

Title:

Fighting against cancer with the help of human's best friend

Abstract

Sungwon Lim
ImpriMed, Inc.

Similar to human, cancer is a life-threatening disease for our animal friends. 50% of the disease-related death in pets is due to cancer, and 6 million dogs and 6 million cats are diagnosed with cancer every year in the US. As every patient has a different response to a cancer drug, optimal treatment needs to be personalized for each patient.

ImpriMed develops a functional precision medicine platform to allow veterinary oncologists to find out appropriate chemotherapies for individual dogs with cancer. Measuring hundreds of different drug responses on the patient's fresh biopsy samples, our platform observes how the live cancer cells react, before actual drug treatment. It screens the most effective treatment options and excludes out non-effective ones as evidenced by testing, and provides this information to veterinarians to be administered to each specific patient as appropriate. The ImpriMed database collected from pet cancer patients will be translated into human oncology and help fighting against human cancer as well.

Currently, lymphoma is the specific form of cancer that ImpriMed is focusing on treating in dogs. With more than 1,000 clinical data collected from canine cancer patients, the prediction accuracy of the ImpriMed's *ex vivo* assay reaches up to 82%. We have established our client network with 81 veterinary hospitals (out of 227 specialty hospitals in the US) in 26 different states in the US.