

# Access adverse event data to track drug toxicity and safety issues

# **Cortellis Competitive Intelligence**

Utilize actionable safety intelligence to reduce patient burden and avoid costly failures.

1. Run your search and apply filters. Open the drug report of interest.

6 resu	ts found for index Search for the s	earch term 'everolimus'			First
Resu	<b>Ilts</b> Per page : <b>50 ∨</b> Sort by:	Relevance 🗸	Order Colum	nns	Ň
0	Drug Name	Originator Company	Active Companies (1) Filters : [0]	Therapy Area Filters : [0]	Active Indications (1) Filters : [0]
0	<u>everolimus</u>	Novartis AG	Novartis AG	Genitourinary/Sexual Function; Immune; Gastrointestinal; Other/Miscellaneous; Respiratory; Cancer; Ocular;	Acute lymphoblastic leukemia; Angiomyolipoma; Astrocytoma; Bladder cancer; Breast tumor; Colorectal tumor; Endometrioid

2. Select the Safety Intelligence tab near the bottom of the list.



3. The safety Heatmap shows all the adverse events for a given drug, grouped by system organ class. The size of the square is proportional to the number of alerts and squares are color-coded based on the strength of safety evidence. You can hover over a square to see the specific adverse event and the number of related alerts.



Heatmap			
The safety Heatmap shows all the adverse events mouse over any square to see the specific advers	s for a given drug, grouped by system organ class. The siz ie event.	e of the square is proportional to	the number of alerts. Hover the
			View safety Heatmap in OFF-X
Key: ① Very High Evidence High Evid	lence Medium Evidence Low Evidence	Not Associated	
Gastrointestinal Disorders	General Disorders And Administration Site	Blood And Lymphatic Sy	Skin And Subcutaneou
Gastrointestinal Disorders			
Adverse Event: Stomatitis			
Number Of Adverse Events: 88			
	Respiratory, Thoracic And Mediastinal Disor		
		Investigations	Nervo Mu Va

4. There are also links to get more detailed information. Click **View safety Heatmap in OFF-X** to access your OFF-X subscription or to request a trial. Click the **Key** icon to learn about the OFF-X Drug Score Methodology (see Appendix for more detail).

Heatmap	
The safety Heatmap shows all the adverse events for a given drug, grouped by system organ class. The size of the square is proportional to mouse over any square to see the specific adverse event.	the number of alerts. Hover the
	View safety Heatmap in OFF-X
Key: 1 Very High Evidence High Evidence Medium Evidence Low Evidence Not Associated	

5. The Comparative Safety Evidence allows you to assess safety findings for drugs under development or on the market. Squares are color-coded based on the strength of safety evidence. Hover over a square to see the number of alerts.



Comparative Safety Evidence																					
The Comparative Safety Evidence allows	you to assess at a gl	ances	afety	findin	ngs for	mole	ecules	unde	er dev	elopn	nento	r that	have	been	launo	hed.					
													Vie	ew Co	mpara	ative S	<u>Safety</u>	Evide	<u>ence ir</u>	n OFF	<u>-X</u>
Key: () Very High Evidence	High Evidence	Mediu	im Evic	lence		Low	Evider	ice		Not As	sociate	d	Ţ	arget/	Class E	videnc	e				
System Organ Class		s								sn	9			26				502			
	Q	Everolimus	Apitolisib	AZD-8055	BI-860585	Bimiralisib	CC-115	CC223	Dactolisib	Deforolimus	Gedatolisib	GSK-615	MKC-1	NVP-BGT226	Omipalisib	OSI-027	Paxalisib	PF-04691502	PI-103	PQR-514	PQR626
All System Organ Classes - 23		1,617	7	11	24	14	16	20	153	135	7	3	47	12	16	3	11	7	10	2	2
Blood and lymphatic system disorders																					
Cardiac disorders																					
Congenital, familial and genetic disorders																					
Endocrine disorders																					
Eye disorders	Everolimus Number of Alerts:	203																			
Gastrointestinal disorders		255																			
General disorders and administration site conditi	ions																				

6. The Latest Safety Alerts keep you informed of the top 10 latest alerts from regulatory safety agencies for a particular drug.

Latest Safety Alerts	
	View All Safety Alerts in OFF-X
September 21, 2020	
Case report of a teenager with MOG-IgG-associated encephalomyelitis who developed interstitial lung disease induced by rituximab (CD20 inhibitor).	
JOURNAL	
September 9, 2020	
Review on the pathogenesis, diagnosis and management of drug-induced liver injury (DILI). Medications associated with DILI or other hepatotoxic disorders are listed.	
JOURNAL	

# Clarivate

## APPENDIX

The **OFF-X Drug Score** aims to facilitate the exploration of factual safety insights published in OFF-X. The **OFF-X Drug Score** classifies the estimated strength of evidence supporting a given Drug-Adverse Event association based on the safety alerts available in OFF-X (more than 790,000 discrete alerts as of July 2020). The score is updated in real time as an average of over 500 alerts are added to the portal each day. Alerts are expertly curated by Bioinfogate's analysts using information from a variety of sources, including scientific publications and congresses, regulatory agencies, clinical trial registries and company communications. The **OFF-X Drug Score** is powered by Bioinfogate's **unique curated data pool** and an **advanced rule-based algorithm** that screens and weights all the individual pieces of evidence available in OFF-X. The weighting score considers the following parameters:

1. Number of alerts reporting a given drug-adverse event association, considering also the proportion of drug alerts with this association

2.Type(s) of **primary source** where each piece of evidence has been reported (regulatory agency, congress, journal publication, etc.)

