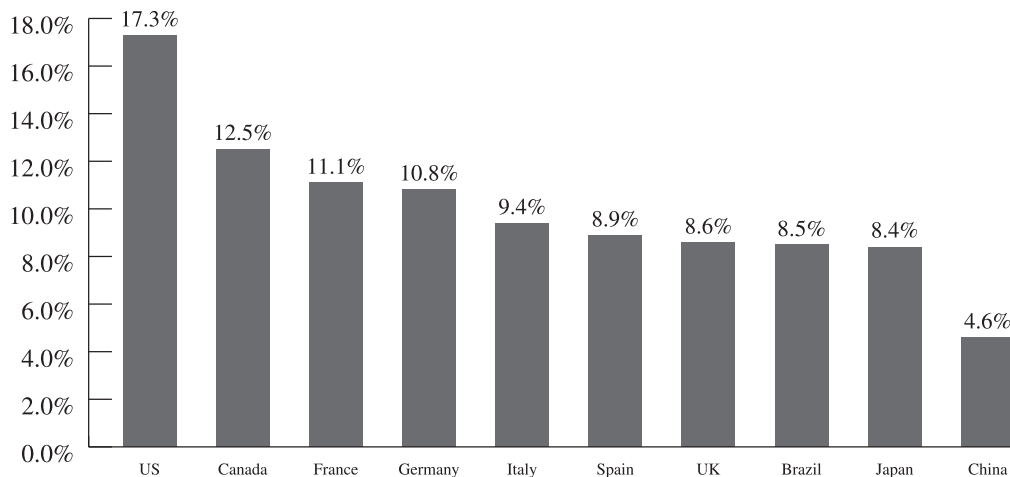
With one-fifth of the world's population, China's per capita healthcare expenditures, despite growing at a CAGR of 18.8% from 2006 to 2011, remains relatively low. China's per capita healthcare expenditures was US\$222 in 2011, the lowest among the top ten markets. The following table sets forth per capita healthcare expenditure information for the ten largest healthcare markets in the world.

Country	Healthcare Expenditures			
	Total	Per Capita		CAGR (2006–2011)
	2011	2006	2011	
(US\$ bn)	(US\$)	(US\$)	(%)	
United States . . . . .	2,704	7,063	8,686	4.2
Japan . . . . .	447	2,759	3,497	4.9
Germany . . . . .	385	3,739	4,710	4.7
France . . . . .	304	4,075	4,838	3.5
China . . . . .	299	94	222	18.8
United Kingdom . . . . .	208	3,393	3,356	-0.2
Italy . . . . .	206	2,853	3,410	3.6
Canada . . . . .	177	4,091	5,205	4.9
Spain . . . . .	138	2,321	2,902	4.6
Brazil . . . . .	135	430	668	9.2

Source: Frost & Sullivan report

China's total healthcare expenditures accounted for approximately 4.6% of GDP in 2011, compared to 11.1% for France and 17.3% for the United States. According to the WHO, the healthcare spending of most developed nations generally accounts for 7% to 9% of GDP. The following chart sets forth the total healthcare spending as a percentage of GDP of selected countries in 2011:

**Healthcare spending as a percentage of GDP in 2011**



Source: Frost & Sullivan report

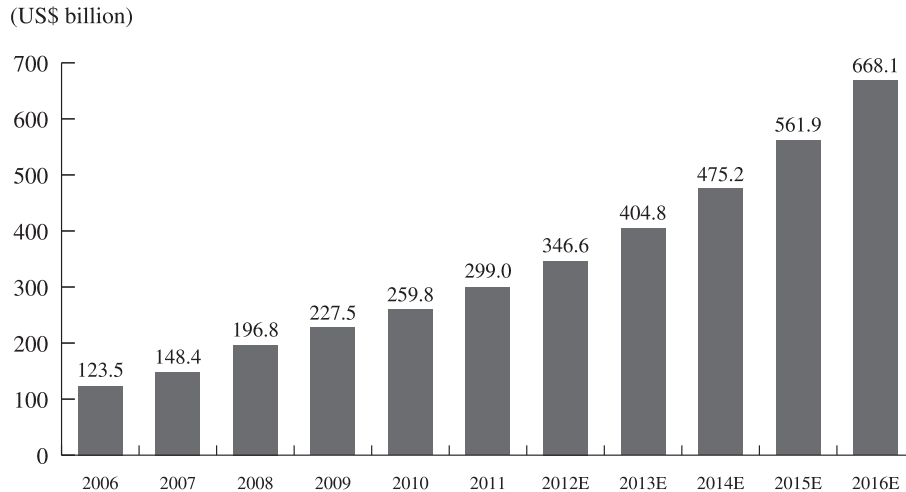
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We believe that China's total healthcare expenditures will continue increasing rapidly as a result of a combination of favourable factors, including the fast-growing economy of China, increasing disposable income and health awareness, an increasing aging population, increased life expectancy and active PRC government support. According to the statistics of Frost & Sullivan, total healthcare expenditure in China will grow at a CAGR of 17.8% from 2012 to 2016, and reach US\$668.1 billion in 2016.

