

Medical Business Strategy: Chinese Market

Business Growth Driven by the Chinese Market

The Chinese market has achieved remarkable growth in recent years. In this section, we outline Olympus' strengths and describe the market conditions and future growth potential.

Robust Business Foundations Based on Long-standing Relationships of Trust with Doctors

In recent years, medical needs in the Chinese market have been expanding due to rapid economic growth, but Olympus' presence in China goes back about 50 years. As part of a medical technology exchange held between Japan and China in 1972, the year when diplomatic relations between the two countries were normalized, a Japanese doctor visited Beijing and an Olympus endoscope was used to perform an examination for the first time in China. Since then, Olympus has been strengthening its business foundations ahead of other companies in the Chinese market, which has offered an abundance of business opportunities because of its increasing and aging population, heightened public health awareness, and variety of measures deployed by the government. Specifically, Olympus has continued to support Chinese doctors in training to learn endoscopic operation and technique from Japanese doctors, while supporting the training of endoscopists capable of performing endoscopy and treatment. We have also worked to make endoscopic diagnosis and treatment more widespread through active cooperation with hospitals and academic societies. In addition to sales, by strengthening the after-sales services at our service sites, we have also responded to the demand for endoscope maintenance and repair services. In this way, the strong business foundations we have built over the years are supporting the current high level of growth. In the years to come, we will make optimal investments and expand business growth to maximize the

potential of the Chinese market, where endoscopy and treatment are expected to increase.

Chinese Government Actively Promoting Healthcare Policies

In China, about 25,000 medical facilities are divided into classes III, II, and I, etc., and there is a tendency for patients to converge on class III hospitals where medical standards are high. In addition, both early-stage diagnosis rates and five-year survival rates for cancer in China are lower than in other developed countries. To resolve this, since the 2010s, Chinese government-led measures have been deployed in two key areas: the standardization of local medical institutions and improvements in medical standards such as at county-level hospitals; and the strengthening of preventive medicine (improvement of early-stage cancer diagnosis and survival rates).

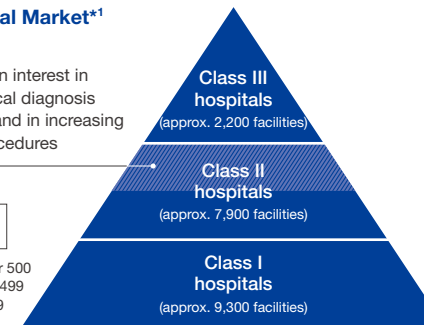
In the "Healthy China 2030" agenda announced in 2016, the prevention of serious diseases was one of the priority items adopted. The presented goal was to improve five-year survival rates for cancer by 15% by 2030 by conducting early screening activities in geographical areas with a high incidence of major cancers. In addition, a working plan for overall improvement of comprehensive capabilities of county-level hospitals was released in 2019. The aim of the plan was to raise the healthcare standards of 500 county-level hospitals and 500 Traditional Chinese Medicine (TCM) hospitals to the same level as a class III hospital or a class III TCM hospital. In this way, Olympus sales are expanding

China's Potential Market*1

Hospitals with an interest in advanced medical diagnosis and treatment, and in increasing endoscopic procedures

Number of Beds per Hospital

Class III hospital: Over 500
Class II hospital: 100-499
Class I hospital: 20-99



*1 As of March 31, 2021

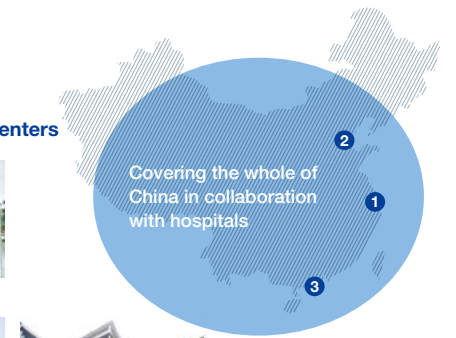
Chinese Training Centers



1 Shanghai



2 Beijing



Covering the whole of China in collaboration with hospitals



3 Guangzhou

rapidly as new hospitals are being constructed and capital investments are being actively carried out to bring about improvements in the level of medical care at class II hospitals.

