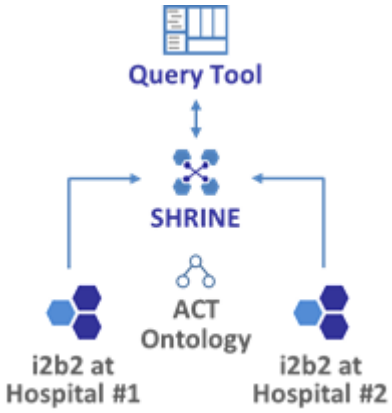
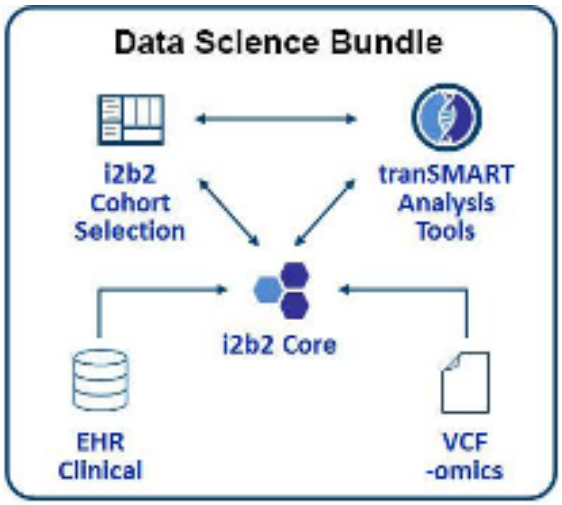
Bundles

Population-Wide Analysis Bundle	Data Science Bundle (draft version)
	
This population-wide analysis bundle provides researchers with real-time access to data on large patient populations at multiple healthcare organizations. It includes **i2b2**, which enables query and analysis of data within an institution, and **SHRINE** (Shared Health Research Information Network), which is a federated query tool that connects different sites' i2b2 systems. In this bundle, patient-level data never leaves an institution. The patient data are stored locally within each site's i2b2 database, and only aggregate counts and statistics are shared with others in the network through SHRINE. The bundle also includes a common ontology called **ACT** (Accrual for Clinical Trials), which has been implemented in a SHRINE network with more than 50 institutions and 125 million patients.	This data science bundle supports complex analyses of real-world clinical and genomic data. It includes **i2b2**, which enables query and cohort identification, and **tranSMART**, adds a suite of tools for data exploration, R-based advanced analytics (e.g., correlation analysis, heat maps, PCA, etc.), and genomic modules for Genome Wide Association Studies (GWAS) and high dimensional data analysis such as RNAseq.