

PRESS RELEASE

CytoSolve releases in silico models of pancreatic cancer

Cambridge, June 10, 2013: In a major breakthrough that represents a tangible application of computational systems biology, CytoSolve has successfully created mathematical models representing the molecular systems involved in pancreatic cancer.

"Pancreatic cancer arises from the dysfunction in two of the most critical biological processes of cell death and cell proliferation in the pancreatic cells. Our research team has conducted an exhaustive systematic bioinformatics literature review that mined the molecular mechanism involved in these two process in pancreatic cancer conditions. We successfully translated the understanding of molecular mechanisms into predictive mathematical models. These models also have been validated using the existing scientific studies to make sure they represent reality," said Dr. Andrew Koo, Director of Research at CytoSolve.

CytoSolve's approach is revolutionary. It is based on integrating mechanisms of molecular pathway interactions derived from actual wet lab experiments. This approach is not "big data analysis" or mathematical statistical modeling that simply provides input-output results, without providing an understanding of mechanisms, which is what biologist require to advance drug discovery and development.

"This is a paradigm shifting milestone in the pancreatic cancer research field. These in silico models provide novel and unique platform to perform hypothesis testing that can direct the design in vitro and in vivo experiments. In addition, these validated in silico models can be used to discover novel therapeutics cheaper and faster," said Dr. V. A. Shiva Ayyadurai, Chairman and C.E.O. of CytoSolve, Inc.

CytoSolve is headquartered in Cambridge, MA. CytoSolve's revolutionary technology for in silico mechanistic modeling is accelerating discovery and development of single and multi-combination therapeutics.