



2018

Introduction to Biotechnology and Pharmaceutical Industries in Taiwan

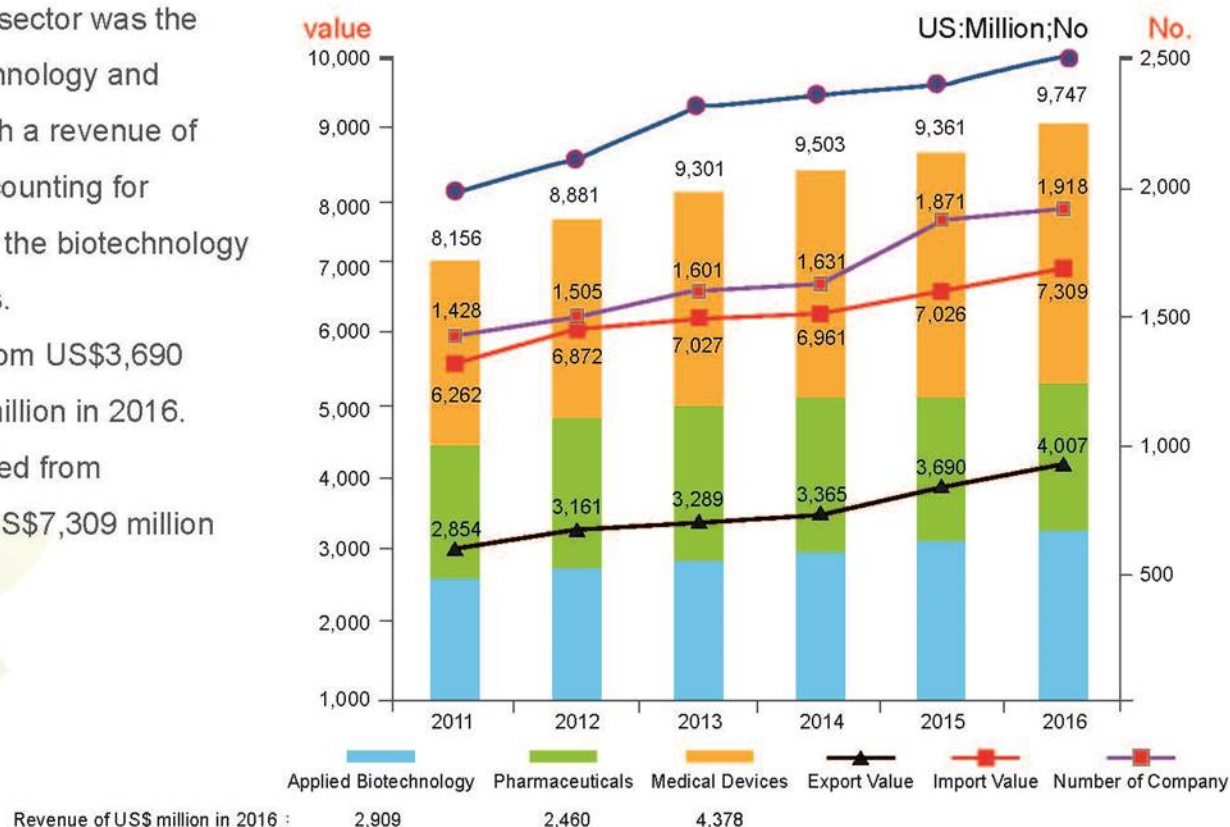


In 2016, the revenue of Taiwan's biotechnology and pharmaceutical industries amounted to US\$9,747 million, representing a growth of approximately 5.5% over the revenue of US\$9,361 million in 2015.

The medical device subsector was the largest within Taiwan's biotechnology and pharmaceutical industries, with a revenue of US\$4,378 million in 2016, accounting for 44.9% of the total revenue of the biotechnology and pharmaceutical industries.

The export value increased from US\$3,690 million in 2015 to US\$4,007 million in 2016.

The import value also increased from US\$7,026 million in 2015 to US\$7,309 million in 2016.

