Clarivate szerepe az innovációs ciklusban

Tóth Szász Enikő

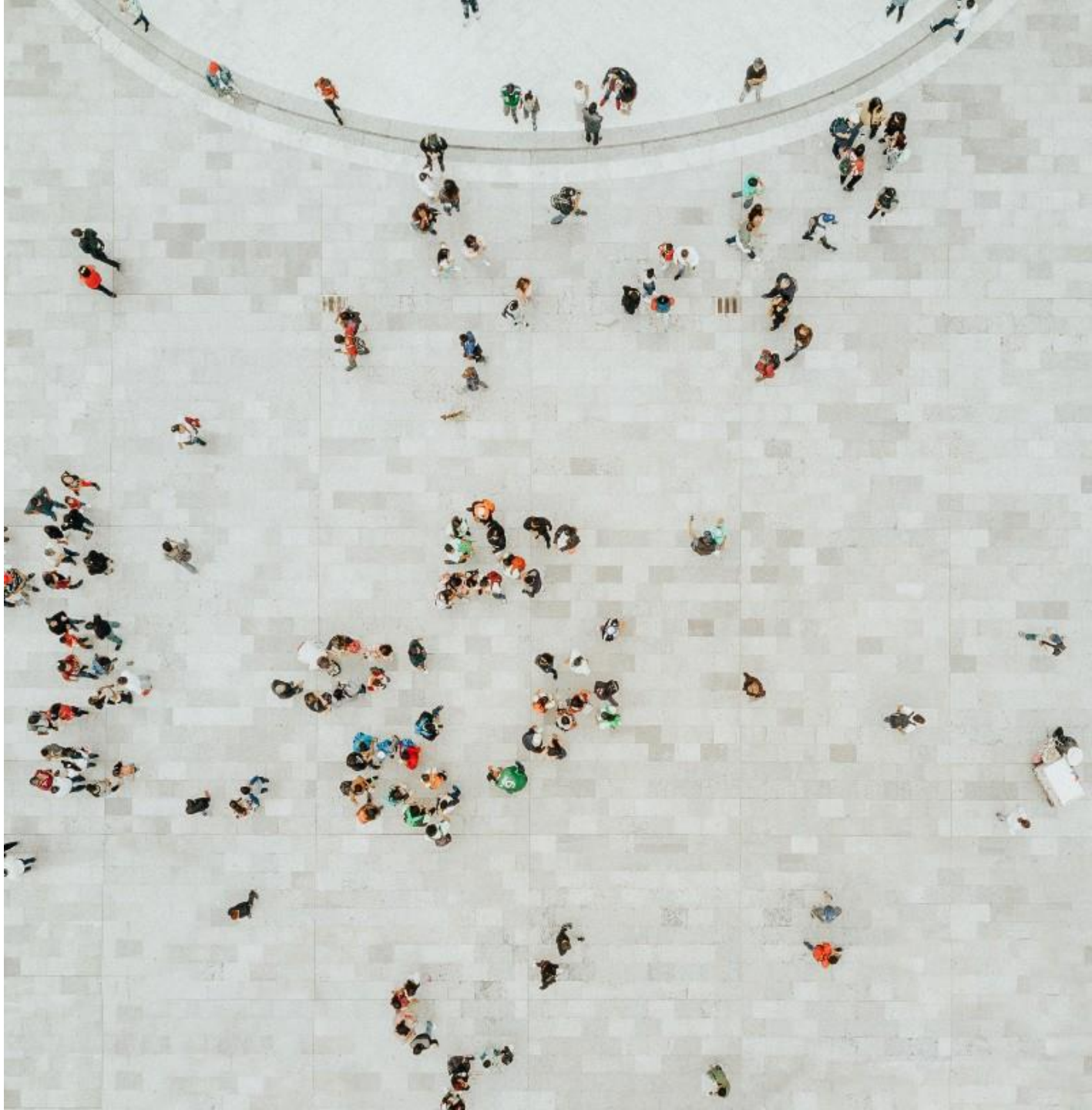
2022. január 24.

Emberi találékonyság és innováció az összetett kihívások megoldására

A megbízható tartalomhoz való hozzáféréssel, fejlett adattudományi képességeinkkel és az innováció teljes életciklusára kiterjedő mély szakértelemmel segítjük az ügyfeleinket az innováció előmozdításában és védelmében.

https://clarivate.com/

Clarivate™



Az innováció életciklusa

Felfedezés

Lehetőségek megállapítása

Védelem

Megfelelő kockázatok felvállalása

Kereskedelmi forgalom

Gyorsabb piacra vitel, mérka erősítése

Clarivate teljes portfóliója

IP Division

Clarivate Web of Science™

Clarivate Cortellis™

DRG Part of Clarivate

Clarivate Derwent™

Clarivate MarkMonitor™

CPA GLOBAL Part of Clarivate

Science Division

Our mission

We are a trusted, indispensable partner to innovators everywhere delivering critical data, information, workflow solutions and deep domain expertise.

Our purpose

We believe human ingenuity can transform the world and improve our future.

Our vision

We will improve the way the world creates, protects and advances innovation.

Clarivate & ProQuest

Complementary Assets Create Industry's Most Robust, End-to-End Platform Serving the Complete Research Ecosystem

Combined assets

ProQuest

ProQuest ONE Academic
ProQuest Ebook Central
Academic Video Online
Rialto
Leganto
Primo
pivot
Vega
Dialog
Alma
Summon
ProQuest TDM Studio
STEM Database
Esploro
PI

Clarivate™

Web of Science™
Research Assistant
Consultancy
EndNote™
Cortellis™
ScholarOne
InCites
Converis
Journal Citation Reports
Healthcare Data Solutions
Derwent™
CompuMark™
CPA GLOBAL

- 5+ million dissertations
- 285+ million journal articles
- 824+ million issues of newspapers
- 1.8+ million e-books
- 7+ billion digital pages
- 1.9+ billion Citations
- 2+ million molecular interactions
- 32+ billion patient claims & EHR records
- 100+ million patent documents

Clarivate & ProQuest – not only products

Clarivate

~8,500

Colleagues

Our Connected Workplace strategy enables us to build inspired and highly collaborative teams across multiple global locations

- Proud heritage
- Customer-first focus
- Commitment to excellence and innovation
- Dedication to colleague engagement

ProQuest

~2,700

Colleagues

43 Global Offices and Knowledge in 158 Countries

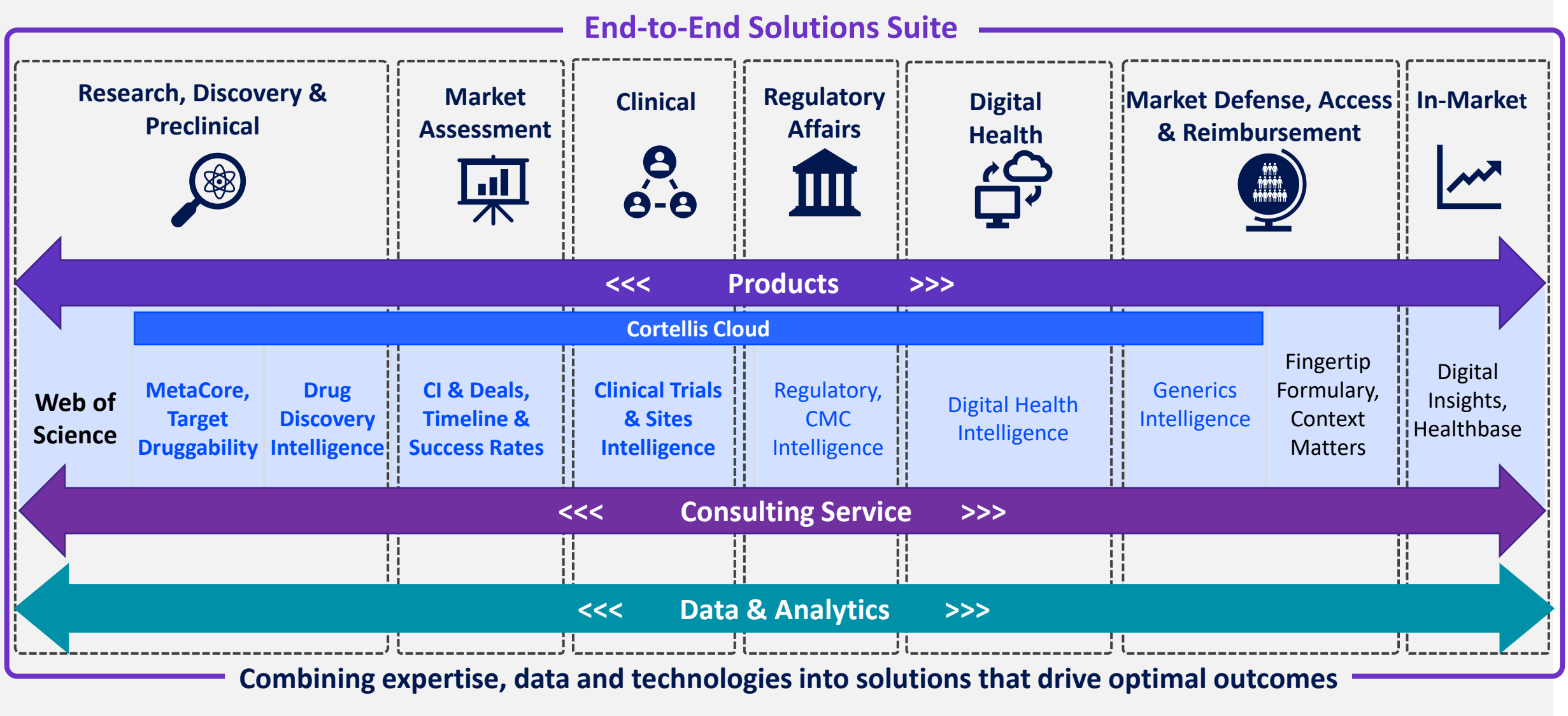
Agenda

1. Clarivate`s End-to-End full suite for innovation support
2. Innovation life cycle on selected example (Kyprolis)
3. Research and Discovery phase
4. Market Assessment phase
5. Clinical Testing Phase
6. Apendix

