

End deaths from cancer worldwide

Of the ~9M people that will die of cancer this year, 70% will be in less developed countries. Therefore, to end deaths from cancer the solution must be inexpensive. We are developing two approaches to meet this requirement. Early detection of cancer, even with current standard of care, could effectively end most deaths from cancer. For example, the 5 year survival of breast cancer detected at stage 1 is 100%. We have developed a blood-based diagnostic that relies on detection of antibodies raised against the tumor neoantigens – specifically, the frameshift peptides (FSP) created by exon mis-splicing events. We manufacture a chip with all the possible FSP synthesized on the surface that is the basis of the diagnostic. Progress in applying this system to the early detection of cancer will be shared. We have also used these chips as the basis for the design of a vaccine to prevent all cancers. The goal is to treat cancer like an infectious disease. This vaccine is currently in a large dog clinical trial. Progress on this trial will be reported.