2017

Corporate Social Responsibility Report

TTY BIOPHARM
台灣東洋藥品

Contents

About TTY Biopharm

TTY Biopharm was incorporated on July 22, 1960. The headquarter is located at 3F, No. 3-1, Park Street, Nangang District, Taipei City. TTY Biopharm is a biopharmaceutical company that specializes in the development [RC(1] of new drugs and delivery methods. Our main business activities involve manufacturing, processing and trading of various medical supplies and chemicals. Our main products include: oncology (cancer) drugs and anti-infective drugs. The Company was listed on Taipei Exchange in September 2001 with share capital of NT$ 2,486.5 million. There had been no material change in the Company or its supply chain during the reporting period.

Competitive Advantage

The Company's competitive advantage lies in the production of liposome and lipid microsphere. We are one of the few companies in Taiwan that possess the technology to provide one-stop pharmaceutical services from research, development, manufacturing to sales. In addition to our world-leading R&D capabilities, we have also been able to deliver valuable and stable products we make, which provide the drivers for the Company's revenue growth.

We specialize in the development of new drugs and customized delivery methods. We direct our long-term concentration towards certain generic drugs that involve significant barriers to entry. Of all the products produced by TTY Biopharm, liposome and lipid microsphere are the two technologies in which the Company has developed world-leading advantage in terms of delivery design, commercialization, and massive production. Both technologies have been partnered by large pharmaceutical companies around the world and are currently being licensed.

Markets Served

The Company sells its products mainly within Taiwan, while Europe and USA constitute the primary export destinations. Other export

▼ Markets Served (unit: NTD thousands)

	Domestic sales	Export sales	Subtotal
Ointment	73,160	-	73,160
Oral dosage form	1,667,333	68,014	1,735,347
Injection	1,351,268	755,632	2,106,900
Others	71,466	217	71,683
Total	3,163,227	823,863	3,987,090

Note: The amounts above exclude service income such as royalty, commission and R&D income.

destinations include Thailand, Philippines, Vietnam and Malaysia. In terms of distribution, products are mostly sold directly to medical centers and regional hospitals, and through distributors to local hospitals, clinics and pharmacies. People who benefit from the Company's products are mostly cancer/tumor patients, hospitalized patients with infection, and patients with conditions such as gastroesophageal reflux, osteoporosis, high uric acid and bacterial infection.

Products and Services

The Company is committed to the research and development of drug delivery systems. We have commercialized a broad range of dosage forms including: liquid, semi-sold, solid, topical, oral, injection, liposome injection, sustained release injection, sustained release oral dosage, and micro/nano emulsions, where "liposome production" is the technology for which we are most reputable. After obtaining drug permit license for "Lipo-Dox" in 1998, TTY Biopharm became the world's 3rd biopharmaceutical company to master the production of liposome.

TTY Biopharm is driven by visionary R&D, marketing and market expansion strategies. We currently produce drugs for anti-tumor, anti-infection of critical disease, chronic illness and general healthcare, and have been actively exploring new drug markets in recent years to further complete its product portfolio while providing the growing catalysts needed to support short-term and long-term business success.

In addition to the research, development, manufacturing, marketing and licensing of drugs, TTY Biopharm also provides diverse services as a contract research organization (CRO), a contract manufacturing organization (CMO), and a contract development and manufacturing organization (CDMO). By engaging global pharmaceutical companies in contracted product design and manufacturing, TTY Biopharm has been able to strengthen our worldwide reputation as a CDMO in recent years.

▼ Main Products and Indications

Main products and indications	• Oncology drug: Anti-cancer drugs. • Anti-infection drug: Cephalosporins, macrolides, sulfonamides, anti-TB, and lipopeptide. • Healthcare: Gastrointestinal tract care and bone care.
New products (services) planned for the future	• Development of new drugs including anti-cancer drugs, biologic drugs, and anti-infection drugs for critical diseases. • Development of liposome or lipid microsphere-covered products for more efficient delivery of targeted drugs. • Ongoing development of chemical technologies and manufacturing documents that conform with international market specifications.

Established Oncology Translational Research Center

TTY is responsible for almost the whole pharmaceutical industry value chain, including marketing of Taiwanese pharmaceutical industry, R&D of marketing, corporate development and medical contributions.

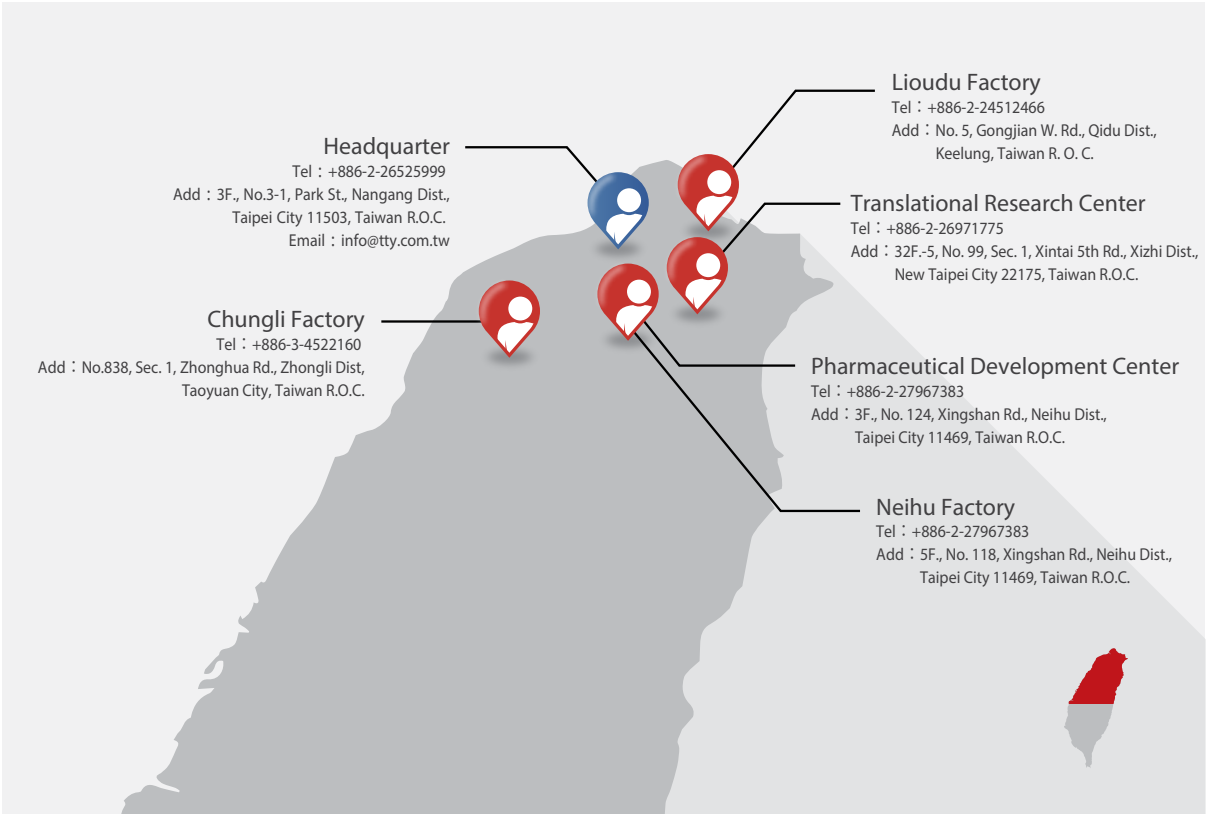
Translational medicine is an inter-field science connecting basic research and clinical application. It combines efficient two-way verification methods with the discovery of disease biomarker or drug candidate from basic research to ultimately become new methods for diagnosis and treatment.