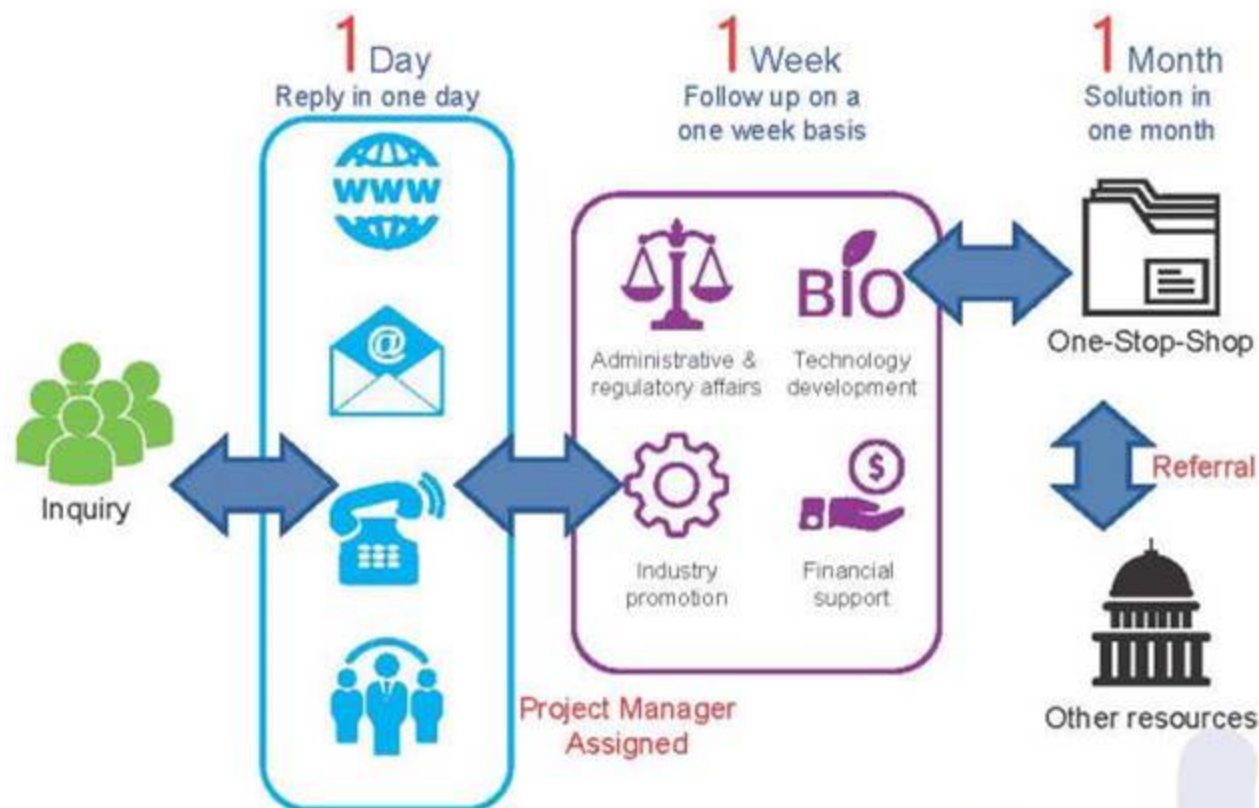


The Best Partner for Biomedical Industry: One-Stop Service Window

The Biotechnology and Pharmaceutical Industries Promotion Office (BPIPO) is the single contact window for Taiwan's biomedical industry. It is a One-Stop Service Window designed to assist companies in the biomedical industries worldwide. The assistances provided by BPIPO include: financial support, investment promotion, stock listing, personnel training and recruitment, R&D collaboration, technology transfer, commercialization, marketing, promotion activities, strategic alliances, and others.

Over the past few years, BPIPO has helped Taiwan's biomedical industry to obtain investments of more than US\$1,500 million per year. BPIPO has also helped set up more than three innovative companies per year. The One-Stop Service Window has helped more than 100 companies per year.





BPIPO

Email: services@biopharm.org.tw

TEL: (886-2) 2655-8135

FAX: (886-2) 2655-8134



<http://www.biopharm.org.tw>



<http://bioass.biopharm.org.tw/>

Local Contacts Worldwide for Taiwan's Biomedical Industry





Industrial Development Bureau, MOEA

Formulating industrial development policies, strategies, and measures; promoting programs related to industrial upgrading, development and management of industrial zones; formulating fiscal and financial measures for industrial development, industrial pollution control, industrial safety counseling and factory management, general industrial administration.

 (886-2) 2754-1255

 No. 41-3, Sec. 3, Xinyi Road, Da'an District, Taipei City 10659, Taiwan

 <http://www.moeaidb.gov.tw>

Department of Industrial Technology, MOEA

Formulating industrial technology development policies; assigning budgets of government technology projects to research institutions to implement and promote industrial development with the goal of establishing emerging high-tech industries and accelerating industrial upgrading.

