

# Medical Industry Status and Development Trend in China

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# 1. Medical Industry's Development in China

## 1.1 Industry's scale

Medical industry is the important industry of the national economy and the people's livelihood.

1978-2005, the production value of medical industry had been increased by 16.1% every year.

Medical industry reached 633,800 million yuan and increased by 25% in 2007



# 1.1 Industry's scale

medical industry in China has formed complete medical industry system and medicine circulate network, and developed into big pharmacy country in the world.

China has 834 industrial large and medium-sized enterprises of medicine

the output of medicinal chemicals occupies the second in the world

Traditional Chinese medicine has been going on the road of scientific process and standardization



# Table 1 China's medical industry sales income and total profit growth in 2007

Industry name	Sales income (100 million yuan)	Increase compared with last year %	Total profit (100million yuan)	Increase compared with last year %
National medical industry	6392.69	24.90	629.99	55.56
Chemical pharmaceutical industry	3181.86		286.64	
Medicinal chemicals	1496.67	25.06	108.78	53.52
Chemical medicines preparation	1685.19	23.62	177.86	56.14
Pharmaceutical industry of traditional Chinese medicine	1584.74		171.78	
Manufacturing industry of Chinese medicine	1312.99	21.69	154.78	59.79
Traditional Chinese medicine decoction pieces	271.75	37.37	17	70.00
Biochemical products industry	495.39	21.62	63.18	50.00
Medical instrument and equipment and apparatus	547.95	22.05	59.46	43.90
Hygiene material and medical articles	298.8	31.14	24.27	50.00
Pharmacy dedicated device	44.55	25.00	2.67	50.00

# 1. 2 Regional Structure

medical industry in China mainly centres in the eastern area.

The proportion of gross product value of these 10 provinces and cities to the gross product value of China is 69%.

Sichuan has already become the big producing province of traditional Chinese medicine of China



# Table 2 The top 10 provinces and cities of China's medical industrial sales income and total profit in 2007 .

Ranking	Sales income				Total profit of 2007			
	Area	Sales income (100 million yuan)	Increase compared with last year (%)	Proportion (%)	Area	Total profit (100 million yuan)	Increase compared with last year (%)	Proportion (%)
	The whole country	6393	24.9	100.0	The whole country	630	55.6	100.0
1	Shandong	944	35.1	14.8	Shandong	89	67.9	14.1
2	Jiangsu	735	18.8	11.5	Jiangsu	71	42.0	11.3
3	Zhejiang	578	16.3	9.0	Zhejiang	51	21.4	8.1
4	Guangdong	468	20.9	7.3	Guangdong	50	56.3	7.9
5	Shanghai	351	12.9	5.5	Henan	42	90.9	6.7
6	Henan	327	32.9	5.1	Jilin	37	146.7	5.9
7	Hebei	272	21.4	4.3	Shanghai	35	42	5.6
8	Beijing	249	23.9	3.9	Beijing	34	36.0	5.4
9	Sichuan	244	27.8	3.8	Hebei	29	93.3	4.6
10	Jiangxi	230	39.4	3.6	Sichuan	25	108.3	4.0
	Total	4398	24.3	68.8	Total	463	59.6	73.5

## 1.3 Foreign trade

In 2007, foreign trade of China's medical health product achieves the new highest record in history, reached 38,590 million dollars, and increased by 25.6%

the export is 24,590 million dollars, increased by 25.1%

Import is 14 billion dollars, increased by 26.6%



# Table 3 Imports and exports of all kinds of medical products in China in 2007

Classification	Total import and export value (100 million dollars)	Increase compared with last year %	Total export (100 million dollars)	Increase compared with last year %
Raw materials medicine of Western medicine	195.5	26.9	135.6	27.1
Medical equipment	126.9	20.3	84.2	22.5
Traditional Chinese medicine	15.4	10.5	11.8	8.1
Biochemical medicine	9.3	28.1	6.5	24.3
Western medicine preparation	38.8	58.4	7.8	55.6
Total	385.9	25.6	245.9	25.1



# Several characteristics appear in China's medical foreign trade in 2007

( 1) The traditional export markets continue being kept.

