

## **Covance and Novartis Institutes for Biomedical Research (NIBR) Collaborate to Develop a State-of-the-Art Clinical Data Warehouse**

Effective clinical data integration is one of the pharmaceutical industry's most pressing unmet needs. While some commercial solutions exist, their deployment has been notoriously costly and problematic, and has not met user expectations. To address this gap, Covance has entered an in-kind collaboration with Novartis Institutes for Biomedical Research (NIBR) to accelerate the development of a state-of-the-art clinical data warehouse designed to support data integration and meta-analysis for preclinical and clinical research.

The collaboration will combine Covance and NIBR's technical and clinical data management expertise to further develop a next generation clinical data warehouse. The team will augment NIBR's current platform, which is used to integrate data for hundreds of studies and serves as a foundational platform for data management and medical review. The new data warehouse will enable rapid and highly scalable data loading into an extensible model that allows for future growth, moving beyond the limitations of conventional relational database technologies.

The goal of this project is to make it possible to integrate massive volumes of data faster, more reliably and more economically, improving the quality and reducing the cycle time for the development of new medical treatments. By leveraging established industry standards and by intelligently automating the data-mapping process, the software is expected to bring important practical benefits across a wide range of preclinical, clinical and translational applications, such as real-time monitoring of clinical trials and cross-trial analysis.

"A key differentiating feature of NIBR's data warehouse is that it can effectively store both preclinical and clinical data into a single repository, a particularly important feature for Covance and our clients," said Dimitris Agrafiotis, Ph.D., Covance's Chief Data Officer. "Covance produces more safety and efficacy data to support drug approvals than any other company in the world, and is the only CRO whose services span the entire drug development continuum, end-to-end. Integrating data across the preclinical and clinical divide is critical for advancing a molecule along the development pipeline and for enabling translational research. Pairing the two informatics teams will bring new thinking and innovation in an area that has been historically stagnant and underserved."

The technology will serve as an important component of Covance's new clinical data integration services, underpinning its next generation risk-based, centralized, and medical monitoring solutions. Covance intends to make these capabilities available to its biopharmaceutical clients in combination with other recent IT strategic investments. These systems are designed to dramatically improve the quality and reduce the time and cost of drug development through real-time, secure, integrated, and contextualized access to all relevant clinical and operational trial data.