### Total healthcare expenditure in China



Source: Frost & Sullivan report

### Healthcare Reform Plan

In September 2008, the PRC government published a draft plan to increase availability and lower the costs of healthcare services for PRC citizens. On 17 March 2009, the PRC government issued the Opinion on Deepening the Healthcare System Reform (《中共中央國務院關於深化醫藥衛生體制改革的意見》). Subsequently, the PRC government released the Notice on Important Implementing Plans for the Healthcare System Reform 2009–2011 (《國務院關於印發醫藥衛生體制改革近期重點實施方案(2009–2011)的通知》). The goal of the healthcare reform plan is to establish a basic, universal healthcare framework to provide Chinese citizens with safe, efficient, convenient and affordable healthcare services.

To fulfill the above healthcare reform plan, new funding for the healthcare industry is estimated to be RMB850.0 billion, of which RMB331.8 billion is to be subsidized directly by the PRC central government. In August 2012, the Ministry of Finance announced that the actual spending between 2009 and 2011 for these healthcare reform plans amounted to RMB1,522.8 billion, of which RMB450.6 billion was subsidized directly by the PRC central government. The reform plan aims to establish the following four fundamental healthcare systems in China:

- *The public health services system.* As a complementary medical service system fully funded by the PRC government, this system focuses on preventing public diseases and promoting preventive healthcare as an alternative to medical treatment. The public health services system will provide

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services such as immunizations, regular physical check-ups (for senior citizens over 65 years of age and children under three years of age), pre-natal and post-natal check-ups for women, prevention of infectious or chronic diseases, and other preventive and fitness activities.

- *The public medical insurance system.* This system covers drugs and medical treatments for the majority of the population. Under the healthcare reform plan, the framework of the current public medical insurance schemes under the national medical insurance program will be retained, but these schemes will expand to cover more of the population and medical treatments, and raise the cap and percentage of claim payments.
- *The basic healthcare security system.* One of the primary goals of the healthcare reform plan is to build more healthcare facilities and to improve the training of healthcare professionals in China. The healthcare reform plan also aims to achieve the goal that there are at least a medical clinic in every village and a hospital in every county in China by 2011. In addition, the PRC government will encourage private investors to establish public non-profit hospitals.
- *The drug supply system.* This system regulates the pricing of drugs and how drugs will be procured, prescribed and dispensed in healthcare institutions. The healthcare reform plan will focus on pricing, procurement, prescription and dispensing of essential drugs.

According to the Implementation Plan for the Recent Priorities of the Healthcare System Reform (2009-2011), to implement the series of programs outlined in the healthcare reform plan, two-thirds of the estimated funding of RMB850.0 billion would be used for the healthcare service users and the rest would be used for the healthcare service providers.

As part of the ongoing reform, in August 2012, the PRC Ministry of Health released a new report with an updated plan called “Healthy China 2020”, which is designed specifically to provide a strategic reform roadmap for the PRC healthcare industry. The “Healthy China 2020” report sets forth 10 specific targets to be achieved before 2020:

- Further improvement in the key health indicators for the PRC population, that by 2020, the average life expectancy of the PRC population should reach 77 years, the mortality rate of children less than five years old should be below 1.3%, and the mortality rate for women during pregnancy should be less than 0.02%. In addition, the regional gap in health conditions among people living in different parts of the PRC should be further narrowed;
- The healthcare system should be improved, whereby the standards and accessibility of healthcare services should be increased;
- The medical insurance system should be enhanced and the economic burden of treatment for health problems should be reduced;
- Health risks should be better managed and the spread of chronic diseases and health hazards should be effectively controlled, reduced or eliminated;
- Strengthen the control of infectious and endemic diseases, and reduce the hazards of infectious diseases;

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- Strengthen monitoring and supervision measures to ensure the safety of food and drugs;
- Leverage on advancements in advance and adapt to the developments in medical science; shift focus from the diagnosis and treatment of diseases to the prevention of diseases;
- Encourage the further development of innovative Traditional Chinese Medicine to enhance its influence in China's healthcare market;
- Further develop the healthcare industry to satisfy the diverse demand for healthcare services from various segments of the population; and
- Continue to fulfill the government's responsibilities and further boost investments in the healthcare industry, so that by 2020, healthcare expenditure should account for up to 6.5%–7.0% of the total GDP of the PRC to ensure the strategic targets set under "Healthy China 2020" can be realized.

