

# A Guide to Understanding the Differences between Integrity and Cortellis Drug Discovery Intelligence

Please use this document in conjunction with the  
Cortellis Drug Discovery Intelligence [Glossary and Help](#)

# Introduction

Integrity has been around for almost 20 years and served many of you well over the past two decades. However; the look and feel is somewhat dated; it has not kept up with the latest enhancements in usability; it is slow; and the underlying technology is out of date which limits our ability to offer new features that you have been asking for.

Cortellis Drug Discovery Intelligence is the replacement for Integrity. It is built on a modern platform using the latest technologies; it is fast; has a modern look and feel; is more intuitive to use; and importantly the new platform will enable us to continue to build on the legacy of Integrity, delivering the new analytics and functionalities you have requested.

## Major improvements

The following is a list of the major improvements. For details, please see the corresponding sections in this manual.

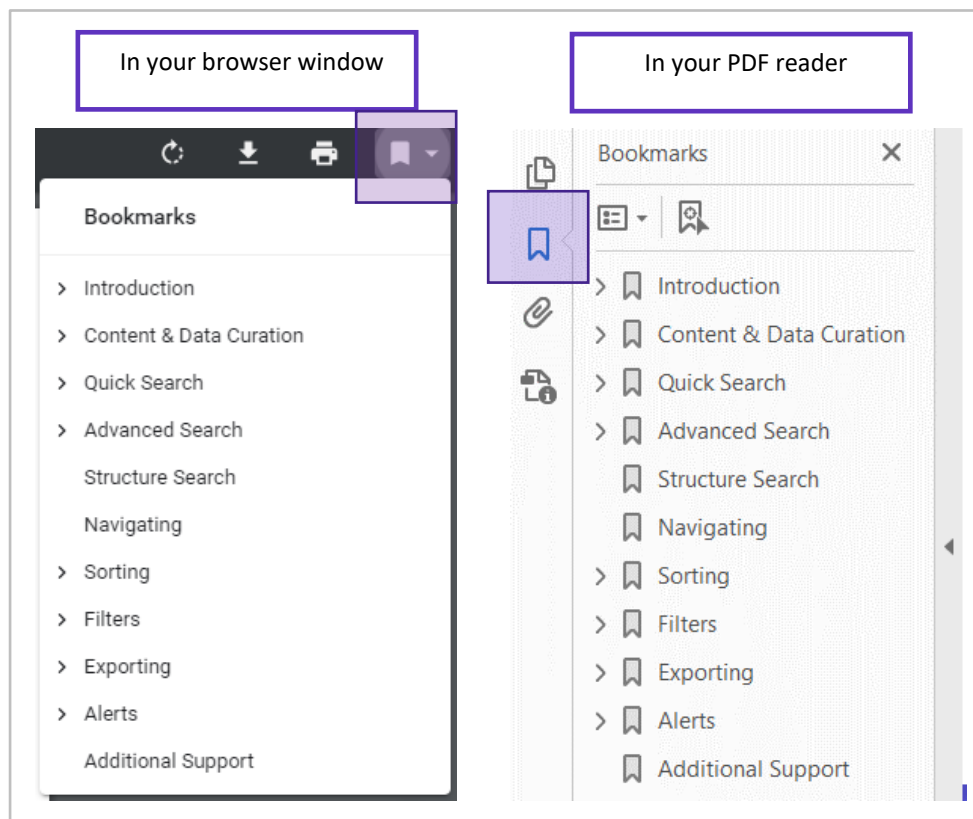
Feature	Integrity	Cortellis Drug Discovery Intelligence
Quick Search Auto-suggest	Not available	Use auto-suggest to quickly identify relevant terms for your searches
Genes and Targets combined	Targets & Pathways and Genomics are separate areas Separate records for each transcript variant	Genomics and Targets records have been combined into a single record to make it easier to assess the evidence for validated and putative targets Transcript variants and isoforms have been consolidated into a single record to make it easier to view all relevant information in one place
Biomarker Uses consolidated	Separate BMK use for each technique and substrate	Biomarker uses with the same Condition, Population and Role have been consolidated into a single use with techniques and substrates listed in tables within each use. This makes it easier to search and sort by context of use for each biomarker
Routes of Synthesis	Some schema are split into different records making it difficult to follow the entire route of synthesis	Multiple sub-schema coming from the same source document are now grouped under the same Organic Synthesis record. This makes it easier to follow the entire route of synthesis for a product
New content		<ul style="list-style-type: none"><li>• Affiliated organizations</li><li>• Clinical study phase</li><li>• Pharmacokinetics from patent sources</li><li>• Physiologically-based PK models</li></ul>
New filters		See the extensive list of new filters below
Boolean operator NOT	Not available between search fields in Advanced Search	Available in Advanced Search. Much more intuitive. Use the operator NOT to exclude subsets of data from your search results
Multiple search parameters in Advanced Search	Up to 3 search parameters	Unlimited
Performance	OK	Much faster – try it for yourself; for example, use Quick Search to look for “Cancer”
Help	<ul style="list-style-type: none"><li>• Manual</li><li>• FAQ</li><li>• Quick start guides</li></ul>	<ul style="list-style-type: none"><li>• Glossary &amp; Help file</li><li>• <del>FAQ</del></li></ul>

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- Contact customer support
  - Training resources page with Quick start guides and videos
  - In-app tooltips, announcements, guided tours
  - Easier access to training sessions
  - Give feedback
  - Contact customer support
- 

## How to navigate this manual

You can view or download this manual from the Resources & Updates > Training Resources > All Training resources > *Upgrading from Integrity...*

Once you are able to view this document, be sure to use the bookmarks to navigate to your section of interest:



