



HEALTHCARE

Healthcare Business Group

Pharmaceuticals

■ Market Presence & Business Opportunities

Hyperuricemia and gout treatments

Top share* in Japan

Countries or regions where the Teijin Group has business alliances

117

Operating conditions remained harsh for the recently developed drugs business owing to the downward revisions of Japan's National Health Insurance drug reimbursement prices for prescription pharmaceuticals and higher sales of generic drugs. However, the Teijin Group's originally developed hyperuricemia and gout treatment febuxostat, its first novel global treatment in 40 years, has already secured the top share of the domestic market. Sales are forecast to continue to the extent that they will be a driver of business growth. In addition, we have secured exclusive distributorship agreements for febuxostat covering 117 countries and regions overseas and sales have already started in more than 70 of these places as of June 2017, with plans to expand the sales area going forward.

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Source: IMS, Japan Pharmaceuticals Market Statistics, April 2016–March 2017
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Home Healthcare

■ Market Presence & Business Opportunities

Therapeutic oxygen concentrators for HOT and CPAP ventilators for the treatment of SAS

Top share* in Japan

Number of users

Over 300,000

In Japan, Teijin was a pioneer in home oxygen therapy (HOT) services. Teijin's strengths are its customer base, the largest in the sector, and its extensive domestic structure, which can support patients 24 hours a day, 365 days a year. Teijin provides home healthcare services to over 300,000 patients inside and outside of Japan. We have also secured the No.1 share in Japan for the rapidly growing market for continuous positive airway pressure (CPAP) ventilators for the treatment of sleep apnea syndrome (SAS), the same as with our HOT services.

* Estimated from external reports and Teijin's rental volume

■ Fiscal 2016 Performance

Sales of our novel treatment for hyperuricemia and gout expanded favorably

The domestic pharmaceuticals market continues to face a challenging business environment. In this climate, sales of hyperuricemia and gout treatment *FEBURIC* (febuxostat) and *Somatuline*, a treatment for acromegaly, continued to expand steadily. We posted firm sales of new formulations of existing drugs. In addition, we are working to expand sales of the transdermal anti-inflammatory analgesic patch formulation *LOQQA* Tape.

In August 2016, we signed an exclusive license and supply agreement with Versartis, Inc., a biopharmaceutical company based in the U.S., for the development and marketing of *Somavaratan* (VRS-317), a novel, long-acting form of recombinant growth hormone (rhGH), in Japan. VRS-317 was developed by Versartis, Inc. Going forward, Teijin will work closely with Versartis, Inc. to advance the development of this drug.

■ Business Sites

70 sales offices in Japan



■ Fiscal 2016 Performance

Rental volumes either remained high or increased for all offerings

In Japan, we firmly maintained a high level of rental volume for therapeutic oxygen concentrators for HOT. Rental volume for CPAP ventilators for the treatment of SAS continued to increase favorably, due to increasing the appeal of *NemLink*, a monitoring system for CPAP ventilators that uses mobile phone networks, and to the use of the *SAS-2100* sleep disorder diagnostic system. Moreover, we have steadily expanded sales of *VitalLink*, a multidisciplinary collaboration and information sharing system supporting comprehensive community healthcare, for which sales commenced in 2015.

Meanwhile, in April 2017, we withdrew from the home healthcare business in the U.S., where the business environment had come under severe pressure, by transferring this business to a peer company in this sector in the U.S.

■ Business Sites

65 sales offices in Japan



HEALTHCARE



Medium- and Long-Term Strategies

“We will strive to capture synergies between both the pharmaceuticals and home healthcare businesses. Our goal is to provide peace of mind for our patients and their families.”



Akihisa Nabeshima
General Manager,
Healthcare Business Group

Demographic change and increased health consciousness solutions

Strengthen Growth Domains

Drug discovery has become increasingly important in response to growing needs for advanced medical care in step with the progression of demographic change. Moreover, with the number of patients for home healthcare continuing to increase, community healthcare based on collaboration between medical and nursing care, has become more crucial than ever.

