

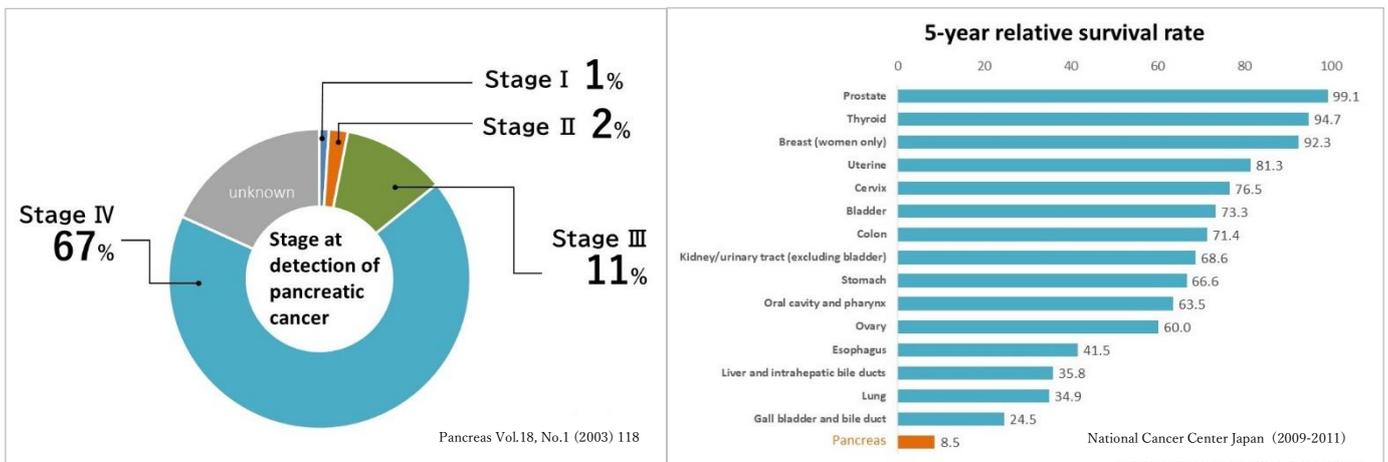
Practical Application of Cancer Species Specific Tests for Nematode Cancer Testing
World's First Test for Early-Stage Pancreatic Cancer,
"N-NOSE® plus Pancreas", Now Available

— Pre-orders open today. Special pricing applies during the pre-order period. —

HIROTSU BIO SCIENCE INC. (Head Office: Chiyoda-ku, Tokyo; Representative: Takaaki Hirotsu; hereafter referred to as "HIROTSU") is pleased to announce the commercialization of "N-NOSE plus Pancreas," the first next-generation "cancer type specific test" for the "N-NOSE®".

"N-NOSE plus Pancreas" is the world's first test that can detect early-stage pancreatic cancer. Through the "N-NOSE plus Pancreas", HIROTSU aim to achieve early detection of as many cases of pancreatic cancer as possible and contribute to improving pancreatic cancer treatment results.

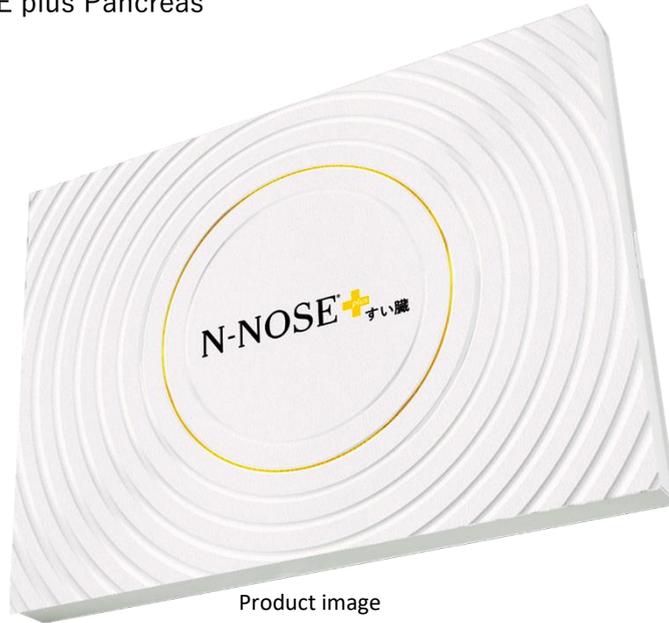
Pancreatic cancer, which is particularly difficult to detect in its early stages and is often found in advanced stages up to stage 4, is responsible for about 30,000 deaths annually according to the latest cancer statistics, and the 5-year survival rate by cancer type is significantly lower than that of other cancers. Since there is no effective screening for pancreatic cancer, such as gastric and colorectal cancer screening, the medical society has been saying that it would be revolutionary if a method to test for early-stage pancreatic cancer could be developed.



HIROTSU have been conducting research and development of a "cancer-specific test" as a next-generation test for the "N-NOSE" primary cancer screening test that was launched in January 2020, and we have been putting all our efforts into research and development in order to commercialize a specific test for pancreatic cancer, which is particularly difficult to detect in its early stage. In November 2021, we succeeded in creating a "special nematode" that specifically reacts to the smell of pancreatic cancer by genetically modifying *C. elegans* nematodes. Subsequent research confirmed that this special nematode is capable of detecting early-stage pancreatic cancer, and after completing verification tests at a testing center, we have now commercialized the "N-NOSE plus Pancreas".

"N-NOSE plus Pancreas" may greatly contribute to early detection and early treatment of pancreatic cancer. We are committed to making use of this technology, which was made possible by the fusion of biotechnology and the idea of using the superior abilities of living organisms, to help save as many lives as possible.

■ Overview of "N-NOSE plus Pancreas"



Product image

Pre-order Period:

From November 17, 2022 to January 3, 2023

Pre-order Website:

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

Price:

70,000 yen (tax included)

*35,000 yen (tax included) if applied for during the pre-order period

Shipping of Products:

From January 4, 2023

■ **About N-NOSE nematode cancer screening**

N-NOSE is the world's first primary cancer screening test that utilizes "nematodes," microorganisms that are highly sensitive to the odor of cancer in human urine. Clinical research has shown that nematodes even respond to early-stage cancer (stages 0 and I), which is difficult to detect with conventional screening methods.

The fact that cancer risk can be assessed in one test, regardless of the location in the body,* is another strength that sets N-NOSE apart from other tests.

* Types of cancer that nematodes are known to respond to: stomach, colorectal, lung, breast, pancreatic, liver, prostate, uterine, esophageal, gall bladder, bile duct, kidney, bladder, ovarian, oral/pharyngeal—15 types of cancer (as of September 2019)

【HIROTSU BIO SCIENCE INC.】

Address: New Otani Garden Court 4-1 Kioi-cyo, Chiyoda-ku, Tokyo

President and CEO: Takaaki Hirotsu Founded: August 2007

Business: Research, development, and sale of a cancer screening test that utilizes the olfactory sensory functions of nematodes

URL: <https://hbio.jp/en/>