Clarivate™

Our premier suite of intelligence solutions

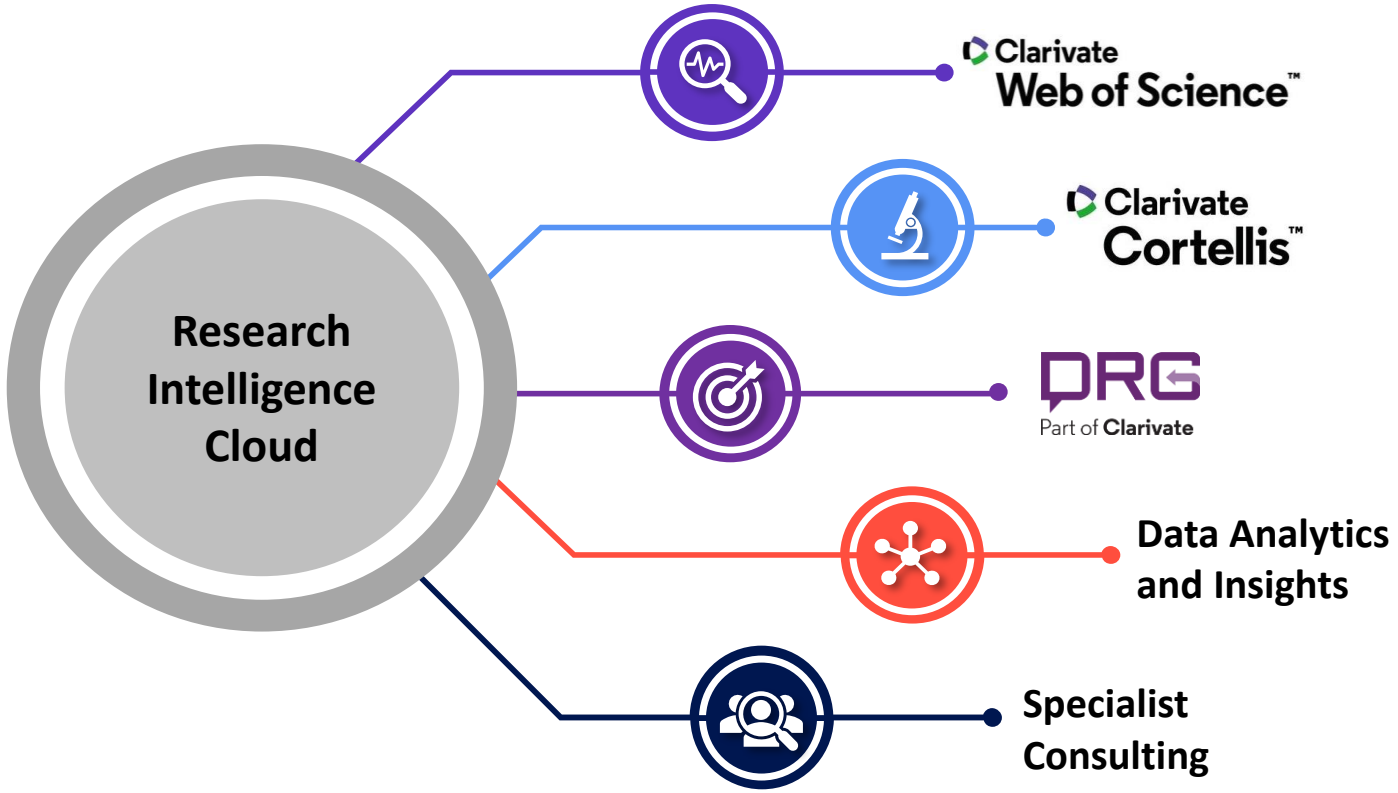
Data-driven insights spanning the entire innovation & product lifecycle



Reduce Researcher Overload

Improve the researcher experience with the best data and tools

- **1.7B** cited scholarly references
- **2.6M** molecular interactions
- **34K** academic journals
- **450K** clinical trials
- **32B** unique patient claims and HER record
- **3M** pharmacology records
- **1.9K** US hospitals' medical device purchase volume data
- **200** global disease and market forecasts
- **245K** regulatory reference documents
- **100%** of US population in enrollment data by coverage type
- **3K** patient segments covered in epidemiology studies
- **80K** pipeline programs
- **80** medical device market overviews
- **270K** variant disease associations
- **19K** US and EU hospitals' diagnosis and procedure data
- **620K** searchable chemistry compounds



High quality research produces greater funding opportunities for your institution

Web of Science solutions

We support you at every stage of your research journey

- **Research discovery and workflow Solutions**
- **Research analytics, evaluation & management Solutions**
- **Research publishing solutions**

Web of Science

Discover the latest research and how it fits into the world's network of ideas, people, funders and institutions with a publisher-neutral citation index trusted by leading research institutions around the world for decades.

Publons

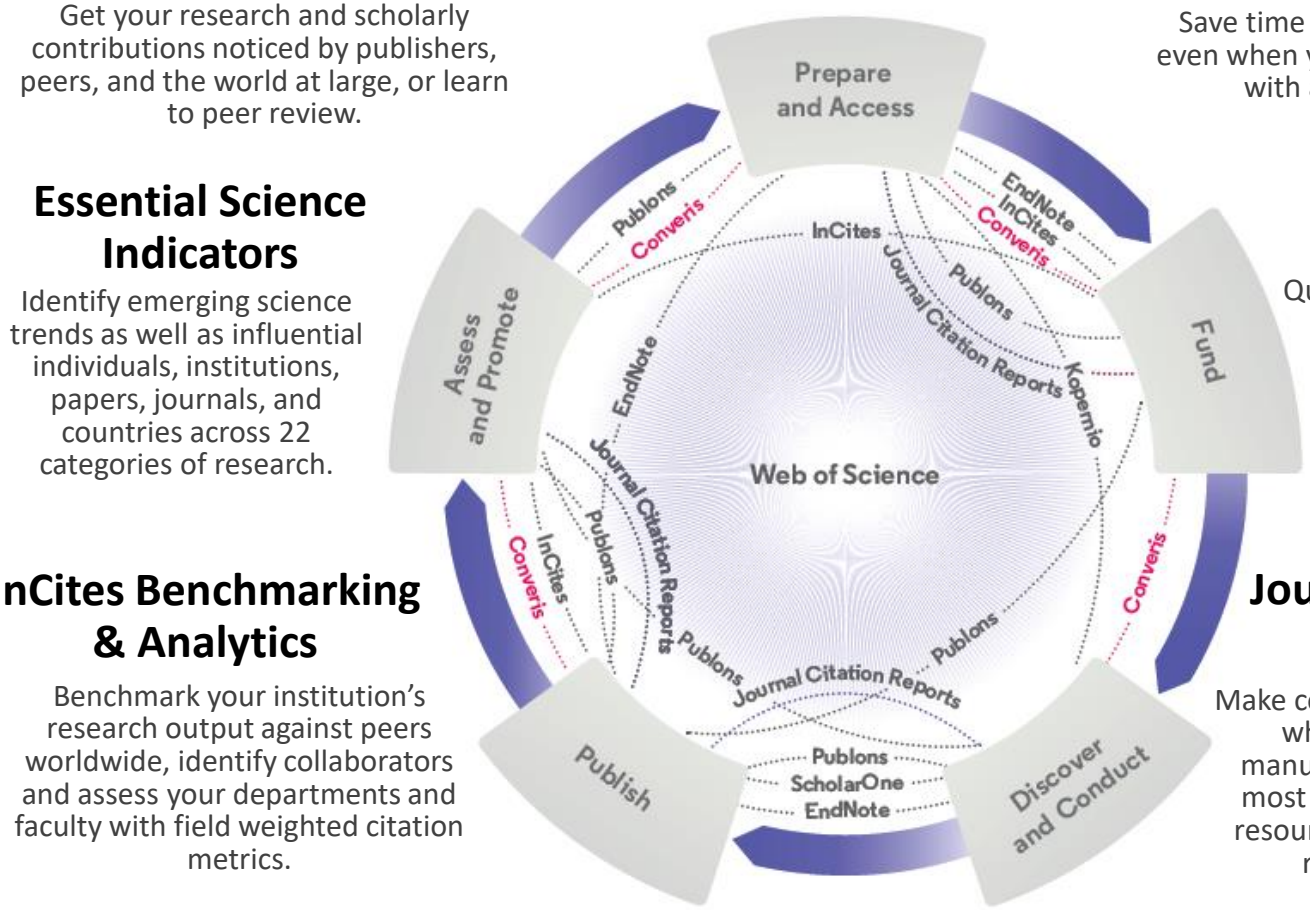
Get your research and scholarly contributions noticed by publishers, peers, and the world at large, or learn to peer review.

Essential Science Indicators

Identify emerging science trends as well as influential individuals, institutions, papers, journals, and countries across 22 categories of research.

InCites Benchmarking & Analytics

Benchmark your institution's research output against peers worldwide, identify collaborators and assess your departments and faculty with field weighted citation metrics.



EndNote

Save time authoring papers, even when you're collaborating with a large team.

EndNote Click

Quickly access millions of high-quality research papers with a single mouse click.

Journal Citation Reports

Make confident decisions about where to submit your manuscript with the world's most influential and trusted resource for evaluating peer-reviewed journals.

