

## **Personalized Medicine Roadmap: Definiens Releases Five Steps to Utilize Data Mining with Image Analysis**

The Associated Press

Definiens, a healthcare company that advances personalized medicine through image analysis and digital pathology solutions, today released tips for integrating data mining with image analysis. As pathologists, researchers and clinicians seek to advance personalized medicine through the development and prescription of targeted therapies, data generated through image analysis of digitized tissue sections is becoming essential to stratifying patients and providing personalized care.

“With the increasing prevalence and need for personalized medicine, the importance of tissue datafication through image analysis is becoming ever more present. While genomic data is highly valuable, it will be the correlation of genomics and tissue phenomics with patient outcomes that brings a level of accuracy to diagnosis, prognosis, and therapy that can’t be met with genomic data alone,” says Thomas Heydler, CEO of Definiens.

Definiens’ five steps for researchers and clinicians to effectively utilize data mining with tissue image analysis include:

- **Integrate:** Diagnostic tests are becoming increasingly multi-parametric. In order to streamline research and clinical workflows, data mining needs to be seamlessly integrated with image analysis. Integration ensures high quality data throughout the analysis chain by minimizing manual interactions.
- **Review:** Efficient review of results occurs when you can easily navigate through individual slides, groups of cases or projects. Assess image quality alongside image analysis results and data points, and quickly identify outliers for follow-up. Normalize and standardize your data sets for consistency in results.
- **Correlate:** Integrated data mining allows you to correlate quantitative image analysis results with outside data sources. Align genomic data and patient outcomes with tissue profiles to create better diagnostic tests that allow for targeted, personalized therapies.
- **Discover:** Use data mining on quantitative image readouts to discover trends, find patterns and confirm hypotheses. Data analysis allows you to utilize plots and statistical tools to locate and quantify subtle differences in expression profiles within tissue.
- **Confirm:** Confirm your discoveries on novel or standard data sets, as well as confirm your patient diagnosis. The integrated image analysis and data mining pipeline allows you to repeat your analysis quickly in order to demonstrate the reproducibility and accuracy of your results.

## **Personalized Medicine Roadmap: Definiens Releases Five Steps to Utilize D**

Published on Medical Design Technology (<http://www.mdtmag.com>)

---

For more information on Definiens, visit [www.Definiens.com](http://www.Definiens.com).

**Source URL (retrieved on 01/27/2015 - 11:52pm):**

<http://www.mdtmag.com/news/2013/10/personalized-medicine-roadmap-definiens-releases-five-steps-utilize-data-mining-image-analysis>