In recent years, biopharmaceutical industry has been the fastest growing sector in the global pharmaceutical industry. From 1998 to 2009, the compound annual growth rate of biopharmaceutical industry reached 18.6%, far higher than 8.5% of the global pharmaceutical market. USA is the most active country in R & D and innovation of biopharmaceutical products, taking the core position in the global biotechnology industry. Now, nearly 60% of biotechnology patents are held by USA.

At present, there are more than 700 companies in China's biological and bio-chemical pharmaceutical industry, with total sales revenue of about RMB75.3 billion in 2009. Growing at a compound annual growth rate of about 30% from 2005 to 2009, China biological and bio-chemical pharmaceutical industry had become one of the fastest growing fields in China pharmaceutical industry. China is still backward in biomedical development compared with European and American countries. Currently, China biological and bio-chemical pharmaceutical industry only takes a small proportion in China pharmaceutical industry, and only contributed 10% to the total sales revenue in 2009, so it has broad room for growth.
As for segments, the international blood products market is monopolized by big companies, Bayer and Baxter acquire as high as 80% market shares. Due to the lack of plasma, China is confronted with tight supply of blood products, with low concentration degree and many manufacturers. In the international blood products market, coagulation factor products take the dominating position; however, in the Chinese blood products market, human albumin and immune globulin products take the dominating position, while coagulation factor products account for a small proportion and have huge potentials in the future. Hualan and Shanghai RAAS have diversified blood products with strong competitiveness.
Hualan’s Operating Income (by Product), 2007-2009 (Unit: RMB mln)

Source: ResearchInChina

Hualan’s Gross Margin (by Product), 2007-2009

Source: ResearchInChina
The international vaccine market has high concentration degree. GlaxoSmithKline, Sanofi-Aventis, Merck, Pfizer/Wyeth and Novartis are the leaders in the market. Chinese vaccine market has low concentration degree, with many manufacturers. Vaccine I (planned vaccine) still has potentials because of the big difference between China and high-income countries in child mortality; Vaccine II has huge potentials in the future with the rise of per capita income and the enhancement of citizens’ awareness of disease prevention. Tiantan Biological has many types of vaccine, and it has acquired Chengdu Ronsen which has one of the largest blood product workshops, so it will achieve growth in the future.

In the international diagnostic reagent market, mergers and acquisitions frequently occur. The pharmaceutical giants are aggressively acquiring small and medium diagnostic reagent companies. Increased product lines and expanded application fields make diagnostic reagent grow rapidly. In Chinese diagnostic reagent market, the major companies include KHB, Da An Gene and so on. The low-end biochemical diagnostic reagents occupy the leading position in Chinese market, but China is developing mainstream immune diagnostic reagents and nucleic acid diagnostic reagents which are popular in the international market.

Monoclonal antibody drugs have been the antibody drugs with the highest compound annual growth rate in recent years. Among Top 20 Best-Selling Drugs in the World in 2009, there were four monoclonal antibody drugs. During 1999 to 2009, the compound growth rate of the global monoclonal antibody drug market reached 62.88%. Chinese monoclonal antibody drug market is still in the initial stage, and the market only values RMB1 billion, showing a big gap with the developed countries in Europe and the United States. Now, China has had antibody drug industrial bases in Beijing, Shanghai and Xi’an. The base in Beijing is led by Beijing Biotech Pharmaceutical Co., Ltd. (BPL) and Beijing Mabworks Biotech Co., Ltd. The base in Shanghai is led by Shanghai CP Guojian Pharmaceutical Co., Ltd. (CPGJ). The base in Xi’an is led by the Fourth Military Medical University and Chengdu Huasun Group.
Recombinant protein drugs are widely used in the treatment of a variety of major diseases, with huge market potentials. GeneScience Pharmaceuticals Co., Ltd. (GenSci) which is a subsidiary of Changchun High and New Technology Industries (Group) Inc. is the first one to develop recombinant human growth hormone in China, with large market shares. Anke Biotechnology is the only manufacturer that is granted with the approval to produce interferon and growth hormone at the same time. Tonghua Dongbao is a leading enterprise in China insulin industry, and long-acting insulin will be the highlight in its future growth. Therapeutic antibodies and genetic engineering vaccines will generate considerable revenue for SL Pharmaceutical.
Table of Contents

