News Release



Nippon Chemiphar Co., Ltd.

January 11, 2018

Cyclic Innovation for Clinical Empowerment (C*i*CLE) Adopts NC-2800 as an Antidepressant/Anxiolytic Drug Candidate

Nippon Chemiphar Co., Ltd. (HQ: Chiyoda-ku, Tokyo; President & CEO: Kazushiro Yamaguchi) announces that an antidepressant/anxiolytic it has been developing, NC-2800 (a delta (δ) opioid receptor agonist*), has been selected by the Japan Agency for Medical Research and Development (AMED) for its Fiscal 2017 Cyclic Innovation for Clinical Empowerment (C*i*CLE) funding program in the second call for submissions.

NC-2800 was adopted for research in October 2015 for AMED's "Acceleration Transformative Research for Medical Innovation (ACT-M), Title: Development of δ opioid receptor agonist regulating the emotional system" (researchers: Hiroshi Nagase, Hideaki Fujii, Akiyoshi Saito, company: Nippon Chemiphar). During the period of this program, through March 2018, we have been pursuing research with the aim of completing non-clinical studies. Based on these research results, NC-2800 has been adopted by C*i*CLE, which AMED is promoting, in anticipation of its possibilities as an emotional regulating agent based on a new mechanism of action and the potential for overcoming issues faced with existing antidepressants/anxiolytics.

• Outline of the selected research project

Project title:	Development of a groundbreaking emotional regulating agent with a
	mechanism for activating &pioid receptors
Support period:	March 2018 – March 2027 (nine years)
Representative organization:	Nippon Chemiphar Co., Ltd.

Nippon Chemiphar is aggressively pursuing drug discovery themes that have the potential to lead to groundbreaking new drugs in response to unmet medical needs.

Reference

• Cyclic Innovation for Clinical Empowerment (CiCLE)

CICLE is a program that aims to consolidate Japanese expertise through industry–academia–government collaboration, establish the infrastructure (including human resources) for achieving groundbreaking innovations (such as by conducting R&D in order to respond accurately to unmet medical needs and accelerate drug discovery and other types of practical application) and create an environment for promoting open innovation and venture development in medical field.

*δ opioid receptor (DOR)

There are three subtypes of opioid receptors, μ , κ and δ . Clinical narcotic analgesics such as morphine show various side effects, such as constipation, respiratory depression or drug dependence derived from μ opioid receptor activation. On the contrary, activation of DORs has been associated with pharmacological effects such as improvement of depression and anxiety disorders, with few side effects. Therefore, DOR agonists are expected as promising antidepressants/anxiolytics, with good safety and tolerability profiles.

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