

THOMSON REUTERS INTEGRITY

QUICK GUIDE SERIES: No. 9



HOW TO IDENTIFY CHEMISTRY COMPETITIVE INTELLIGENCE FROM THE LATEST PATENT INFORMATION

With *Thomson Reuters Integrity*SM you can stay abreast of the newest structures emerging from the latest patent literature. Search for compounds similar to yours and view a patent list with the corresponding chemical structures to quickly identify competitors. Find all related information to drill down into this comprehensive database of scientific information available from Thomson Reuters. Additionally, you can easily export the set of records retrieved.

This step-by-step guide will show you how to:

- Find similar compounds to yours and identify competitors based on the latest patent information
- Display a patent list with the corresponding chemical structures
- Find all related information to a particular patent available in *Integrity*
- Easily export the records retrieved, including structures

EXAMPLE SCENARIO: PATENT DATA IN THOMSON REUTERS INTEGRITY

A Medicinal Chemist wants to stay abreast of the newest structures emerging from the patent literature and wants to be able to compare them, and any similar structures that are found in *Integrity*, to the structures found in his company's internal library.

1. RETRIEVING RECENTLY ANALYZED PATENTS

- Click on **Today's Featured Patents** from the *Integrity* Home Page. (FIGURE 1)

Tip:

- There are alternative methods of retrieving a set of patent records in *Integrity*. You can navigate to **Gateways to Patents** within the **Weekly Insights** section on the Home page (on the right hand side of the screen) and click on **'The latest in intellectual property portfolios in drug R&D'**. The Patent Gateways are also found in the lefthand frame of the Patents search form. Patents can be also searched by fields such as **Condition** or **Available Since** (date) from the **Patents** knowledge area.
- A table of results is retrieved with links to the patent full records and to drug records for the lead compounds cited in the patents. (FIGURE 2)
- Open the **Options** pulldown menu and select **Patent List with Structure** to display the chemical structure of the lead compound from each patent. (FIGURES 3, 4)

Patents (Applicants)	Title	Subject Matter	Condition	Lead Compound
<input type="checkbox"/> WO 2011039554* (Egis Pharmaceuticals Plc)	2,3,4- <u>Benzo[1,2-d:4,5-e']imidazo[1,2-a]pyridine-7,2-dioxide derivatives</u>	Drug Substances	Neurological Disorders	722976
<input type="checkbox"/> WO 2011041198* (TransTech Pharma, Inc.)	<u>Substituted imidazole derivatives for treatment of Alzheimer's disease</u>	Drug Substances	Dementia, Alzheimer's type	727547

FIGURE 4

Highlights

Today's News

- Endocrine Disorders**
 - Concept Therapeutics submits NDA for Corlux in Cushing's syndrome
- Eye Disorders**
 - VEGF Trap-Eye BLA gets FDA priority review for treatment of wet AMD
- Cardiovascular Disorders**
 - Chelsea Therapeutics updates Northera NDA filing strategy in NOH
- Infections**
 - CHMP recommends amendments to Pandemrix's product information
- Respiratory Disorders**
 - FDA requires new studies of LABA-containing drugs
 - Pivotal phase III GLOW1 study of INVA-237 in COPD meets primary endpoint

Today's Featured Patents

Click here to display today's featured patent family entries in Integrity

FIGURE 1

Records Retrieved: 6 in Patents

Patents (Applicants)	Title	Subject Matter	Condition	Lead Compound
<input type="checkbox"/> WO 2011029841* (Orizon Genomics, SA)	<u>Local specific chemokines-1 inhibitors and their use</u>	Drug Substances	Cancer	721121
<input type="checkbox"/> EP 230079 (Genzyme SA)	<u>Prokinetic drug derivatives as histamine antagonists</u>	Drug Substances	Asthma, allergic; Cancer; Dermatological Disord; Hyperostosis; Idiopathic pulmonary fibrosis; Inflammation; Pain	
<input type="checkbox"/> WO 2011030283* (Hoffmann-La Roche, Inc; Hoffmann-La Roche AG)	<u>Local macrocyclic inhibitors of hepatitis C virus replication</u>	Drug Substances	Hepatitis C (HCV)	
<input type="checkbox"/> WO 2011030817* (Amira Pharmaceuticals, Inc.)	<u>novel inhibitors of F-kinasease</u>	Drug Substances	Asthma; Asthma; Allergic; Cancer; Chronic obstructive pulmonary disease (COPD); Rheumatoid Arthritis	
<input type="checkbox"/> US 2011069547; WO 2011033993 (Disaron, LLC) USA	<u>Novel positive inotropic from sodium acetate salts</u>	Nature Products; Drug Substances	Pain; neuropathic	