Supporting Endoscopist Training

In recent years, demand in China for early diagnosis and minimally invasive treatments has been increasing due to the growing health awareness among its people, but the number of endoscopists per 100,000 people remains low (Japan: 25 endoscopists, China: 2.2 endoscopists*2), and the shortage of endoscopists is becoming an urgent issue.

Based at three in-house training centers in Shanghai, Beijing, and Guangzhou, as well as at collaborative training centers affiliated with around 20 hospitals nationwide*3, Olympus is supporting training for endoscopists throughout China by providing a range of learning programs. In addition to hands-on training (on-site training) by each disease/procedure, which is conducted by doctors who have a wealth of clinical experience, the program includes online tutorials for before and after the hands-on training, so it allows healthcare professionals to learn everything from theory and basic knowledge to hands-on operation by means of comprehensive training according to their individual levels. These programs are held in high regard by participants. Olympus also invites Japanese doctors to China who tutor Chinese trainers. Most recently, we have been supporting Japanese doctors who provide online lectures on the activities of Chinese trainers and evaluate as well as comment on case presentations.

*2 Source: Calculated by Olympus using publicly available data *3 As of September 2021

Approx. **25,000** people

Number of doctors who have participated in Olympus training programs over the past five years* (including approximately 5,000 online participants in FY2021)

*4 FY2017 to FY2021

Training Example

Day 1	Pre-training tutorial
✓	<ul style="list-style-type: none"> Watch online video content in advance E-learning
Day 2	On-site training at the training center: half day to one day
✓	<ul style="list-style-type: none"> Lecture by a trainer who has a wealth of clinical experience Hands-on training covering the procedures of each clinical department using a medical mannequin, etc. Live demonstration/live streaming Discussion
Day 3	Follow up and post-training tutorial
	<ul style="list-style-type: none"> Online follow-up training Information on other training

History of Olympus Business in China

Around **50** years

1972
Entry into the Chinese market

1972
Normalization of diplomatic relations between Japan and China / First Japan-China endoscopy exchange meeting



Prof. Chen Minzhang (second from left), who was then Chief of Gastroenterology at Peking Union Medical College Hospital, performs the first endoscopic examination in China under the instruction of Prof. Rikiya Fujita (left), an assistant professor at the University of Tokyo

1979
Opened Olympus endoscope repair center in Shanghai (Managed by contract with/under consignment to Chinese state-owned enterprises)

1983
Endoscope training center opened in the teaching hospital, Peking Union Medical College Hospital



1987
Established representative office in Beijing

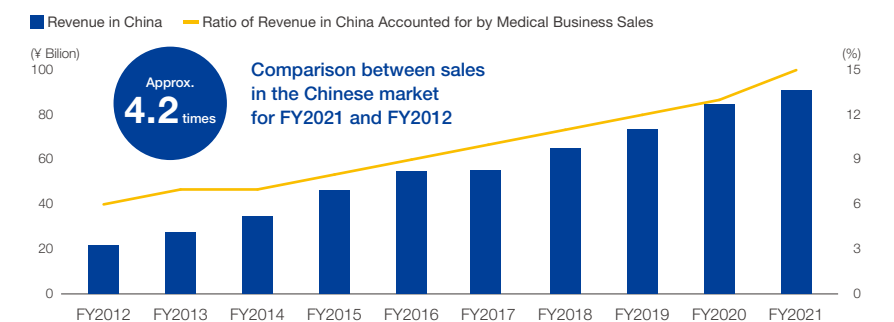
Endoscopic training by Japanese doctors in China (1984)

