

(Signing Ceremony Report)

2023.06.13 Hirotsu Bio Science Inc.

Hirotsu Bio Science Signs Memorandum of Understanding with Global Health Equity Fund, Aims to Expand Overseas Deployment of N-NOSE®

Hirotsu Bio Science Inc. (Headquarters: Chiyoda-ku, Tokyo, Representative Director: Takaaki Hirotsu) has signed a memorandum of understanding with the Global Health Equity Fund (GHEF), an impact fund that aims to support and create impacts that lead to solutions to global health issues, to expand N-NOSE overseas to countries with underdeveloped healthcare systems.

The Global Health Equity Fund (GHEF), established through a partnership between the WHO Foundation and venture capital firm OurCrowd, is an impact investment fund that aims to promote the permeation of innovative medical treatments that utilize groundbreaking technologies to improve the health conditions of people living in vulnerable low- and middle-income countries and regions, and to bring about healthier lives for humanity on a global scale while pursuing profitability.

This signing ceremony ratified the agreement between Hirotsu Bio Science and the GHEF to expand the overseas deployment of N-NOSE to low- and middle-income countries, as agreed upon in a meeting on May 11th.

GHEF General Partner Dr. Morris Laster and the WHO Foundation's Chief Executive Officer Anil Soni and Chief Impact Investment Officer Geetha Tharmaratnam visited Japan as representatives of the GHEF. Masayoshi Hirose, General Manager of Healthcare Dept., Infrastructure & Healthcare Division of Sojitz Corporation, who are cooperating in the overseas expansion of N-NOSE, attended the ceremony.



Masayoshi Hirose, General Manager of Healthcare Dept. (Sojitz). Morris Laster, OurCrowd General Partner & GHEF General Partner (OurCrowd). Takaaki Hirotsu, President & CEO (Hirotsu Bio Science). Anil Soni, CEO and Geetha Tharmaratnam, Chief Impact Investment Officer (WHO Foundation)



■ Summary of the memorandum of understanding:

Hirotsu Bio Science, with its innovative cost-effective, comprehensive, and high-precision cancer testing, aims to support the overseas expansion of N-NOSE to low-and middle-income countries and contribute to the resolution of global health issues.

- 1. Advice on N-NOSE product improvement and cost optimization for new markets
- 2. Identify promising markets for Lower Middle Income Countries (LMICs)
- 3. Provide guidance on regulatory pathways in target countries
- 4. Leverage the WHO Foundation's network to provide third-party distributors in LMICs target countries. Provide access and drive market entry and expansion
- 5. Identify key regulatory stakeholders in target markets and LMICs
- 6. Preparation of financial forecasts for various market entry scenarios
- 7. Establish pilot programs and local partnerships for early adoption
- 8. Providing pricing strategies for diverse LMICs markets
- 9. Leverage the relationship between GHEF and the WHO Foundation to increase credibility and awareness
- 10. Response to local medical insurance systems
- 11. Secure additional funding from local governments and NGOs
- 12. Access to Global Key Opinion Leader (KOLs)

■ Comments from attendees at the memorandum signing ceremony:

·Takaaki Hirotsu, Representative Director at Hirotsu Bio Science:

Our company's vision is to create a future where people are not afraid of cancer. We have developed N-NOSE, the world's first preliminary screening test for cancer which combines affordability, simplicity, and high precision by leveraging the abilities of living organisms. Clinical research is also progressing overseas, proving that this is a global technology that transcends ethnicity and dietary culture. There are many countries and regions in the world where cancer testing is not widely available or part of their habits. We believe that this collaboration with GHEF will be the first step towards reducing the lives lost to cancer from all over the world. We will continue collaborate widely while striving towards achieving our mission of contributing to a healthy future for humanity through the creation of innovative technologies.

·Anil Soni, Chief Executive Officer at WHO Foundation:

In my own childhood and many years of working at WHO, I have seen many examples of Asian technology solving difficult disease challenges. It is not only Western countries that are changing the world. Science, innovation, and medicine are universal.

We created GHEF to find innovations, like N-NOSE, and share them to the world. Therefore, it is an incredible honor for us to be partnered with our project to share this technology which can help people detect cancer and live longer life with the world.



·Geetha Tharmaratnam, Chief Impact Investment Officer at WHO Foundation

When we first met Dr. HIROTSU, he said, "The vision of this company is to make this technology more affordable and available everywhere in the world." Hirotsu Bio Science has worked hard to keep reducing the cost and increasing the sensitivity of the test. Now we are pleased to be here in partnership with you.

Making N-NOSE widely available as a non-invasive cancer screening test is going to save many lives and we are very proud to be working with you and making the vision come true.

·Dr. Morris Laster, GHEF General Partner

The mission of our fund is to achieve global health for all, while also making a financial impact for investors. The vision that Hirotsu Bio Science is presenting here is completely in line with our mission.

I am very impressed with the approach that came from basic biology and resulted in an amazing low-cost system for early detection of cancer. I am also very moved by the progress they have made in such a short time. I look forward to working with you to bring this technology to LMICs as quickly as possible.

• Masayoshi Hirose, Director of the Healthcare Business Division, Infrastructure & Healthcare Office, Sojitz Corporation:

Hirotsu Bio Science has developed N-NOSE, the world's first primary screening test for cancer that combines affordability, simplicity, and high precision. The WHO Foundation works to solve healthcare issues by leveraging its worldwide network, and OurCrowd is a strong supporter of growth for the startups in which it invests. We have great expectations for this collaboration between the three companies as we proceed with the deployment of N-NOSE in low- and middle-income countries. Sojitz intends to cooperate in various aspects of business development by utilizing our overseas bases and customer networks.



