

Press Release

RubrYc Therapeutics To Present at AACR Virtual Conference

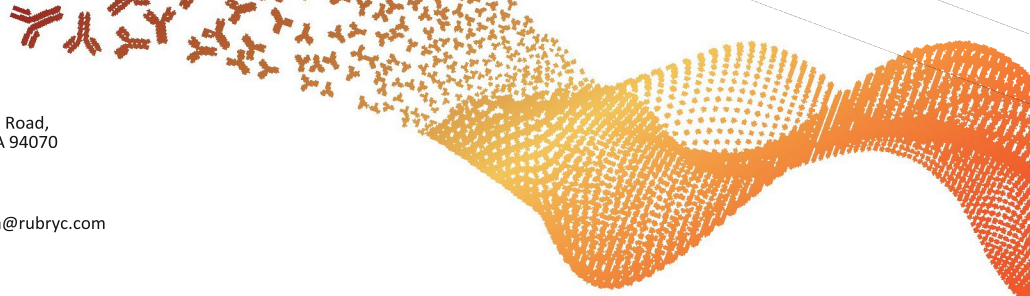
San Carlos, California, June 22, 2020 - RubrYc Therapeutics, Inc., a pre-clinical biotherapeutics company developing epitope selective therapies to improve outcomes for cancer, today announced the presentation of discovery and pre-clinical data from their lead program RTX-003, a CD25 targeted monoclonal antibody for selective depletion of regulatory T cells (Tregs) in the tumor microenvironment (TME).

A poster titled “Discovery of Epitope-Selective Anti-CD25 Targeting Therapeutic Antibodies for Effective Treg Cell Depletion in Cancer using a Machine Learning-Based Platform” will be presented by Dr. Phung Gip, Director of Biology, at the AACR Virtual Conference on June 22nd (Abstract #6055).

RubrYc’s technology addresses one key limitation in early antibody discovery, which is immunodominance – an evolutionary bias toward specific epitopes that steer antibody selection away from potentially high-efficacy epitopes. An integrated computational and laboratory approach to antibody discovery enables us to build focused epitope embodiments of structural epitopes. These epitope embodiments, called Meso-scale Engineered Molecules (MEMs), are used in antibody selections to steer hits towards the intended epitopes. In our lead program RTX-003, we target CD25 (IL2R α) which is highly expressed on regulatory T-cells (T_{regs}) that drive immunosuppression in the TME. Depletion of T_{regs} can restore anti-tumor T effector (T_{eff}) function in the TME by increasing the T_{eff}/T_{reg} ratio, especially when combined with checkpoint-inhibitors. Using our epitope-selective antibody discovery platform, we built MEMs that embody eight CD25 structural epitopes outside the CD25:IL-2 interface. Through both immunization and in vitro selection based approaches, several medium to high-affinity (median K_D = 25 nM) anti-CD25 antibodies from each of the eight intended CD25 epitopes were identified and confirmed to be on prescribed epitope by cross-blocking assays and in-epitope alanine mutations. Several conventional- and epitope-selective anti-CD25 clones were converted to human IgG1 and tested in in vitro assays. As a result, these antibodies bound specifically to CD25+ cells, preserve IL-2 signaling via pSTAT5 assays and elicited potent ADCC activity using human effector cells, and had in vivo efficacy superior to benchmark antibodies. These studies demonstrate that our integrated computational and laboratory platform improves the productivity of epitope-selective antibody discovery and produces clones with improved biological function and therapeutic potential.

Dr. Isaac Bright, CEO, said, “The in vivo results from our lead program RTX-003, are the first demonstration that RubrYc Discovery Engine can yield highly epitope-specific monoclonal antibodies with enhanced biological function. These mAbs can be used for internal or partnered programs in monospecific and bispecific antibodies, antibody drug conjugates or cellular therapies. We look forward to refining the platform and bolstering our development capabilities for accelerated discovery and development of epitope-specific therapeutics for patients in need.”

About RubrYc Therapeutics



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RubrYc Therapeutics, Inc., is a biotechnology company applying proprietary machine-learning and computational biology solutions to discover epitope-selective biotherapeutics. Inspired by recent advances in molecular library synthesis, massively parallel screening and computing, RubrYc is forging a new path for information-driven discovery of therapeutic antibodies. Founded in 2017, RubrYc Therapeutics, Inc. emerged as the exclusive biotherapeutic partner of immunomics leader HealthTell, Inc.. In April 2018, RubrYc Therapeutics, Inc., spun out of HealthTell, and has leveraged the RubrYc Discovery Engine to advance proprietary discovery programs, and to partner with top-tier pharmaceutical companies that share our mission to expand therapeutic options and improve outcomes with novel, epitope-targeted biotherapeutics. RubrYc is backed by a strong syndicate of investors, including Third Point Ventures, Paladin Capital Group, and Vital Venture Capital. The Company is based in San Carlos, California. For more information, visit www.rubryc.com.

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