

HOOKIPA and DarwinHealth Enter into a Research Collaboration

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HOOKIPA Pharma Inc. ("HOOKIPA"), a clinical stage biopharmaceutical company developing a new class of immuno-therapeutics targeting infectious diseases and cancers based on its proprietary technology platform, announced today that it entered into a research collaboration and license agreement with DarwinHealth to develop novel immunotherapies based on the systematic discovery and prioritization of the next generation of immunogenic, tumor-specific cryptic antigens.

DarwinHealth is a precision-focused cancer medicine company, utilizing systems-biology derived algorithms to identify appropriate therapies for cancer patients and to systematically discover and prioritize the next generation of immunogenic, tumor-specific antigens.

Under the terms of the agreement, DarwinHealth will utilize a combined single-cell transcriptome analysis and bioinformatics-based approach using both mouse and human cancerous and non-cancerous tissues to identify the next generation of shared "off-the-shelf" tumor-specific antigens. HOOKIPA will perform the validation experiments and be granted exclusive rights to the development, manufacturing and commercialization of products arising from the collaboration.

"Immunotherapy is one of the areas of greatest potential for future cancer treatment. Arguably, all antigen-specific immunotherapy is limited by the scarcity of known antigens. The current group of shared tumor self-antigens has been established for many years, and while more recent efforts have been aimed at identifying patient-specific neo-antigens, systematic attempts to identify the next generation of tumor self-antigens have not been pursued as aggressively," said Dr. Igor Matushansky, Chief Medical Officer and Global Head of Research and Development of HOOKIPA.

"This is why the primary objective of our next generation, antigen discovery program - entitled HIDE **H**uman **I** mmunotranscript **D**iscovery initiativ**E**]" - with DarwinHealth is to identify a novel constellation of shared self-antigens for multiple tumor subtypes. Our goal is that following a successful completion of the two-year program, antigens with validated immunogenicity will be deployed clinically as antigen-specific, vector-mediated immunotherapy using our Thera **P** vector."

"DarwinHealth utilizes proprietary, systems biology-generated algorithms to match cancer patients with the drugs and drug combinations that are most likely to produce a successful treatment outcome. These same algorithms can also be used to

prioritize investigational drugs and compound combinations of unknown potential against a full spectrum of human malignancies, as well as novel cancer targets," explained Andrea Califano, Dr. co-founder of DarwinHealth and Clyde and Helen Wu Professor of Chemical Systems Biology and Chair, Department of Systems Biology at Columbia University, "and importantly, for immuno-oncology applications, DarwinHealth can apply proprietary bioinformatics- and experimentally-based methodologies to identify human, cryptic immunogenic transcripts