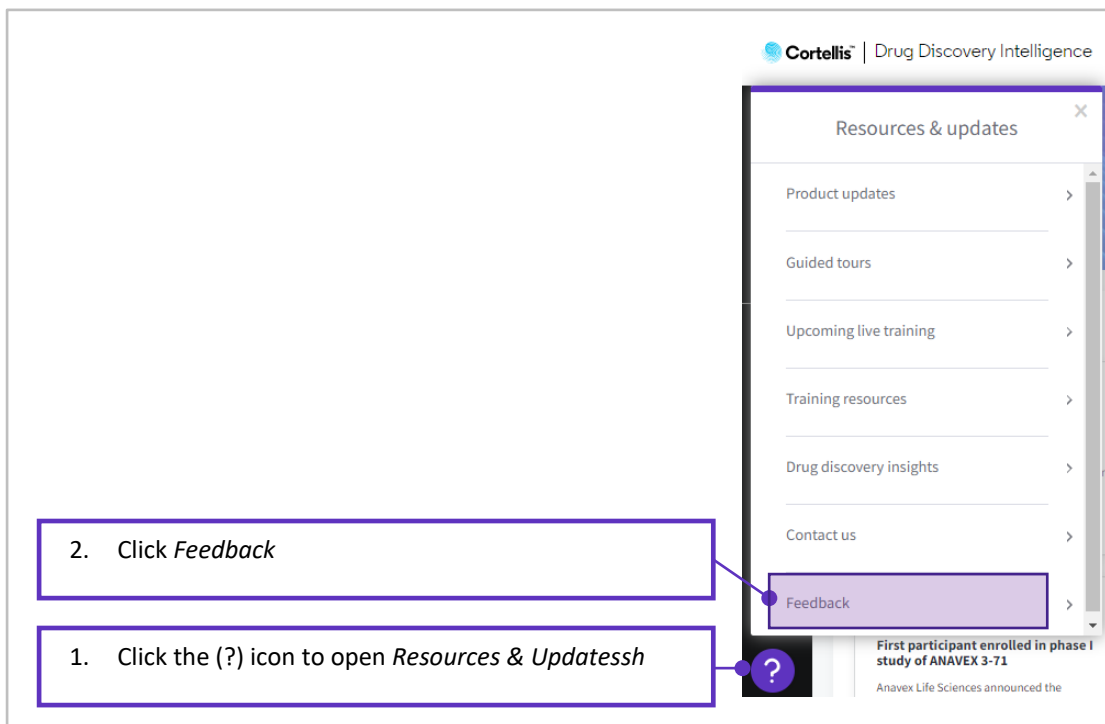
## Something missing?

Cortellis Drug Discovery Intelligence includes most of the content and features that you are used to from Integrity. However, some less-frequently used features are still under development and will be added during 2020. Further details are given in this manual.

If you find there is a task that you can do with Integrity but you cannot do in Cortellis Drug Discovery please let us know – your feedback is invaluable and it helps us to prioritize our development roadmap.

- Contact **customer support** to provide your feedback

- Use the in-app feedback tool:



## Help

We fully understand that it may take time to get used to the differences between Cortellis Drug Discovery Intelligence and Integrity. The following resources are available to support you through this transition:

- This manual provides a detailed description of the differences between the two products.
- The Cortellis Drug Discovery Intelligence **Glossary & Help File** provides guidance on how to use the new product.
- The new **Resources & Updates** center houses:
  - *Product updates* contains notes on major enhancements
  - *Guided tours* contains short “Walk-through” guides on how to do some tasks such as how to manage your alerts
  - *Upcoming live training* allows you to sign up for scheduled live training sessions
  - *Training resources* has downloadable PDF guides on how to use the product
  - *Drug Discovery insights* contains links to upcoming webinars and downloadable reports
  - *Contact us* offers a variety of ways to chat with/email customer support, either to ask questions, or to offer feedback.
  - *Feedback* provides an alternative way to give your feedback
- Many of you will have extended periods of dual access to both Integrity and to Cortellis Drug Discovery Intelligence; this is to allow the time that it takes to transition from the old to the new platform.

Please feel free to **contact us** with any questions you have, or to give feedback to help improve the new product.

We hope you enjoy using Cortellis Drug Discovery Intelligence,

Your Cortellis Drug Discovery Intelligence team.

# Content & Data Curation

The information sources, curation process and content are the same for both Integrity and Cortellis Drug Discovery Intelligence.

However, some content areas have been re-organized, others renamed, new data has been exposed for Organizations and for Clinical Studies, and in a couple of cases, content has yet to be added:

Integrity	Cortellis Drug Discovery Intelligence
Drugs & Biologics	<ul style="list-style-type: none"> <li>Easier access to Development Status information through tabs</li> <li>Easier access to Milestone information through tabs</li> <li>New Overview tab provides graphical display of results</li> <li>Pending to add "Updates" table to drug records – coming in 2020</li> </ul>
Targets & Pathways	<ul style="list-style-type: none"> <li>Genomics records and Target records have been merged into one "<b>Genes &amp; Targets</b>" record</li> </ul>
Genomics	<ul style="list-style-type: none"> <li>Where transcript variants and protein isoforms are separate records in Integrity, they have been merged into a single Genes &amp; Targets record in Cortellis Drug Discovery Intelligence</li> <li>For example, Integrity has 18 records for EGFR transcript variants and isoforms. The information that was spread across these 18 records has now been consolidated into one record in Cortellis Drug Discovery Intelligence, and none of the detail is lost. This makes it easier to evaluate the evidence for putative as well as validated targets, all in one record</li> <li>As a result of this consolidation, you can expect to see fewer records in your searches/alerts</li> <li>Targetscapes and Animations are available through Disease Briefings. To be added to Genes &amp; Targets records in 2020</li> <li>Some Genomics records in Integrity have a sub-section called "Gene-related studies". Content for this sub-section is no longer maintained in Integrity and has not been transferred to Cortellis Drug Discovery Intelligence</li> <li>The Integrity target categories <i>Validated</i>, <i>Candidate</i> and <i>Experimental</i> are no longer used in Cortellis Drug Discovery Intelligence because it is easier to see at a glance which targets are highly developed, and which ones are novel</li> </ul>
Biomarkers	<p>Biomarkers is an add-on module in both Integrity and in Cortellis Drug Discovery Intelligence, it requires an additional subscription. If your organization subscribes to the Biomarkers Module you can identify and evaluate biomarkers to support drug development</p> <ul style="list-style-type: none"> <li>The content remains unchanged</li> <li>Easier access to Biomarkers, Biomarker Uses and Biomarker Kits through tabs</li> <li>Biomarker Uses with the same condition, population and role have been consolidated into one; and the techniques and substrates are found as tables within each use record. This means you may see fewer "uses" in your search results</li> <li>The numbers of drugs and gene variants associated with each biomarker are shown with biomarker uses – this makes it easier to assess the level of evidence in support of a biomarker use.</li> </ul>
Organic Synthesis	<ul style="list-style-type: none"> <li>Where separate parts of a single synthetic schema are represented by separate records in Integrity; the separate parts have been brought together into one record in Cortellis Drug Discovery Intelligence. This makes it easier to follow the complete route of synthesis in the Organic Synthesis area. Please see below at the foot of this table for examples</li> <li>Because of this consolidation, you can expect to see fewer Organic Synthesis records in your searches/alerts</li> </ul>
Experimental Pharmacology	<ul style="list-style-type: none"> <li>Structure-Activity tables will be added in 2020</li> </ul>
Experimental Models	Unchanged
Pharmacokinetics/Metabolism	<ul style="list-style-type: none"> <li><b>New content:</b> PK results described in patents are now included. To test this, try using Quick Search with the name of a drug of interest, for example "Rapamycin". Click the "Patents" knowledge area. From the patents results list in Integrity use Options &gt; All related information via Quick Search, you will find 0 PK results. In Cortellis Drug Discovery patents results list use "View related info" button on the top right of your results list and you will see results in the PK area.</li> <li><b>New content:</b> Study Type = "Physiologically based PK modelling"</li> <li>View details by clicking the arrowhead to the left of each row</li> <li>Metabolism data to be added in 2020</li> </ul>