More information →

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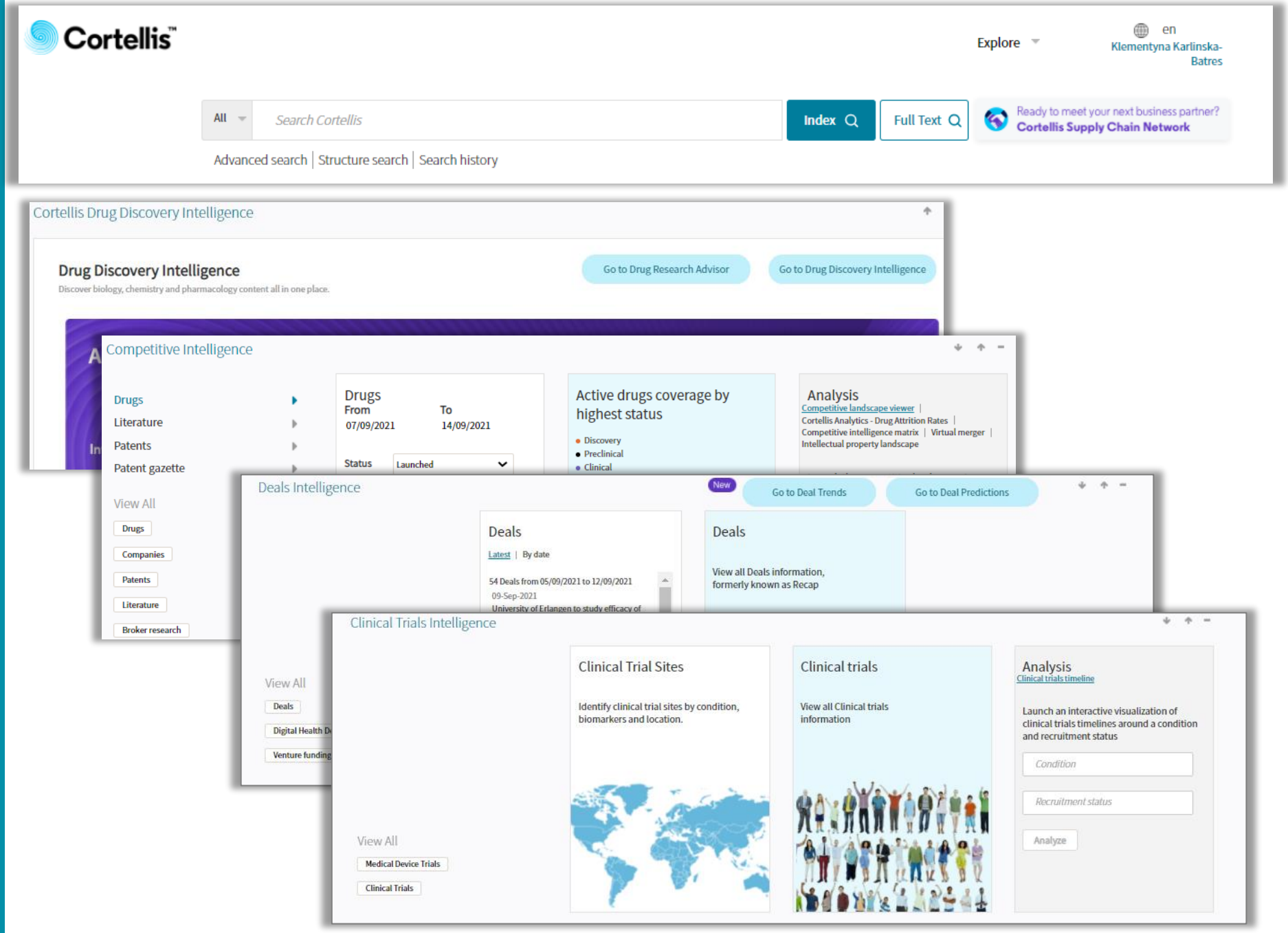
Cortellis solutions

Unique suite of health and life sciences analytics solutions

- **A source of comprehensive, validated, selected, regularly updated data and analysis on literature, biological pathways, protocols, facilities, patient populations and global regulatory requirements**
- **Cortellis delivers insights from hidden data, accelerates innovation, supports clinical trial planning and increases the odds of clinical success**



[More information →]

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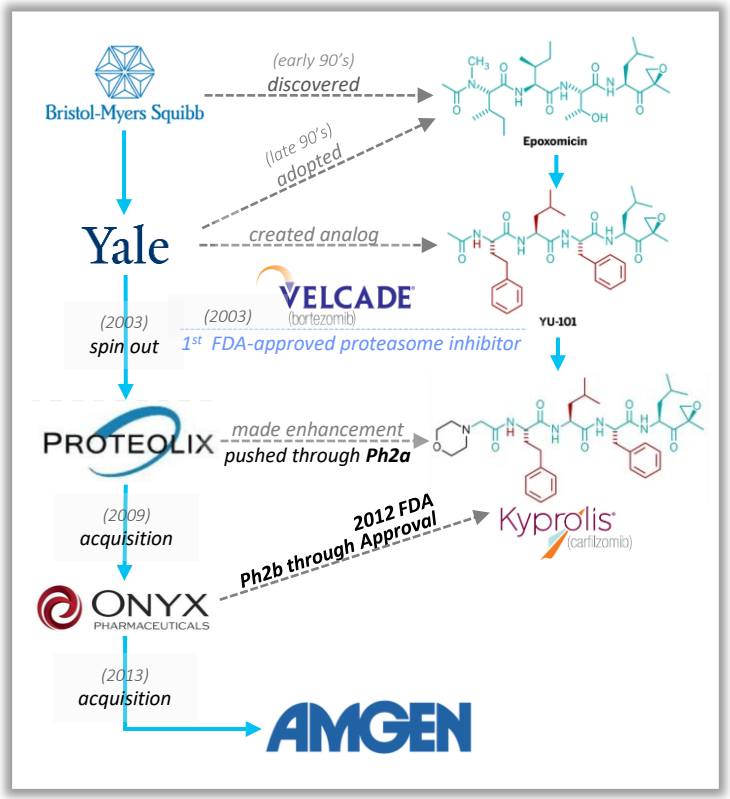
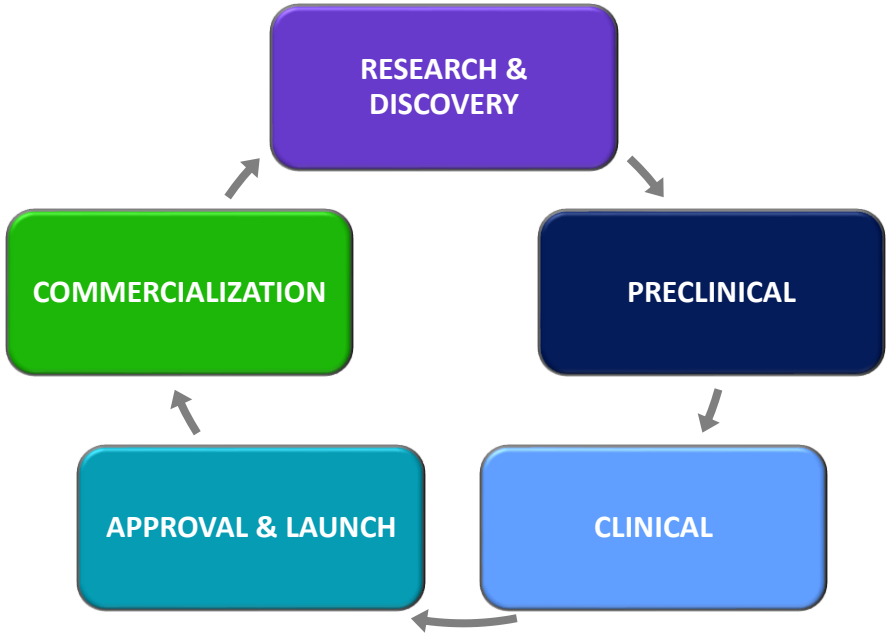
Innovation life cycle on selected example Kyprolis

Following Kyprolis as an example of an asset's journey

From discovery through in-market for its first indication, Multiple Myeloma





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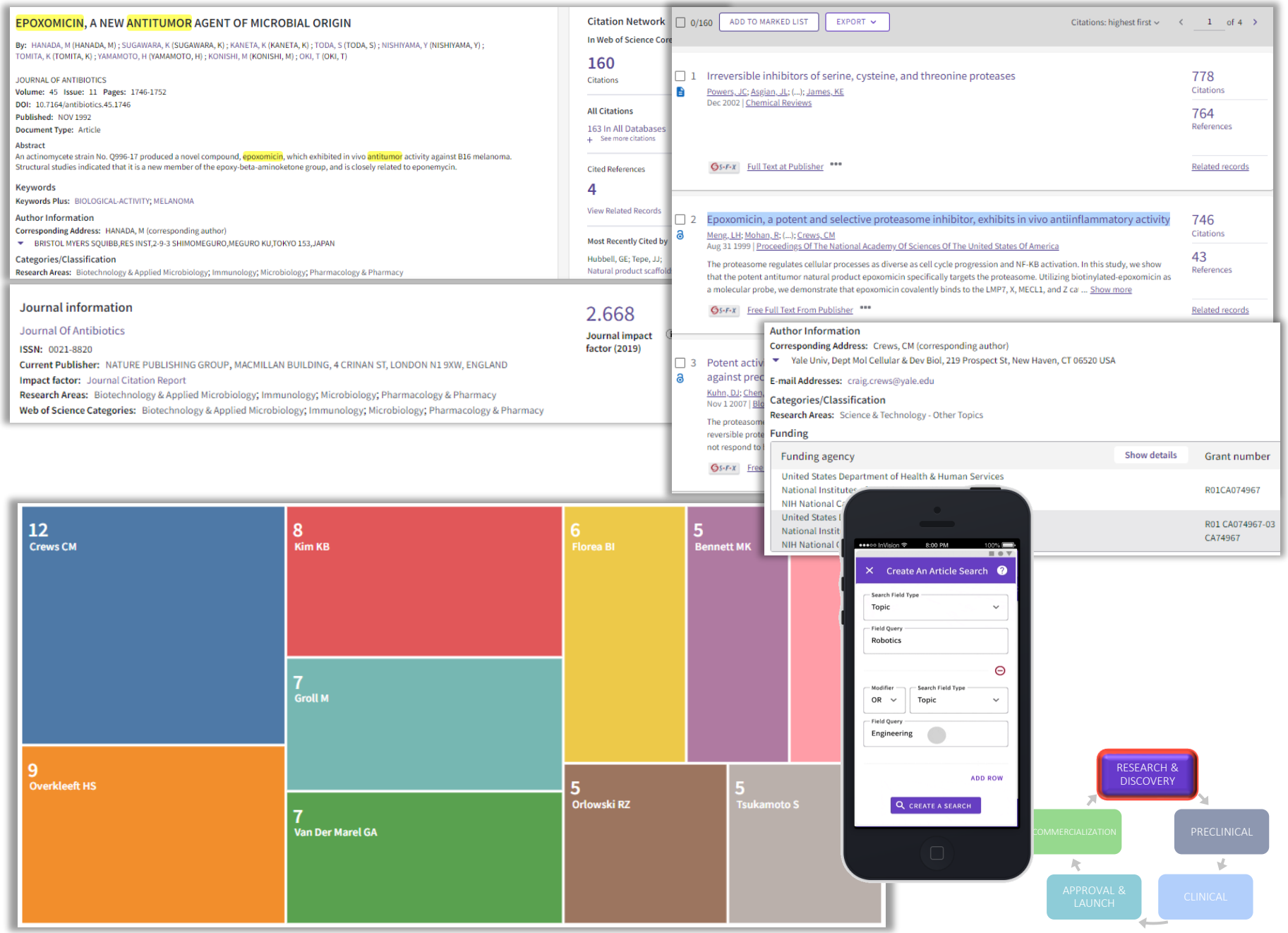
PHASE 1
RESEARCH, DISCOVERY AND PRECLINICAL

Web of Science

The most trusted literature and citation database

- **Detect breakthrough science & emerging trends**
- **Identify novel technologies**
- **Serve an unmet need**
- **Pinpoint the top researchers & institutions**
- **Examine the research funders and collaborators**
- **Tap into international & emerging markets**

Advance your discovery efforts by uncovering emerging scientific trends earlier and faster.



