PROTEOME™ (HumanPSD™+TRANSPATH®) release 2020.2

The Human Proteome Survey Database (HumanPSD™) with focus on human proteins as disease biomarkers and drug targets contains these new features:

- **Disease-disease associations**

  Disease reports have been enriched with inferred disease-disease relationships on the basis of shared causal biomarker genes. Disease vicinity networks visualize clusters of diseases with apparent biomedical relevance. Heatmaps illustrate connections between causal biomarker genes and clustered diseases. More details…

- **More Clinical Trial and Biomarker data**

  New data from clinicaltrials.gov and manual disease biomarker curation by experts have increased the number of CT-Disease-Drug assignments to 564,793 and the number of disease annotations to 338,651.

  More than 350 additional FDA-approved drugs and improved processing of clinical trials data using the AACT database have contributed to these elevated numbers.

The TRANSPATH® database on mammalian signal transduction and metabolic pathways contains these new data features:

- **Increase in number of reactions**

  5,112 new binding reactions between proteins in human, mouse, and rat have been added, among them e.g. from the AMPK interactome and ALS-associated proteins.

- **Update of links to pathway databases**

  Links from genes/proteins to the pathway databases Reactome (version 71) and Wikipathways (20200210) have been updated. Wikipathways links now also include Saccharomyces cerevisiae and Drosophila melanogaster.

- **Pathway reports with more information**

  Participating proteins in a pathway are now listed with a short summary of their functional properties to allow quicker assessment of their role in the network.