Clinical Studies	<ul style="list-style-type: none"> <li>• <b>New content:</b> when a clinical study record in Cortellis Drug Discovery Intelligence is linked to an NCT record in clinicaltrials.gov, then the study phase is shown</li> <li>• Clinical Studies in Integrity are organized into tabs according to the type of information source. Not available in Cortellis Drug Discovery Intelligence</li> </ul>
Disease Briefings	Unchanged
Companies & Research Institutions	<ul style="list-style-type: none"> <li>• Now called "Organizations"</li> <li>• <b>New content:</b> Affiliated Organizations</li> <li>• Sales information and Affiliates are accessible through tabs at the top of each record</li> </ul>
Literature	Unchanged
Patents	Unchanged

## Organic Synthesis

You can expect fewer records in the Organic Synthesis area of Cortellis Drug Discovery Intelligence compared to Integrity. This is because multiple synthetic schema described in the same source are represented as separate records in Integrity; whereas they have been consolidated under one Organic Synthesis record in Cortellis Drug Discovery Intelligence.

**For example**, there are six separate Organic Synthesis records for the synthesis schema 175652-05 (a to f) in Integrity that have been grouped under one record in Cortellis Drug Discovery Intelligence. These six-schema come from the same source document *Total synthesis of rapamycin*, Maddess, M.L. et al, **Angew Chem Int Ed** 2007, 46(4): 591.

Integrity	Cortellis Drug Discovery Intelligence
Schema 175652-05-a, b and c are continuations of the same schema divided into three parts. These are presented as three records in Integrity	Schema 175652-05-a, b and c are presented contiguously under the same record to make it easier to follow the three parts of the same schema
Schema 175652-05-d, e and f relate to synthesis of key intermediates. Again, they are presented as three separate records in Integrity	Schema 175652-05-d, e and f are presented within the same record as the main synthetic schema (a-c) to make it easier to follow the entire synthesis, intermediates included

# Quick Search

## Auto-suggested terms

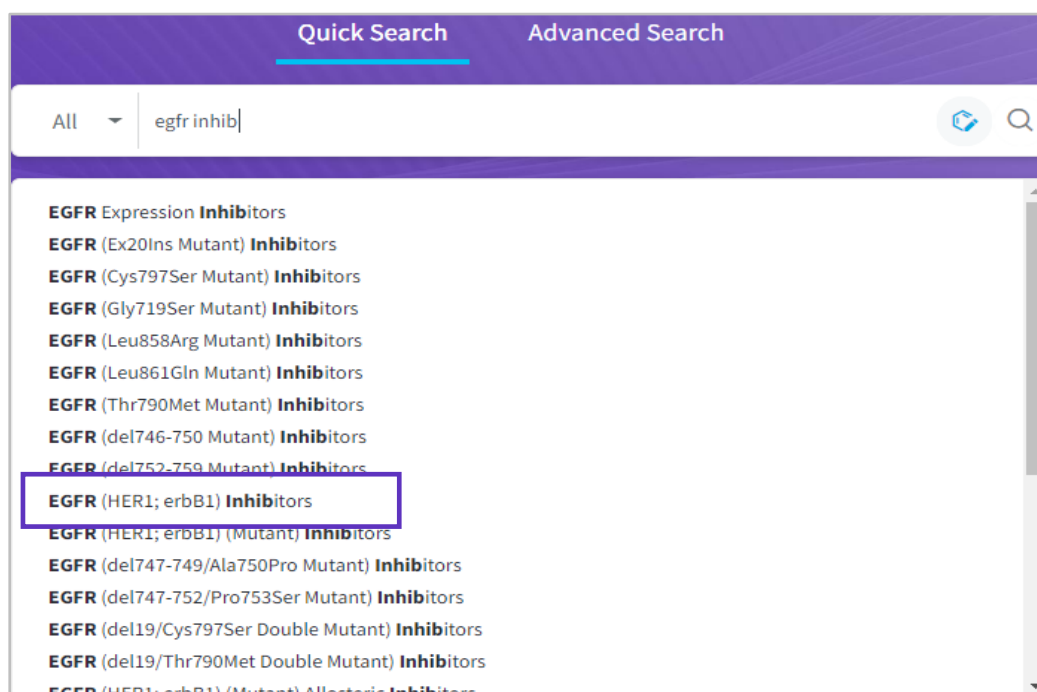
The first and most obvious difference between Integrity and Cortellis Drug Discovery Intelligence is that Quick Search has auto-suggested terms; just start typing your keywords of interest and select from the list of suggested terms. Auto-suggest makes the Quick Search more intuitive, and for many searches, Quick Search + filters may be the fastest route to obtain the results you want.

The auto-suggested terms are drawn from the following controlled vocabulary indexes:

- Drugs & Biologics Main name, Code names, Generic name and Brand names.
- Genes & Targets main names, synonyms and target family name.
- Organization names.
- Conditions.
- Product category.
- Molecular and Cellular mechanisms of action.

The advantage of using the auto-suggested terms is that you don't have to second-guess the exact terminology used by Clarivate's scientists to curate the content.

**For example**, if you want to find EGFR inhibitors, just start typing "EGFR inhib" in the Quick Search box and select the term "**EGFR (HER1; erbB1) Inhibitors**".



## Search fields

Cortellis Drug Discovery Intelligence Quick Search has been refined to give more relevant results. This becomes evident if you compare the search results from Cortellis Drug Discovery Intelligence Quick Search with those from Integrity. The following table summarises the refinements:

Search	Enhancement	Example
Condition	Child terms included	Integrity Quick Search for "Asthma, allergic" missed several records, such as EN 836130, Etokimab in development for Eosinophilic asthma, a child term of "Asthma, allergic"