 (886-2) 2321-2200

 No. 15, Fuzhou Street, Zhongzheng District, Taipei City 10015, Taiwan

 http://www.moea.gov.tw/MNS/doit_e/home/Home.aspx

Biotechnology & Pharmaceutical Industries Promotion Office, MOEA

Acting as the single contact window for domestic and international biomedical-related industries; acting as One-Stop Service Window; promoting industrial investment and integration; assisting biotechnology, pharmaceutical, medical device industry development and upgrade.

 (886-2) 2655-8135

 Room A, 17F, No. 3, Park Street, Nankang District, Taipei City 11503, Taiwan

 <http://www.biopharm.org.tw>





Taiwan: Your Best Partner in Asia

We are One-Stop Service Window for Biomedical Industry

About Taiwan

Taiwan is located at the southernmost point of Northeast Asia, at the center of the East Asian island arc and the western edge of the Pacific Ocean, with Japan and the Ryukyu Islands to the north and the Philippines to the south. Taiwan is not only a crucial Asia-Pacific trade and logistics hub but also a major strategic base. Across its 36,000 km² are diverse natural elements and rich cultures.

Capital: Taipei

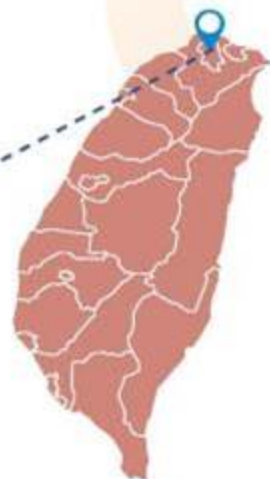
Land Area: 36,000 km²

Population: 23.50 million

Primary Ethnic Groups: Han Chinese, Aboriginal Groups, and New Immigrants

Languages: Mandarin, Taiwanese, Hokkien, Hakka, and Indigenous Languages

Religions/Believes: Buddhism, Taoism, Folk Beliefs, Christianity, and Islam



Taiwan serves as an Asia-Pacific transportation hub connecting Northeast and Southeast Asia. Convenient travel from its world-class international airports makes it possible to fly in an average of just 2.55 hours from Taipei to six major cities in the western Pacific: Tokyo, Seoul, Beijing, Shanghai, Hong Kong, and Singapore. Convenient transport from its world-class harbors makes it possible to ship goods in an average of just 56 hours from the Port of Kaohsiung to five major ports in the region: Manila, Singapore, Hong Kong, Shanghai, and Tokyo. Taiwan acts not only as a crucial hub connecting Europe, America, and Japan to emerging Asia-Pacific markets but also as a preferred location for multinationals to establish Asia-Pacific headquarters.

more information <http://investtaiwan.nat.gov.tw>



Taiwan is currently a member of several international economic organizations, including the World Trade Organization, the Asia-Pacific Economic Cooperation group, and the Asian Development Bank. Moreover, we engage in frequent trade and exchange with over 140 countries worldwide. As the global economy becomes freer and undergoes rapid development, Taiwan is continually adjusting its industrial strategies, easing regulations, removing investment restrictions, and reinforcing measures of intellectual property protection to align itself with international trends.

Major Economic Indicators, Taiwan 2016

GDP	US \$ 529.9 billion
GDP per Capita	US \$ 22,540
Economic Growth	1.48%
Export Value	US \$ 280.32 billion
Import Value	US \$ 230.57 billion
Foreign Exchange Reserves	US \$ 434.2 billion (end of 2016)
Unemployment	3.92% (end of 2016)
Labor Participation Rate	59.01 (end of 2017.08)