1. Overview of Biopharmaceutical Industry
   1.1 Introduction
   1.2 Main Products

2. Overview of Global Biopharmaceutical Industry
   2.1 Development
   2.2 USA
   2.3 Europe
   2.4 Japan

3. Status Quo of China Biopharmaceutical Industry
   3.1 Rapid Growth
   3.2 Policy Support

4. Key Segment Markets of Biopharmaceutical Industry
   4.1 Blood Products
     4.1.1 Concept
     4.1.2 Global Market
     4.1.3 Chinese Market
   4.2 Vaccine
     4.2.1 Characteristics and Classification
     4.2.2 Development in the World
     4.2.3 Development in China
   4.3 Diagnostic Reagents
   4.4 Monoclonal Antibodies
     4.4.1 Profile
     4.4.2 Development in the World
     4.4.3 Development in China
   4.5 Recombinant Protein Drugs
     4.5.1 Interferon
     4.5.2 Growth Hormone
     4.5.3 Recombinant Human Insulin
     4.5.4 Recombinant Human Follicle-stimulating Hormone
     4.5.5 Long-acting Recombinant Protein Drugs
5. Chinese Enterprises

5.1 Hualan Biological Engineering
5.1.1 Profile
5.1.2 Operation

5.2 Shanghai RAAS
5.2.1 Profile
5.2.2 Operation
5.2.3 Strategy

5.3 KHB
5.3.1 Profile
5.3.2 Operation
5.3.3 Strategy

5.4 Da An Gene
5.4.1 Profile
5.4.2 Operation
5.4.3 Strategy

5.5 Tiantan Biological
5.5.1 Profile
5.5.2 Operation
5.5.3 Strategy

5.6 SL Pharmaceutical
5.6.1 Profile
5.6.2 Operation
5.6.3 Strategy

5.7 Changchun High and New Technology
5.7.1 Profile
5.7.2 Operation
5.7.3 Strategy

5.8 Anke Biotechnology
5.8.1 Profile
5.8.2 Operation
5.8.3 Strategy

5.9 Tonghua Dongbao
5.9.1 Profile
5.9.2 Operation
5.9.3 Strategy

5.10 Sino Biopharmaceutical Limited
5.10.1 Profile
5.10.2 Operation

5.11 Other Companies
5.11.1 BPL
5.11.2 CPGJ
• 5.11.3 Wantai Biological Pharmacy
• 5.11.4 Livzon
• 5.11.5 Sichuan Shuyang

6. International Biopharmaceutical Companies
• 6.1 GlaxoSmithKline
  • 6.1.1 Profile
  • 6.1.2 Operation
  • 6.1.3 GlaxoSmithKline (China)
• 6.2 Roche
  • 6.2.1 Profile
  • 6.2.2 Operation
  • 6.2.3 Shanghai Roche
• 6.3 Amgen
  • 6.3.1 Profile
  • 6.3.2 Operation
• 6.4 Novo Nordisk
  • 6.4.1 Profile
  • 6.4.2 Operation
  • 6.4.3 Novo Nordisk (China)
• 6.5 Merck

• 6.5.1 Profile
• 6.5.2 Operation
• 6.6 Novartis
  • 6.6.1 Profile
  • 6.6.2 Operation
  • 6.6.3 China Novartis Institute for BioMedical Research
• 6.7 Sanofi-Aventis
  • 6.7.1 Profile
  • 6.7.2 Operation
  • 6.7.3 Operation in China
• 6.8 AstraZeneca
  • 6.8.1 Profile
  • 6.8.2 Operation
  • 6.8.3 AstraZeneca (China)
• 6.9 Bristol-Myers Squibb
  • 6.9.1 Profile
  • 6.9.2 Operation
  • 6.9.3 Bristol-Myers Squibb (China)
• 6.10 Eli Lilly
  • 6.10.1 Profile
  • 6.10.2 Operation
  • 6.10.3 Eli Lilly (China)
• 6.11 Johnson & Johnson
Selected Charts