		With the same search in Cortellis Drug Discovery Intelligence, Etokimab was retrieved
Condition	Milestone conditions included	Integrity Quick Search for "Hypertension, pulmonary" missed a couple of records, e.g., EN 90701, Carvedilol which entered a phase I/II clinical trial in children with pulmonary arterial hypertension in 2012, and the study was later suspended in 2015 due to lack of enrolment
		Carvedilol was retrieved using the same search in Cortellis Drug Discovery Intelligence
Organization	Affiliates included	Integrity Quick Search for "Teva" missed multiple records. E.g., EN 306109, Metformin hydrochloride/glipizide which was launched in 2007 in the US for treatment of Type II diabetes by Barr Laboratories, a subsidiary of Teva
		EN 306109 and others were retrieved when searching for "Teva" in Cortellis Drug Discovery Intelligence
Organization	Milestone organizations included	Integrity Quick Search for "Teva" missed multiple records. E.g., EN 411079, Fluorocyclophenenylcytosine which had been licensed to Teva in 2009, and then the license terminated in 2013
		EN 411079 and others were retrieved when searching for "Teva" in Cortellis Drug Discovery Intelligence
Mechanism of Action	Child terms included	Integrity Quick Search for "Drugs Targeting Mammalian Target of Rapamycin (mTOR; FRAP1)" retrieves zero results because there are no drugs associated with this mechanism
		Cortellis Drug Discovery Intelligence Quick Search for "Drugs Targeting Mammalian Target of Rapamycin (mTOR; FRAP1)" retrieves thousands of results because the search now includes the child terms "Mammalian Target of Rapamycin (mTOR; FRAP1) inhibitors" and "Mammalian Target of Rapamycin (mTOR; FRAP1) activators"
Mechanism of Action	Related content included	Integrity Quick Search for "Mammalian Target of Rapamycin (mTOR; FRAP1) Inhibitors" retrieves <ul style="list-style-type: none"> <li>• The relevant Drugs &amp; Biologics records</li> <li>• A handful of patents and literature references are also retrieved because the mechanism is described in the Integrity abstract</li> <li>• No other related content is retrieved</li> </ul>
		The same Quick Search in Cortellis Drug Discovery Intelligence retrieves <ul style="list-style-type: none"> <li>• The relevant Drugs &amp; Biologics records</li> <li>• All other records indexed with this mechanism, and its child terms, including over 1,000 patents that have been indexed with this mechanism but were not retrieved in the Integrity QS</li> </ul>
Product Category	Child terms included	Integrity Quick Search for "Macrolides" retrieves Drugs & Biologics indexed with this product category, but not drugs indexed with its child terms "Bryostatins", "Epothilones" and "Ketolides"
		Cortellis Drug Discovery Intelligence Quick Search for "Macrolides" retrieves Drugs & Biologics indexed with this term as well as its child terms
Product Category	Related content included	Integrity Quick Search for "Macrolides" retrieves <ul style="list-style-type: none"> <li>• The relevant Drugs &amp; Biologics records</li> <li>• But does not retrieve any Genomics or Target records related to the macrolide drug records</li> <li>• Neither does it retrieve related content from other knowledge areas</li> </ul>
		The same Quick Search in Cortellis Drug Discovery Intelligence retrieves <ul style="list-style-type: none"> <li>• The relevant Drugs &amp; Biologics records</li> </ul> AND



- All other records indexed with this product category, including over 100 Genes & Targets records that are associated with macrolide drugs

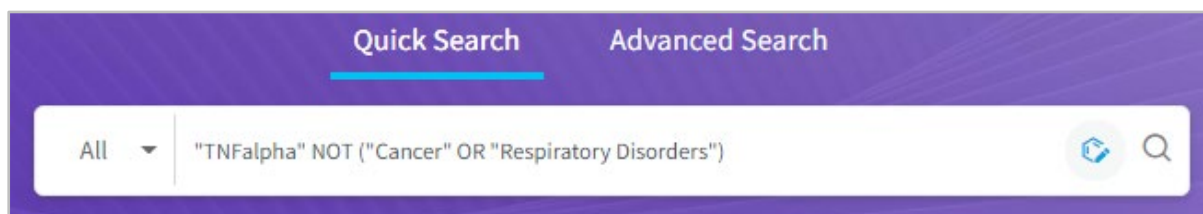
Target name and synonyms	Related content included	<p>Integrity Quick Search for “FKBP prolyl isomerase 1A” retrieves</p> <ul style="list-style-type: none"> <li>• The relevant target records</li> <li>• But does not retrieve any content in other knowledge areas that are related to the targets</li> </ul>
		<p>The same Quick Search in Cortellis Drug Discovery Intelligence retrieves</p> <ul style="list-style-type: none"> <li>• The relevant drug target records</li> <li>• It also retrieves content related to the target FKBP prolyl isomerase 1A, including related drugs, pharmacological studies, patents and literature</li> </ul>

## Boolean operators

Combining search terms is more intuitive in Cortellis Drug Discovery Intelligence Quick Search:

- The default operator is AND when using multiple terms in Quick Search.
- You can replace AND with OR or NOT operators.
- Searches can be combined with parenthesis.

For example:



## Word order

When using more than one word in Quick Search, e.g., “neutrophilic asthma” then:

- Integrity Quick Search adheres to the order in which you type your words and will only retrieve records with the text string “neutrophilic asthma”. This is problematic because Integrity scientists use the controlled vocabulary index term “Asthma, neutrophilic” to curate the content related to this condition. Thus, many relevant records are missed when searching Integrity with “neutrophilic asthma”.
- Cortellis Drug Discovery Intelligence Quick Search does not respect word order unless the words are enclosed in quotation marks. Thus, in the example of *neutrophilic asthma*:
  - a) The index term “Asthma, neutrophilic” is suggested – preferred option because it makes best use of the way the content is indexed by Clarivate’s scientists.
  - b) You can also search on *neutrophilic asthma* without quotation marks and the search will retrieve records indexed with “neutrophilic” AND “asthma”.

The table provides a detailed description of the differences between Integrity and Cortellis Drug Discovery Intelligence Quick Search using the example “neutrophilic asthma”. **However**, when you use Cortellis Drug Discovery Intelligence the Auto-suggested terms, the search is intuitive, easy to use, and you do not need to learn the Quick Search rules to begin using the product.

Search term	Integrity	Cortellis Drug Discovery Intelligence
Neutrophilic asthma	Relevant records are missed because Integrity searches by the text string “Neutrophilic asthma” and the correct index term used in Integrity is “Asthma, neutrophilic” – word order matters.	<ul style="list-style-type: none"> <li>• The most accurate search results are obtained when you select the suggested term “Asthma, neutrophilic”</li> </ul>

		<ul style="list-style-type: none"> <li>If you do not select the suggested term, all records with the terms "Neutrophilic" AND "Asthma" will be returned</li> </ul>
"Neutrophilic asthma" (using quotation marks to force a search for this text string)	Same with or without quotation marks	Same as Integrity; finds only records with this text string and misses all records indexed with the term "Asthma, neutrophilic"
Asthma, neutrophilic (no quotation marks)	Retrieves records indexed with this condition. But requires you to learn the subtleties of the Integrity indexing system	<ul style="list-style-type: none"> <li>Suggests "Asthma, neutrophilic"</li> <li>If you do not select the suggested term, all records with the terms "Asthma" AND "Neutrophilic" will be returned</li> </ul>
"Asthma, neutrophilic" (with quotation marks)	Same with or without quotations	This is the same as if you had selected the auto-suggested term "Asthma, neutrophilic"

## Hyphenated names

Integrity Quick Search rule = avoid using hyphens in drug code names.

