

January 14, 2015  
SBI Holdings, Inc.  
SBI Pharmaceuticals Co., Ltd.

## **Acquisition of a Patent for Prophylactic/Ameliorating Agent for Adult Diseases Containing 5-ALA as an Active Ingredient**

SBI Pharmaceuticals Co., Ltd. (Head office: Minato-ku, Tokyo; Representative Director and CEO: Yoshitaka Kitao; “SBI Pharmaceuticals”), a subsidiary of SBI Holdings, Inc., engages in research and development of pharmaceuticals, health foods and cosmetics using 5-aminolevulinic acid (“5-ALA”)\*<sup>1</sup>. We are pleased to inform you that SBI Pharmaceuticals has obtained a patent in Japan for a prophylactic/ameliorating composition containing 5-ALA as an active ingredient, for one or more adult diseases selected from a group consisting of hyperlipidemia, diabetes, hypertension, shoulder stiffness, postmenopausal disorders, gray hair, wrinkles, obesity, poor circulation, and constipation.

Patent number: 5665544  
Name of discovery: Prophylactic/ameliorating agent for adult diseases, containing 5-aminolevulinic acid, a derivative of 5-aminolevulinic acid, or salt of 5-aminolevulinic acid or a derivative of 5-aminolevulinic acid as an active ingredient  
Patent owner: SBI Pharmaceuticals Co., Ltd.  
Filing date: October 27, 2009

Outside Japan, SBI Pharmaceuticals has been expanding business in the Middle East, especially Bahrain, where the ratio of diabetes (including IGT (\*2)) is extremely high at 24.6% (\*3). SBI Pharmaceuticals, together with the Department of Diabetes at Bahrain Defense Force Royal Medical Service Hospital, has started clinical studies on type 2 diabetes by using 5-ALA. In addition, preparations are currently underway to conduct similar clinical studies in collaboration with the Arabian Gulf University hospital and Royal College of Surgeons in Ireland - Medical University of Bahrain.

SBI Pharmaceuticals also published research papers on the results of clinical studies conducted jointly with Hiroshima University (Higashikawa F et al. *Nutrition* 2013 Jul–Aug; 29(7-8): 1030–6), University of Hawaii (Rodriguez, BL et al. *Clin. Trans. Sci.* 2012 Aug; 5(4): 314–20), and the Institute of Medical Science, the University of Tokyo (Yamashita N et al. *Functional Foods in Health and Disease* 2014; 4(9) 415–428).

SBI Pharmaceuticals will continue to pursue various potential applications of 5-ALA, and focus on research and development to provide pharmaceuticals that satisfy the unmet medical needs of as many people as possible around the world.

\*1: 5-aminolevulinic acid (5-ALA)

An amino acid created in mitochondria. It is an important substance that serves as protein material related to energy production in the form of heme and cytochromes, and its productivity is known to decrease with age. 5-ALA is contained in food such as shochu distillation remnants and red wine. It is also known as a material forming chloroplasts in plants.

\*2: Impaired Glucose Tolerance



\*3: (Source) International Diabetes Federation, Diabetes Atlas 6th Edition

\*\*\*\*\*

For further information, please contact:

SBI Pharmaceuticals Co., Ltd.: Corporate Planning Dept., Tel: +81 3 6229 0095