Options:

- Keep Me Posted
- Export Center
- Integrity Reports
- Patent List with Structure**
- Full Records
- Product List
- All Related Information via Quick Search
- Printer Friendly Format

FIGURE 2

FIGURE 3



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- Open the **Options** pulldown menu again and select **All Related Information via Quick Search** to display all related information types – that is, other records that are linked to the patent records that are on display – integrated in a single view. (FIGURES 5, 6)

Tip:

- The **All Related Information via Quick Search** option in the **Options** pulldown menu provides an overview of all the other information available in Integrity that is related to the set of records currently displayed.
- Clicking on **Experimental Pharmacology** will take the reader to a display of experimental pharmacology values derived from this set of patents.
- Click on **Drugs & Biologics** (FIGURE 6). When the drug records appear, use the **Options** pulldown menu to display structures along with basic drug information. (FIGURES 7, 8)

Tip:

- By clicking on the **Entry Number** you can go to a single full record. Use the **Options** pulldown menu to go to a series display of full records.



FIGURE 5

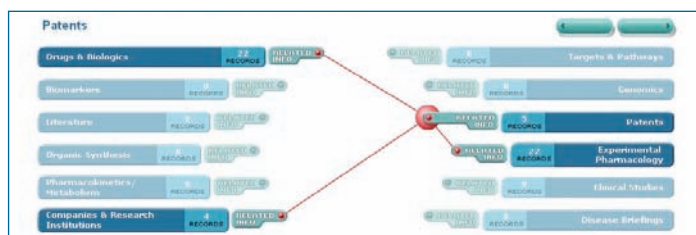


FIGURE 6

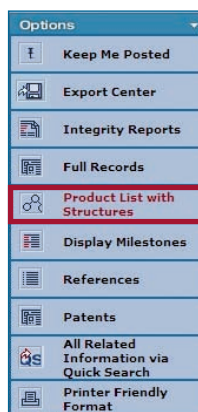


FIGURE 7

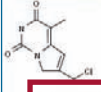
Entry Number: 228128	Drug Name:	Highest Phase: Biological Testing
	Product Category: Diagnostic for Cancer	Mechanism of Action: University of Zagreb (Originator)
	Standard InChI: 1S/C9H9ClN2O2/c1-8-7-2-6(3-10)-4-12(7)9(14)11-8(5)13/h2H,3-4H2,1H3,(H,11,13,14)	
	Standard RCRKey: OTAXXVXMDIRRN-UHFFFAOYSA-N	

FIGURE 8

2. WORKING WITH YOUR DATA

- To see if *Integrity* has other compounds similar to those that have newly entered from the patent literature, select a structure of interest from the **Product List with Structures** display above. Click on **Structure Feature Options** (this is called **Structure Features** in the full record display) and then select **Export Molfile** and save the molfile to your computer. (FIGURE 9)
- Go to the **Drugs & Biologics** knowledge area and click on **Structure Search** to open the structure search form. (FIGURE 10)

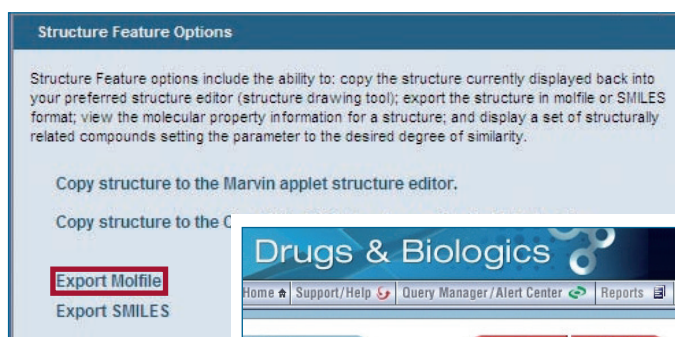


FIGURE 9



FIGURE 10



- You can now import the molfile just saved (right-click your mouse in the structure drawing window and import the **molfile [*.*mol]** file of your interest by clicking on **File > Open**. This applies to all structure editors except *ChemAxon Marvin Applet* where you will find the File tab on the structure drawing window toolbar. (FIGURE 11)
- Use the tools in your structure editor to modify the structure to a substructure of interest.

Tip:

- Refer to the [How to search by substructure Quick Guide](#) or the [How to run a structure similarity search Quick Guide](#) for further information.
- Check that the **Search Type** and Search Options settings meet your criteria for the search and click on **Start** to launch your search.