Cortellis Drug Discovery Intelligence Quick Search does not have this rule and is more forgiving:

Integrity	Cortellis Drug Discovery Intelligence
Type "FK506" retrieves relevant results Type "FK-506" misses relevant results	Type either "FK506", "FK-506", or select "FK-506" from the auto-suggested terms. Any of these three options will retrieve all relevant records

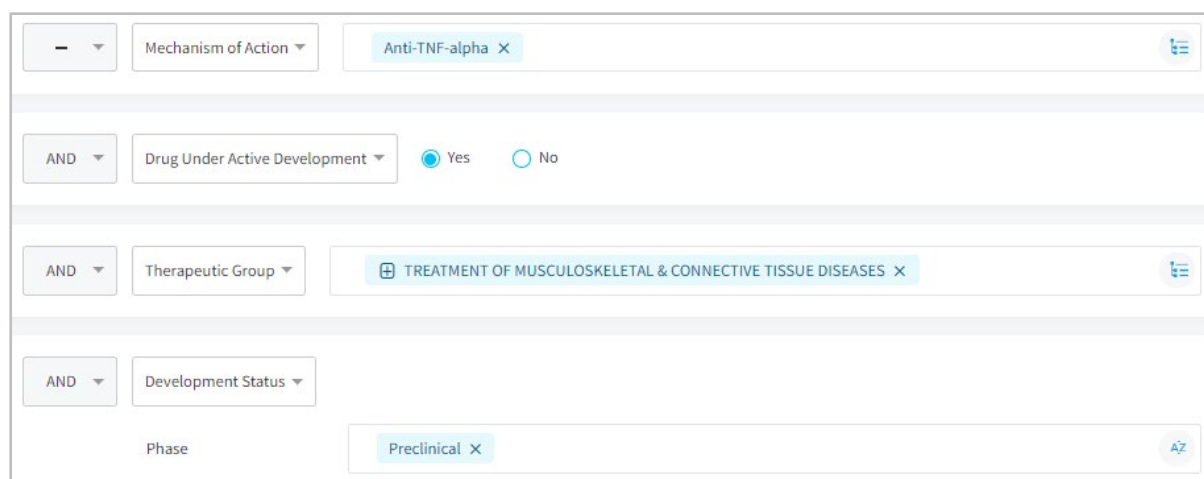
# Advanced Search

Advanced Search has also been enhanced in Cortellis Drug Discovery Intelligence.

## Build a Query

Where Integrity Advanced Search is limited to a maximum of 3 different search fields, Cortellis Drug Discovery Intelligence has no limit.

For example:

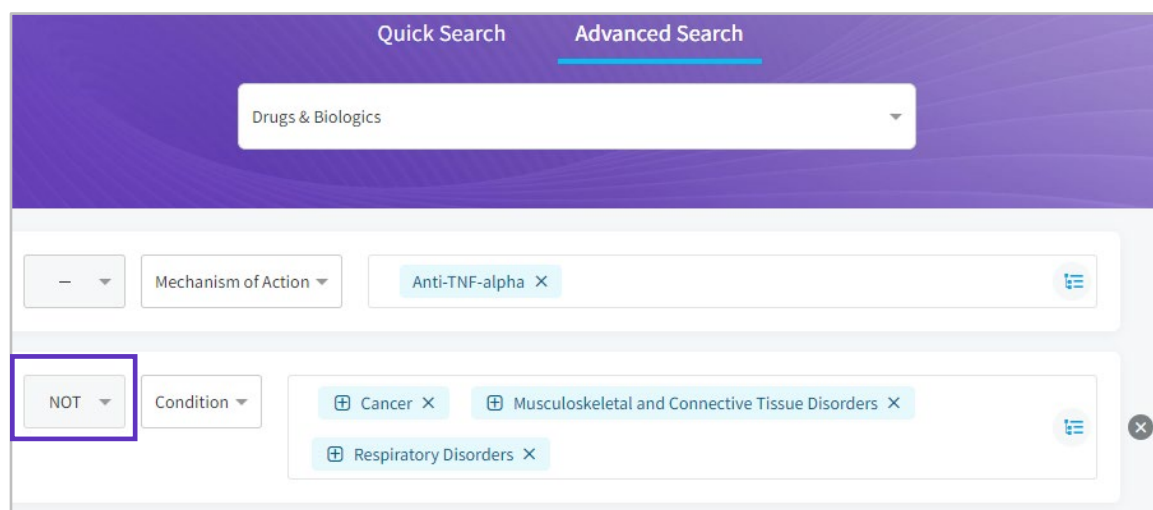


The screenshot shows a search interface with four rows of filters. Each row has a dropdown menu for the operator (all set to 'AND'), a dropdown menu for the field name, and a search box with a selected term. The first row: Mechanism of Action field with 'Anti-TNF-alpha'. The second row: Drug Under Active Development field with 'Yes' selected. The third row: Therapeutic Group field with 'TREATMENT OF MUSCULOSKELETAL & CONNECTIVE TISSUE DISEASES'. The fourth row: Development Status field with 'Preclinical'. There are also 'AZ' and 'X' icons for each search box.

## Boolean operators

Both Integrity and Cortellis Drug Discovery allow the operators AND / OR / NOT when combining multiple terms in the same search box. However, you can now exclude entire search categories in Cortellis Drug Discovery using the NOT operator between search fields

For example,



The screenshot shows a search interface with two rows of filters. The top row: Mechanism of Action field with 'Anti-TNF-alpha'. The bottom row: Condition field with 'NOT' operator highlighted in a red box, and three search terms: 'Cancer', 'Musculoskeletal and Connective Tissue Disorders', and 'Respiratory Disorders'. There are also 'X' icons for each search box.

Note, the default operator within an Advanced Search field is OR, thus “Cancer” OR “Musculoskeletal and Connective Tissue Disorders” OR “Respiratory Disorders” in the example above.

## New Advanced Search fields

The following is a list of advanced search filters that have been added to Cortellis Drug Discovery, and which were not available in Integrity

Knowledge Area	Field	Type	Description
Drugs & Biologics	Drug Type	Controlled vocabulary list	Use this list to refine your search according to drug size, biologics versus chemicals, drug combinations, conjugates and herbal-type drugs
Genes & Targets	RefSeq Transcript	Free-text	Search with the RefSeq accession number prefix, without the version number  <div data-bbox="774 414 1396 795" style="border: 1px solid #ccc; padding: 5px;"> <p>GenBank ▾</p> <p><b>Homo sapiens erb-b2 receptor tyrosine kinase 2 (ERBB2), 1 mRNA</b></p> <p>NCBI Reference Sequence: NM_004448.4</p> <p><a href="#">FASTA</a> <a href="#">Graphics</a></p> <hr/> <p><a href="#">Go to:</a> ☺</p> <p>LOCUS NM_004448 4557 bp mRNA linear PRI 09-JUN-2020</p> <p>DEFINITION Homo sapiens erb-b2 receptor tyrosine kinase 2 (ERBB2), transcript variant 1, mRNA.</p> <p><b>ACCESSION NM_004448</b></p> <p>VERSION NM_004448.4</p> <p>KEYWORDS RefSeq; RefSeq Select.</p> <p>SOURCE Homo sapiens (human)</p> <p>ORGANISM <a href="#">Homo sapiens</a></p> <p>Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Haplorrhini; Catarrhini; Hominidae; Homo.</p> </div>
Pharmacokinetics	Analysis type	Controlled vocabulary list	Search by models of drug distribution (one-compartment, two-compartment etc)
Clinical Studies	Phase	Controlled vocabulary list	Where the source document is a ClinicalTrials.gov register, then phase is now included