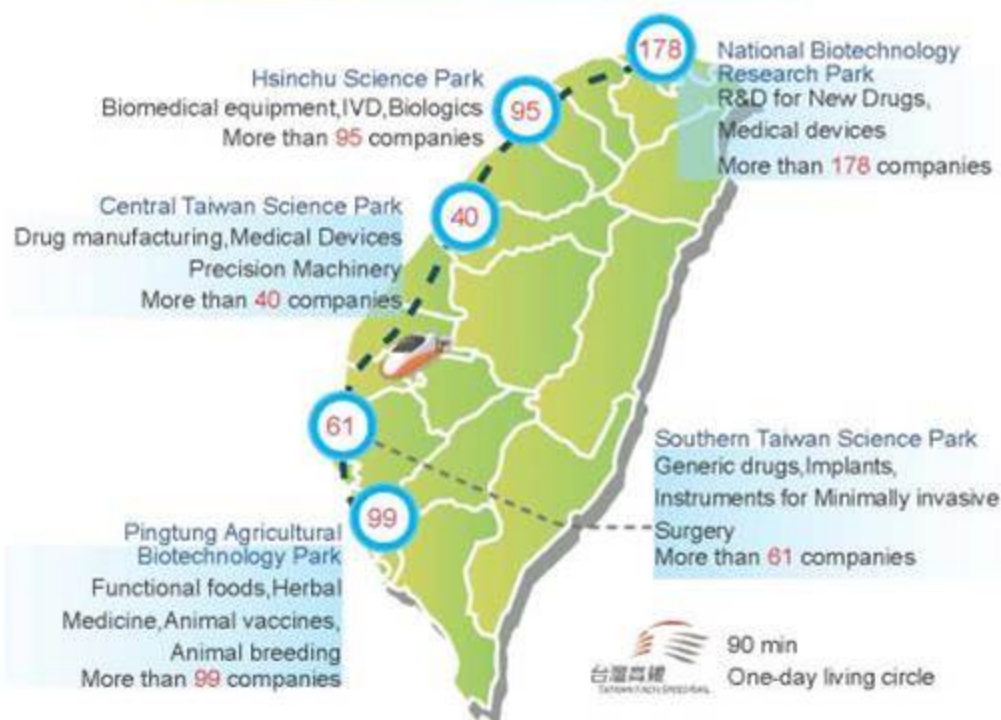
(Sources: National Statistics, ROC (Taiwan))



Why Taiwan

Taiwan's longstanding commitment to promoting global trade and open markets is well established. The government has come this far to create an infrastructure and regulatory framework conducive to the biomedical industry. A favorable location, open financial markets, sound financial institutions, low taxes, a reliable legal system, abundant foreign reserves, and the country's talented people make Taiwan the perfect place for business.