Key measures mentioned in the "Healthy China 2020" strategy report to promote the development of the PRC healthcare industry include the following:

- Shifting the focus of healthcare services from the diagnosis and treatment of diseases to the prevention of diseases and the integration of diseases prevention and treatment services;
- Establishing a fiscal spending policy and system for healthcare that is appropriate for the level of national economic and social developments and lowering the percentage of per capita spending on healthcare services to per capita income to less than 30% through increased government investments and social planning;
- Continuing to improve the medical insurance system and further enhance insurance policies by increasing the compensation ratio under the basic medical insurance system; and continue to integrate the medical insurance systems in urban and rural areas by integrating the management of these systems;
- Encouraging the development of Traditional Chinese Medicine products by further promoting innovation within this industry;
- Actively promoting international exchange of ideas and collaborations;

### **Hospitals and Retail Pharmacies**

In China, retail pharmaceutical and other healthcare related products could be purchased at either hospital pharmacies or retail pharmacies, including independent pharmacies and retail pharmacy chains. Historically, sales by hospital pharmacies accounted for a larger percentage of retail sales of pharmaceutical products in China. This is because out-patients typically purchase their prescription medicines at hospital pharmacies in accordance with physicians' prescriptions. However, if a medical condition could be treated with over-the-counter medicines, it is also common for the PRC patients to purchase over-the-counter medicines from retail pharmacies instead of seeing a doctor in a hospital for prescription medicines.



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### *Hospitals*

Traditionally, out-patients in China typically filled their prescriptions at hospital pharmacies, unlike in the United States and other developed countries, where patients typically fill their prescriptions at pharmacies unaffiliated with hospitals. Although the latest healthcare reform plan aims to reduce patients' reliance on sales from hospital pharmacies, out-patients still primarily fill their prescriptions at hospital pharmacies. Beginning from 2010, drug consumption prescribed at the outpatient clinics grew rapidly due to the coordinated implementation of the social medical insurance funds used at the outpatient clinics.

According to MOH, as at 31 December 2011, there were approximately 21,979 hospitals, 32,860 community healthcare centers and 37,295 township healthcare institutes in China. Hospitals owned and operated by the government in China are classified under MOH-administered hospital classification system into three classes based upon a number of factors, including reputation, the number of doctors and nurses, total number of in-patient beds, equipment and expertise. The best and largest hospitals are designated as "class-three hospitals", and the second and third tiers as "class-two hospitals" and "class-one hospitals", respectively. According to MOH, as at 31 December 2011, hospitals in China included approximately 1,399 class-three hospitals, approximately 6,468 class-two hospitals and approximately 5,636 class-one hospitals and the rest were non-classified.

Substantially all of the hospitals in China are owned and operated by government bodies, and these government-owned hospitals enjoy an increasingly high degree of operating autonomy. Instead of receiving the bulk of their funding from government sources, they are generally expected to generate enough revenues to cover 70% to 90% of their operating expenses. Although the local healthcare administrative bureau sets staff salaries and determines patient charges for hospital services, including treatment prices for most services, its decisions are usually based on the recommendations of hospital administrators in the region. In addition, hospital administrators have the authority to make decisions on equipment purchases and staff bonus payments.

Hospitals at or above county level, which usually have 100 or more beds and are reasonably adequately staffed and well-equipped, tend to get more and better equipment since they have the resources and expertise needed to attract higher revenues from patients. Hospitals that are below county level tend to be small, relatively poorly staffed and under-funded. These hospitals are expected to receive additional funding from the government under the current reform plan.

### *Retail pharmacies*

While out-patients in China generally fill their prescriptions at hospital pharmacies, they primarily purchase over-the-counter medicines from retail channels. To the extent that a medical condition can be treated with an over-the-counter medicine, many PRC patients choose to purchase over-the-counter medicines instead of seeing doctors for prescription medicines.

The retail pharmacy sector in China is highly fragmented. Retail channels in China include pharmacy chain stores, individual pharmacies, and over-the-counter medicine counters in supermarkets.