## Missing Advanced Search fields

Some Advanced Search fields that are available in Integrity have not been included in Cortellis Drug Discovery Intelligence Advanced Search because they were not being used. Please contact **Clarivate Customer Support** if you there is an advanced search field that you relied on to do your work and which is not available in Cortellis Drug Discovery

## Searching across knowledge areas

In Integrity it is possible to search in one knowledge area using parameters from other areas, we call this “multi-index searching”. For example, you can search Drugs & Biologics using parameters relating to the product, the supporting literature and patents, and associated Targets:

The screenshot displays the 'Advanced Search' interface with the following sections:

- Product** (highlighted with a purple box): Includes a 'Structure Search' button and checkboxes for 'Lead Compounds' and 'Under Active Development'. Below are three rows: 'Select Value' and two 'Optional Value' rows, each with an 'Index' button and an 'AND' dropdown arrow.
- Reference** (highlighted with a purple box): Includes three rows: 'Select Value' and two 'Optional Value' rows, each with an 'Index' button and an 'AND' dropdown arrow.
- Targets & Pathways** (highlighted with a purple box): Includes three rows: 'Select Value' and two 'Optional Value' rows, each with an 'Index' button and an 'AND' dropdown arrow.
- Patent** (highlighted with a purple box): Includes three rows: 'Select Value' and two 'Optional Value' rows, each with an 'Index' button and an 'AND' dropdown arrow.

At the top of the interface are tabs for 'Advanced Search' and 'Session History', and buttons for 'Clear Form' and 'Start'.

This feature will be added to Cortellis Drug Discovery Intelligence in 2020. In the meantime, in many cases you can achieve the same result by using Quick Search or using the Related Content links. For example, if you wish to identify drugs related to the target EGFR, then search first for EGFR, then from the target record, select view related Drugs & Biologics.

# Structure Search

The structure search cartridge and search engines have been completely overhauled in Cortellis Drug discovery and all those fiddly system requirements have gone away!

Cortellis Drug Discovery Intelligence uses the JChem Base from ChemAxon Ltd, and modern versions of the structure editors Elemental, Marvin JS and ChemDraw JS. This solves the conflicts between different operating systems (Windows versus Mac), internet browsers and structure editors seen with Integrity.

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## Requirements for Structure Search

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Requirements	Integrity	Cortellis Drug Discovery
Operating system	Windows-only	Windows and Mac
Browsers	Internet Explorer v11	Any
Structure editors	<ul style="list-style-type: none"><li>• Elemental</li><li>• MDL Draw</li><li>• MDL ISIS Draw</li><li>• Chemaxon Marvin</li><li>• CS Chemdraw (plugin required)</li></ul>	<ul style="list-style-type: none"><li>• Elemental</li><li>• Marvin JS</li><li>• Chemdraw JS (no plugin required)</li></ul>
Available in Quick Search	No	Yes – you can also combine structures with keywords in QuickSearch

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## Search across knowledge areas

• Drugs & Biologics	Y	Y
• Genes & Targets	N	Y
• Organic Synthesis	Y	Y
• Experimental Pharmacology	Y	Y
• Experimental Models	Y	Y
• Pharmacokinetics	Y	Y
• Clinical Studies	Y	Y
• Organizations	Y	Y
• Literature	Y	Y
• Patents	Y	Y
• Disease Briefings	Y	Y
• Biomarkers	N	Y

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## Viewing your results:


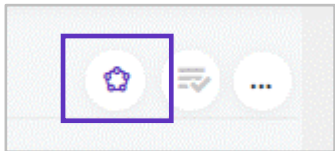
- When you run a Similarity Search in Cortellis Drug Discovery Intelligence, results are ranked by similarity to the query structure, and the similarity score is displayed.

- When you run a Substructure Search in Cortellis Drug Discovery Intelligence, the query structure is highlighted within the structure of the results retrieved.

# Related Content

## Navigating Related Content within Cortellis Drug Discovery Intelligence

Almost all records in Cortellis Drug Discovery Intelligence have related records in other Knowledge Areas.

Functionality	Integrity	Cortellis Drug Discovery Intelligence
Navigate from a results list or a record to all related content in other knowledge areas	Options > All Related Information via Quick Search	"View related info" button on top right of the results list
		
Navigate from a record to related content in another knowledge area	Via "Related Information" section at the bottom of the record	Via "Related Content" panel to the right of the record

## Different results in related content?

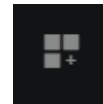
In some cases, the number of related records in other knowledge areas may be different in Cortellis Drug Discovery Intelligence compared to Integrity.

- Cortellis Drug Discovery Intelligence is **displaying more related records** than Integrity. This is because Cortellis Drug Discovery Intelligence includes more relationships between records compared to Integrity. For example, the organizations listed in drug milestones are now included in the list of organizations related to a drug record, where this information was not being included in Integrity related content. This enhancement means that relevant records that were being missed in Integrity are now being retrieved. For a detailed description of the additional fields included in the Related Content, see the [Search fields](#) table under the Quick Search section.
- Cortellis Drug Discovery Intelligence is **displaying fewer related records** than Integrity. This is because
  - Integrity "Targets & Pathways" and "Genomics" areas have been consolidated in Cortellis Drug Discovery Intelligence, so fewer records are displayed, though the content is the same. For further information, see the [Content & Data Curation](#) table of this manual.
  - Related sub-schema in the Organic Synthesis area of Integrity were indexed as separate records; whereas they have been consolidated in Cortellis Drug Discovery Intelligence. For further information, see the [Content & Data Curation](#) table and [Organic Synthesis](#) section of this manual.
  - There are fewer biomarker uses when compared to integrity; this is because the uses with the same condition + population + role have been consolidated into one, whereas in integrity they were separate if the biomarker was measured using different techniques



## Navigating Related Content in other databases

If you have access to other Cortellis products such as Cortellis Competitive Intelligence, you can navigate to the Cortellis home page by clicking on the “Cortellis Family” icon in the left-hand menu bar; login not necessary. Please note that when navigating between Cortellis Drug Discovery and other Cortellis products, it is not possible yet to go directly from record to record.



If you have access to Drug Research Advisor – Target Druggability, you can navigate from a DRA-TD record to the equivalent record in Cortellis Drug Discovery Intelligence, and vice versa using the links provided. Login not necessary.

# Sorting

## Sort Columns

Column sorting remains the same as for Integrity, but with one exception:

It is now possible to sort Biomarker Uses. For example, sort by numbers of associated drugs or numbers of supporting references to help rank your biomarker results list.

