

September 4, 2018

**Lilium Otsuka's R&D project is selected for inclusion in FY 2018  
Project to develop robotic devices for nursing care and set the  
standards (subsidized project for development) by AMED**

Lilium Otsuka Co., Ltd. (Head Office: Sagami-hara, Kanagawa, Japan; President and Representative Director: Isao Shirasaki; "Lilium Otsuka"), a subsidiary of Otsuka Pharmaceutical Factory, Inc. (Head Office: Naruto, Tokushima, Japan; President and Representative Director: Shinichi Ogasawara), announces that its research and development on a urination support device which improves QOL and reduces a burden on nursing care has been selected for inclusion in the field of excretion support (prediction of excretion) in the FY 2018 Project to develop robotic devices for nursing care and set the standards for such devices<sup>\*1</sup> (subsidized project for development) by the National Research and Development Agency, Japan Agency for Medical Research and Development (AMED).

In a super-aging society, there is a growing need for excretion care in nursing care settings. Lilium Otsuka developed and markets a medical device "Lilium  $\alpha$ -200"<sup>\*2</sup> which predicts urination timing using ultrasonic technology. The company will accelerate the development of a new product with ease of use at nursing care facilities and at home by focusing on making it wireless and smaller. In the research, RIKEN cooperates in ultrasonic simulation and clinical research.

Ken Hiroe, President of Kohoen Social Community Service, a cooperating institute of the research, and Director of Nonprofit Organization of the Japanese Association of Business Management for Long-term Care, states as follows.

"With the aim of providing better nursing care, we have promoted the development of tools which solve personnel shortages and difference in experience and skills among nursing care staff in nursing care practice. We expect that Lilium Otsuka's project will help to understand needs of caregivers and care recipients and develop the device leading to improvement of ADL<sup>\*3</sup> and support for care recipients' independence. We would like to be involved in needs surveys and verification and cooperate in the development of this innovative product."

Based on the corporate philosophy of "Otsuka-people creating new products for better health worldwide," the Otsuka Group is dedicated to contributing to the health of people around the world.

\*1 Project to develop robotic devices for nursing care and set the standards for such devices: It is one of the projects promoted by AMED. The project is aimed at contributing to realizing a society where people can live a long healthy life by working on the following: measuring and evaluating the effects of robotic devices for nursing care which have already been developed to spread and promote them; developing robotic devices for nursing care which help to maintain an independent life of elderly persons, developing the safety standards for such devices and implementing the standards; and thus contributing to creating Japan's new manufacturing industry.

\*2 Liliium  $\alpha$ -200: Liliium  $\alpha$ -200 was developed by Liliium Otsuka and launched in November 2015. The product is a medical device which can visually indicate the amount of urine in the bladder noninvasively using ultrasonic technology. It can comprehensively evaluate bladder function by urine volume monitor (post-void residual measurement or 24-hour periodic measurement) and is useful for the care after removal of indwelling urethral catheters and removing diapers at an appropriate time. It is expected to become an effective tool for patients to support urinary independence and promote recovery at home.

\*3 ADL, activities of daily living: Person's ability to perform basic activities in daily life such as eating, changing clothes, moving, toileting, grooming, and bathing.

## Company Profile

### Liliium Otsuka Co., Ltd.

|                      |   |   |
|----------------------|---|---|
| Established          | : | January 29, 2015  |
| Capital              | : | 75 million yen  |
| Representative       | : | Isao Shirasaki, President and Representative Director   |
| Head Office          | : | 4-12-6, Chiyoda, Chuo-ku, Sagamihara, Kanagawa 252-0237, Japan                                |
| Number of Employees  | : | 18 (as of December 31, 2017)  |
| Business Description | : | Research and development, manufacturing and marketing of medical devices and related products |
| Website (URL)        | : | <a href="http://www.liliium.otsuka/en/">http://www.liliium.otsuka/en/</a>                     |

### Otsuka Pharmaceutical Factory, Inc.

|                      |   |  |
|----------------------|---|--|
| Established          | : | October 7, 1969 (founded September 1, 1921)  |
| Capital              | : | 80 million yen   |
| Representative       | : | Shinichi Ogasawara, President and Representative Director  |
| Head Office          | : | 115 Kuguhara, Tateiwa, Muya-cho, Naruto, Tokushima 772-8601, Japan   |
| Number of Employees  | : | 2,297 (as of December 31, 2017)  |
| Business Description | : | Manufacture, sale, import and export of clinical nutrition products and other pharmaceutical products, medical devices, functional foods, etc. |
| Website (URL)        | : | <a href="https://www.otsukakj.jp/en/">https://www.otsukakj.jp/en/</a>  |