A small portion of retail pharmacies in China is authorized under the National Medical Insurance Program. A patient that participates in this program may be reimbursed for the cost of a medicine included in the Provincial Medical Insurance Drugs Catalog only if he or she purchases that medicine from an authorized retail pharmacy.

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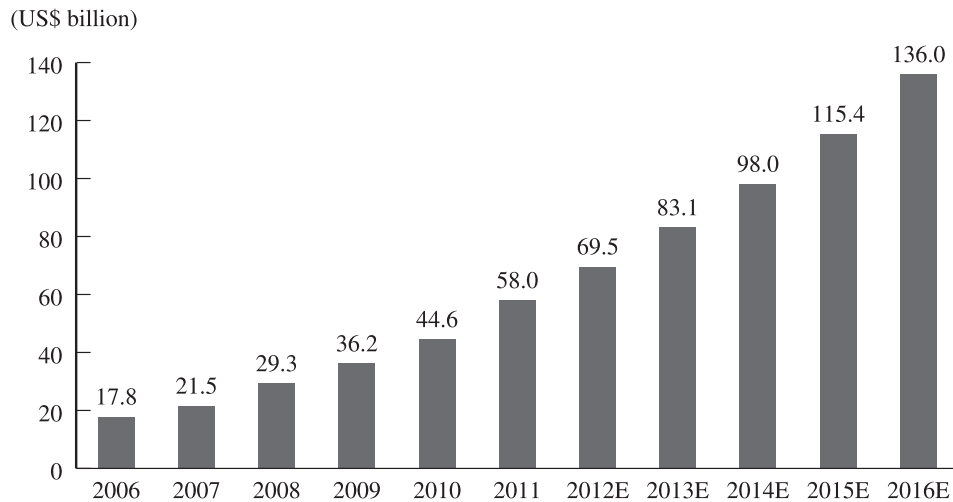
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### PHARMACEUTICAL INDUSTRY IN CHINA

#### Overview

The pharmaceutical market in the PRC has grown rapidly in recent years. According to the statistics of Espicom and ISI Emerging Markets, the PRC pharmaceutical market grew from US\$17.8 billion in 2006 to US\$58.0 billion in 2011, representing a CAGR of 26.6%. Growth in the PRC pharmaceutical market has been partly driven by the favorable macro environment in terms of GDP growth and an increase in healthcare expenditure in the PRC. As a result of increasing urbanization, increasing disposable income and health awareness, aging population and the prevalence of chronic health problems, and government initiatives relating to the healthcare industry, the PRC pharmaceutical market is projected to continue to experience significant growth in the future, reaching US\$136.0 billion in 2016. The following chart shows the historical and projected size of the PRC pharmaceutical market from 2006 to 2016.

**Pharmaceutical market size in China (at retail price)**



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Source: The Medical Market: China, Espicom Business Intelligence, 2012; ISI Emerging Markets

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### Global country rankings based on total spending on pharmaceuticals

Rank	2006	2011	2016E
1	United States	United States	United States
2	Japan	Japan	China
3	France	China	Japan
4	Germany	Germany	Brazil
5	China	France	Germany
6	Italy	Brazil	France
7	Spain	Italy	Italy
8	UK	Spain	India
9	Canada	Canada	Russia
10	Brazil	UK	Canada

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Source: IMS

According to the statistics of IMS, in terms of total spending on pharmaceuticals, China was ranked as the fifth and third largest pharmaceuticals market globally in 2006 and 2011, respectively. Spending on pharmaceuticals in China is expected to continue to grow rapidly and by 2016, China is expected to be the second largest pharmaceuticals market globally.

### General Description of the PRC Pharmaceutical Industry

#### *Fragmentation of the PRC Pharmaceutical Industry*

The pharmaceutical industry in the PRC is highly fragmented and competitive, with more than 8,412 pharmaceutical manufacturers in 2012 according to SFDA. According to IMS, the top 20 pharmaceutical manufacturers in terms of sales in 2011 accounted for only 24.8% of the total PRC pharmaceutical market, while the largest five pharmaceutical manufacturers only accounted for 9.0%. Since most local pharmaceutical manufacturers lack scale, nationwide sales capabilities and product breadth, we believe that pharmaceutical manufacturers with well-developed nationwide distribution networks, strong existing product portfolios and effective strategy to expand product portfolio are well-positioned to capture the opportunities to expand and consolidate their businesses and become industry leaders in the PRC.