Comprehensive Bio-industrial Clusters



Sound Infrastructure

Taiwan has a dense, comprehensive transportation network and relatively inexpensive water, electricity, and telecommunications utilities, close to 100% penetration.

Asia-Pacific Logistics Hub

Taiwan serves as an Asia-Pacific transportation hub connecting Northeast and Southeast Asia.

Comprehensive Bio-industrial Clusters

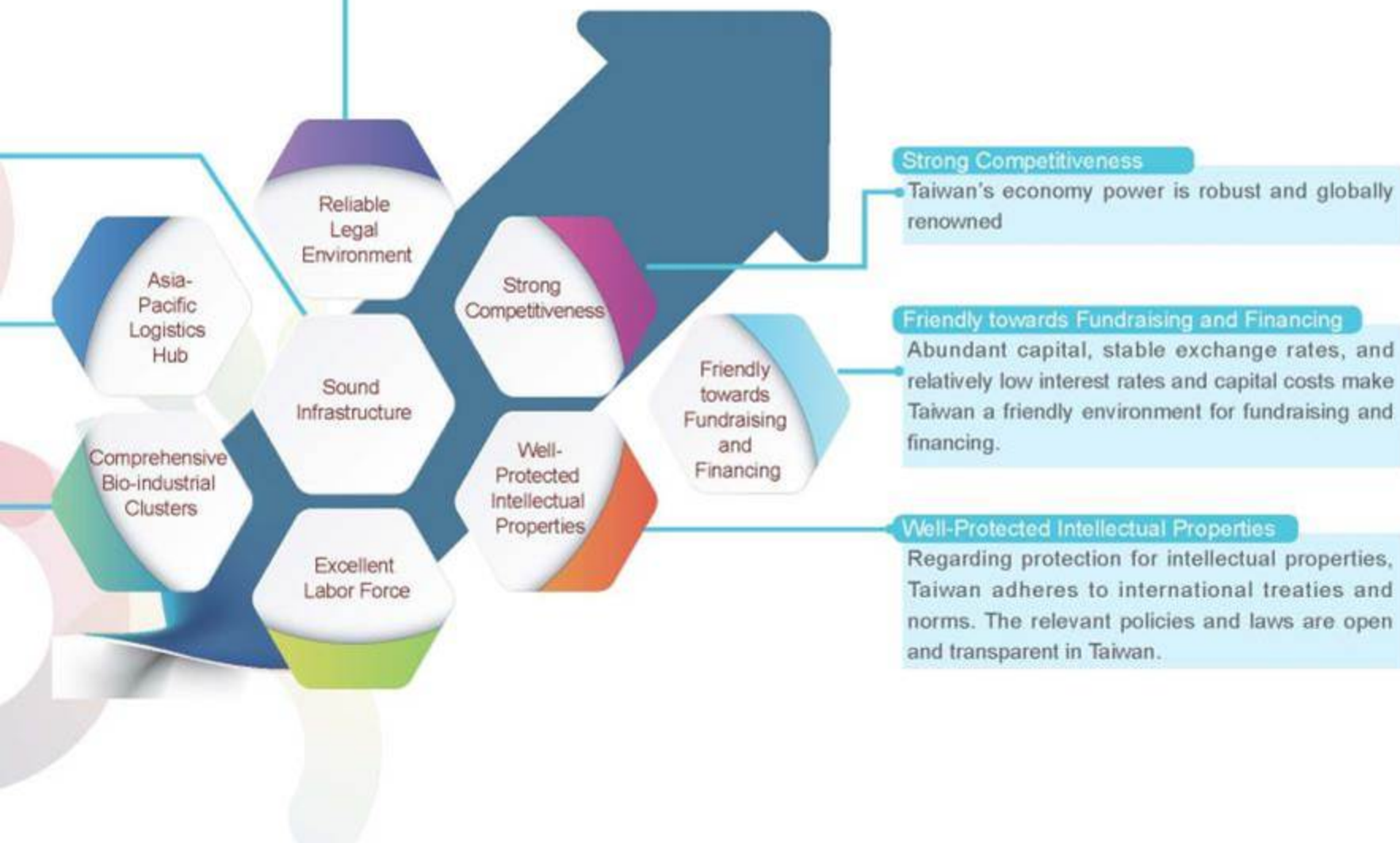
Taiwan has built up biotechnology and medical industry clusters based on local characteristics and the geographical environment.