TTY Oncology Translational Research Center was established in 2007. It has a professional project team for early-stage new drug development, which is established to implement translational medicine and help with medical needs. The team is equipped with an ISO/IEC 17025 testing laboratory, Bio Safety Level 2 (BSL2) laboratory and Specific Pathogen Free (SPF).

In the early stage, the center utilize the advanced translational medicine technologies for drug exploration, verification, assessment, licence, and cooperation. The center are not only involved in satisfying the medical needs and improving the quality of human's life but also responsible for the development of basic medical research and clinical application. In the early part of industry value chain, as a pioneer of druggability and new drug invention, TTY expects to be the head of medical health industry in Taiwan.

Participation in External Associations

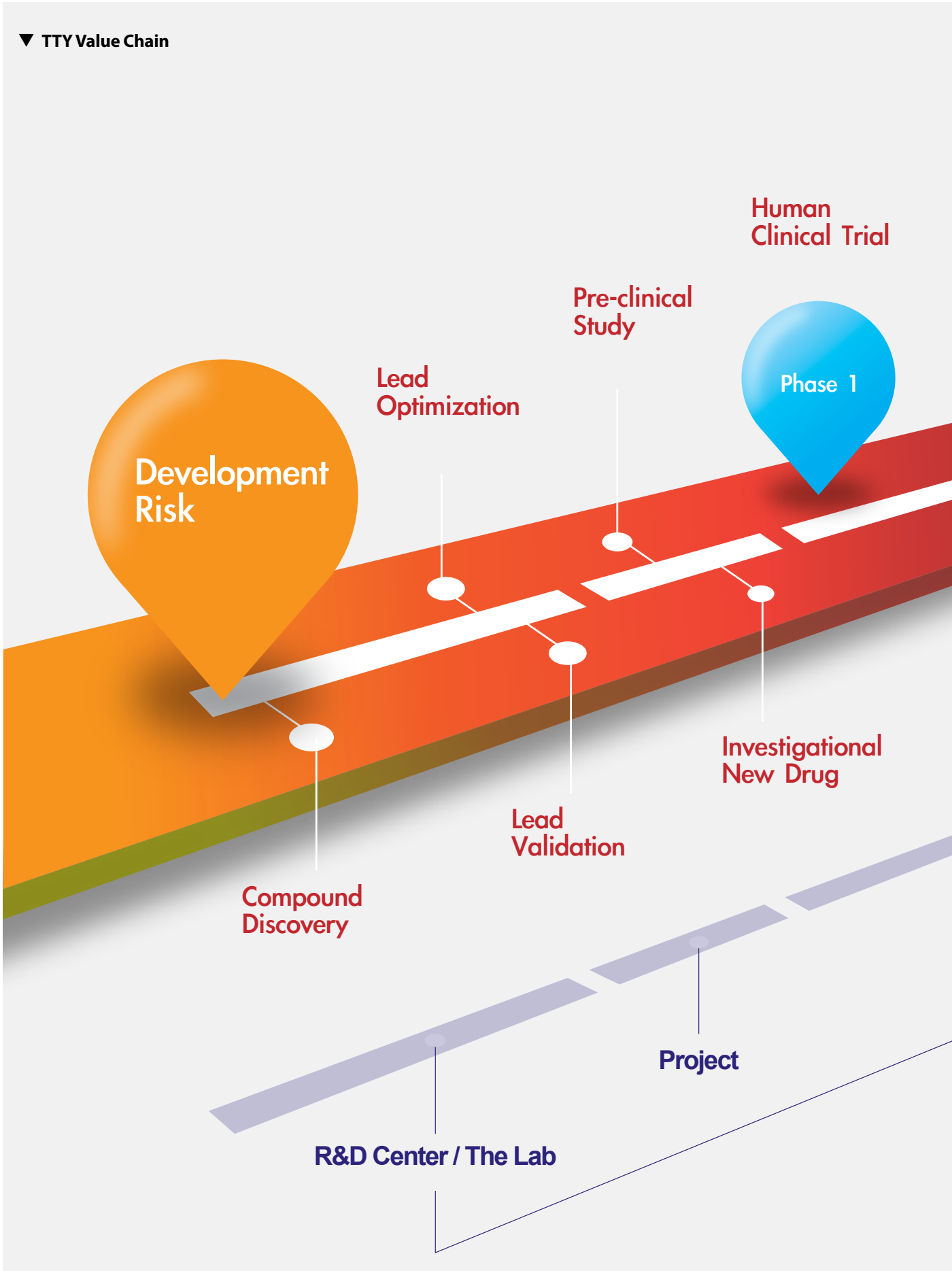
TTY Biopharm is fully aware that participation in various associations and societies provides excellent communication channels that facilitate a constant refinement of TTY's R&D capabilities in the biopharmaceutical industry and maximize the company's influence in the field of CSR. TTY therefore actively participates in various industry associations as a member or director with the goal of drawing attention of competitors to sustainable operations through the company's influence in the biopharmaceutical industry.

