

## **Preliminary Cancer Detection Rates After Use of N-NOSE® Dogs Released.**

HIROTSU Bioscience Inc. (Head Office: Chiyoda-ku, Tokyo, Representative: Takaaki Hirotsu, hereinafter referred to as "HIROTSU") has verified the cancer detection rate\*<sup>1</sup> from the claim data after the use of "N-NOSE Dogs" based on the insurance claim information of Anicom Insurance Inc. (Head Office: Shinjuku-ku, Tokyo, Representative : Shingo Noda, , hereinafter referred to as "Anicom").

Cancer is the leading cause of death in dogs. The number of deaths per age group is rising sharply, especially after the age of 5~6 years, and it is known that 21% of all deaths at the age of 10 years are due to cancer.\*<sup>2</sup> Therefore, as in the case of humans, early detection of cancer in dogs is considered to be important.

In order to ensure that our service "N-NOSE Dogs", which is linked to early detection of cancer in dogs, can be used by all, we have conducted a survey on tumor claims after the use of "N-NOSE Dogs". The survey was conducted on 883 cases among Anicom's pet insurance policyholders who used the "N-NOSE Dogs" service and were sent the results between mid-June and mid-September 2023, to determine whether they received tumor treatment. The results of this survey are calculated based on the information on claims submitted to Anicom Insurance after medical treatment related to the tumor.

### ■Survey Report

- Of the 883 canine subjects\*<sup>3</sup> who underwent the "N-NOSE Dogs" test, 22 cases (2.5%) underwent tumor treatment and submitted insurance claims.
- 1.2% for low risk (A, B), 3.6% for medium risk (C) and 6.3% for high risk (D, E)
- As for each risk assessment, the tumor detection rate for Result A was 1.1%, whereas the tumor detection rate for Result E was 14.9%, approximately 13.5 times higher.

Of the 883 dogs in this survey that used the "N-NOSE Dogs", 22 were presumed to have been treated for tumors after disclosure of the results. The results for each risk group showed that the detection rate was significantly higher for dogs that received a high-risk decision than for those that received a low-risk decision.

This survey presents preliminary results based on insurance claim data up to December, for judgment results disclosed from mid-June to mid-September 2023. Therefore, among the 883 cases tested with "N-NOSE Dogs", there are cases that did not undergo further testing at veterinary clinics or have not been definitively diagnosed following the disclosure of results.

### ■Survey Summary

#### ▶Targets

"N-NOSE Dogs" users which decision results (A to E) were disclosed between mid-June and mid-September 2023\*<sup>4</sup>

#### ▶Number of cases

883 cases

#### ▶Method

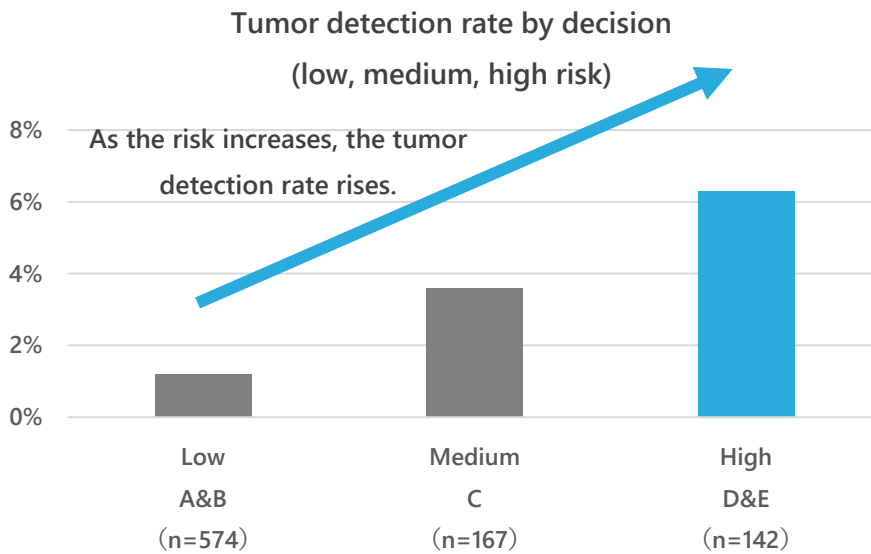
Data aggregation based on insurance claim details.

#### ▶Items

1. Tumor detection rate by judgment group (low, medium, and high risk)
2. Tumor detection rate for each judgment\*<sup>5</sup> (A, B, C, D, E)

