

This material is an English translation of the press release announced on November 18, 2024 in Japanese, and the Japanese release is given priority about the content and the interpretation.

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November 18, 2024

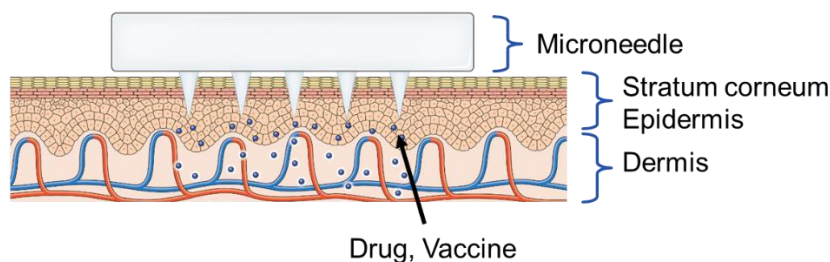
**Notification of the Adoption of Public Solicitation for Program on R&D of New Generation Vaccine Including New Modality Application by AMED**

Hisamitsu Pharmaceutical Co., Inc. (Head Office: Tosu City, Saga Prefecture; President: NAKATOMI, Kazuhide; hereinafter “Hisamitsu Pharmaceutical”) hereby announces that our research “Study of transdermal vaccines for Covid-19 using microneedle drug delivery system” has been adopted by the Strategic Center of Biomedical Advanced Vaccine Research and Development for Preparedness and Response (SCARDA\*<sup>1</sup>) within the Japan Agency for Medical Research and Development (AMED) for program on R&D of new generation vaccine including new modality application.

Microneedle technology delivers vaccines directly to the outer layer of the skin, which immune cells are abundantly distributed, and thus are capable of inducing a high immune response.

In addition, Hisamitsu's microneedle technology “HalDisc<sup>®</sup> Technology\*<sup>2</sup>” has advantages such as accurately controlled drug administration and short application time. In this research, we will evaluate the immunogenicity of the Covid-19 vaccine with HalDisc<sup>®</sup> Technology\*<sup>2</sup> and analyze the mechanism of immunity enhancement by this device.

Hisamitsu Pharmaceutical will proceed with this research, in collaboration with the National Institute of Infectious Diseases (Takayuki Matsumura, PhD., Chief of Research Center for Drug and Vaccine Development), in order to develop a novel vaccine that is effective for immunocompromised individuals, that rapidly elevates antibody titer, and maintains neutralizing antibody titer, while also reducing the risk of adverse reactions.



**[Microneedle schematic]**

※1: About SCARDA

<https://www.amed.go.jp/en/program/list/21/index.html>

※2: About HalDisc® Technology

This technology is a new transdermal drug delivery system that combines a microneedle disc made of biodegradable resin with an applicator for administration, which is applied to the skin to deliver the drug into the body. Microneedles allow drugs that are conventionally used as injectable agents to be administered transdermally because they enable drug administration that is unaffected by the stratum corneum barrier function.