



Innovation Funding supported a study and successfully fast-tracked pre-seed investment

■ Cancer is the leading cause of death for dogs over 12 months old, however, current detection and monitoring methods are invasive, time-consuming and expensive. The use of liquid biopsy, a non-invasive laboratory test to detect signs of a tumour, in humans has helped increase the early detection of cancers and inform therapeutic strategies. CanCan Diagnostics is refining this approach with the inclusion of next-generation sequencing to analyse cell-free DNA fragments in dogs. Longer term it is hoped that the technology will be able to predict recurrence and screen dogs before clinical signs of cancer occur.



Canine Cancer Liquid Biopsy

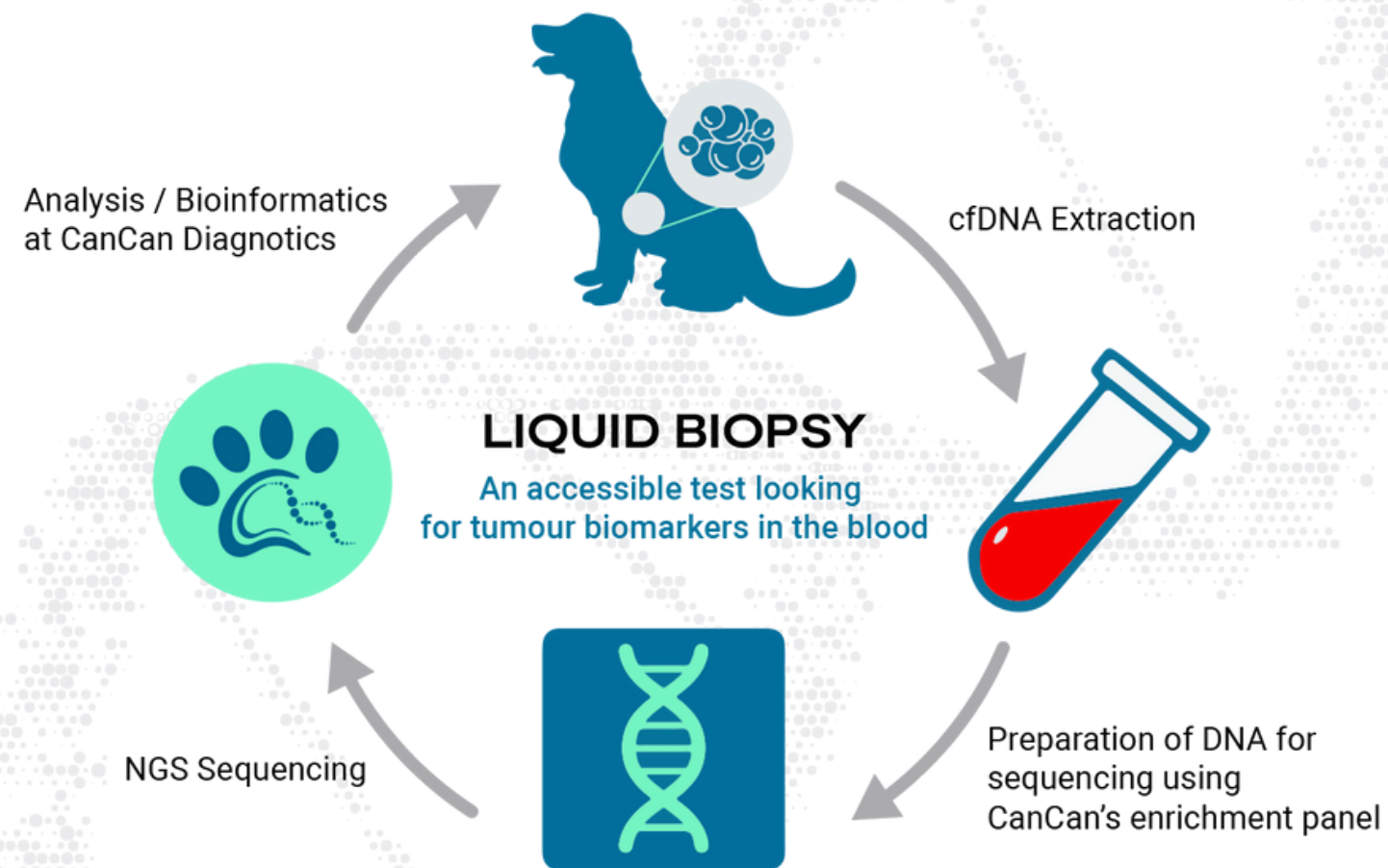
CIA support allowed the company to further validate the technology before it could attract investment. The project facilitated a collaboration between the company and The Royal (Dick) School of Veterinary Studies to streamline sample preparation and provide access to genomic sequencing / analysis techniques to test samples from animals with known and well documented tumour types. This included mast cell tumours, soft tissue sarcomas, melanomas, and anal sac adenocarcinomas. Furthermore, AI-based detection methods further helped to refine diagnostics in a range of cancer types, a methodology which is currently not available on the market for canine cancer detection.

As a result of funding CanCan Diagnostics were able to secure pre-seed funding from Advanced Genomics Limited and a private investor. Furthermore, the company are planning to start selling their flagship product "K9-LiquiDX" liquid biopsy test, which will be the first test of this kind available on UK and European market. The team hopes to take their product to market in 2024 and plans to offer additional tests to enhance diagnosis and personalise treatment for pets with cancer.

“ We believe our approach of using liquid biopsy to detect and monitor cancers in dogs to be the first application of this type of technology to veterinary diagnostics in the UK and Europe. It will help improve the disease monitoring for affected pets and their owners, while also providing vets with a novel, minimally invasive and quick to perform diagnostic test.

We anticipate that further development could lead to sophisticated diagnosis and personalised treatments, including specific products for particular breeds, in future. ”

Dr Maciej Parys Veterinarian at the Royal (Dick) School of Veterinary Studies and director of CanCan Diagnostics



The Blood Hounds

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