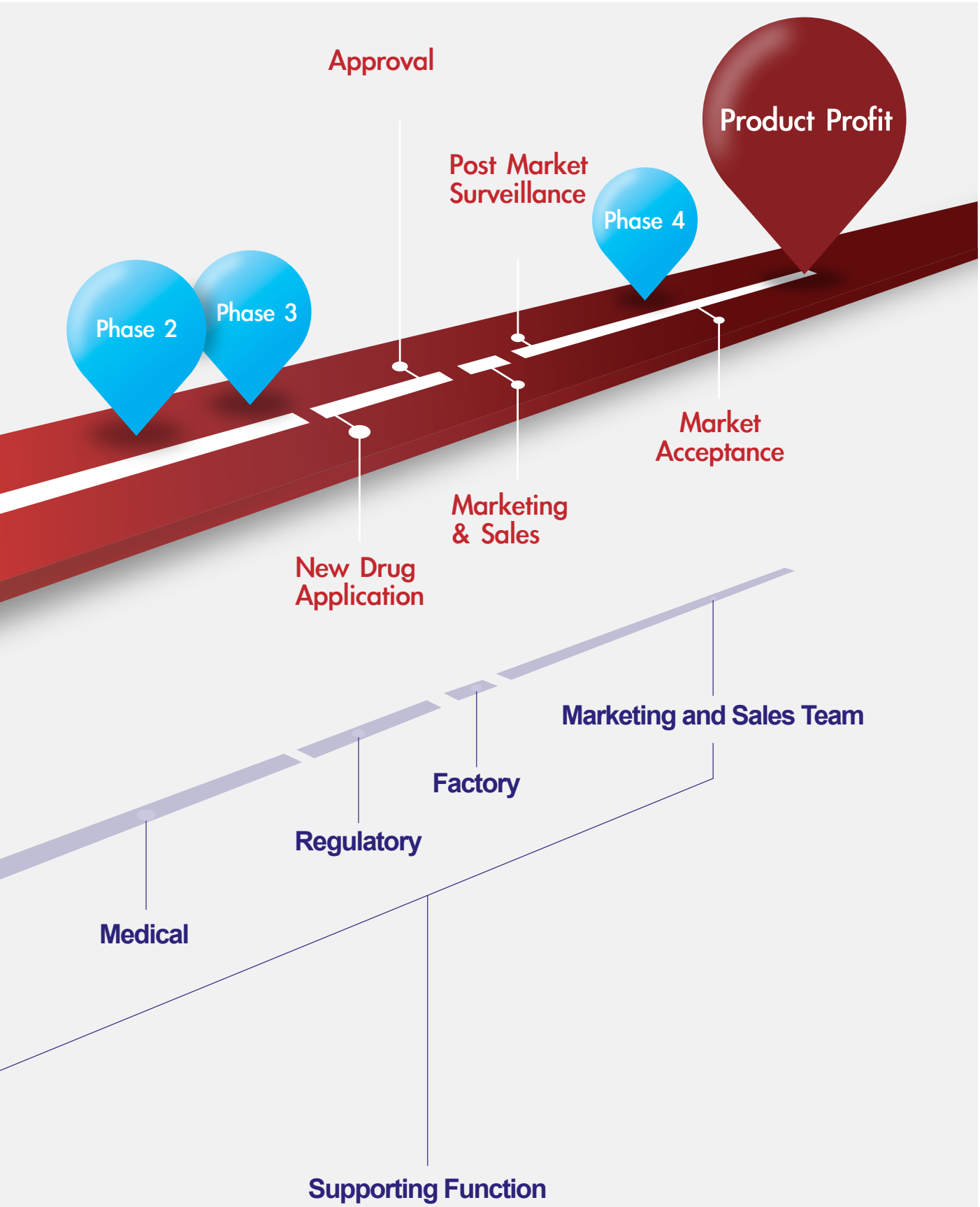


▼ **Participation in External Associations**

No.	Association/organization name	Position inside the organization
1	Research Center for Biotechnology and Medicine Policy (R.B.M.P) Institute for Biotechnology and Medicine Industry (I.B.M.I.)	Director
2	Taiwan Bio Industry Organization	NA
3	Chinese Pharmaceutical Manufacture and Development Association	Director, Pharmaceutical Laws and Regulations Committee Chairman and Vice Chairman, IP and Law Committee Vice Chairman
4	Industrial Technology Research Institute (Micromolecular Drug Development Alliance) Biomedical Technology and Device Research Laboratories	NA
5	Taiwan Pharmaceutical Manufacturer's Organization	Alternate supervisor
6	Taipei Pharmaceutical Agents and Distributors Association	Director
7	Importers and Exporters Association of Taipei	NA
8	Taipei Pharmaceutical Business Association	NA
9	Cross-Strait Medical Academic Research Exchange Association	NA
10	Taiwan Society of Regulatory Affairs for Medical Products	NA
11	T.M.U. Pharmacy Foundation For Culture and Education	NA
12	Taiwan Parenteral Drug Association	NA
13	Keelung City Union	NA
14	Medical and Pharmaceutical Industry Technology and Development Center	NA

▼ **TTY Value Chain**




Approval
Product Profit
Post Market
Surveillance
Phase 4
Phase 2
Phase 3
Market
Acceptance
Marketing
& Sales
New Drug
Application
Marketing and Sales Team
Factory
Regulatory
Medical
Supporting Function

Operating Results

The Company recorded a consolidated net operating revenue of NT$4,078,760,000 in 2017, up NT$318,043,000 or 8.46% from the NT$3,760,717,000 in 2016. This increase was mainly driven by improved sales of anti-cancer and anti-infection drugs and collection of royalties and milestone payments in 2017. Net income attributable to parent company amounted to NT$1,344,731,000 in 2017, up NT$151,407,000 or 12.69% from the NT$1,193,324,000 in 2016. The result was mainly attributed to an increase in operating revenues in 2017, which benefited operating profits by NT$77,303,000, and a gain on disposal of investments totaling NT$222,174,000. The Company presented NT$3,672,040,000 as parent-level basis sales revenue for year 2017 which achieved 100.71% of the budgeted target. Meanwhile, pre-tax profit reached to NT$1,563,698,000, which achieved 129.38% of the budgeted target for the year.

▼ Direct Economic Value (currency: NTD)

	Unit	2013	2014	2015	2016	2017
Share capital	$,000s	2,330,365	2,486,500	2,486,500	2,486,500	2,486,500
Consolidated revenue	$,000s	3,110,092	2,979,902	3,195,218	3,760,717	4,078,760
Gross profit	$,000s	2,054,576	1,891,999	2,188,349	2,556,944	2,671,059
Income tax	$,000s	191,726	98,145	279,003	257,335	226,753
Consolidated net income	$,000s	644,530	811,695	1,246,592	1,254,724	1,368,314
Net income attributable to owners of the parent company	$,000s	587,440	779,645	1,211,018	1,193,324	1,344,731
After-tax earnings per share	$	2.52	3.14	4.87	4.8	5.41
Net worth per share (attributable to parent company)	$	15.59	16.87	20.52	21.63	22.11
Employee salary and welfare expenses [CH(1] (Note 2)	$,000s	850,187	791,676	781,097	862,873	878,114
Payment to investors: stock dividends	$/share	0.67	0	0	0	0
Cash dividend	$/share	2	2.5	3.5	3.8	4.5

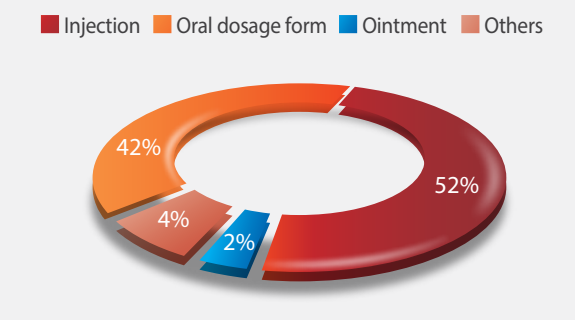
Note 1: Since 2013, the Company has changed the basis of financial statement preparation from Generally Accepted Accounting Principles (GAAP) to International Financial Reporting Standards (IFRS).

Note 2: Information was prepared based on International Accounting Standards 19 - Employee Benefits (IAS 19).

Revenue Distribution

TTY Biopharm's focus on anti-cancer and anti-infection generic drugs has been rewarded with consistent demands for cancer treatments. Meanwhile, increasing demand for new anti-infection drugs and prominent success in overseas licensing are all expected to contribute to the Company's revenue and profit growth over the long term.

▼ Revenue Distribution



Chungli Factory, one of the Company's main production sites, has established a quality analysis laboratory equipped with high-performance liquid chromatography to perform product content analysis for the Company.

R&D Investments and Results

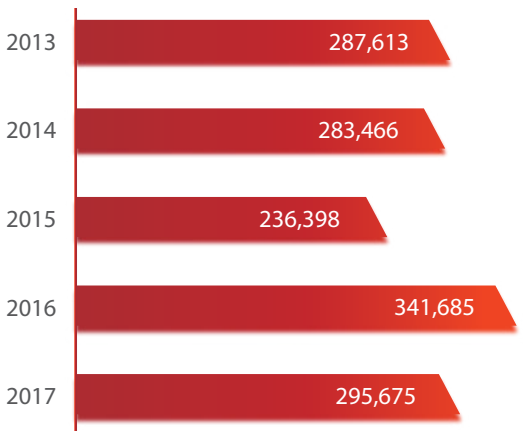
TTY Biopharm is dedicated to research and development projects. Not only do we possess the ability to execute research projects from prescription development, pre-clinical tests, drafting and execution of human trial proposal to new drug application, but we are also capable of integrating R&D and manufacturing resources to produce chemical technologies and manufacturing documents that conform with market specifications. The capability to integrate pharmaceutical development resources makes TTY Biopharm one of few innovator in the local industry. Apart from research and development, we are constantly searching for new drugs with promising potentials to introduce into the local market.

