SeromYx Systems and ACROBiosystems Announces Strategic Collaboration on Comprehensive Functional Profiling of Anti-CD20 Monoclonal Antibodies

Woburn, MA / Newark, DE – 9/30 - SeromYx Systems, a cutting-edge immunology technology company, and ACROBiosystems, a leading provider for life science solutions and tools, are excited to announce the release of their joint study on the comprehensive functional profiling of approved anti-CD20 monoclonal antibodies (mAbs). The collaboration leverages SeromYx's advanced biophysical and cellular Fc-effector function platform and ACROBiosystems' recombinant human full-length CD20 virus-like particles (VLPs) to provide new insights into the potential drivers of therapeutic safety and efficacy of anti-CD20 mAbs.

CD20, a critical target for treating B-cell malignancies and autoimmune diseases, is selectively expressed on B-cells, allowing for effective B-cell depletion while preserving long-term immune memory. The study compared the biophysical binding and immune effector functions of Rituximab (RTX), Ofatumumab (OFA), and Obinutuzumab (OBZ), providing a detailed analysis of their mechanisms of action.

“This study not only reinforces the importance of comprehensive Fc effector profiling as a critical tool for all mAbs in development, ensuring a deeper understanding of safety and efficacy mechanisms, but also has implications for the development of new anti-CD20 mAbs” said Lenny Moise, VP of Research, at SeromYx.

Robust binding profiles and distinct Fc-effector functions of the anti-CD20 mAbs were observed throughout the study. Notably, the collaboration discovered new Fc-effector functions, including antibody-dependent neutrophil and eosinophil phagocytosis activities. These findings broaden the understanding of how these mAbs engage with immune cells, potentially influencing their efficacy in various clinical settings.

“This collaborative study together with SeromYx represents a significant step in exploring the expansive applications of our human CD20 full-length VLP. We are excited to see how our full-length transmembrane protein contributes to a greater understanding of antibody drug efficacy, driving forward innovations in the field of immunology and more” stated John Miao, Senior VP at ACROBiosystems.

About SeromYx Systems

SeromYx Systems leverages high-throughput cell and bead-based assays, coupled with machine learning computational analysis, to advance the design and development of therapeutic monoclonal antibodies. By profiling the functional interactions between antibodies and innate immune cells, we enable biotechnology and pharmaceutical companies to develop targeted therapies with precision. Our platform provides the most

comprehensive Fc effector function profiling to help identify antibody functions for targeting pathogens, infected cells, or tumors.

We offer an extensive suite of biophysical and functional assays to support the entire lifecycle of monoclonal antibody development, from candidate selection to IND and CMC filing. With a GCLP-certified platform and robust data interpretation, SeromYx is a trusted partner in the development of monoclonal therapies that address critical health challenges and unmet medical needs.

About ACROBiosystems

ACROBiosystems is a cornerstone enterprise of the pharmaceutical and biotechnology industries. Our mission is to help overcome challenges with innovative tools and solutions from discovery to the clinic. We supply life science tools designed to be used in discovery research and scalable to the clinical phase and beyond. By consistently adapting to new regulatory challenges and guidelines, we deliver solutions, whether it comes through recombinant proteins, antibodies, assay kits, GMP-grade reagents, or custom services. We empower scientists and engineers dedicated towards innovation to simplify and accelerate the development of new, better, and more affordable medicine.

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