#### *Generic and Innovative Drugs*

Pharmaceutical products are categorized as innovative drugs and generic drugs. Innovative drugs refer to drugs with active ingredients that are new chemical or biochemical entities, while generic drugs refer to drugs with the same active ingredients as, and are considered equivalent to, an innovative drug. The pharmaceutical market in the PRC has been dominated by generic drugs, and innovative drugs only make up a relatively small portion of the PRC pharmaceutical market. Most domestic pharmaceutical companies in the PRC manufacture and sell generic drugs including branded generic drugs, while drugs sold by multinational pharmaceutical companies are mostly innovative drugs, including those that have come off patent.

First-to-market generic drugs are entitled to pricing advantage in the PRC. Sales volume of first-to-market generic drugs in the PRC continues to grow and their prices either remain relatively stable or do not decrease significantly until many competing generic equivalents are introduced to the market. This

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life cycle pattern can be partly explained by drug pricing policy, medical insurance coverage and prescription practices in the PRC. The PRC government allows premium pricing for first-to-market generic drugs over other competing generic drugs to encourage innovation in the pharmaceutical industry and as reimbursements under PRC medical insurance programs do not differentiate between first-to-market generic drugs and other competing generic drugs, the price premium of first-to-market generic drugs will be covered by these insurance programs. These practices allow sales volume of first-to-market generic drugs in the PRC to continue to grow even after competing generic equivalents were introduced. A same life cycle pattern applies to innovative drugs in the PRC.

### Pharmaceutical Market in China by Therapeutic Area

According to NFS MENET, the following five therapeutic areas accounted for 76.4% of the pharmaceutical market in China in 2011:

- (i) systemic anti-infective drugs;
- (ii) oncology and immunomodulating agents;
- (iii) cardiovascular system drugs;
- (iv) alimentary tract and metabolism drugs; and
- (v) blood and blood forming organs.

The following table sets forth market share data and growth forecast of the pharmaceutical market in China by therapeutic area.

	Percentage of the PRC Pharmaceutical Market in 2011	Market growth CAGR 2009–2014F
	(%)	(%)
Systemic Anti-infectives.....	21.2	21.5
Oncology and Immunomodulating Agents.....	17.4	25.5
Cardiovascular System.....	13.4	20.9
Alimentary Tract and Metabolism.....	13.2	25.1
Blood and Blood Forming Organs.....	11.2	22.3
Nervous System.....	9.7	23.7
Musculo-Skeletal System.....	3.2	22.9
Respiratory System.....	2.9	23.4
Genito-Urinary Tract and Sex Hormones.....	1.3	24.4
Dermatologicals.....	0.8	21.4
Others.....	5.7	N.A.

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Sources: NFS MENET; IMS

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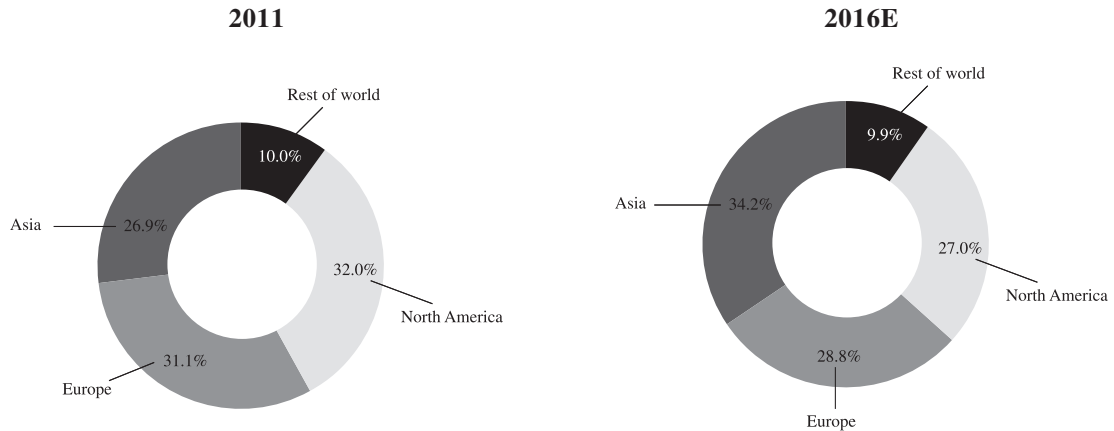
### GLOBAL ACTIVE PHARMACEUTICAL INGREDIENTS MARKET

An active pharmaceutical ingredient (API) is the biologically active chemical substance in a pharmaceutical product. The global API market has been growing steadily in recent years and is expected to experience stable growth in the future. According to the statistics of Frost & Sullivan, the competitive structure of the global Active Pharmaceutical Ingredients Market can be characterized by three main types of competitors — large integrated specialty chemical manufacturers, active pharmaceutical ingredient and intermediate vendors as well as niche participants manufacturing high-potency APIs and biologicals. Competition on the global market is driven by factors including product quality, customer relationships, technological prowess and time-to-market. The following chart shows the historical and projected size of the global API markets for the periods indicated.