TTY Biopharm had continued its existing R&D strategy throughout 2017, making refinements to technologies such as liposome and sustained-release injection while at the same time developing new drug ingredients, new drugs and exploring new indications for existing products to benefit a greater number of patients and create value to shareholders. In 2017, we invested a total of NT$295,675,000 in R&D. Our previous efforts have yielded fruitful results in 2017. We were able to collaborate with international conglomerates on the development of two liposome products for overseas market, and open up opportunities for TTY Biopharm's liposome products in the world.

With respect to new drug development, TTY Biopharm has collaborated with 2-BBB, a Dutch R&D leader, to set up a joint venture named EnhanX Biopharm Inc. that specializes in developing new drugs for acute multiple sclerosis. By contributing liposome technology, this collaboration presents not only an entry into autoimmune disease, but also an opportunity to become the leading brand in this field of expertise.

In the future, TTY Biopharm will continue undertaking visionary and innovative R&D projects to strengthen our technology leadership and core competitiveness.

▼ R&D Expenses Committed in the Last 5 Years (unit: NTD thousands)



Responsible Products and Manufacturing

Manufacturing in compliance with international standards

In order to comply with the manufacturing and commercial regulations of pharmaceutical products in different countries, all pharmaceutical products of TTY Biopharm have been 100% verified their therapeutic effect, quality and safety by the health authority of different countries. Meanwhile, labels, package inserts and packaging of TTY's pharmaceutical products have also been approved by the authorities to minimize risks of misuse or improper storage by users. Not only the clear print of important notes, ingredients, indications and usage instructions are made on the package insert (product instruction), but also the usage instructions and important notes will be delivered again by our sales team to the customers. Before TTY Biopharm submits an application of a pharmaceutical product to an authority for approval, the Regulatory Affairs Department would assist to ensure the compliance of all contents.

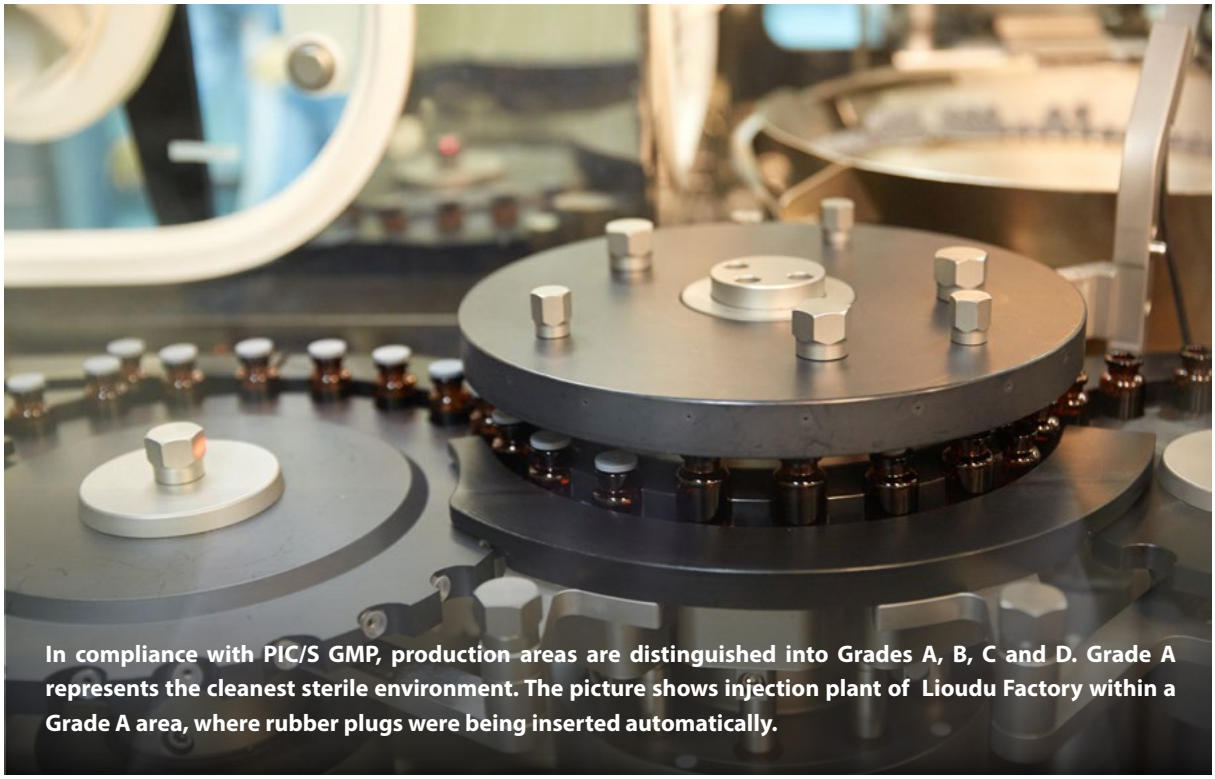
All manufacturing, import, export, storage and transportation of pharmaceutical products of TTY Biopharm are required to comply with Pharmaceutical Inspection Convention and Pharmaceutical Inspection Co-operation Scheme (PIC/S GMP) and "Good Distribution Practice" (GDP). These two standards ensure the safety and efficacy of pharmaceutical products delivered to customers.

PIC/S GMP is currently recognized as the most rigorous standard in the world, one that has been introduced for pharmaceutical productions by many advanced countries in Europe, America and Southeast Asia. This standard aims to control the quality from the beginning of the production by addressing various factors including raw material supply, factory facilities and equipment. It also requires strict process of quality assurance and quality controls to prevent cross contamination and mix-up during production, so pharmaceutical products can be manufactured steady and consistently. Once released, pharmaceutical products still need to undergo comprehensive and periodical quality monitoring and review, and have stability tested on a yearly basis until the expiration date to ensure that the product delivers the expected quality within its validity period.

TTY Biopharm conducts internal GMP audits on a yearly basis, while external inspections are conducted by customers or local/foreign authorities either on a regular or unscheduled basis. Previous results of inspections up till 2017 was found no violation against laws or rules with respect to product manufacturing, import or labeling.

Lioudu Factory, one of the Company's key production sites, allows workers to enter production area only after changing into appropriate clean room wear. A worker with clean room wear is operating a V-shaped mixer to blend powders well.

