



Pharmaceutical Patent Data Mining Platform

Streamlining Patent Analysis to Jump-start Your Drug Discovery



PatSight: Pharmaceutical Patent Mining Platform

PatSight, XtalPi's pharmaceutical patent data mining platform, automates the traditionally manual and time-consuming patent analysis process, reducing the time required **from several days or weeks to just one hour**.

Compound	Tag	Structure	Structure Quality	Value	Bioassay Model	Parameter	Unit	Operation
12	Example		High Confidence	8	anti-proliferative activity against BT549	IC50	microM	
				62	HT1197 anti-proliferative activity	IC50	microM	
				3	T47D anti-proliferative activity	IC50	microM	
				1.2	TOPK inhibition	IC50	microM	
13	Example		High Confidence	4	anti-proliferative activity against BT549	IC50	microM	
				40	HT1197 anti-proliferative activity	IC50	microM	
				3.6	T47D anti-proliferative activity	IC50	microM	
				23	TOPK inhibition	IC50	microM	
14	Example		High Confidence	0.52	anti-proliferative activity against BT549	IC50	microM	
				1.7	HT1197 anti-proliferative activity	IC50	microM	
				0.42	T47D anti-proliferative activity	IC50	microM	
				3.6	TOPK inhibition	IC50	microM	
15	Example		High Confidence	0.22	anti-proliferative activity against BT549	IC50	microM	
				0.89	HT1197 anti-proliferative activity	IC50	microM	
				0.46	T47D anti-proliferative activity	IC50	microM	
				0.16	TOPK inhibition	IC50	microM	
16	Example		High Confidence	1.5	anti-proliferative activity against BT549	IC50	microM	
				3.1	HT1197 anti-proliferative activity	IC50	microM	
				1	T47D anti-proliferative activity	IC50	microM	
				0.074	TOPK inhibition	IC50	microM	
17	Example		High Confidence	3	anti-proliferative activity against BT549	IC50	microM	
				4.5	HT1197 anti-proliferative activity	IC50	microM	

- 01 Automated integration of structure and activity data
- 02 High-precision optical chemical structure recognition
- 03 Processes dozens of patents simultaneously
- 04 Upload patents PDF and get results instantly

Features and Highlights

Compound	Tag	Structure	Structure Quality	Value	Bioassay Model	Parameter	Unit
12	Example		High Confidence	8	anti-proliferative activity against BT549	IC50	microM
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				3	T47D anti-proliferative activity	IC50	microM
				1.2	TOPK inhibition	IC50	microM
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				3.6	T47D anti-proliferative activity	IC50	microM
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14	Example		High Confidence	0.52	anti-proliferative activity against BT549	IC50	microM
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				0.42	T47D anti-proliferative activity	IC50	microM
				3.6	TOPK inhibition	IC50	microM

Rapid automated identification of structures, names, and activities

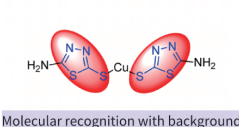
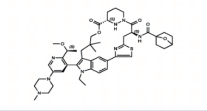
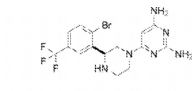
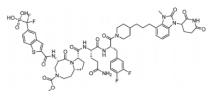
- Completes 90% of patent analysis within 1 hour.
- Automatically recognizes chemical structures from images and scanned documents, converting them into digital files.
- Automatically identifies all data associated with specific compounds.



>95.5%

Compound*Recognition accuracy

*Structures without R groups and Markush structures



High identification accuracy

- 95% recognition accuracy for compound structure recognition.
- 97% recognition accuracy for associated data.



Patent Data Management and Application

XtalPi provides a range of data management and analysis solutions based on patents, literature, SAR (Structure-Activity Relationship) analysis tools, AI model optimization, and intellectual property space exploration to accelerate drug discovery.



SAR Analysis

- Extract both structures and molecular data from patents and literature into CSV file for comprehensive Structure-Activity Relationship (SAR) analysis.
- Streamline SAR processes using MolValley, XtalPi's analysis tool, in conjunction with PatSight.



Big Data Extraction

- Rapidly extract large amounts of structural and molecular characteristic information.
- Provide extensive training data for AI model optimization and development.



Intellectual Property Landscape

- Quickly gain insights into current IP coverage and leverage innovative opportunities through patent data analysis and comparison.

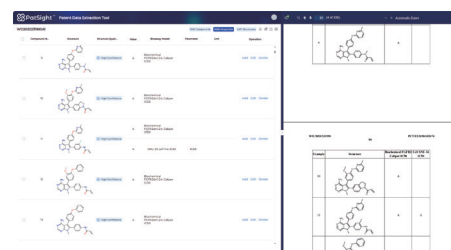
Case Study

1 hour | **1500** structures and activity data

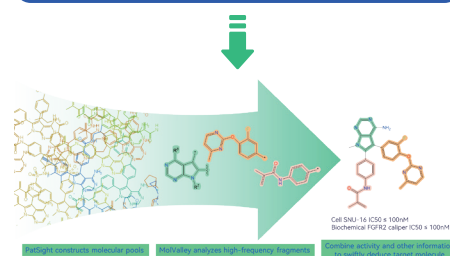
Using a patent related to FGFR2 (WO2020231990) as an example, **the patent contains structure and activity data for 1,500 molecules**, including a target molecule that has entered the clinical stage.

For a more in-depth Structure-Activity Relationship (SAR) analysis, we uploaded the patent document to PatSight. **Within an hour**, we extracted all compound numbers, structures, assay information, and activity values from the patent's examples.

Using the SAR analysis module of MolValley, we quickly identified **three main fragments**. By combining the activity data, target protein pocket information, and other relevant details, **we rapidly identified several potential SAR models**. This is crucial for the subsequent development of related projects.



PatSight: Extracts compound structure and activity data



MolValley: Efficiently performs SAR analysis

Interested in a Free Trial?

01

Please open the link below in your internet browser or scan the QR code. Click the **"Get Started"** button, complete the registration, and you can start using PatSight immediately.



<https://patent.xinsight-ai.com/>



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For more information about PatSight, please contact.



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