	2009A	2010A	2011A	2016E	2009–2011 CAGR	2011–2016 CAGR
	(US\$ billion)					
Global API market size . . . .	94.0	101.1	108.8	159.1	7.6%	7.9%

Source: Markets and Markets

The following charts set forth the breakdown of the global API market by regions in 2011 and 2016:



Source: Markets and Markets

### PHARMACEUTICAL DISTRIBUTION AND RETAIL IN CHINA

#### Pharmaceutical Distribution

The pharmaceutical distribution industry is an essential part of the healthcare industry value chain, linking pharmaceutical manufacturers and pharmaceutical dispensers, including hospitals, pharmacy chain stores, independent pharmacies and other points of sale retail outlets. Pharmaceutical distributors leverage their economies of scale and operational expertise to ensure the prompt delivery of a wide range of products from thousands of manufacturers to numerous and dispersed retailers, effectively reducing the overall supply chain costs.

Pharmaceutical distributors enter into agreements with manufacturers to purchase certain types of pharmaceutical products for onward delivery to hospitals and retailers. Often such agreements can be on an exclusive basis. Pharmaceutical distributors resell the purchased pharmaceutical products to downstream hospitals and retailers, and also provide relevant value-added services, such as logistics services, electronic purchase orders confirmation, tailored packaging, repackaging and reprocessing services, product insurance brokerage, payment collection, inventory tracking and import services. Pharmaceutical distributors in China generally do not engage in the promotion of medicines, which is typically undertaken by sales representatives from pharmaceutical manufacturers.

The pharmaceutical distribution industry in China is highly fragmented, with more than 13,000 pharmaceutical distributors as at 31 December 2010 according to SFDA. In terms of sales, the three largest pharmaceutical distributors in China accounted for approximately 22.8% of the market share of the pharmaceutical distribution industry in China in 2011 according to published information from MOFCOM. We believe that fragmentation of the pharmaceutical distribution industry results in under-utilization of supply chain resources. As competition intensifies, we foresee further consolidation in the pharmaceutical distribution industry and large distributors with effective nationwide distribution capabilities, value-added supply chain services and large-scale operations will benefit from such industry trends.

#### Pharmaceutical Retail

Medicine sales in China include mainly sales of prescription medicines and over-the-counter medicines. Sales of prescription medicines are the principal component of pharmaceutical expenditures in China and are mostly made through hospitals, with a small portion through prescription medicine counters in retail pharmacies. Sales of over-the-counter medicines are mainly made through retail pharmacies. According to MOH, as at 31 December 2011, there were approximately 21,979 hospitals, 32,860 community healthcare centers and 37,295 township healthcare institutes in China. According to SFDA, as at 31 December 2010, there were 399,069 pharmaceutical retail pharmacies in China, including both retail chain pharmacies and independent pharmacies. Please refer to “— Overview — Hospitals and Retail Pharmacies” for additional information on hospitals and the retail pharmacy sector in China.

Out-patients in China typically fill their prescriptions at hospital pharmacies, unlike in the United States and other developed countries, where out-patients typically fill their prescriptions at pharmacies unaffiliated with hospitals. In China, to the extent that a symptom can be treated with an over-the-counter medicine, it is also common that the PRC patients choose to purchase over-the-counter medicines from retail pharmacies, instead of seeking medical consultation for prescription medicines.

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### HEALTHCARE SERVICES IN CHINA

In November 2010, the PRC government issued the Opinions on Further Encouraging and Guiding the Establishment of Medical Institutions by Social Capital (《關於進一步鼓勵和引導社會資本舉辦醫療機構的意見》), which permits foreign medical institutions or enterprises to establish medical institutions in China through joint venture or other cooperative arrangements with Chinese medical institutions or enterprises and simplifies the procedures for establishing medical institutions with private capital, thus improving the business environment for medical institutions funded with private capital.