## Sort by relevance

“Sort by ...” is a new feature in Cortellis Drug Discovery Intelligence. Currently there is only one option, which is the default “Sort by relevance”.

The default sort order in **Integrity** is:

- Numerical ascending order. E.g., Drugs & Biologics are sorted by Entry Number.
- Alphabetical ascending order. E.g., Targets & Pathways are sorted by Target Name.

The Sort by relevance score in **Cortellis Drug Discovery Intelligence** is based on:

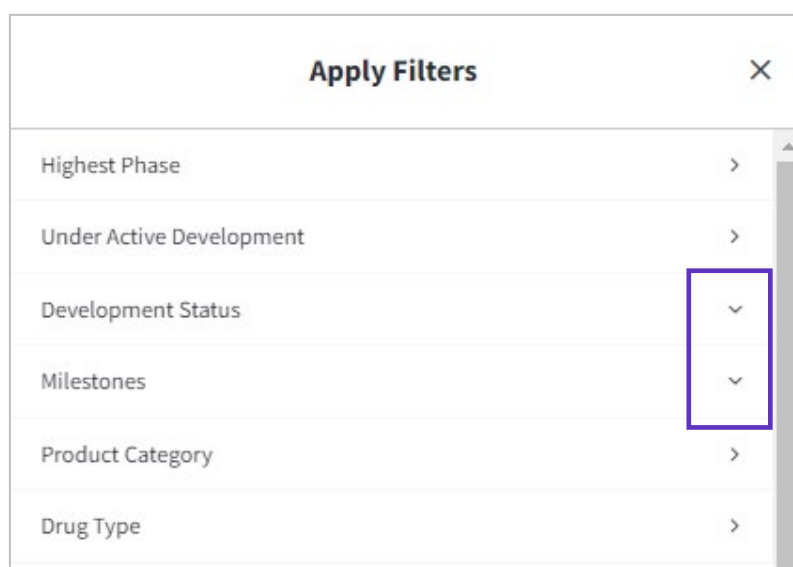
- The frequency of the query term relative to all other terms belonging to the same parameter. For example, the frequency of the condition “Asthma, neutrophilic” relative to all other conditions that a drug record has been indexed with.
- Count of terms. For example, if your query listed three conditions and a drug record has all three conditions, that will be scored higher than a drug record that matches just one of those conditions.
- Specific weighting that is particular to each knowledge area:
  - In Drugs & Biologics, drugs with higher phases are scored higher.
  - In Genes & Targets, records with organism = *Homo sapiens* are scored higher.

# Filters

## Filter by Statistics / Apply Filters

What used to be called “Filter by statistics” in Integrity is now a drop-down menu “Apply Filters” in Cortellis Drug Discovery Intelligence.

- Filters cannot be searched in Integrity, whereas they can in Cortellis Drug Discovery Intelligence. This is particularly useful when you have a long list of terms such as Conditions; just begin typing your condition of interest, and the list will narrow-down as you type.
- Filters are ordered by frequency of results; this is like Integrity but has a numerical rather than graphical display.
- Some filters such as Condition and Mechanism of Action can also be viewed by hierarchy rather than frequency. This is useful if the list of filter terms is very long and you prefer to browse the tree of terms rather than search the list
- Development Status and Milestone filters are more easily accessible. Note the expand/collapse menu option indicating that sub-filters are available:



## New filters

The following filters are new to Cortellis Drug Discovery Intelligence:

Knowledge Area	Filter	Filter type	Description
Drugs & Biologics	Drug Type	List	Refine your results according to drug size, biologics versus chemicals, drug combinations, conjugates and herbal-type drugs
Drugs & Biologics	Specificity	List	Differentiate drugs that interact with a single target, from those that interact with multiple targets
Drugs & Biologics	Experimental Pharmacology	Yes/No	Boolean filter to include/exclude drug records with associated Experimental Pharmacology data
Drugs & Biologics	Experimental Models	Yes/No	Boolean filter to include/exclude drug records with associated Experimental Models

Drugs & Biologics	Pharmacokinetics	Yes/No	Boolean filter to include/exclude drug records with associated PK data
Drugs & Biologics	Patents	Yes/No	Boolean filter to include/exclude drug records with associated patents
Experimental Pharmacology	Experimental model name	List	Filter pharmacological data by the name of the model used in the experiment
Pharmacokinetics	Study Type	List	Filter by type of PK study. E.g. "Dose-finding", "Lead optimization" and more
Pharmacokinetics	Analysis Type	List	Filter by models of drug distribution (one-compartment, two-compartment etc)
Pharmacokinetics	Source Type	List	Filter by type of supporting document (journal, patent, conference, company communication)
Pharmacokinetics	Mechanism of Action	List	Filter by the mechanism of the associated products
Pharmacokinetics	Product Category	List	Filter by the category of the associated products
Pharmacokinetics	Multiple Administered Products	Yes/No	Filter experiments where single/multiple products were administered
Pharmacokinetics	Organism	List	Human, Dog, Rat, Mouse etc
Pharmacokinetics	Sex	List	Male, Female
Pharmacokinetics	Race	List	Asian, White, Black...
Pharmacokinetics	Age group	List	Adult, Children, Elderly...
Pharmacokinetics	Genomics	List	Filter by a list of genes that define the study population. E.g. "Her2 positive"
Pharmacokinetics	Source Type	List	Journal, Patent, Congress, Corporate
Organizations	Headquarters	List	Filter by country / region where an organization's headquarters are based
Organizations	Field of activity	List	Type of activity an organization is engaged in
Clinical Studies	Phase	List	If a clinical study is supported by a clinicaltrials.gov NCT record, then you can filter by trial phase
Clinical Studies	Source Type	List	Journal, Patent, Congress, Corporate
Organizations	Headquarters Country/Region	List	List of countries where the HQ is based
Organizations	Field of Activity	List	Industry segments E.g. Pharmaceutical, Devices, Generics, Manufacturing etc
Literature	Source Type	List	Differentiate between journal articles, conference proceedings, clinical trial protocols (ClinicalTrials.gov), corporate sources (reports, press releases etc) and books
Literature	Drug Name	List	This is not a new filter, but the "Product Citation" filter in Integrity has been renamed to "Drug Name"
Literature	Drugs	Yes/No	Boolean filter to include/exclude literature sources associated with a Drugs & Biologics record

Literature	Genes/Targets	Yes/No	Boolean filter to include/exclude literature sources associated with a Genes & Targets record
Patents	Compound	List	List of Drugs & Biologics associated with the patents
Patents	Compound Category	List	Filter by Drugs & Biologics product category
Patents	Publication Year	List	Filter by the year a patent was published Note, there is a separate filter for the publication year of the basic patent
Biomarkers	Biomarker Use Product Name	List	Filter biomarker uses for those specifically associated with a given drug or biologic

# Exporting

Click on the (...) icon to the top right of a result list, select “Export” and follow the instructions in the export dialog box.