1999
Established a logistics base in Shanghai and a medical equipment service base in Beijing

2003
Established a local subsidiary in Beijing

2008/2010/2013
Established China Medical Training & Education Centers (C-TECs) in Shanghai, Beijing, and Guangzhou

Chinese Sales Growth Trends in the Medical Business



A Doctor's Perspective

Olympus, an irreplaceable asset after many years of contributing to China's medical society



Dr. Guiqi Wang
Chairman, Professor,
Department of Endoscopy,
Cancer Institute,
Chinese Academy of
Medical Sciences,
Peking Union Medical College

Other positions held by Dr. Wang

- Executive Director of the Ministry of Health (rural) of the People's Republic of China (PRC)
- The Group Supervisor (Leader) of the Expert Committee of Early Detection and Early Treatment of Upper GI-Cancer (Esophageal and Cardiac Cancer) (rural) of the Ministry of Health of PRC
- Chairman of China Anticancer Association - Tumor Endoscopic Professional Committee
- The Member of the Expert Committee of Early Detection and Early Treatment of Cancer (Stomach and Lung Cancer) of the Ministry of Health of PRC
- Standing Committee of Chinese Society of Digestive Endoscopy
- Standing Committee of Chinese Medical Doctor Association

Continuous Support for the Project for Early-stage Diagnosis and Treatment of Cancer in Rural Areas

It has been my pleasure to work with Olympus for 23 years as an endoscopist on the development of gastrointestinal endoscopy in China. One highlight that particularly stands out in our long journey together is when I collaborated with Olympus to launch a public-interest project for diagnosis and treatment of early-stage cancers in rural areas in 2005. At the time, China had only just begun early-stage diagnosis and treatment, so we started by developing systems and establishing a philosophy. The project for early-stage diagnosis and treatment of cancer was able to get off to a smooth start through the conclusion of a long-term strategic agreement with Olympus. Over the next 16 years, the project was able to develop significantly thanks to the tireless efforts, mutual trust, and cooperation of both parties.

While the project started out covering five provinces and eight prefectures/cities, it has now grown to 31 provinces and approximately 900 prefectures/cities throughout China. By 2035, it is expected to expand to 31 provinces, approximately 2,800 prefectures/cities and approximately 6,000 medical institutions throughout China. The Chinese government has also come to focus on such initiatives, positioning cancer screening and early-stage diagnosis and treatment as a key focus for improving citizens' health, and has implemented a series of related policies to ensure this. We are also working to

ensure "not one medical institution, not one department, and not one patient is left behind."

This project has implemented a diverse range of initiatives to establish foundations that are supporting the medical development in various regions. First, there has been an improvement in health awareness for Chinese citizens. In the past, because there was a belief in China that a person could not recover from cancer, patients with such a diagnosis would lose color from their faces and would hate treatment, often trying to hide the fact they were sick. While there were significant strides in chemotherapy and radiotherapy technologies, the effectiveness of treatment was unsatisfactory because it took a long time between finding the cancer and treating it. This project has spent many years undertaking various forms of awareness raising initiatives for the people of China, and, by proactively explaining to medical institutions, we have been able to spread the common understanding that the possibility of curing cancer increases if it is found in its early stage using endoscopic screening. I think this shift in understanding is very important. Without this change in people's awareness, or them proactively getting screened, no matter how much effort doctors—including myself—make, or no matter how much progression is made in doctors' skills, we will not be able to achieve the dissemination of early-stage diagnosis and treatment.

Of course, improving the doctors' abilities is an important point. Before these initiatives, rural areas were lacking in medical resources compared to other areas, in addition, there was no training related to medical care and the concept of early-stage diagnosis and treatment was not widespread. I believe it was because of the significant support from Olympus, such as for technology dissemination activities through academic exchange, that many doctors had the opportunity to continuously acquire new knowledge and improve their skills. We can understand that Olympus has not only been selling products, but also has been focused on academic exchange and dissemination of skills through support activities such as when Chinese doctors acquire skills in clinical settings in Japan or when experienced Japanese doctors visit China to give lectures or demonstrations. With so many years of hard work in the Chinese market, Olympus is now irreplaceable and indispensable for China.