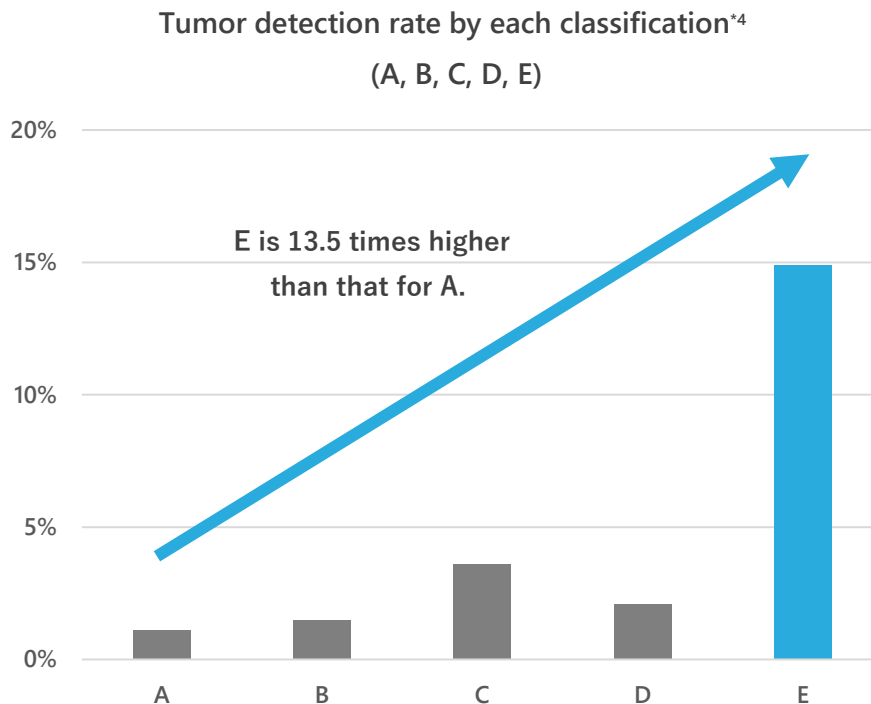
■ Survey Results

1. Tumor detection rate by decision group (low, medium, and high risk)



The tumor detection rate in the low-risk group (A, B) was 1.2%, in the medium-risk group (C) 3.6%, and in the high-risk group (D, E) 6.3%. Thus, the tumor detection rate in the high-risk group was 5.2 times higher than that in the low-risk group.

2. Tumor detection rate by each classification



The tumor detection rate for the E was approximately 13.5 times higher compared to the A.

We will continue to focus on research and development with the aim of realizing the world's first early detection of cancer, and will continuously provide information to our customers, medical professionals, and all other stakeholders.

\*1 Percentage of the number of dogs for which claims were made that fit the following criteria.

- Must have a claim for surgery for a tumor.
- Continuous claims with tumor at least 5 times.

\*2 Anicom White Paper on Household Animals 2023 Causes of death in dogs at age 10

\*3 Only test results linked to contract information

\*4 Includes continuing treatment from prior to disclosure of test results and treatment of suspected recurrence with previous treatment.

\*5 "N-NOSE Dogs" results are determined on a 5-point scale from A, B, C, D, and E, in descending order of risk from lowest to highest.

#### ■ About Anicom Insurance Inc.

Anicom Insurance Inc. is the core pet insurance company within the Anicom Group. The company strives to promote pet insurance so that pet owners can easily visit veterinary clinics for early detection and treatment of their pets' injuries and illnesses. By providing a "Front Desk Settlement System" that allows insurance claims and receipts to be processed on the spot at the time of payment for medical treatment at veterinary hospital counters, it can be used as insurance that is as familiar and easy to use as human health insurance. In addition, the Anicom Group is engaged in various businesses related to "pet health," including medical record management systems for veterinary clinics, research and development of pet food, and operation of veterinary clinics.

Company Name : Anicom Insurance Inc.  
Location : 39F Sumitomo Fudosan Shinjuku Grand Tower, 8-17-1 Nishi-Shinjuku, Shinjuku-ku, Tokyo  
Representative : Shingo Noda, CEO  
Date of Establishment : January 2008  
Main Service : Non-life insurance business (Pet insurance)  
Official Website : <https://www.anicom-sompo.co.jp/>

#### ■ About HIROTSU Bio Science

We as HIROTSU aim to protect the health and future security of people through research, development, and practical application of unique technology that utilize the capabilities of living organisms. Established in 2016, N-NOSE was put into practical use thanks to our researchers' abundance of ideas and tireless efforts. Despite the importance of extending healthy life expectancy being emphasized, it is said that one in every two people will be diagnosed with cancer in this age of 100-year life expectancy. We strive to contribute to solving these social issues with our groundbreaking "bio-diagnoses" technology that utilizes the power of nematodes.

Company Name : HIROTSU Bio Science Inc.  
Headquarters : 22F New Otani Garden Court, 4-1 Kioi-cho, Chiyoda-ku, Tokyo  
Representative : Takaaki Hirotsu, CEO  
Date of Establishment : August 2016  
Main Service : Research, development, and marketing of cancer screenings using nematodes and nematode olfactory sensors  
Official Website : <https://hbio.jp/>

#### ■ 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 has a very good sense of smell. By simply submitting urine, the test is simple, inexpensive, highly accurate, and provides a whole-body comprehensive examination of early-stage cancer risk.

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

■ About “N-NOSE Animals”

“N-NOSE Dogs” and “N-NOSE Cats” developed based on the N-NOSE technology. Up until now, there has not been an easily accessible cancer screening test for pets. Just like N-NOSE for humans, starting in 2023, an easy cancer risk screening only requiring urine for both cats and dogs has been made available due to this product.

Official Service Website: <https://jp.n-nose.com/animal/>

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