Price Listing on the NHI Reimbursement List and Launch of "CEDARCURE<sup>®</sup> Japanese Cedar Pollen Sublingual Tablets", an Allergen Immunotherapy Tablet for Japanese Cedar Pollinosis

Torii Pharmaceutical Co., Ltd. (TSE:4551) announced today that drug price of "CEDARCURE<sup>®</sup> Japanese Cedar Pollen Sublingual Tablets" ("CEDARCURE" hereinafter), an Allergen Immunotherapy Tablet for Japanese Cedar Pollinosis, was placed on the National Health Insurance reimbursement list as of today and expected to be launched in late June, 2018. The New Drug Application for CEDARCURE was approved by the Japanese Ministry of Health, Labour and Welfare (MHLW) on September 27, 2017.

CEDARCURE is the first regulatory approved sublingual tablet available for adult and pediatric patients in Japan. CEDARCURE has characteristics such as higher potency (Unit: JAU<sup>\*</sup>), wider range of treatment age and improved convenience of use with storage at room temperature compared to "CEDARTOLEN<sup>®</sup> SUBLINGUAL DROP - Japanese Cedar Pollen" ("CEDARTOLEN" hereinafter), an Allergen Immunotherapy Drop for Japanese Cedar Pollinosis launched in October 2014.

In CEDARTOLEN (2,000 JAU), it was difficult to develop higher potency product with over 2,000 JAU due to formulation reasons. In CEDARCURE (5,000 JAU), it has become possible to develop higher potency by developing it as a freeze-dried tablet.

In the Phase II/III clinical study of CEDARCURE in Japanese patients with Japanese cedar pollinosis (5-64 years), higher efficacy was suggested in CEDARCURE 5,000 JAU administration group compared to CEDARCURE 2,000 JAU administration group in "Total Combined Rhinitis Score (TCRS)", and no significant difference was observed in safety between each group, so CEDARCURE 5,000 JAU was approved as optimal dose.

Professor Kimihiro Okubo, MD, Ph.D., The Department of Otolaryngology, Head and Neck Surgery, Graduate School of Medicine, Nippon Medical School, Tokyo, and principal investigator for CEDARCURE says: "CEDARCURE (5,000 JAU) is a new product that can be expected to have higher efficacy compared to CEDARTOLEN (2,000 JAU). In addition, CEDARCURE has characteristics such as simpler dosing schedule, expanded treatment age under 12 years old, improved convenience of use with storage at room temperature by tablet formulation compared to CEDARTOLEN. CEDARCURE is expected to be widely used as a basic treatment in future Japanese Cedar Pollinosis treatment."

Torii expects that CEDARCURE becomes established as a new treatment option for Japanese Cedar Pollinosis, and can contribute to the treatment of the patients.

\* Japanese Allergy Units: Japanese unique allergen potency unit stipulated by the Japanese Society of Allergology

<Outline of CEDARCURE >

Product name: CEDARCURE<sup>®</sup> Japanese Cedar Pollen Sublingual Tablets 2,000 JAU CEDARCURE<sup>®</sup> Japanese Cedar Pollen Sublingual Tablets 5,000 JAU

Indication: Japanese Cedar Pollinosis (Hyposensitization therapy)

Dosage and administration:

The usual dose is one tablet of CEDARCURE<sup>®</sup> Japanese Cedar Pollen Sublingual Tablets 2,000 JAU once a day during the first week of treatment and one tablet of CEDARCURE<sup>®</sup> Japanese Cedar Pollen Sublingual Tablets 5,000 JAU once a day from the second week. Patients should keep the tablet under the tongue for 1 minute and then swallow it. Patients should avoid gargling, eating, and drinking for 5 minutes after swallowing the tablet.

Approval conditions:

Necessary measures should be taken for manufacturing and marketing so that this drug will be prescribed and used only by physicians with adequate knowledge and experience regarding sublingual immunotherapy, will be used only under the supervision of physicians and medical institutions that can manage and explain the risks, etc. of this drug, and will be dispensed at pharmacies only after the pertinent physicians and medical institutions have been confirmed.

Packages: CEDARCURE<sup>®</sup> Japanese Cedar Pollen Sublingual Tablets 2,000 JAU

7 tablets (7 tablets  $\times$  1 blister pack)

CEDARCURE® Japanese Cedar Pollen Sublingual Tablets 5,000 JAU

10 tablets (10 tablets  $\times$  1 blister pack), 100 tablets (10 tablets  $\times$  10 blister packs)

NHI drug price: CEDARCURE<sup>®</sup> Japanese Cedar Pollen Sublingual Tablets 2,000 JAU: ¥ 57.70 per tablet

CEDARCURE<sup>®</sup> Japanese Cedar Pollen Sublingual Tablets 5,000 JAU: ¥ 144.10 per tablet Approval date: September 27, 2017

NHI pricing date: April 18, 2018

Launch date: Late June, 2018 (Planned)

Manufacturing and distributor: Torii Pharmaceutical Co., Ltd.

<Japanese cedar pollinosis>

Japanese cedar pollinosis collectively refers to an allergic disease caused by Japanese cedar pollen. Patients with Japanese cedar pollinosis have excessive immunological reaction to Japanese cedar pollen and develop sneezing, nasal discharge, nasal occlusion, itchiness of the eyes, and runny eyes among other symptoms.

According to a nationwide survey, about 25% of Japanese people have pollinosis and about 70% of them have Japanese cedar pollinosis <sup>(ref. 1)</sup>. Japanese cedar pollinosis is widely observed from youth to middle age group but it has been pointed out that onset age is becoming younger in recent years <sup>(ref. 2)</sup> (ref. 3).

- (ref. 1) A FY 2010 MHLW-subsidized research program for prophylaxis/treatment of immunological allergic diseases, "Research for Correct Treatment of Pollinosis"
- (ref. 2) "Rheumatism and Allergy Countermeasure Committee Report", Welfare Science Council Disease Control Committee, Rheumatism and Allergy Countermeasure Committee August 2011
- (ref. 3) "Allergic Rhinitis Epidemiology in Japan 2008 (compared to 1998)", BABA Kohtaro, NAKAE Kimihiro, Progress in Medicine 2008; 28 (8):2001-2012.

<Allergen immunotherapy>

Allergen immunotherapy is a therapeutic method of administering the causative allergen of an allergic disease at a low dose at first and then an increased dose in order to reduce hypersensitivity to the allergen. It is expected curing allergy symptoms and long-term remission.

<Total Combined Rhinitis Score>

The Total Combined Rhinitis Score (TCRS) is a total overall score of the Nasal Symptom Score (sum of the scores allocated as appropriate, depending on the severity of three symptoms: sneezing, nasal discharge and nasal obstruction) and the Medication Score (sum of the scores allocated as appropriate, depending on the number of antihistaminic doses used to alleviate the symptoms of Japanese cedar pollinosis), and is used to measure the degree of improvement of allergic symptoms such as rhinitis.