Manufacturing and quality control

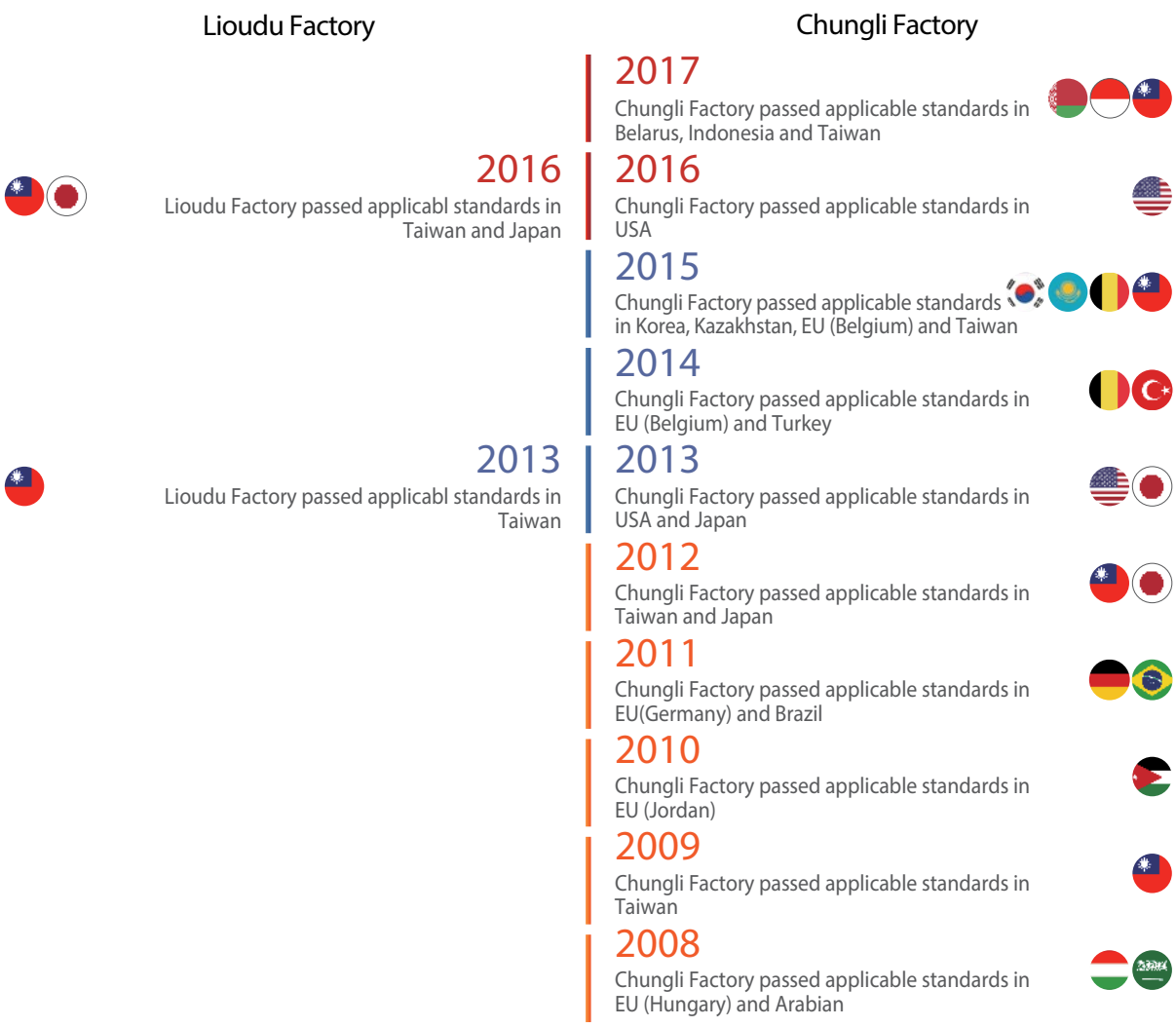


In compliance with PIC/S GMP, production areas are distinguished into Grades A, B, C and D. Grade A represents the cleanest sterile environment. The picture shows injection plant of Lioudu Factory within a Grade A area, where rubber plugs were being inserted automatically.

TTY Biopharm's Chung-Li Factory not only passed the PIC/S GMP follow-up inspections by Taiwan Food and Drug Administration in November 2009, June and July 2012, June 2015 and July 2017, it also passed inspections by the health authorities of other countries and obtained certification. TTY Biopharm's Liou-du Factory, on the other hand, passed PIC/S GMP inspection of Taiwan Food and Drug Administration in August 2013, follow-up inspection for orally administered product plant in May 2016, and inspection for new injection product in July 2016.

Factory inspection standards passed by key production sites

▼ Foreign factory inspection standards passed by key production sites



Storage, logistics and supply

To ensure that the quality of drugs remains consistently upon departure from the factory until the drugs are used, health authorities around the world have tightened supervision by implementing not only the production-oriented Good Manufacturing Practice (GMP), but also Good Distribution Practice (GDP) which covers the distribution aspect. In light of this movement, TTY Biopharm submitted an application for GDP to the Ministry of Health and Welfare in August 2016, which was later approved in 2017. To prevent quality issues caused by improper storage and transportation of drugs while ensuring users' safety, TTY Biopharm has established a comprehensive drug distribution policy that requires all raw materials, work-in-progress and finished goods to be shipped through certified logistics companies and customs broker. Dedicated warehouses have also been set up for storage and quality assurance. Detailed documents are maintained to facilitate tracing of drugs by batch number, date, location and quantity. This traceability enhances control over drug distribution, and ensures product quality and package integrity throughout transportation, distribution and storage.

▼ Standard operating procedures for quality assurance

Education and training	Specialist training is organized on a regular basis.
Operational environment management	Instruments, machinery and equipment are maintained, calibrated and tested regularly, whereas the operating environment is kept tidy, clean, safe and comfortable at all times.
Raw material quality management	Raw material suppliers are reviewed and audited on a regular basis.
Movement planning	Movement of people, air, supplies, finished goods and waste within the manufacturing area have been carefully planned to avoid cross-contamination or mixing of drug ingredients during production.
Sample testing	Employees of the Quality Control Department would perform the necessary tests to ensure the quality of raw materials and drugs. Furthermore, to ensure complete compliance of the manufacturing process, employees of the Manufacturing Department would conduct random checks on the manufacturing process, while employees of the Quality Assurance Department also perform random inspections to enhance quality monitoring of the drugs.
Internal audit	The Quality Assurance Department performs internal audits annually to ensure that all factory operations comply with GMP.
Releasing system	Each department will review batch manufacturing and test records of the products for which they are responsible, and forward them to the Quality Assurance Department for confirmation and product release.

▼ Pharmaceutical storage and logistics procedures

Labeling	The current state of all raw materials (e.g. Pending Inspection, Pass, or Fail) is clearly labeled to avoid misuse. To facilitate effective classification and tracking, all raw materials are clearly labeled with serial number, product name and batch number on the exterior package.
Management of the storage area	In addition to regular cleaning and pest control, temperature and humidity of different storage areas (including chiller and freezer) are calibrated and checked on a regular basis. Supplies are placed inside warehouse in a tidy manner, and are classified by material characteristics and needs; raw materials and finished goods are stored in separate areas.
Storage method	To ensure the quality of supplies, all items must be placed on pallets and cannot come into direct contact with the floor.
Distribution of raw materials	The Production Management Department issues a material collection order based on production requirements. The production unit then presents this order to collect materials from the Warehousing Department, and the Warehousing Department will distribute the requested raw materials to the production unit exactly as stated in the order.
Transportation	Pharmaceutical products are transported to certified logistics companies which are regularly audited by TTY Biopharm, and customs broker for further processing.
Shipment principles	Products are shipped on a "First Expired, First Out (FEFO)" basis.
Documentation	Detailed documents are maintained to facilitate tracing of drugs by batch number, date, location and quantity.

Responsible manufacturing: Lioudu Factory

Lioudu Factory, one of TTY Biopharm's key production sites, was founded in 2011 and formerly owned by Shionogi Taiwan. Lioudu Factory possesses the capacity to manufacture orally administered and liquid injection products in compliance with PIC/S GMP, and the ability to consistently supply pharmaceutical products of high quality.