The Greatest Progress in the Medical Industry is the Increasing Role of Surgery in Internal Medicine

I believe, looking back at the last 20 years, the greatest

advance made in medical care is the increasing role of surgery in internal medicine. Surgery for esophageal, stomach, and colon cancers that in the past needed to be conducted by a surgeon can now be done by an endoscopist. Gallstone treatment, which in the past required an incision in the abdomen, can now be performed by using endotherapy devices. While the main field contributing to internal medicine becoming more surgical is gastrointestinal endoscopy, I believe, innovations such as Olympus' Narrow Band Imaging (NBI) technology and endoscopic treatment of early-stage cancer, or Endoscopic Submucosal Dissection (ESD) have greatly progressed endoscopy.

While NBI technology has been used in China for more than 10 years, it can definitely be considered a technology ahead of its time. Olympus has provided a great number of junior doctors with opportunities to examine a diverse range of cases and has held a NBI image contest* in order to support the training of those junior doctors. Growth of junior doctors through such initiatives has led to significant development in the endoscopy department and all kinds of clinical settings. The endoscopy department has now become the most influential of all hospital departments.

The first time I remember seeing the ESD procedure was in 2006. I observed the procedure on a visit to Japan on a deployment to the Chinese Society of Digestive Endoscopy. Soon after returning to China, I tried to put into practice what I had learned in Japan. However, while I had an endoscope for screening, there were no endotherapy devices in China such as electrosurgical knives. While I had no experience or skills using endotherapy devices, it was Olympus who gave me the necessary support for facilities and products for treatment. In addition to promoting academic exchange and dissemination, Olympus has supported the training of endoscopists by operating a training center that provided endoscopists with opportunities for application of practical skills. I believe, the entire process—from lesion detection to diagnosis and treatment—was able to be established in China.

*The NBI image contest is not only a contest for NBI image quality, but also a contest for quality that is based on actual case reports—from examination of the case and decisions on diagnosis and treatment methods through to the consistency of these with the final pathological diagnosis.

I Want Olympus to Continue Being a Leader in Endoscopy through Technological Innovation, Academic Exchange, and Dissemination Activities

I want Olympus to continue innovating as a leader in endoscopy. I am particularly interested in future developments in AI technology, technology enabling diagnoses to occur in real time, integration of internal medicine with surgical medicine, reduction of burdens placed on doctors, and

dissemination of technology. For example, by analyzing an endoscopic image with AI technology, distinctions can be made in real time for whether or not a lesion is a tumor, or, if it is a tumor, what is the likelihood of it being cancerous. If such diagnoses by doctors are supported, this kind of technology can be utilized not only in large hospitals, but also in a wide range of medical institutions. While in the past, doctors in general were only responsible for their specific range of expertise—internists were only concerned with internal medicine and surgeons with surgery—currently, internists are shifting toward surgery and surgeons are shifting toward internal medicine. Over the next 20 years, the roles of doctors and surgeons are expected to overlap. If doctors are able to conduct surgery to remove various organs by using an endoscope based on technology and integrated platforms developed by Olympus for diagnosis through to treatment, then it may become unnecessary for surgeons to make abdominal incisions.

There is not only an integration of platforms and technology, but also an integration with pathology. Currently, pathological diagnosis is the standard method for making a definitive diagnosis after endoscopic diagnosis and treatment. However, I believe endoscopic diagnosis is getting closer to pathological diagnosis with the advent of NBI technology, magnifying endoscopes, and ultra-high magnifying endoscopes, which are capable of performing imaging similar to a microscope and down to a cellular level. If endoscopists can not only discover lesions, but also determine the type of lesion, this can be considered useful in improving efficiency of medical treatments overall. Furthermore, I believe in the future there will be an increasing focus on improving patients' QOL and on reducing the burden placed on doctors.

