CAS®
A DIVISION OF THE
AMERICAN CHEMICAL SOCIETY

WHERE SCIENCE &
STRATEGY CONVERGE

# SCIENTIFIC INFORMATION

## THE KEY TO R&D EFFICIENCY & PRODUCTIVITY

TO LEARN MORE PLEASE VISIT
**WWW.CAS.ORG/SCIFINDER-N**

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# COST OF MISSING SCIENTIFIC INFORMATION IS HIGH

**LOST MARKET LEADERSHIP**

**>$1B**

MARKET SHARE LAG: >6% [1]

**R&D SPEND INEFFICIENCY**

**$31M**

TIME LOSS: >3MOS [2]

**REPUTATIONAL RISK**

**>$4B**

LOSS OF EXLUSIVITY: >6 YRS [3]

# COST TO MANAGE SCIENTIFIC INFORMATION CONTINUES TO ESCALATE

**1978** **2000** **PRESENT**


**SCIENTIFIC INFORMATION TRENDS** [6] VOLUME COMPLEXITY INTERCONNECTEDNESS

# POORLY MANAGED SCIENTIFIC INFORMATION AFFECTS R&D EFFICIENCY

**18% TIME LOST**

**IN SEARCH VS. RESEARCH** [4]

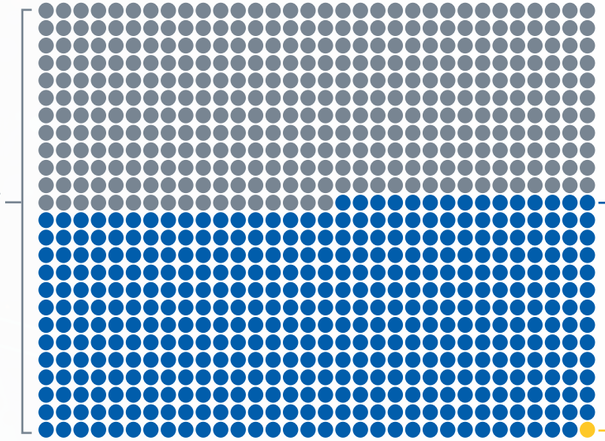
**COST $15K–$20K**

**PER YEAR, PER SCIENTIST** [5]

# YET, INVESTMENT IN EXTERNAL SCIENTIFIC INFORMATION SOURCES REMAINS LOW

**$2.6B**

COST OF INNOVATION [7]



**$1.4B**

COST OF R&D [8]

**<0.25%**

COST OF INFORMATION [9]

# CAS HAS INVESTED > $1B IN SCIENTIFIC INFORMATION SOLUTIONS OVER THE LAST 5 YEARS. INTRODUCING A NEW CALIBER IN CHEMICAL INTELLIGENCE...