Rigorous quality control

Lioudu Factory is equipped with many high-performance instruments such as: high-sensitivity endotoxin detector, particle size analyzer, and high-performance liquid chromatography (HPLC). The ability to perform advanced analyses supports our quality assurance efforts. Furthermore, Lioudu Factory also possesses the ability to develop microbial analyses for new products PIC/S GMP and standards of world's advanced nations such as USA, EU and Japan.

Production capacity

The Company's main products currently include non-cytotoxic related oral tablets and capsules, liquid injection and lyophilized liposome.

- Oral tablet: 350 million tablets/year
- Oral capsule: 72 million capsules/year
- Liquid Injection : 1.5 million vails/year
- Lyophilized liposome: 200,000 vails/year

Feature 1

Non-cytotoxic related liposome plant

Factory has sterile manufacturing plant and advanced equipment to ensure the safety of manufacturing operators. The R&D team also designed distinctive production lines to accommodate microsphere production, and utilized clean-in-place (CIP) and sterilization-in-place (SIP) systems for cleaning and sterilization. For the weighing and dispensing process, the Company adopted complete air condition environment and well equipment solutions to ensure sterility of products and the safety of its employees.

The plant manufactures lyophilized liposome at 200,000 vails/year, and the filling line fills 12,000 vails/hour. The entire production process is controlled and executed by computer, using fully automatic tunnel-styled filler (imported from Europe) and automated freeze-dryer for container cleaning, sterilization, filling, freeze-drying and sealing.

Feature 2

Non-cytotoxic related injection plant

The plant manufactures 150 million vails/year, and the filling line fills 12,000 vails/hour.

Feature 3

Hardware

- Italy Automatic Tunnel-Styled Filling Machine (vial washing machine, depyrogenating tunnel, filling machine, lyophilizer and capping machine)
- GE Kaye Validator
- Water System Equipment from European Manufacturer
- GE On Line TOC Analyzer
- Japan Automated Compress Machine
- Japan Automated Capsule Filling Machine
- Italy Automated Capsule Filling Machine
- Germany Bacteria Identification Instrument Capable of Accurate Identification of "Species"
- Endotoxin Detector Capable of Detecting 0.005EU/ml Extreme Low Amount of Endotoxin
- Total Organic Carbon (TOC) Analyzer
- Waters HPLC and UPLC Equipment
- Malvern Particle Size Analyzer
- TA DSC (Differential Scanning Calorimeters)
- Fluorometer

The injection plant has sterile preparation liposome production facilities furnished with complete air condition and equipment to ensure sterility of products and the safety of employees.

Responsible manufacturing: Chungli Factory

Chungli Factory is one of TTY Biopharm's key production sites, occupying 6,347 square meters of land and comprising 4 separate buildings. It is a liposome injection plant capable of automatic production to global demands. Chungli Factory operates sophisticated plant facilities in isolation to effectively prevent cross-contamination during production. This setup reduces risks and improves the quality of products manufactured. The factory has passed official inspection of many countries, and the products made are exported to overseas markets such as Europe, USA and Japan.

Rigorous and complete QC standards and equipment

All products manufactured by Chungli Factory are compliant with the PIC/S GMP standard. The factory has the capacity to apply microbial analyses in order to the development of new drugs according to pharmaceutical standards such as USP, EP and JP and also is equipped with high-tech instruments, including: (1) high-sensitivity endotoxin detector - capable of detecting 0.001EU/ml extreme low amount of endotoxin; (2) high-accuracy Biolog bacteria identification instrument - capable of accurate identification of "species," and (3) Total organic carbon (TOC) analyzer.

Production capacity

The factory mainly produces anti-cancer drugs in injection and oral dosage forms. Anti-cancer injections are further distinguished between liquid injection and liposome injection.

- Liposome injection: 600,000 ~ 700,000 vials/year
- Cytotoxic injection: 2.5 million vials/year
- Oral capsule for cancer: 25 million capsules/year

Feature 1

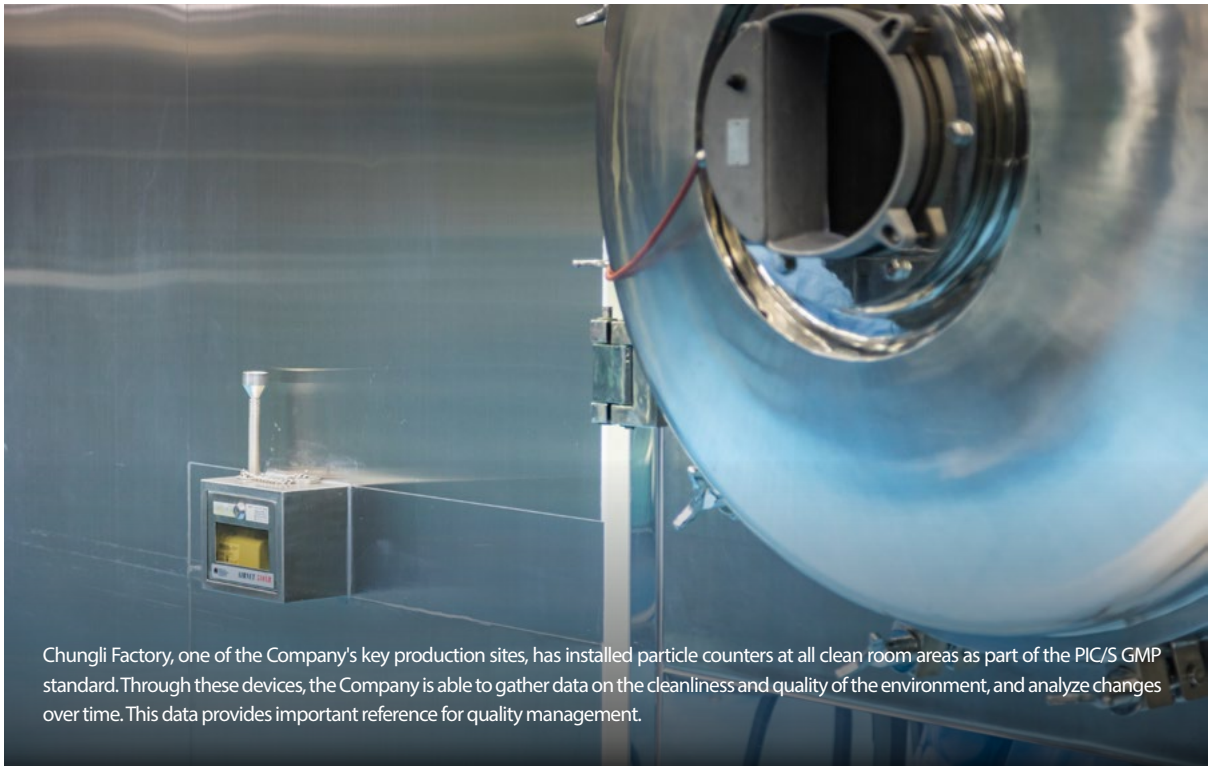
A liposome plant capable of automatic manufacturing to global demands

- Produces 600,000~700,000 vials/year
- Fills 12,000 vials/hour
- Fully computer-controlled production process
- Automatic tunnel-styled filler imported from Europe
- The compounding line and equipment use CIP and SIP systems for cleaning and sterilization. Products have been launched in Taiwan for more than a decade and are sold to overseas markets.