I have high expectations for the future of Olympus products, which are contributing to reducing that burden placed on doctors, through improvements in usability and technological developments that support even higher precision diagnosis and treatment, and are also providing safe and secure endoscopy to patients.

Finally, regarding dissemination of medical technology, I believe the academic exchange and dissemination activities Olympus has conducted over the last couple of decades are worthy of praise. I would like Olympus to continue supporting doctors in gaining even more advanced skills and technologies, and junior doctors in acquiring appropriate endoscopic techniques by providing even more opportunities for training.

I would like Olympus to continue enhancing endoscopy in China by collaborating with endoscopists and listening to the opinions of those in clinical settings. In this way, I hope both endoscopy in China and Olympus can develop and grow together.

A Doctor's Perspective

I hope Olympus will continue contributing to improving endoscopic diagnosis and treatment technology in China



Dr. Zelong Han
Department of Gastroenterology
Nanfang Hospital of Southern Medical University

Other positions held by Dr. Han

- Member, 8th Senior Endoscopic Research Group, Chinese Society of Digestive Endoscopy
- Lecturer (Gastrointestinal Endoscopy), Endoscopist Training Center, Chinese Medical Doctor Association
- Standing Committee Member, Gastrointestinal Endoscopy Junior Doctors Committee, Chinese Endoscopist Association of Chinese Medical Doctor Association
- Deputy Chairperson, Junior Doctors Committee, Gastrointestinal Endoscopy Subcommittee, Guangdong Medical Association

Many Academic Events are Held to Gain Knowledge and Exchange Ideas

In the past, I have participated in many academic events held by Olympus, and the one most prominent in my memory is ANBIG*, which was held at the Guangzhou Training Center in 2015. By interacting with experts from other Asian countries in gastrointestinal endoscopy, my motivation for studying early-stage gastrointestinal cancer in depth grew. In 2016, I had the opportunity to visit the Japanese university hospital where Dr. Kenshi Yao teaches and was able to learn directly from him endoscopic diagnoses of early-stage gastric cancer. Dr. Yao's earnest approach to learning and enthusiastic approach to teaching made a very deep impression on me. I kept in contact with Dr. Yao after returning to China, and with his help, started an international training program related to screening for early-stage gastric cancer (co-organized by Olympus and Department of Gastroenterology, Nanfang Hospital)—which, in 2021, entered its fifth year.

This program is also making a positive impact in the academic world for junior endoscopists in China, as a place where they can perfect their skills and expertise. I hope this program will continue to increase the number of junior



endoscopists and support their careers, while also raising the level of endoscopic diagnosis in China, and, by extension, contribute to patients' health.

Olympus Products Meeting Diagnostic and Treatment Needs

For endoscopists conducting an examination, important features of an endoscope include the image quality, magnification, ability to observe using specific light spectra and operability. In my opinion, Olympus magnifying endoscopes meet clinical diagnostic needs as they can clearly show the surface structure of lesions and the structure of vessels. Regarding treatment, operability of an endoscope is key, such as how it feels when being handled, the flexibility of the endoscope's distal end, diameter of the forceps channel, as well as the auxiliary water feature. I think Olympus endoscopes have excellent operability in regards to these and are useful in a range of clinical treatments.

Contributing to Improving Endoscopic Diagnosis and Treatment Procedure in China

Even though China has a large population and high incidences of stomach and colon cancers, there is a lack of endoscopists and endoscopes. Therefore, many people currently do not have the opportunity to receive endoscopic screening. The Chinese government is also undertaking measures related to early-stage diagnosis and treatment of gastrointestinal cancer, and if more endoscopists are able to engage in diagnosis and treatment, this will contribute to the health of the Chinese people. If in the near future, gastrointestinal cancer can be detected in early stages, the need for minimally invasive treatments using endoscopes will certainly increase.

