



## PerkinElmer Connector for tranSMART and TIBCO Spotfire®

### You've Invested a Lot in tranSMART, Now Get More Out of It

The tranSMART open-source platform provides a proven infrastructure to assemble and centralize data and to analyze those data in pre-defined, web-based workflows. While those workflows support their intended analyses well, they lack the

dynamic, interactive, and exploratory nature of a visual analytics tool like TIBCO Spotfire®. Moreover, any time scientists require a non-standard analysis, they have to enlist the aid of a data scientist or bioinformaticists that can custom build the requisite script. All too often those resources cannot be accessed before the idea is lost in the shuffle of day-to-day work.

With the Connector for tranSMART, scientists can pull tranSMART data into TIBCO Spotfire® as easily as they can find it and then employ the powerful and intuitive interface of TIBCO Spotfire® to develop better hypothesis more rapidly. Also, the Connector for tranSMART integrates with intuitive and powerful OmicsOffice® workflows, so the scientist can identify diagnostic biomarkers for complex biological processes at the click of a button. By connecting and combining these systems, the Connector for tranSMART enables the enterprise to leverage their investment in tranSMART and the scientists to spend more time analyzing the data.

## Advantages of the Connector for tranSMART

- Access all the clinical observations and high-dimensional data stored in tranSMART.
- Support for any type of high-dimensional data that tranSMART stores.
- Connects through the REST API ensuring compliance with the tranSMART security model.
- Automated download, parsing, and loading into TIBCO Spotfire®.
- Integrated and intuitive OmicsOffice® workflows.
- No scripts to write or maintain.
- No need to involve bioinformatics resources to test simple scientific questions.
- Enabled Translational Medicine scientists.

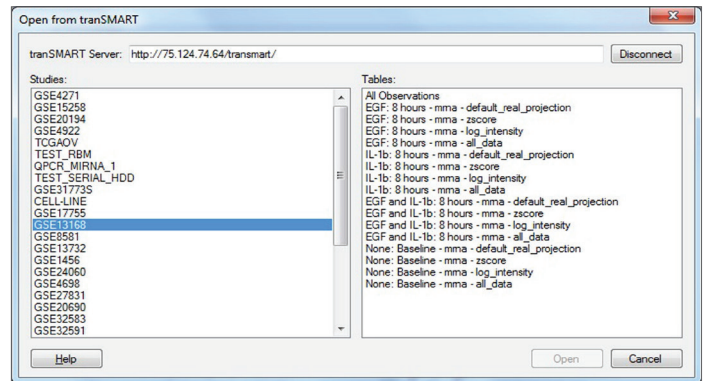


Figure 1. Search and retrieve any type of high-dimensional data from the tranSMART database directly into TIBCO Spotfire®.

## Advantages of OmicsOffice®

- Explore, visualize and integrate multiple OMICS data in an easy and intuitive way.
- Create and characterize lists of relevant targets and connect them with public and custom data repositories to guide the interpretation of the results.
- Leverage the interactive visualizations and publishing quality graphics powered by TIBCO Spotfire®.
- Extract trends and data patterns within your data for enhanced functional and biological discovery.
- Analyze gene expression and differential gene expression data produced by any technology or software analysis tools.
- Benefit from an universal solution, able to adapt to different routines and requirements, complementing the researcher's custom pipelines and providing powerful new features and visualizations.

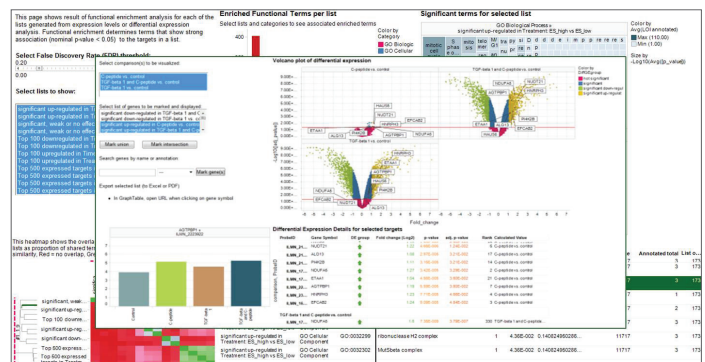


Figure 2. Differential gene expression results in OmicsOffice®, the automatic workflow for exploring Expression and Differential Expression data, powered by TIBCO Spotfire®. Differential Expression volcano plots showing the information on different tissue comparisons with gene list of interest highlighted in black.