Excellent Labor Force

Taiwan's excellent labor force is retained by its universal education system, which produces more than 300,000 new graduates each year at the college level or above.

Reliable Legal Environment

Taiwan has a mature and well-established legal system. Additionally, regulations for commercialization are timely adjusted in line with changing international norms, and foreign investors enjoy substantial protection under the Statute for Investment by Foreign Nationals.



Taiwan's Competitive Advantages

- ◆ Abundance of biotechnology personnel who are familiar with the European, US, and Asian markets.
- ◆ Active capital markets and convenient fundraising channels.
- ◆ One-Stop Service Window for biomedical industry.
- ◆ Drug review regulations made in line with international standards and pharmaceutical processes developed in accordance with internationally accepted PIC/S GMP specifications.
- ◆ Taiwan Clinical Trial Consortium (TCTC) is to develop Taiwan as a place of excellence for new drug and clinical trials in the Asia-Pacific region, and to facilitate the development and commercialization of international and domestic Biomedical Products.

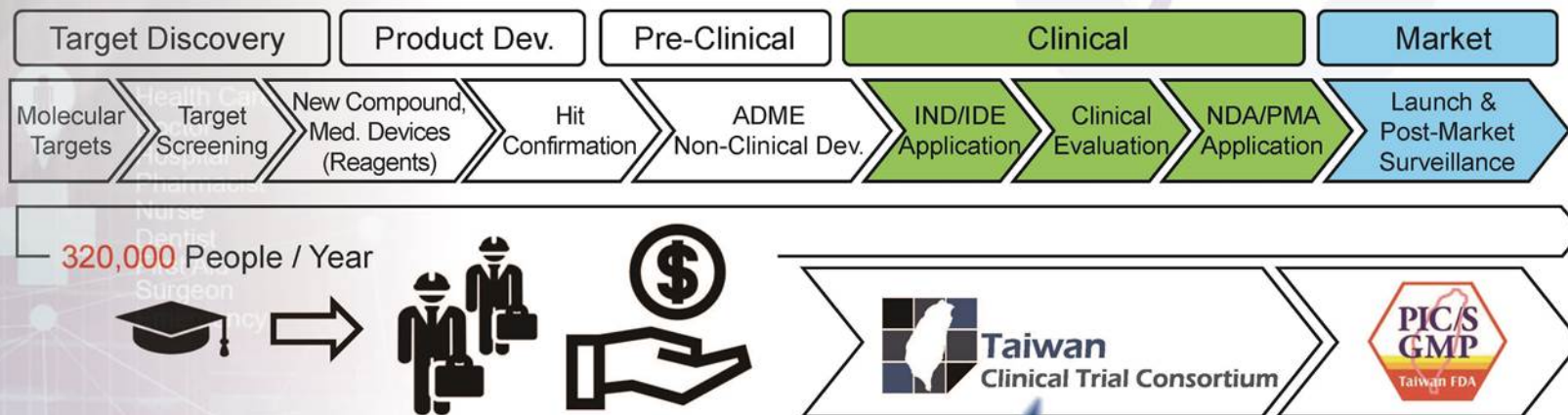


Taiwan
Clinical Trial Consortium



Pharmacist
Nurse
Dentist
First Aid

Health Care
Doctor
Hospital
Pharmacist
Nurse
Dentist
First Aid
Surgeon
Emergency



c-IRB Mechanism (Collaborative IRB Review) since 2013

(updated in 2017.04)

698 multi-center trials using the system

Average of 9.8 days for main review

Average of 7.8 days for expedited review

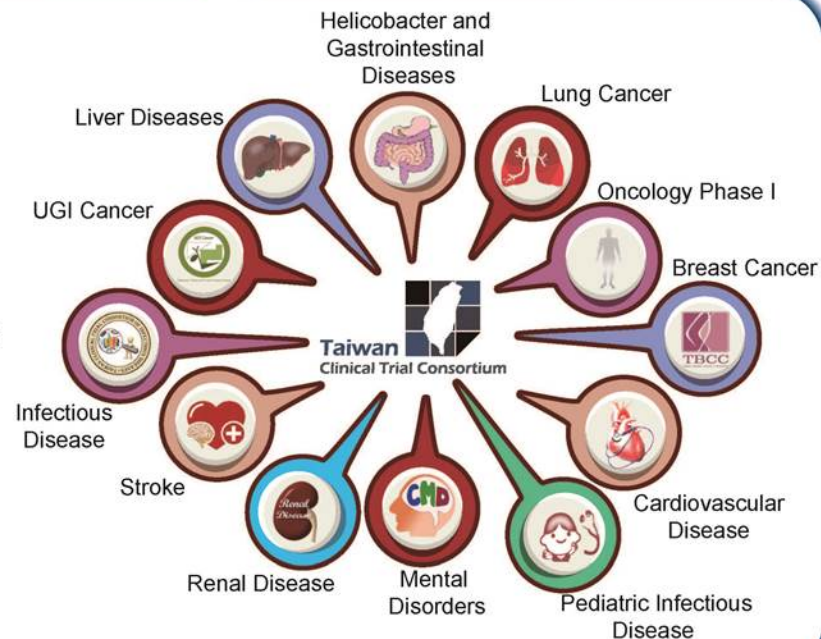
96.7% reviewed within 20 working days

Trials conducted since 2011

★ 427 International Sponsors

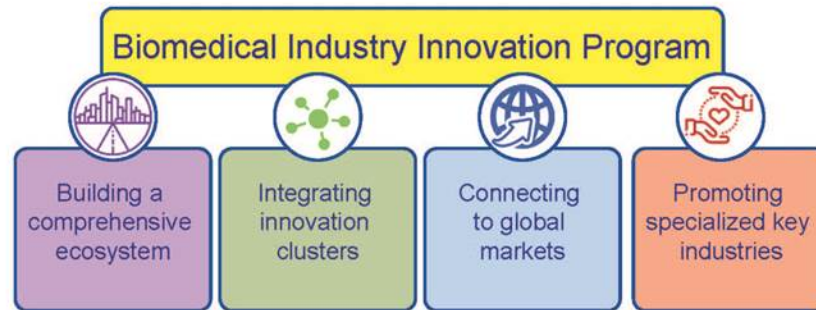
★ 113 Domestic Sponsors

★ 212 Investigator-Initiated Trials



Overview of Taiwan's Biomedical Industry

Taiwan's government has designated biomedicine as one of the "five plus two" innovative industries for priority development. The "Biomedical Industry Innovation Program" to make Taiwan an Asian-Pacific hub for biomedical research and development. This program focuses on the theme of "local, global and future links" and contains four action plans: building a comprehensive ecosystem, integrating innovation clusters, connecting global market resources, and promoting specialized key industries.



Taiwan's biomedical industry has three major sectors: applied biotechnology, pharmaceuticals, and medical devices.