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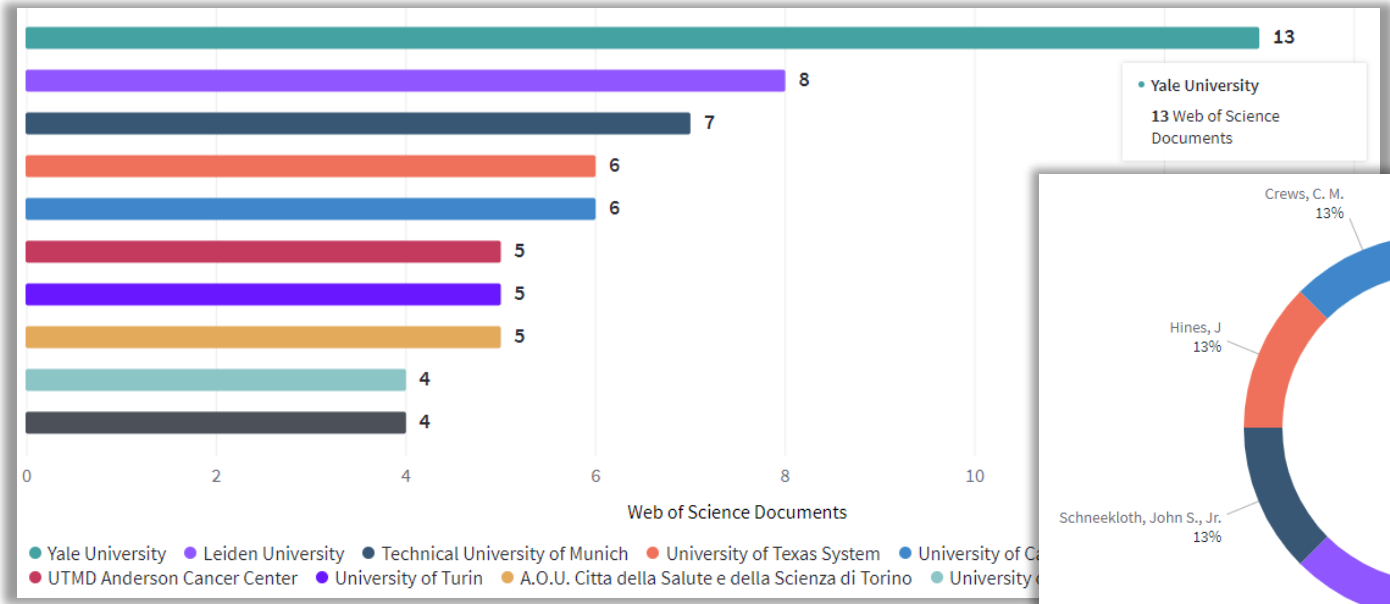
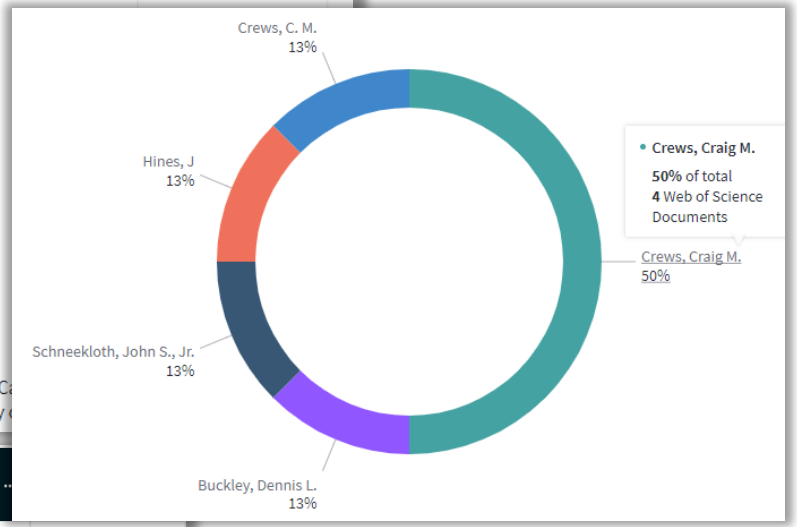
InCites

A customized, citation-based research analytics tool

- **Visualize the most impactful researchers & organizations**
- **Analyze institutional or competitor productivity**
- **Monitor collaborations**
- **Investigate competitors' research funding**

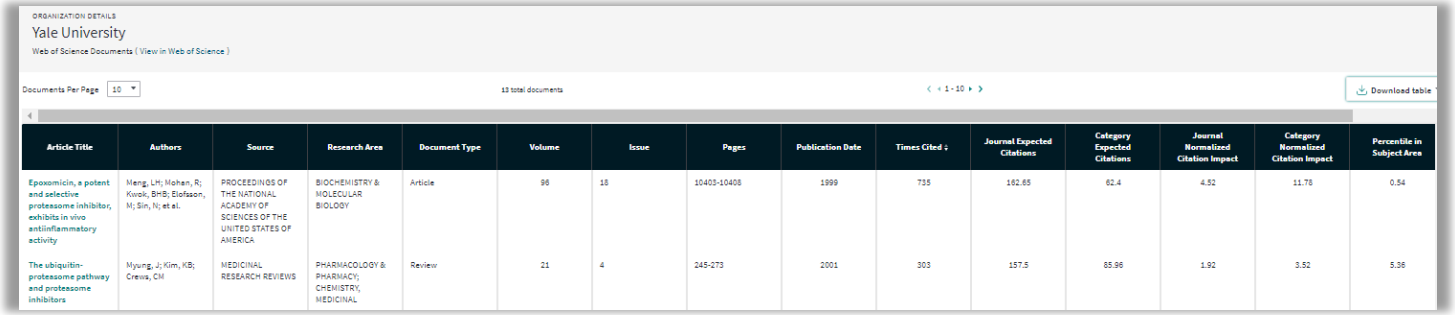
Fast-track and fund your most promising researchers and the breakthrough science in your area.

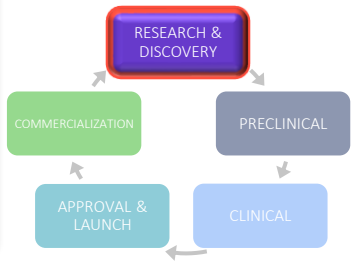




Organization Name	Web of Science Documents	Times Cited	Category Normalized Citation Impact	Rank
Yale University	13	1,691	2.37	1
Georgia Institute of Technology	1	768	3.97	
University System of Georgia	1	768	3.97	
University of North Carolina	3	714	4.92	
University of North Carolina Chapel Hill	2	684	6.56	

Person Name	Affiliation	Rank	Web of Science Documents	Times Cited	Category Normalized Citation Impact
Crews, Craig M.	Yale University	1	4	210	0.91
Buckley, Dennis L.	Yale University	2	1	91	0.74
Schneekloth, John S., Jr.	Yale University	3	1	16	0.37
Hines, J	Yale University	4	1	3	0.17
Crews, C. M.	Yale University	5	1	1	0.42





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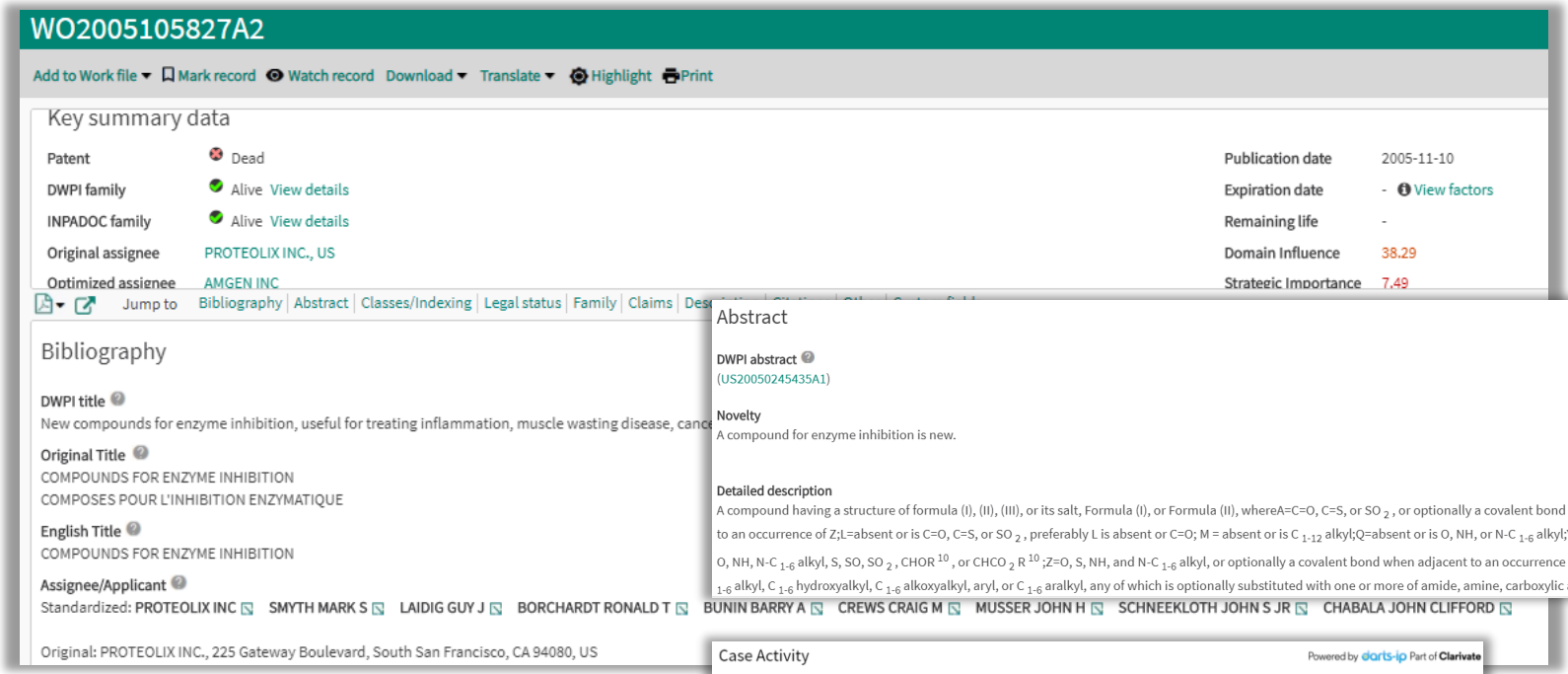
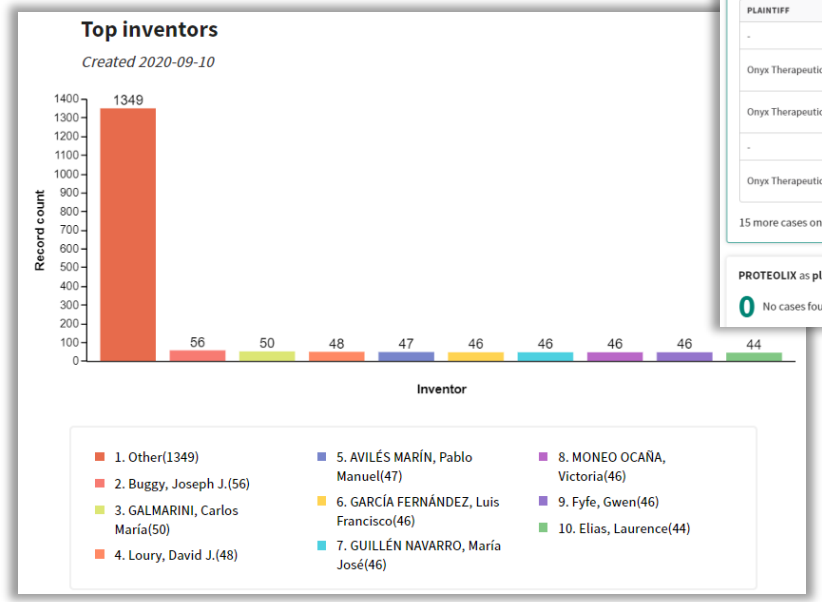
Derwent Innovation

