



Is it cancer? Use of blood-based test as an aid-in-diagnosis for cancer detection in dogs

This session, sponsored by PetDx will review the basic principles of liquid biopsy testing and how this technology may be useful as an aid-in-diagnosis.

Speaker Bios:

Dr. O'Kell is a board-certified internal medicine specialist with experience in both academia and private practice. At PetDx, she serves as a vet-to-vet resource for OncoK9 clinical use consultations as well as supporting clinical research studies. After graduating from the Western College of Veterinary Medicine at the University of Saskatchewan, she completed a rotating Small Animal Medicine and Surgery internship at the Virginia Maryland Regional College of Veterinary Medicine, followed by a combined Small Animal Internal Medicine Residency and Master's degree at the same institution. Dr. O'Kell enjoys all aspects of internal medicine and clinical research, the latter of which has focused on novel disease biomarkers and canine diabetes pathogenesis. She was awarded a prestigious National Institutes of Health Career Development Award in 2018 to support this research. Dr. O'Kell has published numerous articles in peer reviewed journals, has presented at a variety of veterinary conferences, and has a wealth of experience providing education for veterinary students and CE for the veterinary community.

Dr. Cohen is a board-certified internal medicine specialist with more than a dozen years of experience in specialty private practice. At PetDx, he serves as a vet-to-vet resource for OncoK9 clinical use consultations as well as supporting clinical research studies. After earning a Doctor of Veterinary Medicine from UC Davis School of Veterinary Medicine, Dr. Cohen completed his internship at the University of Pennsylvania,

followed by his internal medicine residency back at UC Davis. Before PetDx, he practiced at VCA Animal Specialty & Emergency Center in Los Angeles. both private practice and academic settings. I have been studying diabetes in dogs at the University of Florida since 2016 and am currently supported by an NIH KO8 Career Development Award. My research focus is canine diabetes pathogenesis and early disease biomarker discovery.

Learning Objectives:

1. Describe basic principles of cancer development and understand how cell-free DNA can be used to detect cancer in dogs
2. Identify clinical scenarios in which liquid biopsy may be useful as an aid-in-diagnosis for cancer in dogs
3. Review appropriate interpretation of liquid biopsy results in the aid-in-diagnosis scenario

Agenda:

- Basic principles of cancer development and the origins of cell-free DNA
- Liquid biopsy using cell-free DNA and next-generation sequencing as a means of detecting cancer in dogs
- Clinical scenarios in which liquid biopsy could be appropriate as an aid-in-diagnosis
- Interpretation of liquid biopsy results in the aid-in-diagnosis scenario
- Case examples in which liquid biopsy was used an aid-in diagnosis tool