As the economy of China grows rapidly, the general public's awareness of healthcare, together with a middle class with high spending power, rises quickly in China, and it is expected that the market demand for medical services, in particular, high-end services and specialty services, will grow rapidly in the future.

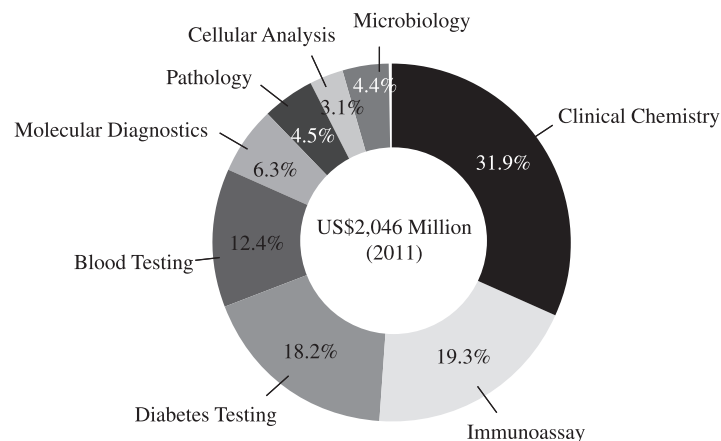
Currently, only special care wards in class-three hospitals, sino-foreign equity joint venture and sino-foreign cooperative joint venture medical institutions, and a few private hospitals can provide premium medical services. With the implementation of the new policies, hospitals funded by private capitals are expected to grow quickly, meeting the growing demand of premium and specialty healthcare services in China.

### DIAGNOSTIC PRODUCTS AND MEDICAL DEVICES IN CHINA

#### Overview of the In-vitro Diagnostic Products Market in China

The diagnostic products market in China includes in-vitro and in-vivo diagnostic products, of which in-vitro diagnostic products are more widely used. According to the statistics of Industry Experts, in China, the in-vitro diagnostic products market was dominated by four major segments in 2011: clinical chemistry (31.9%), immunoassay (19.3%), diabetes testing (18.2%), and blood testing (12.4%). The chart below sets forth the breakdown of China's in-vitro diagnostic products market by revenues of segments in 2011:

**Total In-vitro Diagnostic Products Market: Percentage of Revenues by Segments (China), 2011**



Source: Industry Experts

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## INDUSTRY OVERVIEW

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The in-vitro diagnostic products market in China has been growing rapidly in the past few years, and it is expected to grow steadily in the next few years, with major growth potential in segments such as infectious disease testing, chronic disease testing, and diagnosis in early stages of diseases.

The main growth drivers for the in-vitro diagnostic products market include:

- Great growth potential in rural areas stimulated by the healthcare reform plan;
- Aging population and increasing demand for diagnostic products;
- Increasing demand from the middle class for high-end products; and
- An increase in the number of private hospitals and independent testing laboratories.

According to Industry Experts, demand for in-vitro diagnostic products in China will grow from US\$2,046 million in 2011 to US\$4,460 million in 2016 at a CAGR of 16.9%.



## INDUSTRY OVERVIEW

### Overview of the Medical Device Industry in China

According to the statistics of The Medical Market: China Espicom Business Intelligence, 2012, the total market size of medical devices in China increased from US\$4,751.8 million in 2007 to US\$8,939.8 million in 2011 at a CAGR of 17.1%. In particular, diagnostic imaging devices grew from US\$2,171.6 million in 2007 to US\$3,648.9 million in 2011 at a CAGR of 13.9%, consumables grew from US\$704.8 million in 2007 to US\$1,491.0 million in 2011 at a CAGR of 20.6%, and dental products grew from US\$111.0 million in 2007 to US\$264.4 million in 2011 at a CAGR of 24.2%.