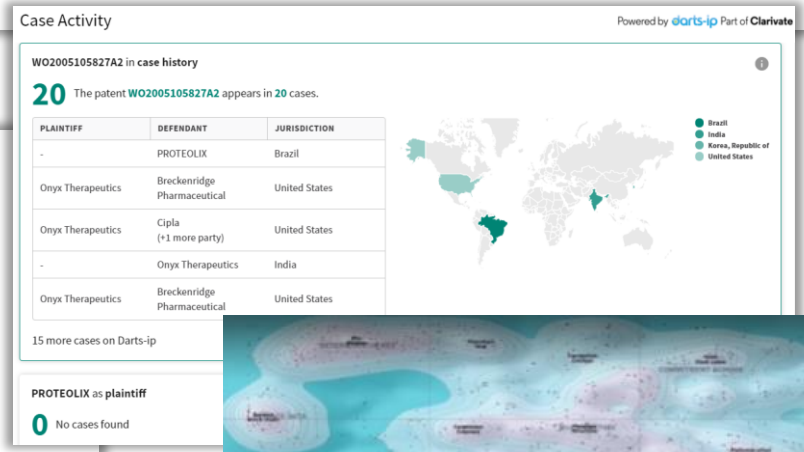
The world's leading patent research & analytics platform

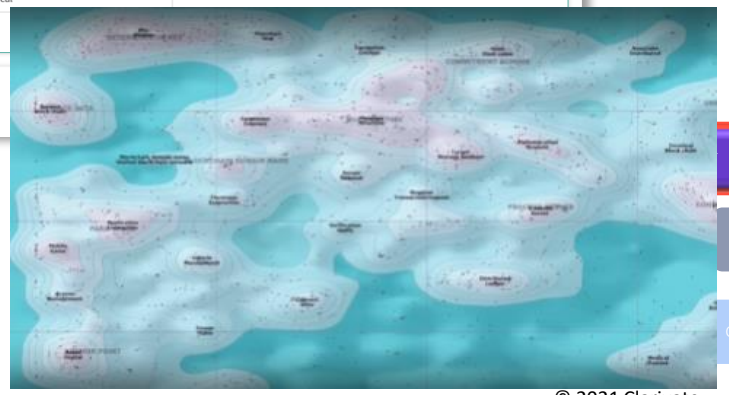
- **Assess patentability and freedom-to-operate**
- **Validate invention novelty**
- **Monitor new entrants or threats**
- **Analyze competitors' patent portfolios**
- **Investigate any litigation on an in-licensing candidate**

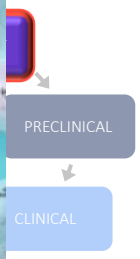
Scan the innovation landscape with speed and confidence.











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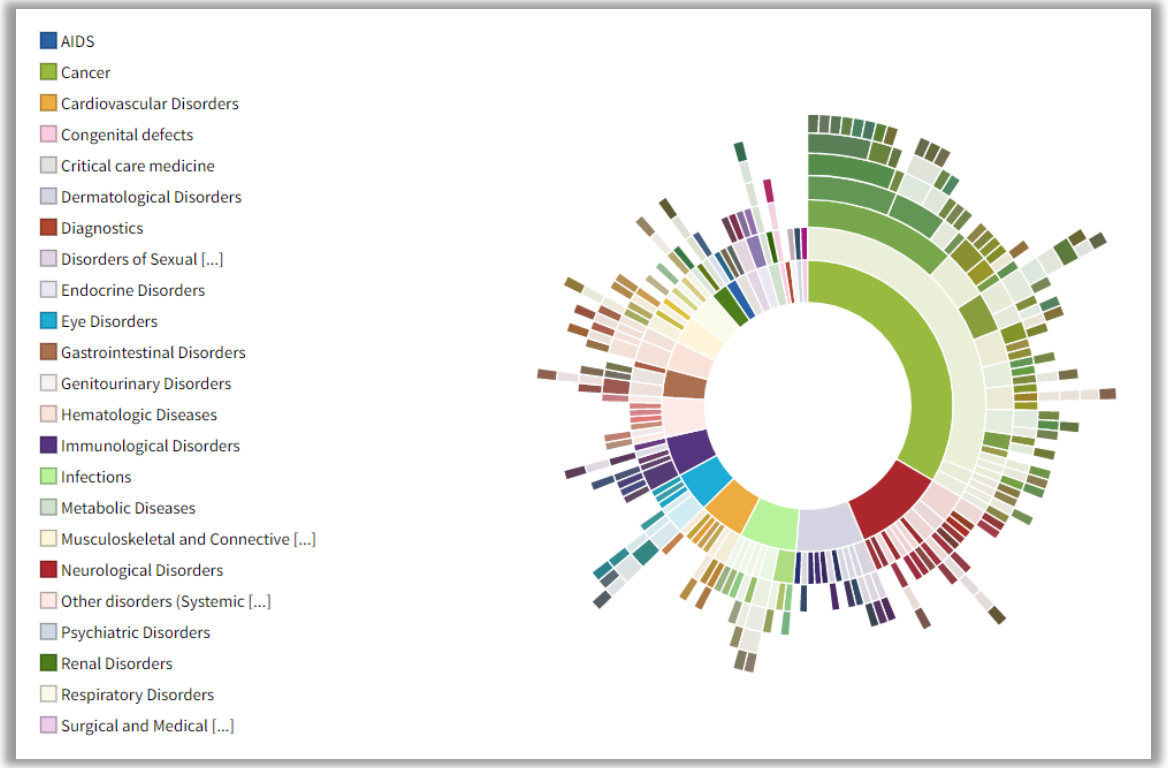
Cortellis Drug Research Advisor – Target Druggability

Game-changing interactive target ID & validation tool

- **Quickly conduct target due diligence**
- **Verify if you have the best target**
- **Run a preliminary patent novelty check**
- **Investigate competition**
- **Prioritize your target**

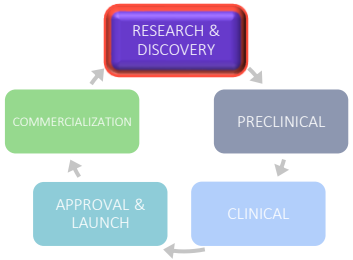
Increase the likelihood of selecting the best-in-class or first-in-class asset.



Target prioritization: Complete novelty | Condition novelty | Early development | No prioritization

Cancer

Rank	Target		Number of related records				
	Target main name	Gene symbol	Drugs	Experimental pharmacology	Animal models	Biomarker uses	Genetic evidence
	Select targets Deselect		filtered (total)		filtered (total)	filtered (total)	filtered (total)
1	Ubiquitin carboxyl-terminal hydrolase BAP1 [SYN]	BAP1			0 (10)	1 (336)	1 (276)
2	Ubiquitin carboxyl-terminal hydrolase CYLD [SYN]	CYLD		2	0 (8)	12 (163)	9 (121)
3	Hyaluronan-binding protein 2 [SYN]	HABP2		37	0 (2)	0 (144)	1 (26)
4	Disintegrin and metalloproteinase domain-containing protein 23 [SYN]	ADAM23				0 (81)	1 (26)
5	A disintegrin and metalloproteinase with thrombospondin motifs 18 [SYN]	ADAMTS18				1 (72)	1 (30)
6	A disintegrin and metalloproteinase with thrombospondin motifs 14 [SYN]	ADAMTS14				0 (57)	1 (18)
7	Calpain-5 [SYN]	CAPN5	0 (1)		0 (3)	0 (62)	1 (21)
8	A disintegrin and metalloproteinase with thrombospondin motifs 19 [SYN]	ADAMTS19				0 (36)	1 (12)
9	Ubiquitin carboxyl-terminal hydrolase 49 [SYN]	USP49				0 (17)	1 (12)
10	Ubiquitin carboxyl-terminal hydrolase 17-like protein 11 [SYN]	USP17L11				0 (2)	1 (1)