Asia, Europe, North America are still three major export markets,

account for 40.7%, 28.3% and 20.1% of the total volume of export of China separately;

Europe, Asia, North America are the three major regions of importing medical goods of China,

account for 41.76%, 37.08% and 19.0% of the total import value separately;



(2) The new variation tendency appears in the structure of imports and exports

The foreign trade proportion of western medicine products rose to 63.1% in 2007

The export proportion of raw materials of Western medicine further rose up to 55.2%,



(3) According to contribution rate of increasing, the export and import of the western medicine products are 66.9% and 77.6% respectively in 2007

the export and import of the medical equipment products are 31.3 and 20.4% respectively



# 1.4 Technological innovation capability

## 1.4.1 Research and development for innovative medicine

The industrial innovation capability of Chinese medicine is insufficient seriously at present.

China sanctioned 1193 new medicines together in 1985-2001, and 147 new medicines of first class among them, accounting for 12.4%.

Only a few become the international famous innovative medicine at present



# Table 4 National registering new medicine of first class

	Year	Clinical	Production	total
Accepted	2003	65	50	115
	2004	52	14	66
	2005	75	6	81
Registered	From 2003 to June of 2006	139	59	198

## 1.4.2 The increase of patents

In recent years, China's medical patents has increased greatly.

According to National Intellectual Property Bureau, among 1996- 2006 years, medical patent applications were 22582, and 7718 patents granted, and average annul growth is 3.62% and 36.26% respectively.

Among them, domestic (including Hong Kong, Taiwan) patent applications are 14859, and 4925 patents granted, and average annul growth is 10.38% and 45.49% respectively



## **2. Development trend of medical industry in China (1)**

- 2.1 Under the pulling of the domestic and international markets, the medical industry in China will enter the period of rapid development**



- At present, China has already become one of the largest medical markets in the world. But according to calculating, China is one of the minimum countries of expenditure of per capita medicines in the world, per capita medicines consume less than 10 dollars, which is about 1/30-1/40 of American-European countries.



- with increasing of aging population and improving of living standards of the people, and quickening of the industrialization and urbanization process, the promotion of the rural new cooperative medical service and enlargement of social security, Chinese medical industry will enter the period of rapid development in the following 5-10 years. .



# Table 5 International comparision of the consumption expenditure

	Unit: %						
Income level	Food	Clothing	Medical treatment and health care	communication and traffic	Education and culture	Live	Other
1000 dollars or less	48	8	3	7	6	11	17
1001-4000 dollars	38	9	6	9	7	10	21
4001-10000 dollars	27	8	7	9	7	14	28
10001-20000 dollars	15	7	9	13	7	15	34
More than 20000 dollars	11	5	12	12	8	18	34
China cities and towns ( 1998)	44.5	11.1	4.7	5.9	11.5	9.4	12.9
China countryside ( 1998)	53.4	6.2	4.3	3.8	10.0	15.1	7.2
China cities and towns ( 2006)	30.98	8.63	8.87	10.97	11.61	14.94	14
China countryside ( 2006)	40.60	5.61	6.54	9.63	10.18	18.16	9.28

## **2. Development trend of medical industry in China (2)**

- 2.2 As cost of factors of production such as the workforce, land resource rise, the medical industry development of China enters the period of structural adjustment**



- In recent years, under the influence of price advancing of the agricultural means of production, workforce, grain, industrial chemicals, medical raw materials, coal, electricity, water and gas, increasing of the interest of bank and RMB appreciating, dropping of export tax rebate, etc., the operating cost of medical enterprises has increased greatly, and meanwhile, the medical product cost is reducing constantly.