SciFinder$^{n}$

A **CAS** SOLUTION

More than "hits"... **UNLOCK INSPIRATION** for your next **BIG INNOVATION!**

## THE BLUEPRINT OF CHEMICAL INTELLIGENCE

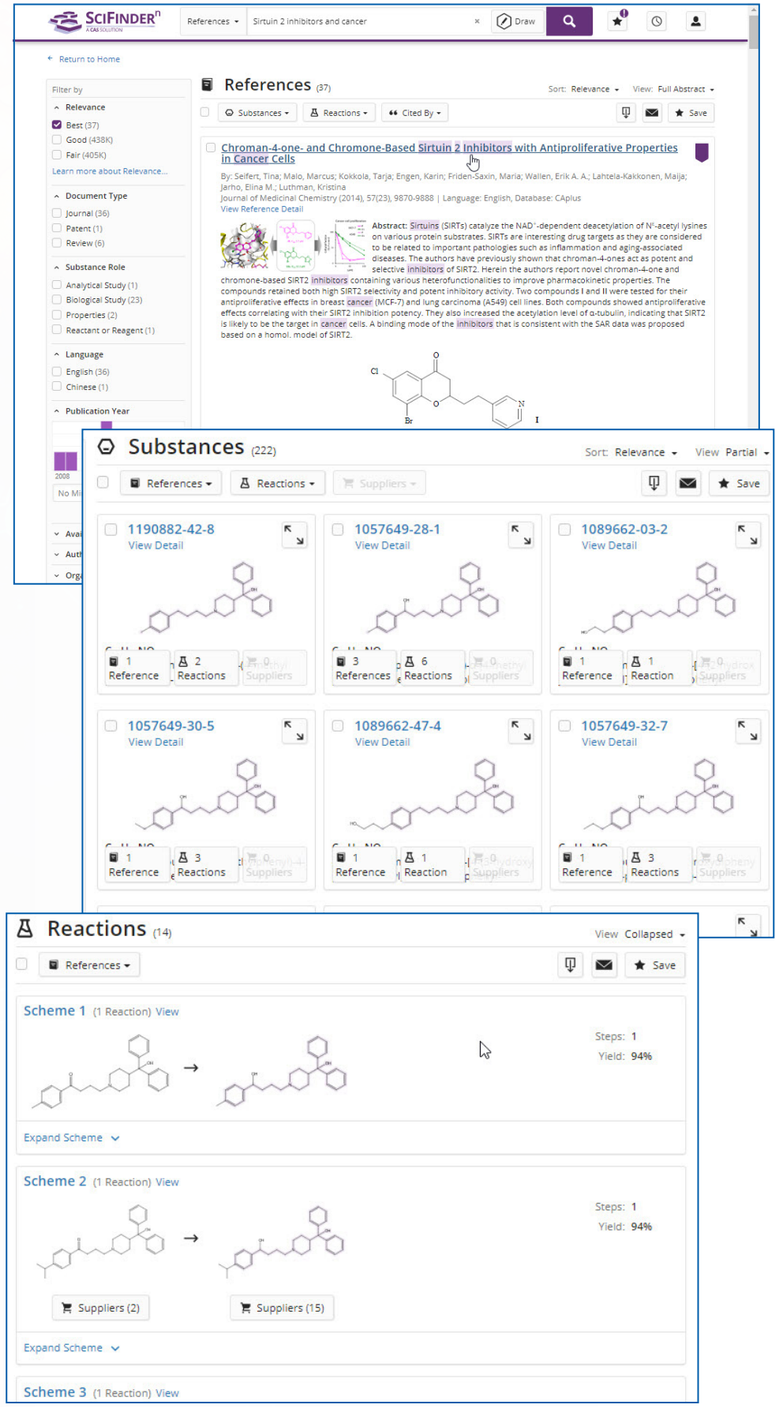
**DIRECT ACCESS** to the unmatched CAS content collection, patent documents and step-by-step synthetic procedures and methods

The most advanced Chemical **RELEVANCE SEARCH ENGINE** shows you where to start and what to focus on

Platform for machine learning & **AI, COMPUTER-AIDED SYNTHETIC DESIGN**, patent search and workflow enhancement

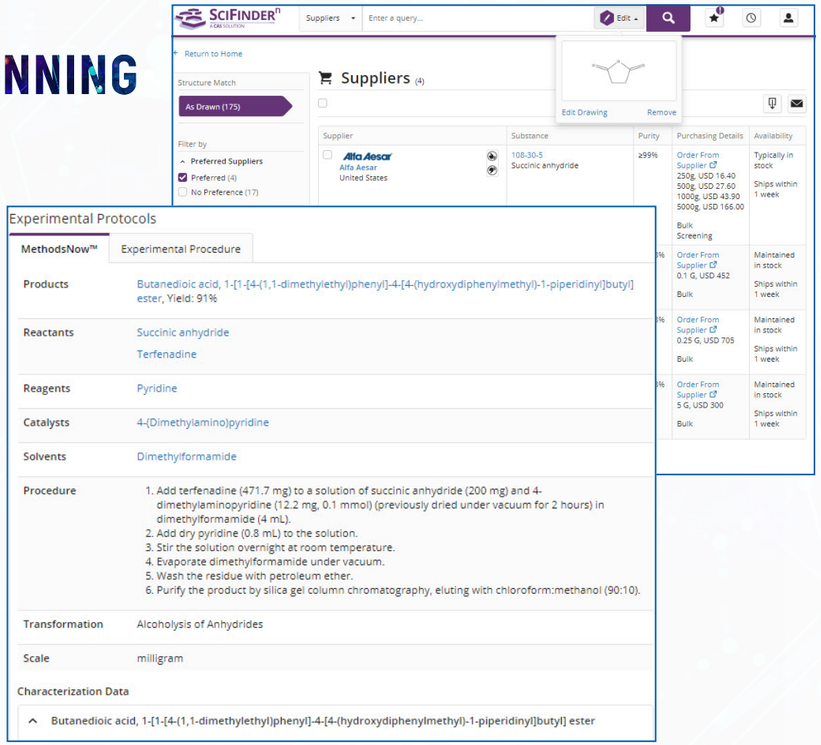
## INSIGHTS

In today's competitive landscape, your research team needs to quickly gain knowledge and insights from relevant discoveries. You can't afford to spend hours sifting through extraneous content in patents and journals. That's why we designed SciFinder$^{n}$ with the most chemistry-aware relevance engine in the industry. It doesn't just search faster—it helps you search smarter, anticipating your information needs and accelerating your work.