Tip:

- You can add text data if you wish (e.g., **Highest Phase**) in order to run a combined text-and-structure search.
- When your search results are displayed on screen, you can export the records in **SDFfile** format by opening the **Options** pulldown menu and selecting **Export Center**. In the **Export Center** dialog box select **SDFfile** format as the Export Type, select the fields to be exported and click on **Export**. (FIGURES 12, 13, 14)

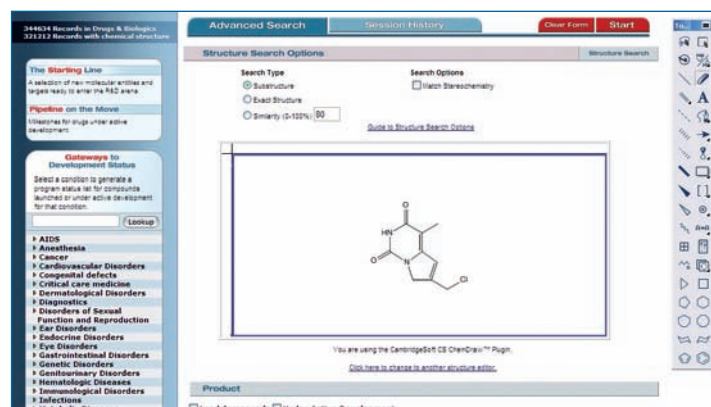


FIGURE 11

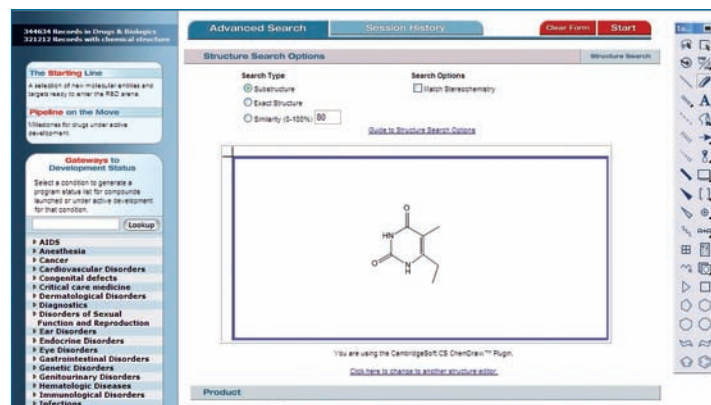


FIGURE 12

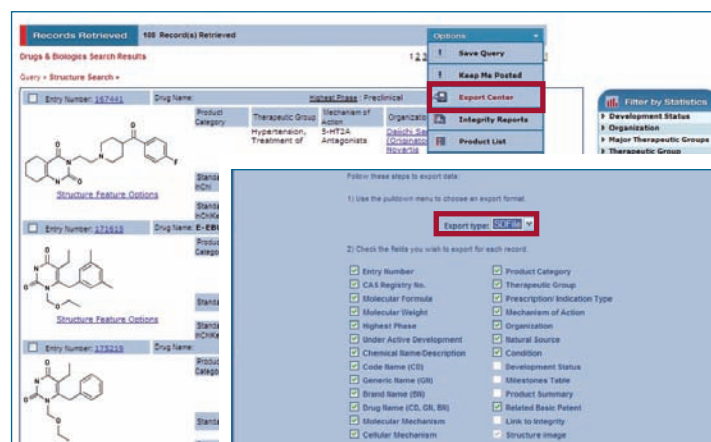


FIGURE 13

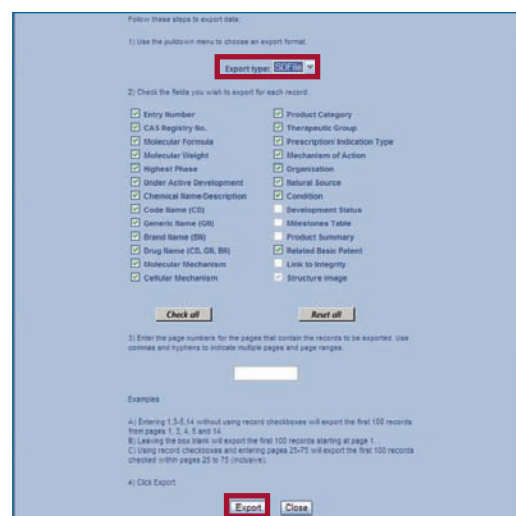


FIGURE 14

[Click here to view other guides in the Integrity Quick Guide series.](#)

If you have any questions about using Integrity please contact us at: ts.support.emea@thomsonreuters.com

