

# Study uncovers FeLV test risks

## Most accurate point-of-care test identified

More than 5 million cats across the U.S. are affected by feline leukemia virus (FeLV) and feline immunodeficiency virus (FIV), placing them at risk for disease and premature death.<sup>1</sup> These are preventable, contagious retroviruses. Identifying and segregating infected cats is the key to controlling the spread of disease. As a result, positive cats may be euthanized based upon the results of a pet-side test.

### Retroviral testing is “high stakes”

With retroviral testing, the stakes are high because the life of a pet faces imminent risk. Accurate results are paramount.

- A false-positive result means that a healthy, uninfected cat has tested positive. A positive test result could lead to that cat being euthanized unnecessarily.
- A false-negative result means that an infected cat has been missed and is considered free of the infection. If that cat is then placed in a household with other cats, it could endanger those cats.

### Study

New independent research conducted by Julie K. Levy, DVM, PhD, DACVIM, and her team at the Department of Small Animal Clinical Sciences at Maddie’s Shelter Medicine Program in Gainesville, Florida, identified significant differences in sensitivity and specificity provided by tests from leading manufacturers of in-clinic tests.

Dr. Levy’s study determined that the IDEXX SNAP® FIV/FeLV Combo Test demonstrated higher sensitivity and specificity for FeLV than competing brands, including the Zoetis Witness® FeLV-FIV Test and the Abaxis VetScan® FeLV/FIV Rapid Test, both of which are lateral flow tests. This means the IDEXX SNAP test had fewer false-positive and false-negative test results.<sup>1</sup>

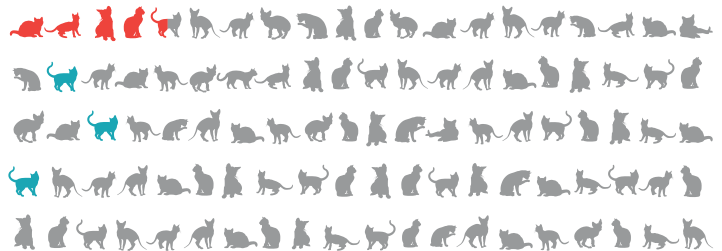
### FeLV test risks

The most significant findings of the Levy study pertained to FeLV. Both the Witness and VetScan Rapid lateral flow tests demonstrated relatively poor specificity for FeLV, which means they generated false-positive results for healthy, uninfected cats. The SNAP FIV/FeLV Combo Test generated zero false-positive results.

For instance, a test with 95% specificity would, on average, falsely identify 5 out of 100 healthy cats as infected. This has increasing importance when screening for a disease that has a low prevalence in the population. In a situation like FeLV, where the prevalence in the tested population is 3%,\* a test with low specificity can produce positive results that will more likely be wrong than right.

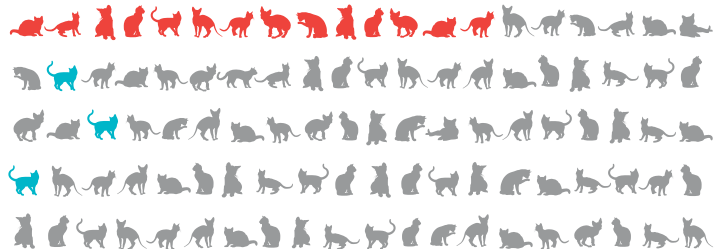
### In “high-stakes” testing, accuracy could be life and death

Prevalence of FeLV is 3% in the population of tested cats.\*



3 true positives + 4.5 false positives

The Witness test was only 95.5% specific in the Levy study!...thus a **“positive” Witness test result was more likely wrong than right.** IDEXX showed 100% specificity.



3 true positives + 14 false positives

The VetScan Rapid test was only 85.7% specific in the Levy study!...thus a **“positive” VetScan Rapid test result was more likely wrong than right.** IDEXX showed 100% specificity.

### Conclusion

Based on the data from this independent, head-to-head study directly comparing in-clinic FeLV/FIV tests using the same sample set, the IDEXX SNAP FIV/FeLV Combo Test demonstrated superior performance in “high stakes” retroviral testing. And because in many cases, the test result is the diagnosis, using an accurate test where the result can be trusted is essential to providing quality medical care.

\*IDEXX results from 1.9 million tests in the U.S. from 2013 to July 2016. Data on file at IDEXX Laboratories, Inc. Westbrook, Maine USA.

#### Reference

1. Levy J. Performance of point-of-care assays for FeLV and FIV [ACVIM Abstract ID06]. *J Vet Intern Med.* 2016;30(4):1475.