Olympus has a strong sense of social responsibility and values endoscopic training very highly. Moreover, Olympus is a leader in the Chinese gastrointestinal endoscopy market. I look forward to Olympus continuing to provide high-quality products and services for clinical applications through its cutting-edge research and development in gastrointestinal endoscopy as well as utilizing its strengths to improve endoscopic diagnosis and treatment procedure in China by continuing to make academic exchange possible for endoscopists in China.

*Asian Novel Bio-Imaging and Intervention Group—a non-government organization Olympus supports as its main sponsor who provides training opportunities in Asia for early-stage diagnoses and minimally invasive treatments through the standardization of endoscopic diagnoses and treatments.

A Corporate Officer's Perspective

We aim to make a global contribution and maintain high growth

Providing Support to Build the Foundations of Endoscopy in China

We have been supporting the foundations of endoscopy in China for almost 50 years. This has involved not only selling endoscopes, but also focusing on supporting training for endoscopists, and endeavoring to improve doctors' expertise and standardizing both procedures and endoscopic operation by providing advanced medical devices as well as platforms for training. I believe China has significant potential for growth as it is currently at a stage where endoscopes are gaining popularity, with new medical facilities being established and capital investment being actively undertaken. In particular, early diagnosis and early treatment of gastrointestinal cancer is in line with Chinese government policy, so we will continue offering support in collaboration with the Chinese government and medical community.

Medium- to Long-term Growth Strategy in China

A key initial initiative from a medium- to long-term perspective is to expand the potential of the market, and the key to our growth is to actively promote cancer screening. Currently, medical resources and patients in China are concentrated in class III hospitals that have high medical standards, however, the Chinese government is carrying out a policy to improve this situation known as hierarchical diagnosis and treatment. The goal is for endoscopic screening to be undertaken at rural hospitals, which will mean that in the future, the number of endoscopists in rural hospitals will increase, enabling much more screening to take place than what is being done currently. We will support the building of this framework in collaboration with the Chinese government and doctors in China.

In the future, I believe we will have a significant role contributing globally within the Olympus Group. Until now, Olympus has been inviting Japanese doctors to China to conduct training programs and rolling out medical devices and technologies developed in Japan or overseas into China. However, in recent years in China, research and development have advanced—not only in the Medical Business—and particularly the digital field has seen remarkable development. With technological development predicted to rapidly progress in the future, by listening attentively to the opinions of doctors and health professionals in China who have advanced thinking and ideas in the Medical Business—and to lead these into



Wenlei Yang
Corporate Officer,
China Strategy, Global
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Olympus (China) Co., Ltd.
President

development of Olympus products and services—we aim to increase our competitive advantage not only in the Chinese market but also in the world. To further develop future market potential, we will focus on strengthening product development and upstream marketing functions, as well as online initiatives and online marketing using advanced digital technologies.

Contributing to Chinese Society and the Medical Field through Total Solutions

Recently, there has been increasing downward pressure on prices for medical devices due to centralized purchasing and preferential treatment of domestic products by the Chinese government. While there is concern about the impact on our business, particularly for consumables, we will work to achieve growth by providing total solutions that are a unique strength of Olympus. While on the one hand, we will continue efforts to reduce costs through improvement initiatives at Olympus facilities, on the other hand, we will continue to introduce differentiated, high value-added products, to position ourselves in a different playing field to local manufacturers. Also, I believe it is important to propose total solutions, which include services and training programs, and not merely individual product technologies. For example, in recent years, we have been expanding our services to proposals such as for efficient floorplan layouts based on the healthcare professional's flow line required for endoscopy and for energy conservation and efficiency of operating rooms. Moreover, we are further strengthening service infrastructure including planning construction of new repair centers. In the near future, we plan to contribute comprehensively to Chinese society and the medical field by building a unique ecosystem in collaboration with hospitals, other companies, and the Chinese government.