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
	US\$ millions					
<b>CONSUMABLES</b> . . . . .	<b>575.1</b>	<b>704.8</b>	<b>956.0</b>	<b>1,147.5</b>	<b>1,287.4</b>	<b>1,491.0</b>
Woundcare Products . . . . .	171.7	206.0	272.1	305.8	345.7	403.4
Syringes, Needles and Catheters . . . . .	370.5	441.6	610.4	759.7	847.4	975.5
Others . . . . .	32.8	57.1	73.5	82.0	94.4	112.1
<b>DIAGNOSTIC IMAGING</b> . . . . .	<b>1,803.3</b>	<b>2,171.6</b>	<b>2,495.3</b>	<b>2,914.4</b>	<b>3,209.5</b>	<b>3,648.9</b>
Electrodiagnostic Apparatus . . . . .	694.8	804.9	1,034.9	1,176.4	1,274.7	1,425.5
Radiation Apparatus . . . . .	621.3	767.5	698.8	945.6	1,039.4	1,179.3
Imaging Parts and Accessories . . . . .	487.2	599.2	761.5	792.4	895.3	1,044.2
<b>DENTAL PRODUCTS</b> . . . . .	<b>84.4</b>	<b>111.0</b>	<b>150.4</b>	<b>191.9</b>	<b>221.6</b>	<b>264.4</b>
Dental Capital Equipment . . . . .	18.4	27.5	34.9	73.2	87.2	107.3
Dental Instruments and Supplies . . . . .	66.0	83.5	115.4	118.7	134.4	157.1
<b>ORTHOPAEDIC PRODUCTS</b> . . . . .	<b>183.9</b>	<b>234.0</b>	<b>311.3</b>	<b>358.6</b>	<b>406.4</b>	<b>475.7</b>
Splints and Other Fracture Apps . . . . .	58.9	76.7	110.8	142.1	163.6	194.4
Artificial Joints . . . . .	52.0	65.2	55.5	76.5	83.0	92.9
Other Artificial Body Parts . . . . .	73.0	92.1	145.0	140.0	159.9	188.4
<b>PATIENT AIDS</b> . . . . .	<b>654.4</b>	<b>702.9</b>	<b>886.9</b>	<b>1,078.9</b>	<b>1,196.6</b>	<b>1,370.0</b>
Portable Aids . . . . .	337.6	373.9	481.4	591.8	665.0	771.3
Therapeutic Appliances . . . . .	316.8	329.0	405.6	487.0	531.5	598.7
<b>OTHERS</b> . . . . .	<b><u>735.5</u></b>	<b><u>827.5</u></b>	<b><u>1,083.5</u></b>	<b><u>1,354.4</u></b>	<b><u>1,489.1</u></b>	<b><u>1,689.8</u></b>
<b>TOTAL</b> . . . . .	<b><u>4,036.5</u></b>	<b><u>4,751.8</u></b>	<b><u>5,883.4</u></b>	<b><u>7,045.7</u></b>	<b><u>7,810.6</u></b>	<b><u>8,939.8</u></b>

Source: The Medical Market: China, Espicom Business Intelligence, 2012

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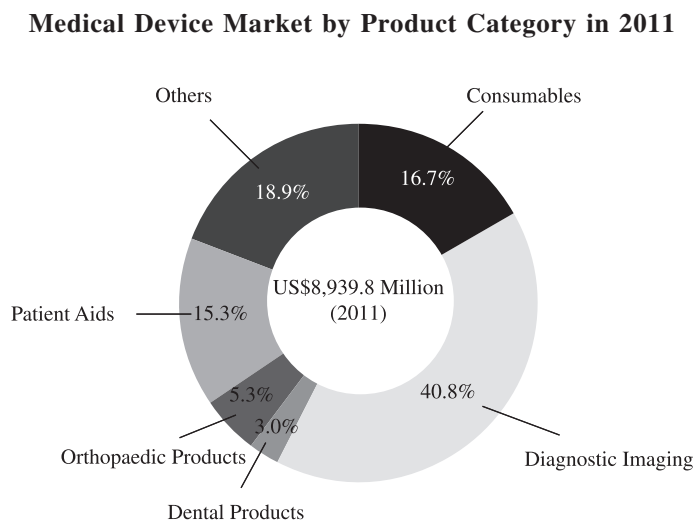
## INDUSTRY OVERVIEW

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The medical device industry in China has experienced significant growth in the past few years due to increasing demand for medical equipment and consumables in both urban and underdeveloped rural areas. The main growth drivers of the medical device industry in China include:

- Development of China's medical systems to increase healthcare coverage and expansion of the cooperative medical systems in China's rural areas;
- Aging population and increasing health awareness of the general public;
- Upgrading of existing medical equipment and other devices in hospitals; and
- Increased government funding designated for developing healthcare infrastructure.

Below is the breakdown of the medical device market by product category in 2011:



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Source: The Medical Market: China, Espicom Business Intelligence, 2012

### SOURCE OF INFORMATION

The information and statistics set out in this section have been extracted or derived from public and private publications of certain information providers, including Industry Experts, Markets & Markets, NFS MENET, IMS, Espicom, Frost & Sullivan and ISI Emerging Markets. All of these information providers are Independent Third Parties and the reports and sources used by such information providers have not been commissioned by us.