Make the most out of the Clarivate Analytics Integrity interface

Want to get the most out of Clarivate Analytics Integrity? How well do you know the functionality of Integrity? Do you know what happens when you click on the Options menu or where you can filter by value range?

Integrity interface enables you to apply highly targeted search strategies, refine and filter retrived results and generate a data map to see all the information related to your results in all Knowlegde Areas. **Example Scenario**: you are searching for drugs that have been reported to show gastrointestinal toxicity, and then identify those with the mechanism of action of interest (e.g. non-steroidal anti-inflammatory drugs, NSAIDs). For those drugs, you would like to review Experimental Pharmacology data for *in vivo* models to identify coupounds with a higher effective dose (which may be the cause of observed toxicity).

Advanced Search form:

Advand	ced Sea	rch	5	Session	History		Clear	Form Start		A	II the Knowledge Areas of Integrity have additional
Product								Structure Search		se	earch fields beneath the main search form section.
Lead Compo Select Va Optional V Optional V	unds Dun alue /alue /alue	der Active	Developm	ient				Index AND > Index AND > Index AND >		Th th yo lin	his useful feature allows you to search information nat is directly linked to the records. For example, ou can search reference, target, and patent data nked to a drug using the corresponding sections in
Reference Title/Tex Optional V Optional V	xt /alue /alue	*gastroi	ntestinal	toxic* or *	GI toxic*			index AND > index AND > index AND >		th Ki Se Iii	he Advanced Search Form of the Drugs & Biologics nowledge Area. You can use the free text Title/Text earch field in the reference section to search the terature, identify those terms and see the drugs
Select Va Optional V Optional V	Pathway alue /alue /alue	\$ *						index AND > index AND > index AND >		lir	nked to those references.
Patent Select Va Optional V Optional V	alue /alue /alue	Drugs & Biologic:	s Search Result	5	Opt	ions	v	Index AND , Index AND , Index AND ,	Tip:		
Drugs & Biologics Seam Query > Title/Text = "gas	rch Results	or "GI toxic"			12	345678910 (Next>] [Last>>]			0	Don't forget that you can use the asterisk to truncate search terms; so toxic* also finds toxicity.
Entry Highest C Number Phase C Launched- 070002 1955	Code Name G	eneric Name rednisolone	Brand Name Predonine Prelone	Product Category Glucocorticoid Prodrugs Steroids	Therapeutic Group Asthma Therapy Lymphoma Therapy Immunosuppressants Inflammation, Treatment of Rheumatida Arthritis, Treatment of Muscular Dystrophy, Agents for Treatment of Autoimmune Diseases	Mechanism of Action	Organization Muro Shionogi Teva	Filter by Statistics Development Status Organization Major Therapeutic Groups Therapeutic Groups Major Condition Groups Condition Mechanistic Scope Molecular Mechanisms Cellular Mechanisms		T	he results list shows all those compounds linked to
Launched- 070003	Μ	ethylprednisolone	Depo- Medrol Medrol Urbason	Glucocorticoid Steroids	Lymphocytic Leukemia Therapy Antiallergy/Antiasthmatic Drugs Rheumatoid Arthritis, Treatment of Ear disorders, treatment of		Pfizer (Originator) Imperial College Sanofi Jiangsu Province Hospital of TCM Vilnius University	Major Product Categories Product Category Launch Year Target Under Active Development / No Development		re (ii *(ncluding truncations): *gastrointestinal toxic* or GI toxic*
Launched- 070005 - 1960 C 1960 C F G O 1 (ATI-1501 M CB-01-14 MMX FP-250 SK-567 PF- 00344568 IDR-90105 (Ophthalmic)	etronidazole	Anaemetro Flagyl Florazole MetroCream MetroGel- Vaginal MetroLotion Metrogel Nuvessa Rosased Rozex Zidoval	Imidazoles, Antifungal Agents	Treatment of Protozoal Diseases Antibacterial Ophthalmic Drugs Antibiotics Inflammatory Bowel Disease, Agents for Antitrichomonals Gastrointestinal Disorders (Not Specified) Antiamebics Antifungal Agents	Cytochrome P450 CYP1A2 Inhibitors	Eormac institute for Drug Research Allergan Plizer (Originator) Cosmo Shionogi Valeant Applii Therapeutics SLA Pharma	 Filter Only Lead Compounds Natural Source Categories Natural Source Scientific Name Prescription/Indication Type Administration Route 			



Filter by statistics:

dition



Now you can work with the data, and Integrity offers a number of ways to refine it. Filter By Statistics appears to the right of the results list. When you click on any of the terms a graphical representation of the data is generated. In this example the filter **Product Category** is selected.

The graph shows the number of records for each type of product category. Now select the term(s) of interest using the check box, in this example, the product category Non-Steroidal Anti-inflammatory Drugs.