In this environment, the Teijin Group is working to maximize earnings from existing growth drivers, while focusing on drug discovery research and striving to strengthen home healthcare using IoT. The Teijin Group will proactively support comprehensive and efficient community healthcare, an approach that aids in preventing diseases and monitoring signs of exacerbation and other parameters.



■ Pipeline

| Area | Code No. | Target Disease | Phase of Clinical Trials | | | |
|--------------------------------------|---------------------|---------------------------------------------------------------------------------------------|--------------------------|---------|---------|-------|
| | | | Phase 1 | Phase 2 | Phase 3 | Filed |
| Bone and joint disease | ITM-058 | Osteoporosis | | | | |
| | KTP-001 | Lumbar disc herniation | | | | |
| Respiratory disease | PTR-36 | Bronchial asthma | | | | |
| | TMX-67TLS | Tumor lysis syndrome | | | | |
| | TMX-67 (PRC) | Hyperuricemia and gout | | | | |
| | ITM-014N | Gastro-entero-pancreatic neuroendocrine tumors | | | | |
| Cardiovascular and metabolic disease | STM-279 | ADA deficiency | | | | |
| | VRS-317 | Pediatric growth hormone deficiency (GHD) | | | | |
| | TMG-123 | Type 2 diabetes | | | | |
| | TMX-049 | Hyperuricemia and gout | | | | |
| | TMX-049DN | Diabetic nephropathy in Type 2 diabetes | | | | |
| Others | GGS-ON, -MPA, -CIDP | Optic neuritis, Microscopic polyangiitis, Chronic inflammatory demyelinating polyneuropathy | | | | |

► Pharmaceuticals

Sales of febuxostat, a treatment for hyperuricemia and gout, have been increasing steadily worldwide. Aiming to maximize earnings from febuxostat, we will work to raise disease awareness based on clinical research and to boost recognition of the importance of treatment. We will also strive to provide patients with a wider range of choices through new formulations. Examples include an oral jelly and an intravenous drip of the osteoporosis treatment *Bonalon*, and *Mucosolvan* L Tablet 45 mg, a novel reduced-sized tablet-form version of the sustained-release expectorant *Mucosolvan*. Efforts are also being made to expand sales of the transdermal anti-inflammatory analgesic patch formulation *LOQQA* Tape.

In drug discovery research, we are working to expand drug discovery fields. Specifically, we are conducting R&D activities focused on advanced medical materials based on the integration of materials and healthcare technologies, and also including areas such as nuclear receptor drug discovery, and macrocyclic and constrained peptide drug discovery. Another priority is to pursue regenerative medicine initiatives related to treatments for neurological diseases. We will also maximize value by promoting alliances on a global scale. For example, in December 2016, we entered into a collaboration and license agreement with Amgen Inc. of the U.S. regarding research and development of new therapeutic agents for kidney diseases and

disorders. In addition, we entered into a worldwide license agreement with Merck & Co., Inc. for the development, manufacture and commercialization of an investigational preclinical antibody candidate targeting tau protein for a possible treatment of Alzheimer's disease.

► Home Healthcare

In CPAP ventilators for the treatment of SAS, we will strengthen *NemLink* functions for monitoring treatment conditions, expand sales of *SLEEPMATE10*, a model featuring a built-in heater-humidifier, and improve our ability to respond to patient needs by capitalizing on our home healthcare call centers.

In therapeutic oxygen concentrators for HOT, we will develop relationships with general practitioners and strengthen monitoring functions for signs of exacerbation and other parameters. We will also strive to further boost rental volume by enhancing and expanding the lineup of portable oxygen concentrators as well as achieving the same for non-portable oxygen concentrators.

VitalLink is a multidisciplinary collaboration and information sharing system used by medical professionals as a tool to support comprehensive community healthcare. We have been steadily expanding sales of *VitalLink* by making progress on signing agreements with general practitioners through medical associations, in addition to signing agreements directly with primary care physicians.

