

## New tools in PubPharm, the search engine for pharmacy-specific literature

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PubPharm is a pharmacy-specific search engine that is being developed by the Specialised Information Service (SIS) Pharmacy (Fachinformationsdienst Pharmazie). The project aims at sustainably improving the supply of literature for academic pharmaceutical research in Germany [1]. It is being funded by the German Research Foundation (Deutsche Forschungsgemeinschaft) since January 1st 2015. SIS Pharmacy is a collaboration project between Braunschweig University Library and the Institute for Information Systems at Braunschweig University.

PubPharm provides search within pharmaceutical journals free of charge. It can be used to search within 45 Mio. publications. The underlying database index goes well beyond Medline (PubMed) data (27 Mio.) to provide a comprehensive set of publications for pharmaceutical research. Hence, using one single query, many different literature resources can be found, for example, interesting Medline articles, articles in chemical journals (that are not contained in Medline), pharmaceutical e-books and PhD theses. The PubPharm search engine contains an availability check which, for users from universities in Germany, is personalized based on location. Through this, the full text of many publications can be directly accessed.

The PubPharm search engine can be found here: [www.pubpharm.de](http://www.pubpharm.de)

A new feature in PubPharm is structure search which allows to search for a compound not only by its (textual) name but also by its molecular structure. Both similarity search and substructure search can be performed. Structure search features a web interface for accessing PubChem data. PubChem contains 60 million unique chemical structures. For similarity search the minimum Tanimoto score is 90 using a 880-bit fingerprint. The hit list contains brief information about each compound from DrugBank and PubChem. Prospective, hits will also be combined with data from Protein Data Bank. For each hit, links to relevant literature sources and patent documents are provided.

PubPharm undergoes a continuous development process. Since its launch in October 2016 several new features have been added. At the moment, integration of authority data is under development. It allows query expansion and thereby retrieval of additionally relevant documents. For example, if the search query is the brand name of a pharmaceutical drug, also publications containing only the INN or IUPAC name will be retrieved. Furthermore, content expansion is planned: Data about pharmacy-related patents and ongoing clinical trials will be integrated.

More information about SIS Pharmacy and the PubPharm system can be found in the PubPharm blog: <https://blogs.tu-braunschweig.de/pubpharm/>

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