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## Export Availability in Integrity and Cortellis Drug Discovery

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	Integrity	Cortellis Drug Discovery
Export limit	2500 records	2000 records
Drugs & Biologics		
• Results list	Y	Y
• Individual drug records	Y	
• Product	Y	Y
• Development Status	Y	Y
• Milestones	Y	Y
•		
• Excel	Y – However, you get tables within tables when exporting Dev Stat and Milestones	Y – Development Status and Milestones are exported to different tabs in the excel workbook
• Spatial Data File	Y	Y
• BizInt	Y	Y
• Word	Y	
• ISIS for Excel	Y	
Genes & Targets		
• Results list	Y	Y
• Individual records	Y	
• Excel	Y	Y (fields visible on the screen)
• Word	Y	
Organic Synthesis		
• Results list	Y	
• Synthesis record	Y	
• Excel	Y	
• Word	Y	

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#### Experimental Pharmacology

- Results list Y Y
  - Pharmacology record
  - Excel Y Y
  - SDF Y Y
  - RDF Y
  - Word Y
- 

#### Experimental Models

- Results list Y Y
  - Individual model record Y
  - Excel Y Y
  - Word Y
- 

#### Pharmacokinetics

- Results list Y Y
  - Individual model record
  - Excel Y Y
  - Word Y
- 

#### Clinical Studies

- Results list Y Y
  - Individual model record
  - Excel Y Y
  - Word Y
- 

#### Organizations

- Results list Y Y
  - Individual model record
  - Excel Y Y
  - Word Y
- 

#### Literature

- Results list Y Y

- Individual model record
- Excel Y Y
- Word Y
- Endnote Y
- Reference Manager Y
- RefWorks Y

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#### Patents

- Results list Y Y
- Individual model record Y
- Excel Y Y
- Word Y
- BizInt Y Y
- RDF Y

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#### Disease Briefings

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#### Biomarkers

- Results list Y Y
  - Individual model record Y
  - Excel Y Y
  - Word Y
- 

### Integrity Reports

Reports such as those found in Integrity are not available for Cortellis Drug Discovery



# Alerts

Set up alerts on searches run using Quick Search as well as Advanced Search. In Integrity, alerts are only possible via Advanced Searches.

Set up alerts from a results list or from a record using the (...) options menu on the top right of your screen.

Manage alerts from the "Searches & Alerts" management center available in the left-hand menu bar.



## Save & Alert

Use Save & Alert to stay up to date on the latest information relating to a saved search.

In addition to Advanced Search, it is now possible to set an alert on results obtained using Quick Search – this functionality is not available in Integrity.

## Keep Me Posted

Use Keep me Posted to stay up to date on new information added to drug records of interest.

### Availability of Keep Me Posted alerts

Knowledge Area	Integrity	Cortellis Drug Discovery
Drugs & Biologics	Y	Y
Genes & Targets	Y	Y
Organic Synthesis		
Experimental Pharmacology		
Experimental Models	Y	
Pharmacokinetics		
Clinical Studies		
Organizations		
Literature		
Patents	Y	Y
Disease Briefings		
Biomarkers	Y	Y
Biomarker Uses	Y	Y
Biomarker Kits		

## Controlled Vocabulary

Use Controlled Vocabulary alerts to stay up to date on:

- New terms added to the Controlled Vocabulary indexes.
- New information curated with existing terms.

### **Different results?**

If you set up the same alert in both Integrity and Cortellis Drug Discovery Intelligence, you will notice that the results are sometimes different. This may be due to consolidation of records in the Genes & Targets, Organic Synthesis and Biomarker Uses (see section on **Content & Data Curation**) of Cortellis Drug Discovery Intelligence; or due to enhancement in Quick Search and Advanced Search. Overall, the Cortellis Drug Discovery Intelligence searches and alerts are more sensitive than Integrity and return more results. For further details, please see the sections on **Quick Search** fields and **Advanced Search** for an explanation of the enhancements to Searches & Alerts

### **Alerts on zero-result searches**

In Integrity it is possible to set an alert even when a search returns zero results. The value of this is to be alerted when content is added to the database that match your search criteria.

This functionality will be added to Cortellis Drug Discovery Intelligence alerts in 2020.

### **What will happen to my existing Integrity alerts?**

We will work with your organization to ensure your Keep Me Posted and Controlled Vocabulary alerts are copied automatically from Integrity to Cortellis Drug Discovery Intelligence, at a time that is convenient for your organization.

Regarding your Saved Queries, Cortellis Drug Discovery Intelligence uses the “Elastic Search” engine which permits greater efficiency and search accuracy. However, this new search engine is not compatible with Integrity queries and for this reason it will not be possible to automatically transfer Integrity Saved Queries to Cortellis Drug Discovery Intelligence. We ask that you review your existing Integrity Saved Queries and re-build them in Cortellis Drug Discovery Intelligence using the following steps:

1. Reproduce the search using Quick Search or Advanced Search.
2. Apply any filters that are necessary to refine your results.
3. Click the Options menu (...) to the top right of the results screen and select “Save & Alert”.
4. Follow the instructions in the pop-up dialog box, click Save when complete.
5. Click the “Searches & Alerts” button in the left-hand menu bar to view/manage your saved searches and alerts.

If you have any questions about this process, please don't hesitate to contact **Clarivate Analytics customer services**.

# Additional Support

Where can I go for additional support, or to give feedback?

Click on the (?) icon in the left-hand menu bar to open the “Resources & Updates” center. From here you can search or browse the following:

Section	Subsections	Content
Product Updates		Recently added features and content
Guided Tours		Short in-app guided tours on topics such as managing your alerts
Upcoming live training		Register for a training session
Training Resources	All training resources	Opens a new webpage with links to: <ul style="list-style-type: none"><li>• Training videos</li><li>• Quick guides (workflows)</li><li>• Manuals</li></ul>
Drug Discovery Insights		<ul style="list-style-type: none"><li>• Register for webinars</li><li>• Download white papers</li></ul>
<b>Contact us</b>	Submit an inquiry	Submit your question or feedback via a web-based form
	Call us	List of phone numbers to call, organized by geographic region
	Other support options	Additional options include <ul style="list-style-type: none"><li>• Search/browse the knowledge base</li><li>• Chat with customer service</li></ul>
Feedback		Submit written feedback

When an inquiry is received, it is assigned to a member of our [customer service](#) team to resolve and answer. Most inquiries having to do with the database content or with how to accomplish a certain task are resolved directly. For those cases where additional expertise is required, inquiries are referred to a member of the Content Department or the Technical Department.

We are continually improving Cortellis Drug Discovery Intelligence in direct response to your suggestions. We encourage you to send us your [feedback](#) on issues you face when using Cortellis Drug Discovery Intelligence, and your suggestions for improvements.