3. Type of study reported (meta-analysis, clinical study, retrospective study, case report, etc.)

4.Level of evidence associated to each individual alert (confirmed, suspected or refuted) as determined by Bioinfogate's editorial guidelines

5. **Development phase** where the adverse event has been reported (discovery, preclinical studies, clinical studies or postmarketing)

The OFF-X score considers contradictory alerts for a given Drug-Adverse Event association published in the portal. Given the above, the estimated strength of evidence supporting a given Drug-Adverse Event association (based on content published in OFF-X) can be labeled as:

### **Very High Evidence**

When there is confirmatory evidence from a regulatory body supporting a Drug-Adverse Event association and there are multiple reports from other sources supporting it.

### **High Evidence**

When at least one regulatory body has reported evidence supporting a Drug-Adverse Event association or, in the absence of communications from regulatory bodies, the evidence is supported by a significant number of publications from other data sources.

### **Medium Evidence**

When the evidence supporting a Drug-Adverse Event association has been reported in several data sources or is under review by a regulatory agency.



### Low Evidence

When some preliminary evidence supporting a Drug-Adverse Event association has been reported either in humans or during preclinical studies.

### **Not Associated**

When there is evidence that refutes a Drug-Adverse Event association.

### **Target/Class Evidence Only**

When only class alerts are available for a given adverse event and the drug of interest was not explicitly mentioned in the data source(s). This score label also includes alerts associated to target genetic studies / mutations.

OFF-X Score algorithm version 2.2 (released July 1st, 2020)

### **IMPORTANT DISCLAIMER**

**OFF-X Drug Score** classifies the estimated strength of evidence supporting a given drug-adverse event association ('Score') based on third party evidence which includes, among others, publications, congress references and case reports **('Third Party Evidence')** available in the OFF-X portal. Third Party Evidence is obtained from sources that Bioinfogate considers to be relevant and reliable, but Bioinfogate does not audit or undertakes any independent verification of such sources, which are not under its control.

The OFF-X Drug Score is not an association score and does not confirm the causal relationship or frequency between a drug and an adverse event. The OFF-X Drug Score does not describe the severity of an adverse event or adverse drug reaction.

Scores are categorized by a proprietary algorithm that screens and weights the available Third Party Evidence according to several parameters previously determined by Bioinfogate. Bioinfogate assumes no obligation to update or correct the Scores or the contents of the Third Party Evidence in which such Scores are based. The Scores may contain errors and, although Bioinfogate shall not be liable for such errors, and does not assume any obligation to correct them, Users can report such errors by emailing <u>info@bioinfogate.com</u>.

Scores shall be considered statements of opinion as of the date they are displayed, and not statements of fact. Scores are provided for investigation purposes (not for patient diagnosis or treatment) and shall not be relied on and are not intended to substitute the skill, judgment and experience of the User nor the need to conduct further research and/or replace clinical judgment or the need to conduct experimental studies to verify the obtained results. It is the User's responsibility to verify the accuracy, adequacy, completeness, reliability and timeliness of the relevant Third Party Evidence that supports each Score. The Scores and the Third Party Evidence shall not be used for any unlawful purpose.

THE SCORES AND THIRD PARTY EVIDENCE ARE PROVIDED ON AN 'AS IS' BASIS AND, THEREFORE, BIOINFOGATE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, REGARDING THE ACCURACY, CORRECTNESS, ADEQUACY, COMPLETENESS OR TIMELINESS OF THE SCORES, THE THIRD PARTY EVIDENCE OR THEIR FITNESS FOR ANY

© 2021 Clarivate. Clarivate and its logo, as well as all other trademarks used herein are trademarks of their respective owners and used under license.



PARTICULAR PURPOSE, AND EXPRESSLY EXCLUDES ANY LIABILITY IN RESPECT THEREOF. BIOINFOGATE SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE SUSTAINED BY THE USER OR OTHER THIRD PARTIES THAT DIRECTLY OR INDIRECTLY MAKE USE OF THE SCORES OR THE THIRD PARTY EVIDENCE. ALL WARRANTIES, CONDITIONS OR OTHER TERMS IMPLIED BY LAW ARE EXCLUDED TO THE FULLEST EXTENT PERMITTED BY LAW.