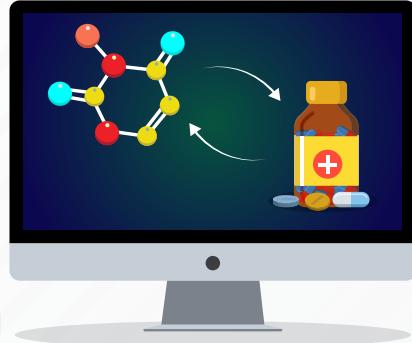


Transforming Chemical Synthesis Pathways

The need for SYNTHIA® retrosynthesis software

Traditional discovery and development of new molecules

- Estimated costs: \$2.8 billion
- 15 years to gain regulatory approval
- Chemical synthesis of drug molecules presents a major bottleneck



SYNTHIA®, a software as a service-based platform, develops synthetic routes using expert-coded rules based on proven chemical transformations. It is used for designing and optimizing the retrosynthesis of small molecules, accelerating drug discovery and development

Draw or paste the molecule of interest into the editor or search for a compound from the database

Obtain synthesis routes that begin with readily available, commercial starting materials

Quickly go from imagining what's possible to testing what's probable

Examine multiple pathways filtered by reaction conditions, chemical groups, or publications

Choose the starting materials from a comprehensive catalog of over 12 million and accelerate your synthesis



Comprises >110,000 reaction rules



Utilizes advanced algorithms to develop retrosynthesis routes



Examines both established and innovative solutions



Filters out ineffective pathways and optimizes the number of reaction steps



Minimizes costs



Maximizes the likelihood of obtaining the desired molecule



Decreases the number of steps



Reduces the time required for identifying a viable laboratory approach



Permits customized search to find greener alternatives to hazardous chemicals



Encourages chemists to explore new ideas for synthesis



Allows chemists to access extensive repositories of chemical reactions

SYNTHIA® is a powerful tool that empowers chemists to identify the most promising and viable pathways to create novel molecules, saving time and costs, while accelerating chemical retrosynthesis and drug discovery and development

For more information about SYNTHIA®, please visit:

<https://www.synthiaonline.com/>

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