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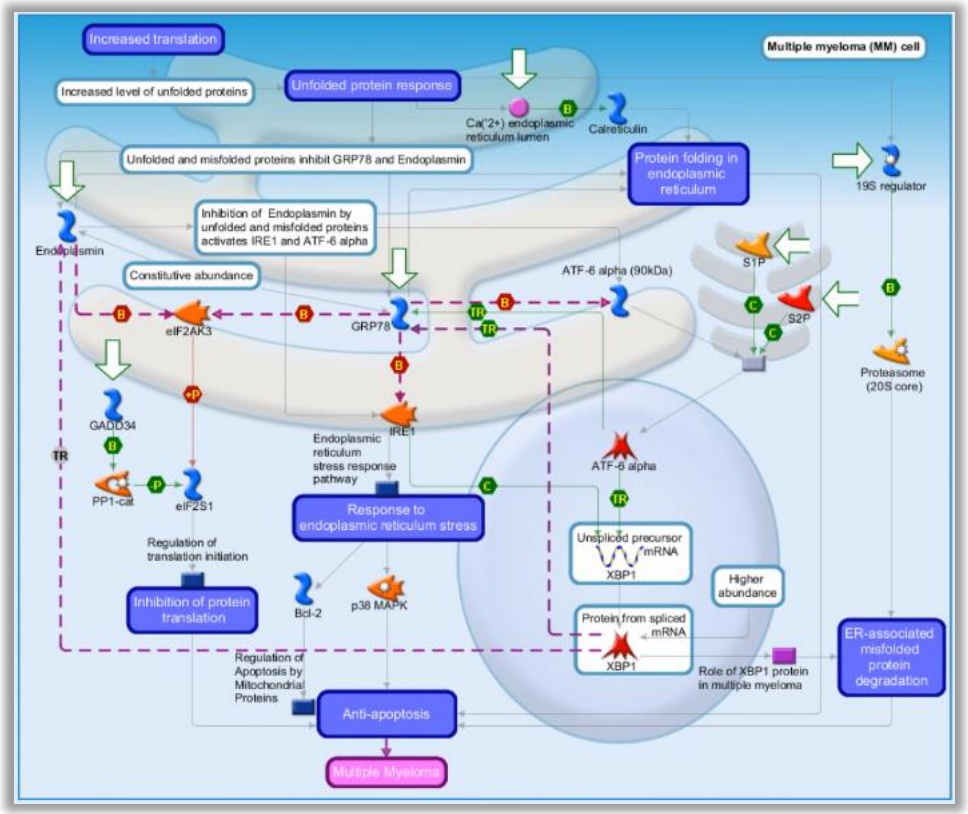
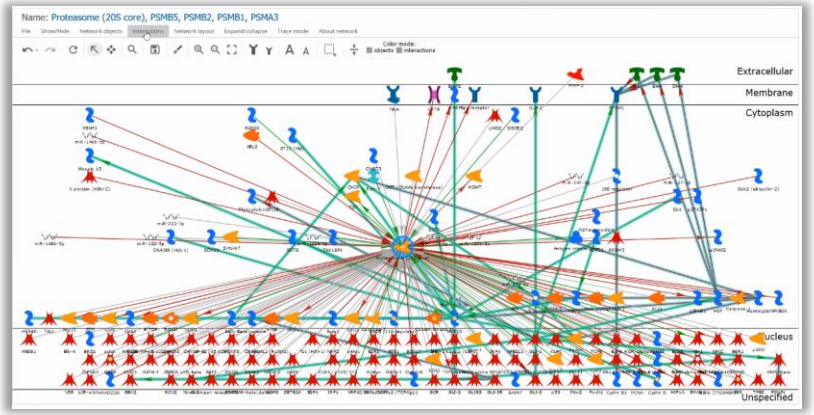
MetaCore

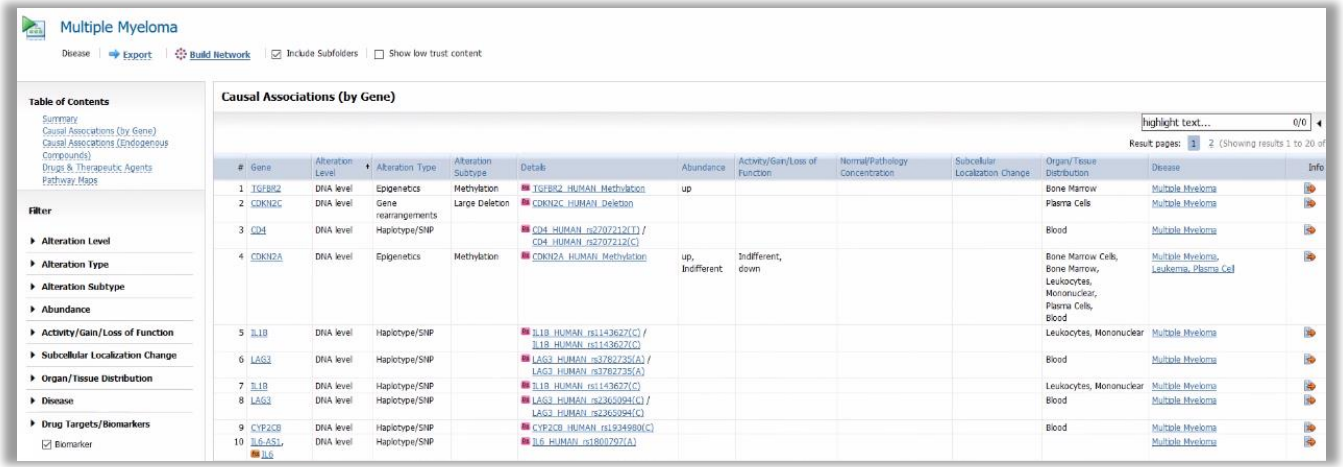
Bioinformatics suite for functional analysis of OMICs data

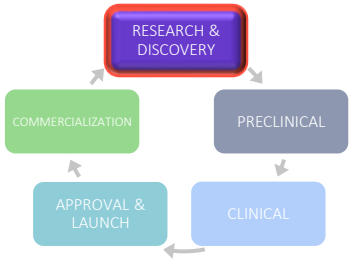
- **Visualize how your target works**
- **Examine genetic evidence**
- **Gain a molecular understanding of the disease**
- **Identify novel biomarkers**

Accelerate biomarker discovery and make better initial go/no-go decisions on your target.









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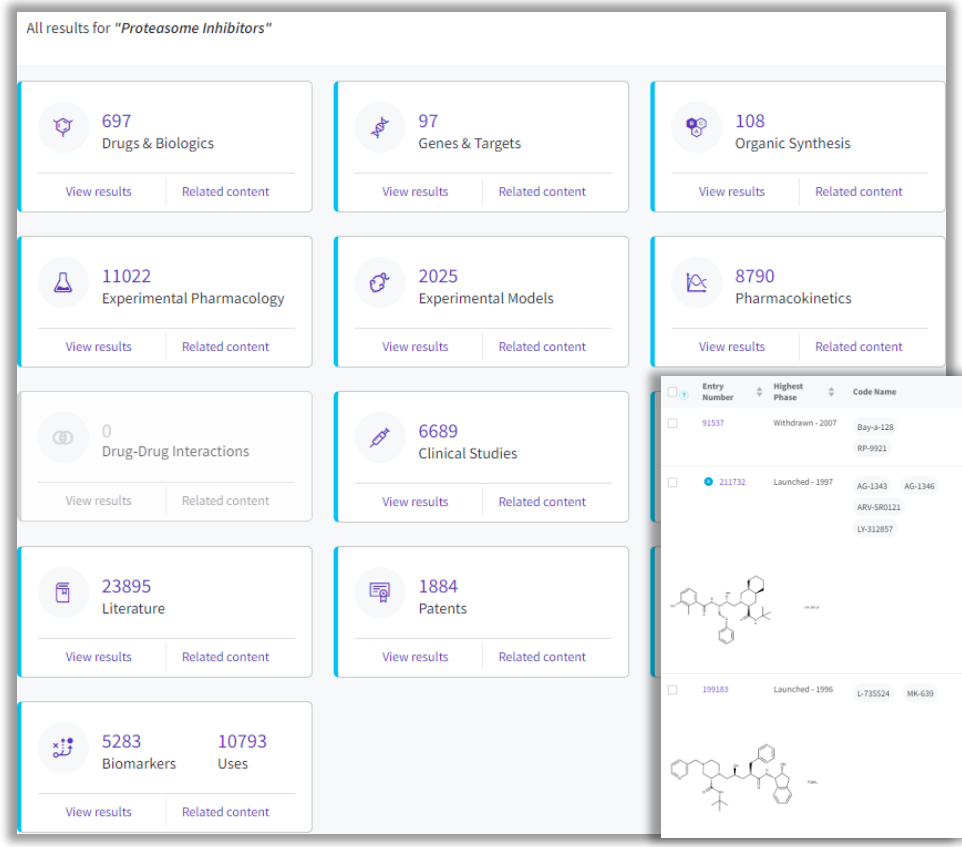
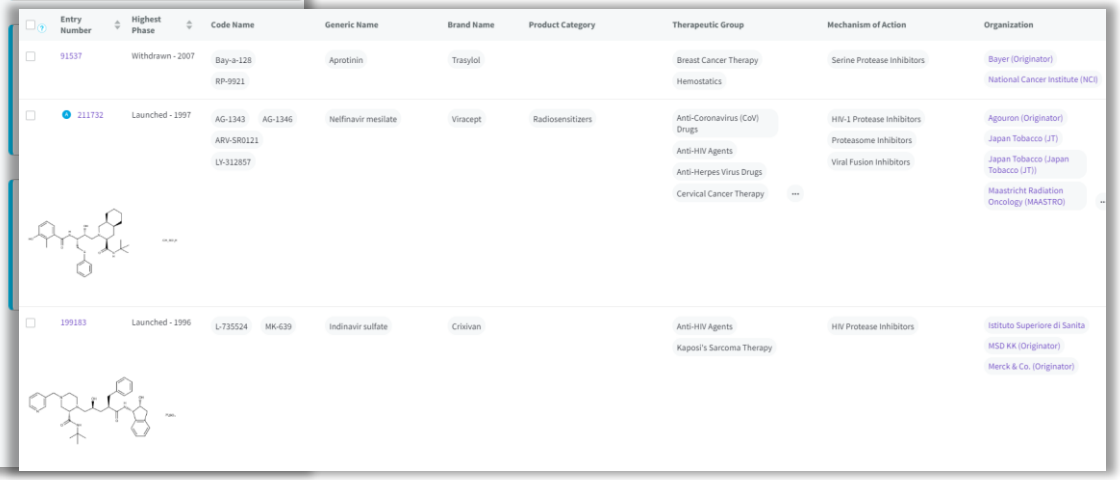
Cortellis Drug Discovery Intelligence