Options menu:



When you have your subset of results you can use the Options. There are numerous options available in this pulldown menu. Here some of the less obvious options are highlighted. To change the view you can select Full Records or Product List with Structures. At the bottom is the Printer-Friendly Format option. Finally, one of the really useful functionalities of Integrity is All Related Information via **Quick Search**

Tip: Integrity Exports, Reports, and Alerts can also be generated from the Options menu

All related information via Quick Search:



This feature is found in the **Options** menu in all Integrity Knowledge Areas. When you click on this option a data map is generated that allows you to see all the information related to your results in the other Knowledge Areas. In this example you can click through to the Experimental Pharmacology Knowledge Area.



Filter by statistics:

IN VITRO										
IN VIVO 🗸		dm								
EX VIVO 🗌	153	2								
1 Check All	6	800	200	600	00	40	800	200	600	00
	IN VITRO IN VIVO EX VIVO theck All o	IN VITRO IN VIVO EX VIVO 153 † Check All 00 8	IN VITRO IN VIVO EX VIVO 1632	IN VITRO □ IN VIVO ☑ EX VIVO □ 1532 ↑ Check All □ □ ♀ ♀ ♀ ♀	IN VITRO □ IN VIVO ☑ EX VIVO □ 1532 ↑ Check All □ 9 § § 8	IN VITRO □ IN VIVO ☑ EX VIVO □ 1532 ↑ Check All □ 0 0 0 0 0 0 0 0 0 0	IN VITRO □ IN VIVO Ø EX VIVO □ 1532 1532 1532 1532	IN VITRO □ IN VIVO Ø EX VIVO □ 1532 1652 1652 1652	IN VITRO □ IN VIVO ☑ EX VIVO □ topology 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,	IN VITRO IN VIVO EX VIVO ↑ Check All Do 0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

From your Experimental Pharmacology results you can filter by **System** to select *in vivo* results.

Filter by value range:

	Records	Retrieved	666 in Experimental	Pharmacology		Options							
E	xperimental P	harmacology Searc	h Results			12345678910 [Next>] [Last>>]							
C.	Drug Name	Biomarker	Mechanism of Action	Experimental Activity	Pharmacological Activity	Material / Experimental Model	Method	Parameter	Value	Details			
	(S): Naproxen		Nitric Oxide (NO) Donors Cyclooxygenase (COX) Inhibitors	Edema remission/reduction, IN VIVD	Edema (carrageenan- induced), inhibition	Paw, rat Edema, carrageenan- induced, in rat (Spranue Dawlay)		ED-50	29.7 µmol/kg p.o.	<u>Ref. 5</u>	Filter by Statistics Biomarker Experimental Activity		
	Naproxen	ere	Nitric Oxide (NO) Donors Cyclooxygenase (COX) Inhibitors	Cyclooxygenase-1 (COX- 1)_inhibition, IN VITRO	Cyclooxygenase 1 [COX 1], inhibition	Seminal vesicles, rat	Arachidonic acid as substrate	IC-50	61 ± 3.00 nM	Ref. 7	System Activity/Effect Target/Condition/Toxicity		
	(S): Naproxen		Nitric Oxide (NO) Donors Cyclooxygenase (COX) Inhibitors	Cyclooxygenase-1 (COX- 1) inhibition, IN VITRO	Cyclooxygenase 1 [COX 1], inhibition	Ovine enzyme	ELISA assay	IC-50	0.180 µM	Ref. 6	Administration Route Dose Regimen Experimental Model Sinacles		
	(S)- Naproxen		Nitric Oxide (NO) Donors Cyclooxygenase (COX) Inhibitors	Aldo-Keto Reductase Family 1 Member G3 (17- beta-HSDS) inhibition, IN VITRO	3-alpha-hydroxysteroid dehydrogenase (AKR1C3), inhibition	Recombinant enzyme	NADPH formation assay	IC-50	0.180 ± 0.040 µM	<u>Ref. 7</u>	Strain		
	(S): Naproxen		Nitric Oxide (NO) Donors Cyclooxygenase (COX) Inhibitors	Aldo-Keto Reductase Family 1 Member C4 inhibition, IN VITRO	Aldo-keto reductase family 1 member C4 (AKR1C4), inhibition	Recombinant enzyme	NADPH formation assay	IC-50	0.900 µM	<u>Ref. 7</u>	Filter by Value Range		

Another feature of *Integrity* that can be really useful when working with data values is the **Filter by Value Range** function. Only available in the Experimental Pharmacology and Pharmacokinetics / Metabolism Knowledge Areas, which deal with values, it is found at the bottom right of results.

You will need to select the Parameter and Units. Here ED-50 and g/kg are selected.

Finally, from the chart select the higher EC-50 values and click View Subset(s). This will give you some insight into which compounds require higher doses *in vivo* models and would therefore be more likely to cause side effects in humans.