- With regard to the development trend in the future, energy and raw materials shortage will be the main 'bottleneck' restriction of China's economic development. It is the challenge that the medical industry must be faced in the medium and long-term development of future.
- As the country strengthens environmental protection, intellectual property protection and rising of production cost, the market competition will be fiercer,
- and medical industry's resources will be centralized to advantage enterprises and regions, and medical industry in China will enter the period of optimizing and upgrading of industrial structure.



## **2. Development trend of medical industry in China (3)**

- 2.3 Under the pushing of rapid development of biotechnology, the development potentiality of bio-pharmaceuticals will be enormous**



- In the past 30 years, biotechnology was developed rapidly in the medical field, which is known as the first tide that the modern biological industry developed. The market scale of global biological medicines was 15 billion dollars in 1997, 30 billion dollars in 2000, and 60 billion dollars in 2005.



- At present, Chinese Government pays close attention to bio-pharmaceuticals industry's developing, and in <<The “Eleven five” plan of national biological industry >> and <<The “Eleven five” plan of medical industry >>, China has already regarded it as the developing focus, and will take the practical measure to promote its development.



# 3. The main measures of development of the medical industry in China

- According to <<The development instruction of medical industry during the “Eleven five” >>, the overall goal in the period of “eleven five” is to set up the medical industry with stronger international competitiveness, and enter the leading ranks of the world in some fields, and lay the solid foundation in order to transform into medical powerful country.
- In order to realize this goal, China will improve people's health and safety as the focal point, speed up the development of biological medicine, modern traditional Chinese medicine and biomedical engineering, and take the following measures:



## **3.1 Protecting the intellectual property right and advancing the industrial innovation of medicine.**

- At present, the engineering platforms for transforming medical scientific and technological achievements into production are weakness and the transform ratio is not high in China, and the enterprise's technological innovation capability is insufficient.



- For this reason, China should strengthen the construction of technique center of enterprises, and strengthen the subject position of enterprise's technological innovation;
- China should advance the reform and reorganization of the bio-scientific research institutions, and form several life sciences research centers that are more extensive, more multi-disciplinary, and stronger of innovation capability, which can gather and train world first-class talents, and obtain more important primitive innovative achievements in the fields of life sciences;



- Cooperated in the implementation of the great projects such as biological breeding of good quality and high output, vaccine and diagnosing reagent, modern traditional Chinese medicine, etc.,
- China should transform and newly build a batch of national engineering centers, strengthen the capability of system integration and engineering of the great scientific achievements.
- China should catch hold of the three links of training, attracting and using talents to the best extent, innovate training mode of talents, and strengthen the capability construction of personnel training, especially train the talents for primitive innovation, engineering development, high skill and advanced management and administration, etc..

## 3.2 Strengthening international cooperation and advancing the

### internationalization of medical industry.

- China should encourage multinational companies to come to China to make investment, set up the organizations of research and development and do contract and joint research;
- encourage domestic enterprises to launch the work of registering and marketing of their products in world, set up the organizations of research and development and make the investment to set up enterprises outside of the country, support the biotechnology products with independent intellectual property right“Walk out” ( sell to outside of the country ) ;
- participate in formulation and revision about the international standards actively.



### 3.3 Setting up the biological industrial bases and advancing integrated development of medical industry

- Integrated development is general trend and inexorable law for the current industry especially high-tech industry.
- At present, in order to cultivate strategic high-tech bio-industry, a lot of countries in the world are accelerating to set up the zone of high-level biological industry, and strive to seize the commanding point in the competition for biological industry's talents and technology, etc..
- facing this situation, China should follow the law of integrated development of biological industry, and accelerate the construction of the biological industrial bases and foster growth poles of biological industry in some regions where are stronger of scientific and technological innovation capability and better foundation of industry.



## 3.4 Building the good environment of market and policy.

- China should extend the coverage of medical insurance and planning of immunity progressively, and expand market demand of the biological products actively.
- Meanwhile, China should advance the reform of health care system actively, and set up the new system of the logistics of medicines.
- China should make the tax revenue preferential policy for promoting biological industry's development, and accelerate finance innovation and venture investment development



- Thank you for your attention!.

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