Feature 2

An independent anti-cancer injection factory

- It produces liquid injections at 2.5 million vials/year.
- It passed inspection for EMA, USFDA, PMDA and ANVISA, and has been supplying world-renowned pharmaceutical companies for global distribution since 2013.
- Automatic tunnel-styled filler imported from Europe
- PIC/S GMP-compliant plant facilities and equipment



Chungli Factory, one of the Company's key production sites, has installed particle counters at all clean room areas as part of the PIC/S GMP standard. Through these devices, the Company is able to gather data on the cleanliness and quality of the environment, and analyze changes over time. This data provides important reference for quality management.

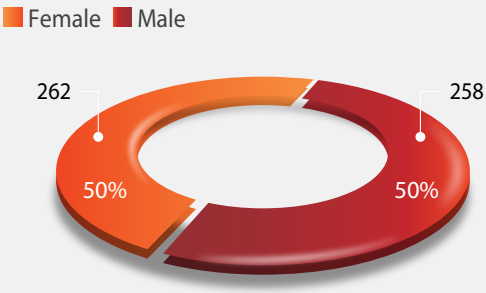
Employee Care

Employee Structure

TTY Biopharm is committed to create a caring and diverse workplace. We have 520 permanent employees in 2017. By gender, 258 or 50% of employees were male, while the other 262 or 50% were female. By age, those in the age group of 30 years old and below accounted for 19%, while those in the age group of 31 to 50 years old accounted for 68%. On the other hand, those in the age group of 51 years old and above constituted 13% of total employees. The Company adopts the policy of hiring local workers; therefore, 100% of our employees are local citizens. Permanent employees do not include contract and temporary workers.

Biopharmaceutical is a technology-intensive industry where employees are recruited primarily for their professional knowledge and technical capabilities. As a result, gender distribution is fairly equal and the employee size is unaffected by peak and low seasons. There had been no material change in total employee count compared to the previous reporting period.

▼ **By Gender**



▼ **By Age Group**

	Male		Female		Total	
	Count	Percentage	Count	Percentage	Count	Percentage
30 years old and below	52	10%	47	9%	99	19%
31 to 50 years old	173	33%	183	35%	356	68%
51 years old and above	33	6%	32	6%	65	13%
Subtotal	258	50%	262	50%	520	100%

▼ **New and Departed Employees**

		Male		Female		Total	
		Count	Percentage	Count	Percentage	Count	Percentage
New employees	30 years old and below	21	6%	18	3%	39	8%
	31 to 50 years old	16	3%	26	5%	42	8%
	51 years old and above	1	0%	0	0%	1	0%
	Subtotal	38	7%	44	8%	82	16%
Departed employees	30 years old and below	8	2%	13	3%	21	4%
	31 to 50 years old	17	3%	24	5%	41	8%
	51 years old and above	3	1%	0	0%	3	1%
	Subtotal	28	5%	37	7%	65	13%

Salary and Benefits

Employees' contributions are highly related to a company's growth, which is why TTY Biopharm is committed to introduce a competitive compensation system. We also strive to provide equal pay for equal work, and ensure that there is no gender gap in employees' salaries. In 2017, the ratio of basic salary of females to males was 1:1.

Pension Plan

The Company's retirement policy has outlined employees' retirement conditions and pension standards as follows:

(1) Employees may voluntarily retire in any of the following situations:

1. Aged 55 or above (as shown in household registration) and having completed at least 15 years of service.
2. Having completed at least 25 years of service.
3. Aged 60 or above and having completed at least 10 years of service.
4. Employees' years of service only take into account the duration of employment under the Company, starting from the date first hired. However, in the event of a restructuring or acquisition, employees that are transferred to and retained by the new company may have years of service carried forward.

(2) Employees may be compelled to retire in any of the following situations:

1. Aged 65 or above (as shown in household registration).
2. Mentally impaired or suffer physical disabilities that be rendered unfit to work.
3. The 65-year age condition mentioned above may be adjusted for positions that involve danger or physical strength or jobs of special nature, subject to approval from the competent authority. However, the age criteria must be no less than 55.

(3) Employee pension standards

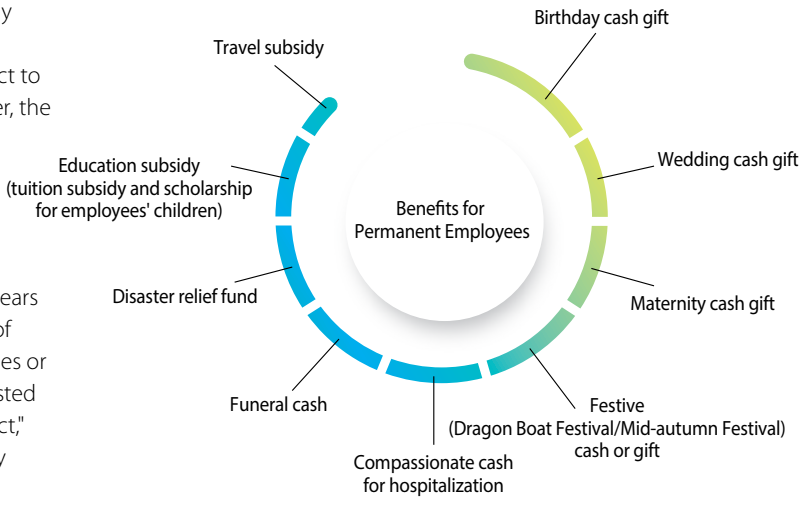
Employee pension is calculated using one of three main standards: (1) based on years of service after implementation of Labor Standards Act; (2) based on years of service and prevailing laws before implementation of Labor Standards Act, or based on the Company's policies or terms agreed with employees if no applicable laws existed at that time; and (3) provisions of the "Labor Pension Act," implemented since July 1, 2005. The Company has fully complied with local employment regulations with respect to the calculation of employees' pension using the above mentioned standards. For further details about pension standards, refer to the Annual Report.

Welfare System

The Company offers a leave system and insurance policy schemes that are superior to the requirements stated in the Labor Standards Act, and provides other benefits such as festive bonus, performance bonus, incentive and subsidy of various types. Driven by the goal to establish a corporate culture of people and care, TTY Biopharm organizes events such as Family Day, local/overseas trips, Chinese New Year banquet, etc. and subsidizes club activities as means to unite employees and gain their recognition for the corporate culture.

Benefits for Permanent Employees

- Group accident insurance, Labor Insurance and National Health Insurance coverage
- Special leave of absence
- Maternity leave, parental leave, travel leave and paid sick leave
- Year-end bonus
- Regular health check-up
- Subsidies



CHAPTER 3 *Employee Care*

Work Environment and Employee Safety Protection

For the protection of employees' safety, TTY Biopharm not only participates Labor Insurance and National Health Insurance for all employees, but also provides group insurance, accident insurance, occupational hazard insurance, cancer insurance, and business travel insurance coverage for all employees. In addition, employee health checkups are organized on yearly basis to monitor employees' healthy condition.

All workplace and factory areas within the Company are covered by public liability insurance. For factories, structural safety and availability of fire safety equipment are subject to inspections and are reported to the competent authority on a regular basis. Certified Fire Safety Officers and fire safety plans have been deployed and implemented on site to enforce fire safety within the workplace.

For the prevention of occupational hazard and protection of employees' health and safety, the Company has followed Occupational Safety and Health Act and related regulations by establishing the "Occupational Safety and Health Code of Conduct" and "Occupational Safety and Health Management Program," and deploying occupational safety and health units, officers and first aid personnel at factory sites. Furthermore, safety and health training is conducted on yearly basis.