- Major Types of Biological Products
- Global Biopharmaceutical Market Scale and YoY Growth Rate, 2000-2009
- Proportion of Global Biopharmaceutical Income (by Region), 2008
- Proportion of Global Biopharmaceutical R & D Expenses (by Region), 2008
- "Blockbusters" in Global Biopharmaceutical Industry, 2009
- Types of Biotechnology Drugs in Clinical Trials in USA, 2008
- Sales Revenue and YoY Growth Rate of China Biological and Bio-chemical Pharmaceutical Industry, 2005-2009
- Sales Proportion of Chinese Pharmaceutical Manufacturing Sub-sectors, 2009
- Proportion of Blood Products in Global Market (by Product), 2009
- Proportion of Blood Products in Chinese Market (by Product), 2008
- Proportion of Chinese Blood Products Manufacturers, 2006
- Major Manufacturers and Their Shares in Chinese Human Albumin Market, 2009
- Major Manufacturers and Their Shares in Chinese Intravenous Human Immunoglobulin Market, 2009
- Major Manufacturers and Their Shares in Chinese Human Coagulation Factor VIII Market, 2009
- Major Manufacturers and Their Shares in Chinese Human Prothrombin Complex Market, 2009
- Sales Revenue and YoY Growth Rate of Global Vaccine Market, 2005-2009
- Vaccine Sales Revenue of Major Vaccine Manufacturers in the World, 2006-2009
- Major Manufacturers and Their Shares in Global Vaccine Market, 2009
- Prevention Sector and Share in Global Vaccine Industry
- Sales Revenue of Blockbuster Vaccine Products in the World, 2006-2009
• Sales Revenue of Vaccines in China, 2006-2009
• Lot Release of H1N1 Influenza Vaccines of All Companies in China, 2009
• Major Manufacturers and Their Shares in Chinese Influenza Split Vaccine Market (by Lot Release), 2009
• Lot Release of Varicella Vaccines, 2009 & Jan-Apr 2010
• Major Manufacturers and Their Shares in Chinese Varicella Vaccine Market (by Lot Release), 2009
• M & A Cases in Global Diagnostic Reagent industry, Jan 2007-Jan 2010
• Major Diagnostic Reagent Manufacturers in China
• Categories of Diagnostic Reagents in China by Proportion, 2009
• Comparison between Monoclonal Antibody Drugs and Traditional Drugs (for cancer)
• Sales Revenue and YoY Growth Rate of Global Monoclonal Antibodies, 1999-2009
• Classification of Recombinant Protein Drugs
• Recombinant Protein Drugs by Product and Share, 2009
• Global Interferon market Scale, 2003-2009
• Chinese Interferon market Scale, 2004-2008
• Major Manufacturers and Their Shares in Chinese Interferon Market, 2009
• Global Growth Hormone Market Scale and YoY Growth Rate, 2003-2008
• Chinese Growth Hormone Market Scale and YoY Growth Rate, 2004-2008
• Major Manufacturers and Their Shares in Chinese Growth Hormone Market, 2009
• Hospital Terminal Scale and Growth Rate of Chinese recombinant insulin, 2004-2009
• Major Manufacturers and Their Shares in Chinese Insulin Market, 2009
• Major Manufacturers and Their Shares in Chinese Follicle-stimulating Hormone Market, 2009
• Sales Revenue of Major Long-acting Recombinant Protein Drugs in the World, 2009
• Hualan’s Operating Income and Net Profit, 2006-1Q2010
• Hualan’s Operating Income (by Industry), 2007-2009
- Hualan’s Operating Income (by Product), 2007-2009
- Hualan’s Operating Income (by Region), 2007-2009
- Hualan’s Gross Margin (by Product), 2007-2009
- Production of Blood Products Manufacturers in China, 2009
- Operating Income and Net Profit of Shanghai RAAS, 2006-1Q2010
- Lot Release of Biological Products of Shanghai RAAS, 2009
- Operating Income of Shanghai RAAS (by Product), 2005-2009
- Gross Margin of Shanghai RAAS (by Product), 2005-2009
- Plasma Volume of Shanghai RAAS, 2007-2011E
- Operating Income of Shanghai RAAS (by Region), 2008-2009
- Comparison between Gene Recombinant Blood Products and Traditional Blood Products
- KHB’s Operating Income and Net Profit, 2006-1Q2010
- KHB’s Operating Income (by Product), 2007-2009
- Sales Revenue of KHB’s Diagnostic Reagents (by Product), 2007-2009
- Forecast for KHB’s Income from Blood Screening Business
- Operating Income and Net Profit of Da An Gene, 2006-1Q2010
- Operating Income of Da An Gene (by Product), 2007-2009