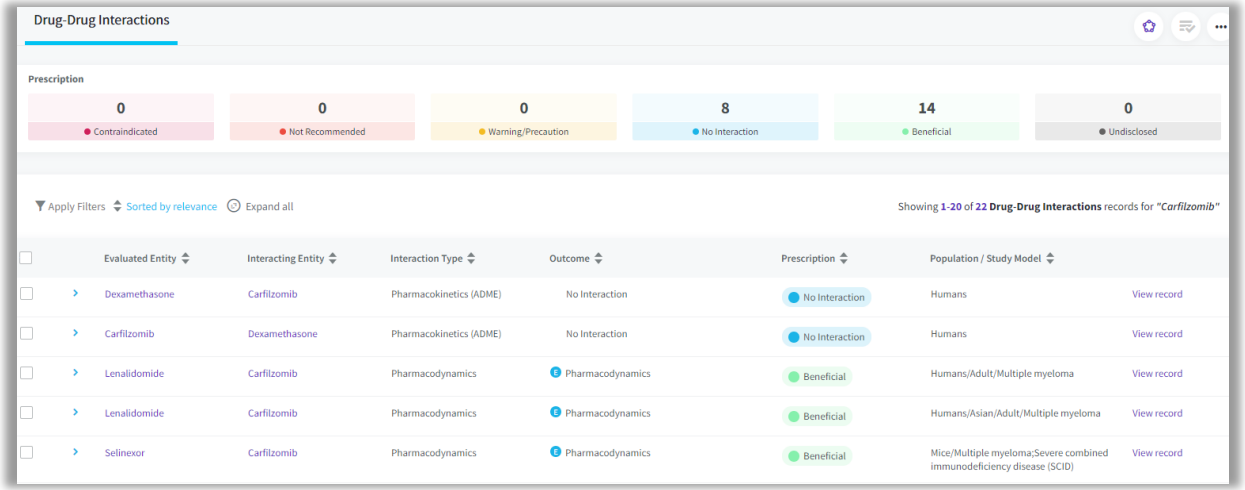
Comprehensive biology, chemistry & pharmacology data in one place

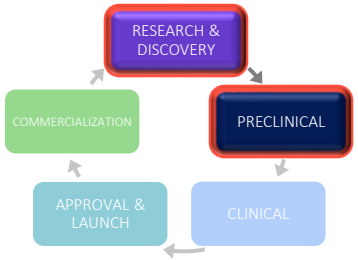
- **Identify, prioritize and select drug candidates**
- **Monitor the target landscape**
- **Inspect competitor's activities**
- **Benchmark experimental performance**
- **Examine drug-drug interactions**

Make better informed go/no-go pipeline and competitor-based decisions.









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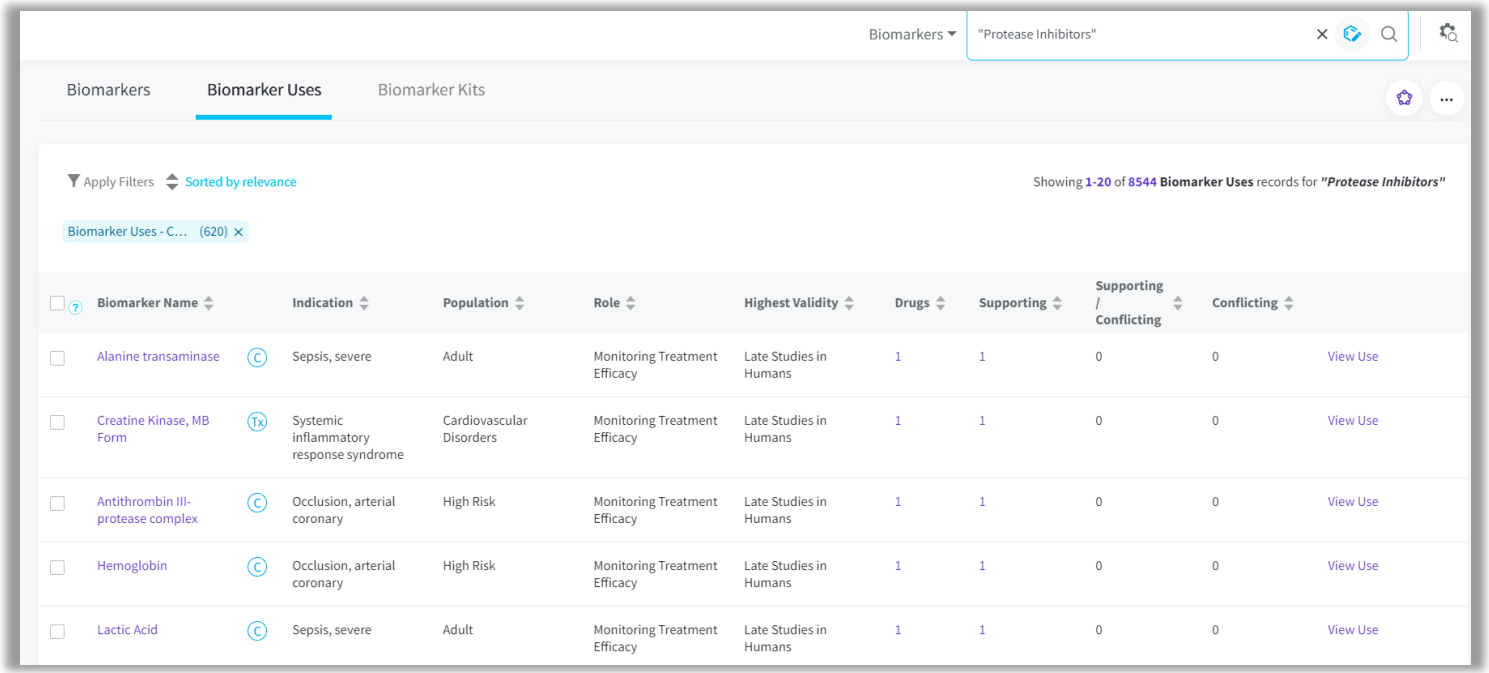
Cortellis CDDI – Biomarkers

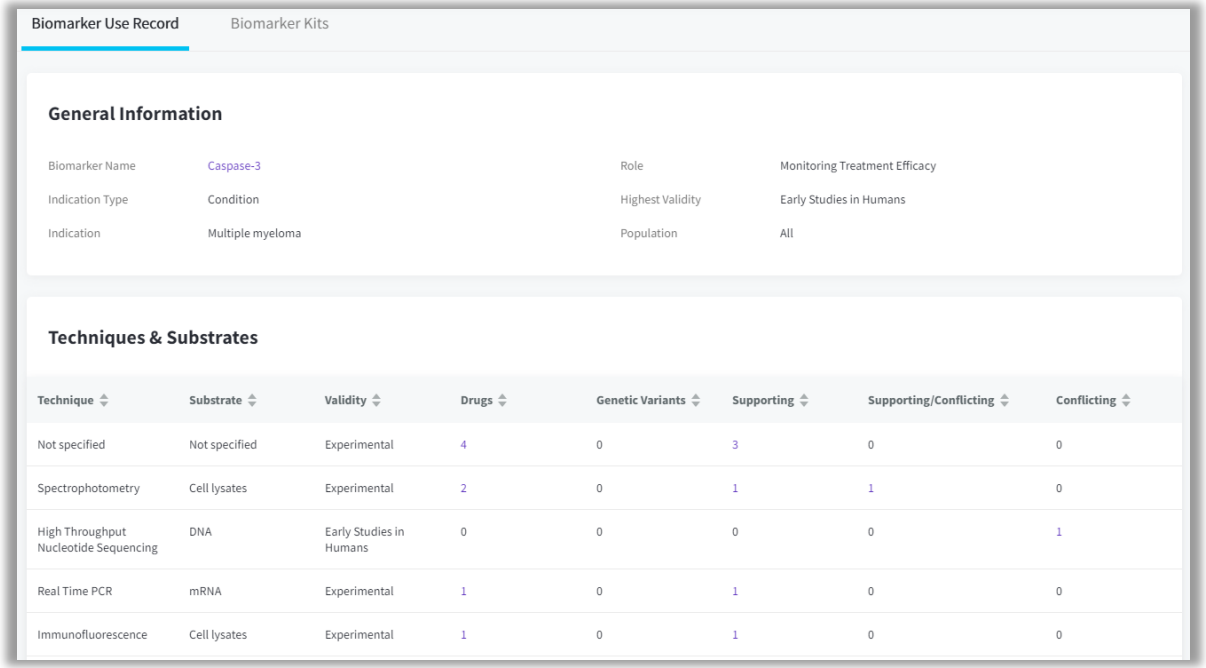
Broadest coverage of biomarker uses at every stage of Drug R&D

- **Identify biomarkers to stratify your patients**
- **Better understand disease pathology**
- **Examine a biomarker's uses and level of validity**
- **Classify biomarkers into lifecycle phases**

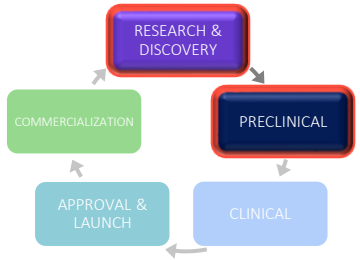
Increase your probability of success in clinical trials, and accelerate drug development.



Biomarker Name	Indication	Population	Role	Highest Validity	Drugs	Supporting	Supporting / Conflicting	Conflicting	
Alanine transaminase	Sepsis, severe	Adult	Monitoring Treatment Efficacy	Late Studies in Humans	1	1	0	0	View Use
Creatine Kinase, MB Form	Systemic inflammatory response syndrome	Cardiovascular Disorders	Monitoring Treatment Efficacy	Late Studies in Humans	1	1	0	0	View Use
Antithrombin III-protease complex	Occlusion, arterial coronary	High Risk	Monitoring Treatment Efficacy	Late Studies in Humans	1	1	0	0	View Use
Hemoglobin	Occlusion, arterial coronary	High Risk	Monitoring Treatment Efficacy	Late Studies in Humans	1	1	0	0	View Use
Lactic Acid	Sepsis, severe	Adult	Monitoring Treatment Efficacy	Late Studies in Humans	1	1	0	0	View Use



Technique	Substrate	Validity	Drugs	Genetic Variants	Supporting	Supporting/Conflicting	Conflicting
Not specified	Not specified	Experimental	4	0	3	0	0
Spectrophotometry	Cell lysates	Experimental	2	0	1	1	0
High Throughput Nucleotide Sequencing	DNA	Early Studies in Humans	0	0	0	0	1
Real Time PCR	mRNA	Experimental	1	0	1	0	0
Immunofluorescence	Cell lysates	Experimental	1	0	1	0	0



