

**Nematode Cancer Screening Test "N-NOSE"**  
**Success in Identifying a New Cancer Type, Liver Cancer**

— Service Launched Today. Special price until March 31, 2024 —

**N-NOSE<sup>®</sup>** 

**HIROTSU Bio Science Inc. (Head Office: Chiyoda-ku, Tokyo; Representative Director: Takaaki Hirotsu; hereinafter referred to as "HIROTSU") has successfully developed a cancer type specific test that can detect early stage liver cancer. "N-NOSE plus" has been added a new product lineup to the service and be starting today.**

Cancer is now the leading cause of death among Japanese, and it is estimated that one in two Japanese will develop cancer during their lifetime. While early detection and early treatment are expected to improve the treatment rate, the cancer screening uptake rate in Japan is not high. In order to change this situation, we have been conducting research and development to create a future in which cancer can be detected at an early stage by lowering the hurdle to screening by developing a cancer test that is easy and affordable for everyone to take.

As a first step, in 2020, we succeeded in developing the "N-NOSE" nematode cancer test, which is a simple and inexpensive way to determine the risk of 15 types\*1 of early-stage cancer throughout the body, as an unprecedented "gateway" to cancer testing. In 2022, we launched the "N-NOSE plus Pancreas" service, the world's first cancer-specific test capable of detecting early-stage pancreatic cancer, which will play the next role in early cancer detection. Now, liver cancer has been added to the N-NOSE plus service as the second phase.

Although liver cancer is the fifth leading cause of cancer deaths\*2 in Japan, it is not included in the five major cancer screenings. With the addition of liver cancer to N-NOSE plus, it is now possible to cover the first five leading causes of cancer deaths in Japan by combining the N-NOSE high-risk screening with the five major cancer screenings.

We are committed to further research and development to create a new cancer test system that will make it possible to identify more types of cancer in the future. We continue to provide information to our customers, medical professionals, and all other stakeholders, aiming for a world where cancer can be detected at an early stage through N-NOSE.

\*1 The cancer type cannot be confirmed. For those who are determined to be at high risk, we recommend that they consult a hospital immediately for early detection.

\*2 Cancer Statistics, Cancer Information Service, National Cancer Center (Vital Statistics, Ministry of Health, Labor and Welfare)

### ■"N-NOSE plus" Service Details

"N-NOSE plus" can be applied for by those who have received a high-risk grade (D or E) after taking the "N-NOSE" test. Using the urine submitted at the time of the "N-NOSE" test, the risk of pancreatic cancer and liver cancer is determined for each cancer type. There is no need to submit new urine.

Official service website : <https://lp.n-nose.com/>

"N-NOSE" Periodic Screening Plan 13,800 yen: 30,000 yen

"N-NOSE" One-time Screening Plan 14,800 yen: 50,000 yen \*

\*Customers using the one-time inspection course until March 31, 2024 can also apply for the regular inspection course for the same price of ¥30,000.

In the future, some medical institutions will allow patients to take the pancreas or the liver test alone. The latest information will be available on our official website as soon as it is ready.

### ■About HIROTSU Bio Science

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

Company Name: HIROTSU Bio Science Inc.

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

Name of Representative: Takaaki Hirotsu, CEO

Date of Establishment: August 2016

Main Service: Research, development, and marketing of cancer screenings using nematode and nematode olfactory sensors

Corporate website: <https://hbio.jp/en/>

■ 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 exhibits an excellent sense of smell. By simply submitting urine, the test is simple, inexpensive, highly accurate, and comprehensive throughout the body to determine the risk of early-stage cancer.

Service Website : <https://lp.n-nose.com/>

■ About “N-NOSE plus Pancreas”

N-NOSE's next-generation "Cancer Type Specific Test". This test uses a "special nematode" genetically engineered from the nematode *C. elegans* that specifically reacts only 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.

Service Website : <https://lp.n-nose.com/suizou/>