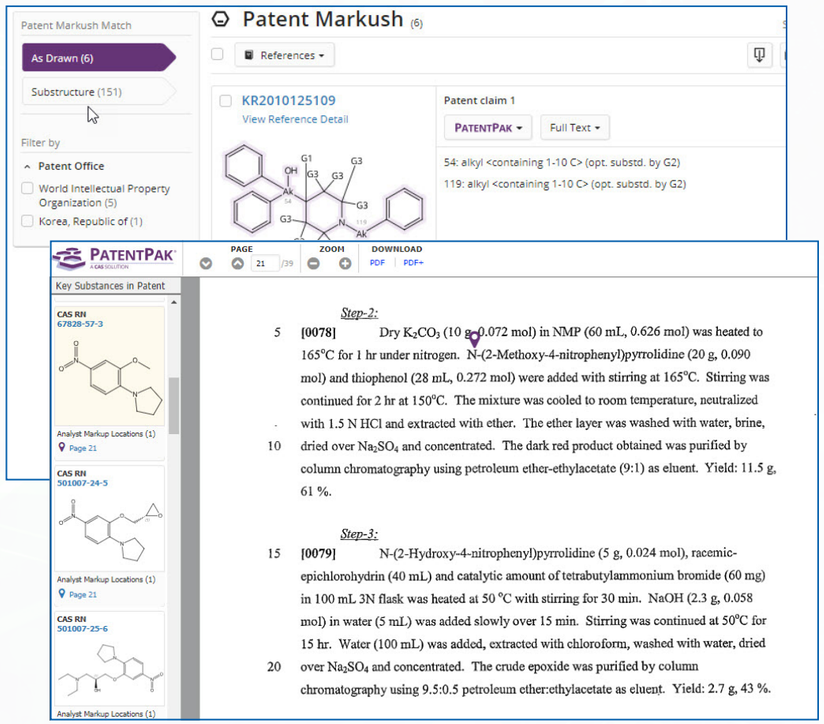
# SYNTHETIC PLANNING

Being efficient in the lab requires a great synthetic plan. Your chemists are juggling many variables in their synthetic planning, from the cost of materials, to the complexity of the procedure and the final yield. SciFinder$^{n}$ helps your team locate the right reactions quickly and maximizes productivity with direct access to chemical sourcing information as well as step-by-step synthetic procedures curated by experts.




# IP STRATEGY

In order to successfully manage your research portfolio and bring your innovation to market, it's essential to first understand the technology landscape. SciFinder$^{n}$ can help answer a host of IP-related questions such as: Where are the opportunities for innovation? Are there infringement risks? Who else is working in this space? SciFinder$^{n}$ gives you access to industry leading capabilities like patent Markush searching and content such as chemically annotated patents, so you can stay on top of the technological landscape.




## Sources


1. https://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/pharmas-first-to-market-advantage
2. Drug Discovery World Fall 2004, Failure rates in drug discovery and development: will we ever get any better?
3. https://www.hhrjournal.org/2017/11/patent-fighters-taking-on-big-pharma
4. SciFinder user survey of top discovery research organizations
5. Average hourly cost for fully-loaded, full-time researcher.
6. CAS Proprietary data, CAS Analytics & Insights
7. Tufts Center for the Study of Drug Development
8. Tufts Center for the Study of Drug Development
9. CAS Market Analysis
10. Pharm Exec's Top 50 Companies 2017
11. The Top Biotech Companies of 2017
12. C&EN's Global Top 50
13. Shanghai Ranking's Global Ranking of Academic Subjects 2017 — Chemistry
14. WIPO IP Facts and Figures 2018


## INDUSTRY LEADERS ACROSS R&D ORGANIZATIONS RELY ON CAS SOLUTIONS

**PHARMA**
48 of the top 50 [10]

**BIOTECH**
20 of the top 25 [11]

**CHEMICAL**
48 of the top 50 [12]

**GOVERNMENT**
10 of the top 10 global patent offices [14]

**ACADEMIC**
100 of the top 100 [13]

Business Card