- Operating Income and YoY Growth Rate of Nucleic Acid Diagnostic Reagents of Da An Gene, 2004-2008
- Forecast for Income of Da An Gene from Blood Screening Business
- Operating Income and Net Profit of Tiantan Biological, 2006-1Q2010
- Operating Income of Tiantan Biological (by Product), 2007-2009
- Gross Margin of Tiantan Biological (by Product), 2007-2009
- Operating Income of Tiantan Biological (by Region), 2007-2009
- Operating Income and Net Profit of SL Pharmaceutical, 2006-1Q2010
- Proportion of R & D Cost to Operating Income of SL Pharmaceutical, 2007-2009
• Operating Income of Tiantan Biological (by Product), 2007-2009
• Gross Margin of Tiantan Biological (by Product), 2007-2009
• Operating Income of Tiantan Biological (by Region), 2007-2009
• Operating Income and Net Profit of SL Pharmaceutical, 2006-1Q2010
• Proportion of R & D Cost to Operating Income of SL Pharmaceutical, 2007-2009
• Operating Income of SL Pharmaceutical (by Region), 2007-2009
• Operating Income and Net Profit of Changchun High and New Technology, 2006-2Q2010
• Operating Income of Changchun High and New Technology (by Industry), 2007-1H2010
• Operating Income of Changchun High and New Technology (by Region), 2007-2009
• GenSci’s Sales Revenue and Net Profit, 2003-2009
• GenSci’s Upcoming New Drugs, 2010
• Operating Income and Net Profit of Anke Biotechnology, 2006-1Q2010
• Operating Income of Anke Biotechnology (by Product), 2006-2009
• Operating Income of Major Biological Products of Anke Biotechnology, 2006-2009
• Operating Income and Net Profit of Tonghua Dongbao, 2007-2Q2010
• Prime Operating Income of Tonghua Dongbao (by Product), 2007-2009
• Gross Margin of Tonghua Dongbao by Product, 2007-2009
• Operating Income of Tonghua Dongbao (by Region), 2007-2009
• Operating Income and Gross Profit of Sino Biopharmaceutical, 2007-2Q2010
• Operating Income of Sino Biopharmaceutical (by Product), 2007-2009
• CPGJ’s Sales Revenue from Etanercept, 2006-2009
• GlaxoSmithKline’s Operating Income and Operating Profit, 2006-1Q2010
• GlaxoSmithKline’s Income in All Therapeutic Sectors, 2007-2009
• GlaxoSmithKline’s Income (by Region), 2007-2009
• Operating Income and Operating Profit of Shanghai GlaxoSmithKline, 2007-2008
• Roche’s Sales Revenue and Net Profit, 2007-1H2010
• Roche’s Sales Revenue (by Industry), 2007-2009
• Roche’s Sales Revenue in Pharmaceutical Industry (by Sector), 2007-2009
• Roche’s Sales Revenue in Pharmaceutical Industry (by Region), 2008-2009
• Roche’s Sales Revenue from Diagnostic Reagents, 2002-2009
• Roche’s Income Structure in Diagnostics Sector (by Product), 2007-2009
• Roche’s Income Structure in Diagnostics Sector (by Region), 2007-2009
• Roche’s Sales Revenue from Four Monoclonal Antibody Drugs, 2006-2009
• Operating Income and Operating Profit of Shanghai Roche, 2007-2008
• Amgen’s Operating Income and Net Profit, 2006-2009
• Amgen’s Operating Income (by Product), 2007-2009
• Sales Revenue and Net Profit of Novo Nordisk, 2005-1H2010
• Sales Revenue of Novo Nordisk (by Industry), 2005-2009
• Sales Revenue (by Product) in Diabetes Sector, 2005-2009
• Sales Revenue (by Product) in Biopharmaceutical Sector, 2005-2009
• Sales Revenue of Novo Nordisk (by Region), 2005-2009
• Operating Income and Operating Profit of Novo Nordisk (China), 2007-2008
• Merck’s Sales Revenue and Net Profit, 2007-2009
• Merck’s Income (by Region), 2007-2009
• Income and YoY Growth Rate of Merck’s Vaccine Products, 2002-2008
• Novartis’s Net Sales Revenue and Net Profit, 2007-2009
• Novartis’s Net Sales Revenue (by Industry), 2008-2009
• Novartis’s Net Sales Revenue (by Region), 2007-2009
• Net Sales Revenue and Net Profit of Sanofi-Aventis, 2007-1H2010
• Sales Revenue of Human Vaccines of Sanofi-Aventis, 2009
• Operating Income and Operating Profit of Hangzhou Sanofi-Aventis Minsheng Pharmaceutical, 2007-2008
# How to Buy

<table>
<thead>
<tr>
<th>Product details</th>
<th>How to Order</th>
</tr>
</thead>
<tbody>
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</tr>
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