TTY Biophram recognizes the importance of protection measures within the work environment and for human safety, which is why we organize an orientation program called "Occupational Safety and Health Series" for new recruits at factory sites. This program covers several topics including general safety and health training, safety awareness, health promotion at work, and the correct way to use face masks. Learning assessments are also introduced as part of the training process to ensure that employees are learning towards the right direction and developing the proper awareness towards safety protection measures available in the workplace.

Safety and Health Committee

We have assembled a Safety and Health Committee in accordance with Article 11 of the "Occupational Safety and Health Act" to review occupational safety issues. It serves as TTY Biopharm's formal committee for monitoring and advising on occupational health and safety programs. The workforce represents at least one-third of committee members.

Statistics on Occupational Hazard

The Company has adopted preventive measures to address certain dangers in the work environment, including noise, heat, dust, specialized operations and organic solvents. For employees who are exposed to special hazards such as organic solvents, specialized operations or noise, the Company provides them with protective gears (including face masks, gloves, goggles and lab suits) and strictly asks them to wear complete gears before commencing work activities. Furthermore, employees are instructed to handle organic solvents and hazardous chemicals only under the fume hood. To prevent noise hazard, ear plugs and ear muffs are provided to employees working in noisy environment, whereas specialized noise health checkups are arranged on a yearly basis. At factory sites, walk-around inspections and contractor safety management are conducted regularly to ensure that all personnel are able to complete their job duties with the utmost safety.

▼ Safety and Health Committee

Members of Safety and Health Committee	Number of members	Department and title
Labor relations representatives	5	Operations Division/Assistant Vice President Manufacturing Department/Senior Manager Factory Affairs Department/Manager Quality Control Department/Manager Efficacy Assurance Department/Deputy Manager
Management representatives	5	Manufacturing Department/Section Chief Quality Assurance Department/Senior Specialist Warehousing Department/Warehousing Officer Manufacturing Department/Technician Quality Assurance Department/Specialist
Occupational Safety and Health Officer	2	Environment, Safety and Health Section/Section Chief Environment, Safety and Health Section/Senior Specialist

▼ Statistics for the Last 3 Years: Male

Year	Occupational hazard		Number of working days lost	Injury rate	Percentage of days lost	Full-year total for male employees	
	Number of persons injured	Number of deaths				Total number of working days	Total number of working hours
2017	3	0	16	0	5.98	66,712	534,938
2016	1	0	60	0	24.29	59,060	493,998
2015	2	0	16	0	6.81	55,933	469,966

▼ Statistics for the Last 3 Years: Female

Year	Occupational hazard		Number of working days lost	Injury rate	Percentage of days lost	Full-year total for male employees	
	Number of persons injured	Number of deaths				Total number of working days	Total number of working hours
2017	0	0	0	0	0	68,870	552,058
2016	1	0	21	0	8.37	59,990	501,526
2015	0	0	0	0	0	58,614	489,071

Note:

1. Injury rate = (total injuries*200000) / total work hours
2. Lost day rate (LDR) = (lost working days*200000) / total work hours
3. Work days lost: means the number of days employees are rendered unable to work (rest days)
4. The statistics covered the headquarter + Neihu Factory + Translational Research Center + Lioudu Factory + Chungli Factory.

Social Welfare

As the leader of the biotech industry, TTY Biopharm has actively participated in social welfare activities for many years. We believe that businesses should care for the local society by feeding back more than what they have gained from it.

Employment opportunities for the socially disadvantaged

In an attempt to encourage rare disease patients to live a perfect and dignified life, TTY Biopharm adopts the policy of hiring people with Down syndrome to assist in cleaning work in office areas. In doing so, we provide people with Down syndrome a way to support themselves and blend into the society, and create opportunities for employees to understand, learn and be with people with disabilities. They seem to lighten up the spirits everywhere they go, as a simple smile and greet would bring them confidence and joy.

Cancer prevention seminars at rural schools - more than 300 sessions for 13 consecutive years

Since 2005, TTY Biopharm's TOT business group has been working with cancer-related non-profit organizations to organize a series of seminars on cancer prevention diet for junior high school students. Each year, speakers would travel to remote locations in Taiwan to promote cancer prevention diet at junior high schools. In 2017, we invited medical specialists from major medical centers to host our seminars at remote areas in Yunlin, Chiayi, Tainan, Miaoli, Hualien, Taitung, Kinmen and Penghu. Through these seminars, we hope to strengthen cancer prevention education in the nation.

The purpose of this seminar series is to convey the correct knowledge and method of preventing cancer and living healthy life to junior high school students. Through knowledge transfer, we hope that these junior students may help their family members develop a correct understanding and idea of preventing cancer, starting from the little things in daily life. This program invites volunteers from the medical industry, regardless of physicians or nurses, to contribute knowledge and share ideas about cancer prevention and healthy living starting from the fundamentals.

Health development programs at rural elementary schools - more than 15 sessions for 6 consecutive years

Since 2012, employees of TTY Biopharm have taken turns volunteering to conduct health promotion events at elementary schools in Ludao, Taitung. By introducing fun competition, the volunteers gave their full-hearted attempt at teaching children to stay away from cancer risk factors at a young age. Now into its 6th year, the program has been favored and supported by students, teachers and principals of Ludao Gongguan Primary School and Ludao Primary School. These efforts may not seem grand by any measure, they are things that the volunteers feel able, willing and satisfied in doing. By sharing our knowledge with those in need, we hope to constantly direct people's attention towards preventing cancer.

Health seminars for cancer patients and family members

For patients who are currently undergoing or have just completed cancer treatment, TTY Biopharm organizes

By providing long-term scholarship,
We sponsor education for children of cancer-struck families.

health promotion seminars on various topics to help patients overcome the discomfort caused by such diseases and treatment, and bring their family members with the correct knowledge to accompany the patients in fighting cancer.

Children's scholarship for cancer-struck families

Age of cancer incidence in Taiwan has lowered continuously over time, and it is increasingly popular for a family's main financial support to be diagnosed of cancer at a time before the children reach adulthood. As a family becomes burdened with additional spending from disease and treatment, it eventually affects children's lifestyle or willingness to study. In an attempt to relieve the financial burden of cancer-struck families so that their children may study and grow without disruption, TTY Biopharm has been sponsoring HOPE Foundation for Cancer Care since 2010 by offering study aids at NT$20,000 per student from cancer-struck families. In 2017, TTY Biopharm sponsored a total of 30 college students and contributed a sum of NT$1 million to the program.

A portion of this sum was also used to support the foundation's "HOPE Camp - Young Volunteer Training" program. Because it is difficult for children of cancer-struck families to find someone to talk about their parents' disease in life, the foundation organized a HOPE Camp with experienced volunteers who, under the guidance of the leader, embarked on the mission of listening to children about changes in their physique, mind and family during their parents' illness. Meanwhile, the volunteers also contribute their support and encouragement in return. This type of sharing helps children of cancer-struck families develop the right perspectives about their parents' illness and relieve the stress they suffer during this time. Contributions from the volunteers also help children find their directions toward future life.

Support for cnYES.com's "Donate for Love" campaign

The Company has been sponsoring the "Donate for Love" campaign organized by cnYES.com, an online financial media, for 2 consecutive years. Funds raised from "Donate for Love" are allocated to support more than 20 social welfare institutions, including Tsz-Ai Mercy Hospice, Kaohsiung Autism Foundation, and Miaoli County Yu An Children's Home.

TTY BIOPHARM
台灣東洋藥品

http://eng.tty.com.tw/

3F., No.3-1, Park St., Nangang Dist., Taipei City 11503, Taiwan R.O.C.