An impact investment fund that seeks to generate profits through the diffusion of new medical treatments to improve the health of people living in countries and regions where healthcare systems are primarily inadequate.

-Execution of follow-up investments -Support for PR and sales activities -Global KOL access -Access to clinical and regulatory authorities worldwide





A global startup investment platform that enables institutional and individual investors to invest in and participate in startup companies.

A Swiss charitable organization and an independent foundation established by the World Health Organization (WHO) to support WHO's mission to build a healthier and fairer future for all people worldwide. WH Foundation supports WHO's mission to build a healthier and fairer future for all people worldwide.



·Global Health Equity Fund (GHEF)

GHEF is an impact investment fund established by the WHO Foundation and OurCrowd, a global venture investment platform with over 400 portfolio venture companies and 43 VC funds.

The fund aims to address the growing disparities in basic health and medical care between countries and regions by leveraging GHEF's solutions. The main objective is to create a platform that promotes economic growth and access to health-related resources through investments in technologies that contribute to health risk reduction, including agri-tech, food-tech and energy transition technologies, in addition to technologies directly related to healthcare.

WHO Foundation

Established in 2021 as an independent entity, the WHO Foundation complements and strengthens the work of WHO and its global network of partners by mobilizing new funding from diverse sources—including philanthropists, corporate entities, and the public—to power WHO's mission. By addressing the world's most urgent health issues in a new, transformative, catalytic way, the WHO Foundation aims to provide everyone, everywhere, a healthier, more equitable future.

•Name of Company : WHO Foundation

•Date Established : 2021

·Location : Geneva, Switzerland

•Representative : Mr. Anil Soni, Chief Executive Officer

•Business : A charitable organization established by the World Health

Organization (WHO). Providing funding and networks to solve global

health challenges to help deliver on WHO's mission.

OurCrowd

OurCrowd, the online global venture investing platform, empowers individual accredited investors and institutions to invest in emerging technology companies. To date, OurCrowd has received over \$2.1 billion in commitments, and deployed capital into more than 400 portfolio companies and 43 funds.

Name of Company : OurCrowdDate Established : 2013

·Location : Jerusalem, Israel

•Representative : Mr. Jonathan Medved, Chief Executive Officer

•Business : Venture capital, asset management

Website : https://www.ourcrowd.com/

Sojitz Corporation

In February 2022, Sojitsu signed a capital and business alliance agreement with HIROTSU Biosciences to develop N-NOSE overseas through mutual cooperation.

•Name of Company : Sojitz Corporation

•Date Established : 2003



·Location : 1-1, Uchisaiwaicho 2-chome, Chiyoda-ku, Tokyo

Representative : President Masayoshi FujimotoBusiness : General trading company

Web : https://www.sojitz.com/

(About Hirotsu Bio Science Inc.)

We aim to "protect people's health and future security" through research, development, and practical application of unique testing technologies that utilize the capabilities of living organisms. Established in 2016, N-NOSE has been put to practical use thanks to the rich ideas and tireless efforts of our researchers. In the age of 100-year life expectancy, it is said that one in two people will be diagnosed with cancer, despite the importance of extending healthy life expectancy. We will contribute to solving these social issues with our revolutionary "biodiagnosis" technology that utilizes the ability of nematodes, which have a superior sense of smell that cannot be matched by artificial devices.

For the healthy future of many people, we are striving for research, development, and practical application to make bio-diagnosis more accessible and more progressive.

•Name of Company : Hirotsu Bio Science Inc.

·Date Established : 2016

·Location : New Otani Garden Court, 4-1 Kioi-cho, Chiyoda-ku, Tokyo

·Representative Director: Takaaki Hirotsu

·Business : Research, development, and marketing of cancer tests using

nematode and nematode smell sensors

·Corporate Website : https://hbio.jp/

·Service Website : https://lp.n-nose.com

[References]

■ About N-NOSE

A primary screening test for cancer that utilizes the highly accurate detection of cancer-specific odors in human urine by the nematode C. elegans, which have very good receptors to smell. Just by submitting urine, it is possible to check for early-stage cancer in a simple, inexpensive, highly accurate, and comprehensive manner throughout the body.

There are 15 types of cancer to which nematodes have been confirmed to react: stomach cancer, colon cancer, lung cancer, breast cancer, uterine cancer, pancreatic cancer, liver cancer, prostate cancer, esophageal cancer, ovarian cancer, bile duct cancer, gall bladder cancer, kidney cancer, and oral cavity/throat cancer. Since its launch in January 2020, more than 400,000 people have taken the test, and more than 1,500 corporate customers have taken the test (as of May 2023).

■ About N-NOSE plus Pancreas

N-NOSE's next-generation "Cancer Type Specific Test". This test uses a "special nematode" genetically engineered to react specifically to the smell of pancreatic cancer. This "special nematode" has a high ability to distinguish between pancreatic cancer and other cancers, and can detect early stage pancreatic cancer in a non-invasive manner.



■ About N-NOSE plus Dogs

Cancer test for dogs based on N-NOSE technology. This test is a simple method to check the risk of lymphoma, mammary gland cancer, skin cancer, etc., which are commonly found in dogs, by simply submitting urine. We launched this service in May of 2023.

Press Inquiries

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