Construction Competitiveness Evaluation System of Regional BioPharma Industry and Case Study: Taking Shijiazhuang as an Example

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ABSTRACT

Biological pharmaceutical industry not only has the continuous pulling action to region economy, also makes a positive contribution on the human productivity and quality of life. Biological pharmaceutical industry will become the leading industry of the century in quite a long time in the future. Taking Shijiazhuang as an example, according to the regional biopharmaceutical industry planning needs, building the industry competitiveness evaluation system, this paper analyzes the comparative advantage of Shijiazhuang in developing bio-pharmaceutical industry from 4 level evaluation index, including: the industry environment and policy, R & D capability, competitiveness of economic scale and industry support system. Provide a reference for local governments and business.

Keywords: Biological Pharmaceutical Industry, Comparative Advantage, Competitiveness, Evaluation System

INTRODUCTION

Economic globalization changed the understanding for industrial geography and regional economy. New world division of labor will no longer follow state borders or political context, but the regional competitiveness. Industrial development not only depends on the country environment, but more importantly on the overall regional environment. Regional advantage will also form a community gathering effect and form the enterprise ecological system and network value chain within the community, thereby resulting in the regional industrial competitiveness with the competitive advantage. Biological pharmaceutical industry is a sunrise and knowledge-intensive industry, not
only has the continuous pulling action to region economy, but also makes a positive contribution on the human productivity and quality of life. In recent years, China’s various provinces and cities rank the biopharma industry as the key pillar industry of future development, but lack the study of the regional pharmaceutical industry field strengths and overall competitiveness, which cannot correctly guide the local development of pharmaceutical enterprises and medical community formation, resulting in repeat construction of medicine projects and technology and science Park in many areas with serious waste of funds and resources.

Domestic and foreign scholars made a lot of theory studies on competitiveness. In foreign general formed five different research perspectives such as: performance, structure, influence, etc.

Chen, Zhang, and Han (2004) domestic scholar, has been studied on the content of regional competitive power of science and technology, built a technological competitiveness evaluation system, and comparative analyzed the technological competitiveness in China’s Yangtze river delta, pearl river delta and Bohai Economic Circle three big economic regions; Yang (2003) and Huang and Yang (2002) also described the content of the industrial technology competitiveness and built a evaluation index system. But, in the domestic, the evaluation of bio-pharmaceutical industry competitiveness still lack in-depth study. This paper conducted a further study and case analysis.

1. REGIONAL BIOPHARMACEUTICAL INDUSTRY COMPETITIVENESS EVALUATION SYSTEM

Biopharma industry is not only a particular pharmaceutical method, it is an integration for the biotechnology industry and medicine industry, covering six major components such as the relevant basic research systems, biological pharmaceutical enterprises, diagnostic techniques and products, biological medical equipment, testing services and wholesale marketing business. The characteristics are broad prospects, large investment, high risk, long industry chain etc. According to China’s biopharmaceutical industry development situation and the related policy, focusing on the biological industry value chain, based on the previous study, Cai, Wu, and Wu (2004) set up a regional biopharmaceutical industry competitiveness evaluation system (Table 1), including 4 level evaluation index and 19 two evaluation index.

According to different characteristic in different areas, different levels of index can be adjusted. Assign value on index selection and weight of index by the Delphi method, and calculate the competitiveness through hierarchical analysis method. But the comparability between index should to consider when evaluating competition ability because of the regional differences of statistical indicators.

2. COMPARATIVE ADVANTAGE OF SHIJIAZHUANG BIOPHARMA INDUSTRY BASED ON THE EVALUATION SYSTEM

Regional pharmaceutical industry competition ability is a comprehensive ability with comprehensive, dynamic and diverse characteristics. In Shijiazhuang this specific region as an example, the evaluation system around the biological industry value chain and regional pharmaceutical industry competitiveness objectively, accurately analyzes the comparative advantage of Shijiazhuang in developing bio-pharmaceutical industry. provide support and information of Shijiazhuang biopharma industry and realizing the sustainable development of biopharma industry.

3. INDUSTRY ENVIRONMENT AND POLICY

(1) City Location and Resources

Shijiazhuang is the capital of Hebei Province with integration of political, economic, cultural center. It is also an important city in the Beijing-
Determinants of User Acceptance for RFID Ticketing Systems
www.igi-global.com/chapter/determinants-user-acceptance-rfid-ticketing/37840?camid=4v1a

Towards Personal, Social, and Urban Awareness
www.igi-global.com/chapter/towards-personal-social-and-urban-awareness/88793?camid=4v1a