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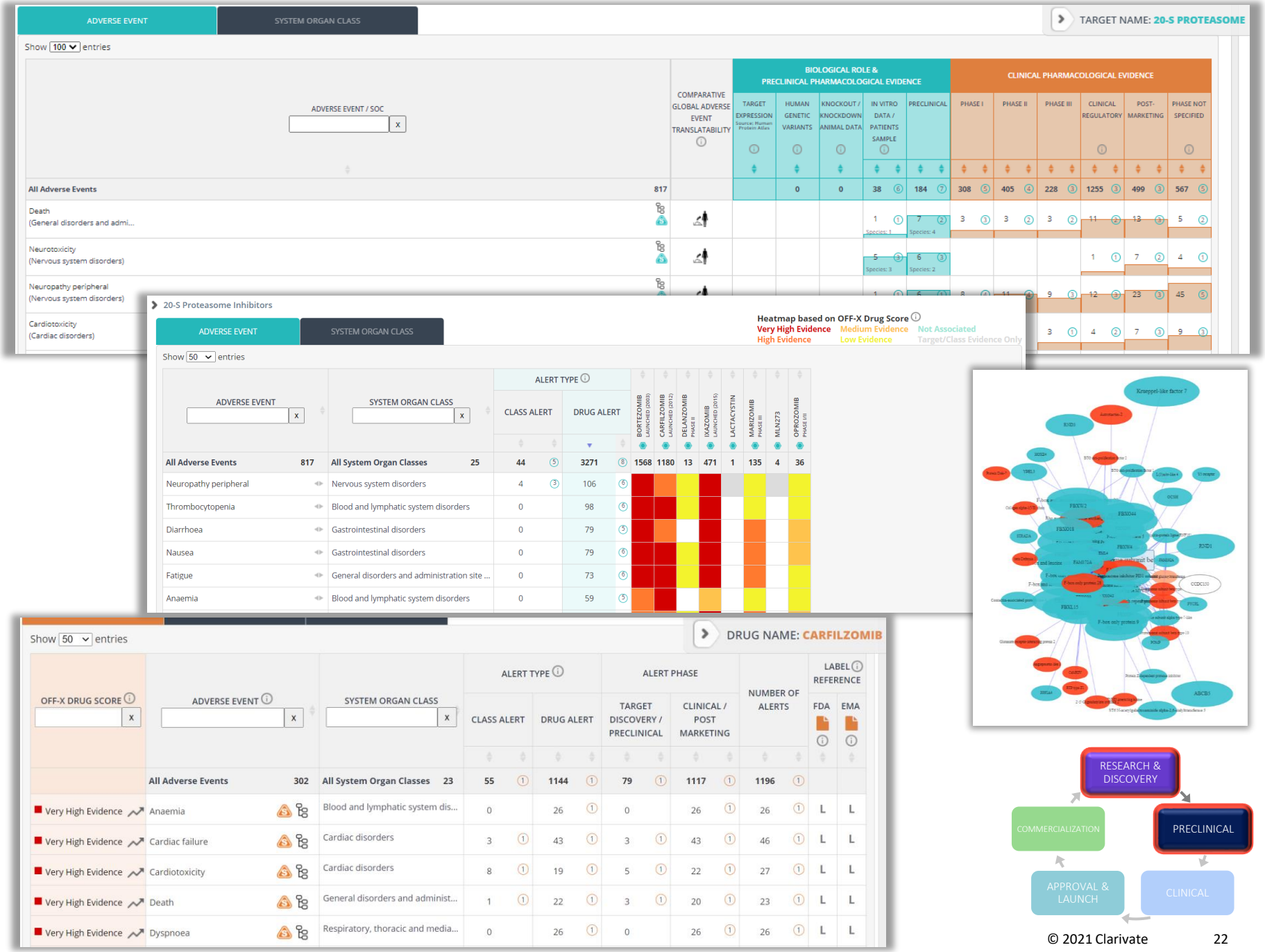
OFF-X

The largest translational safety & toxicity intelligence portal

- **Anticipate toxicity & safety events**
- **Examine the safety profile of in-licensing candidates**
- **Investigate the toxicity of competing treatments**
- **Differentiate your asset**
- **Monitor regulatory concerns and liabilities**

Design better and safer protocols which mitigate unintended risks to patients.



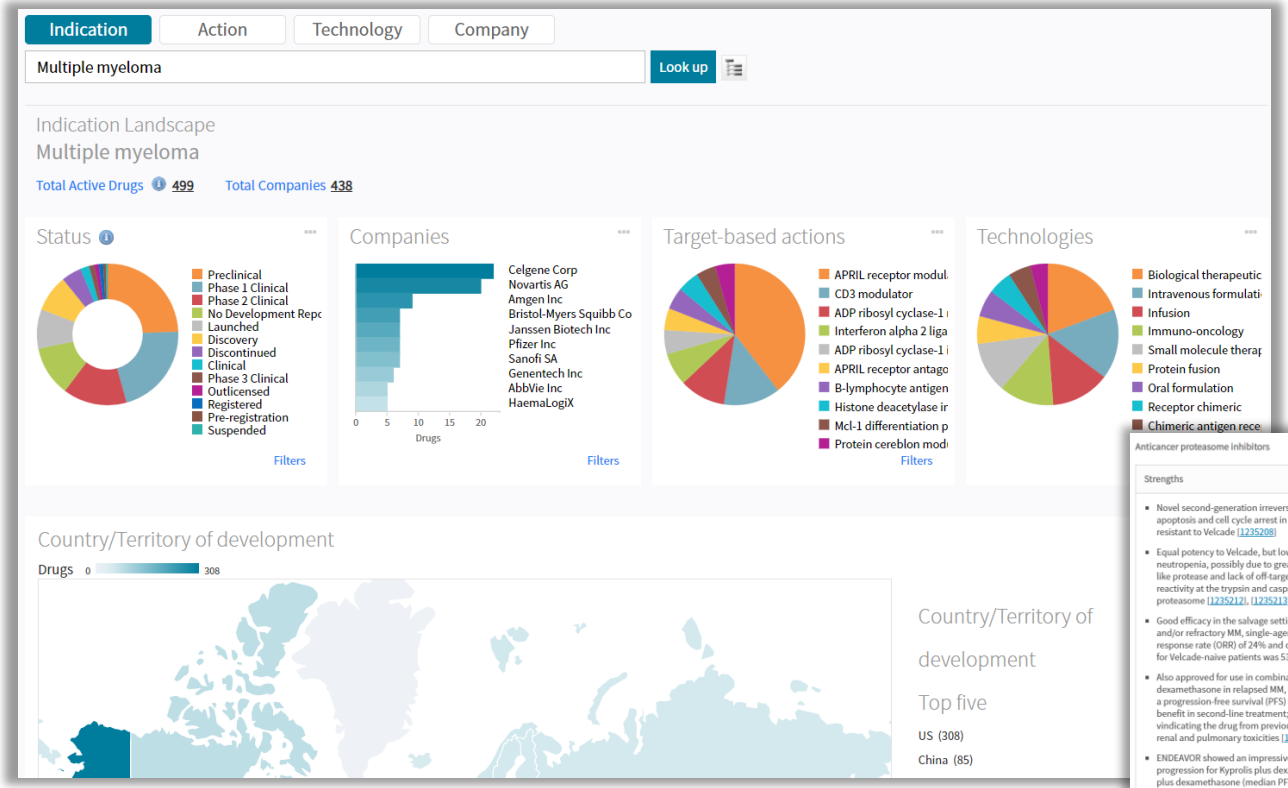
PHASE 2
MARKET ASSESSMENT

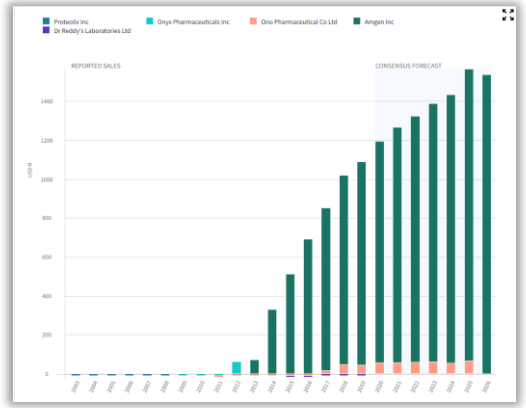
Competitive Intelligence

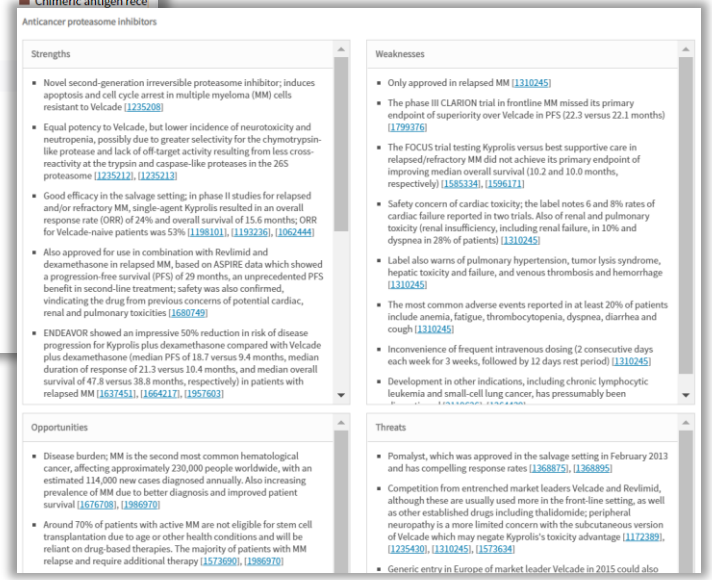
The trusted and industry-leading drug pipeline database

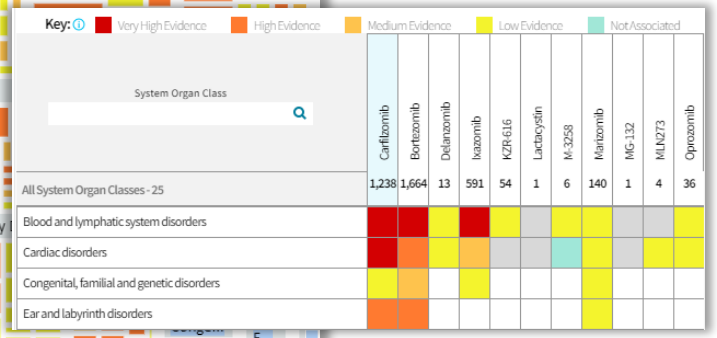
- **Efficiently track the competitive landscape**
- **Understand competitors' product positioning**
- **Differentiate your asset**
- **Assess expected product performance**
- **Determine potential market share**
- **Examine safety findings**

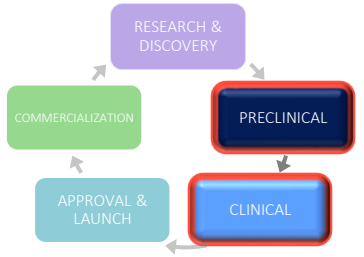
Confidently make critical product, portfolio and competitor-based decisions.











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Deals Intelligence

The gold standard biopharma deals database

- Quickly examine deal valuations & financial terms
- Easily benchmark funding, licensing, and M&A deals
- Analyze potential partners' deal history
- Inform deal negotiations
- Easily visualize deal trends & deal predictions *(Q2 2021)*

Make confident buy or build decisions and strike your best possible deal.

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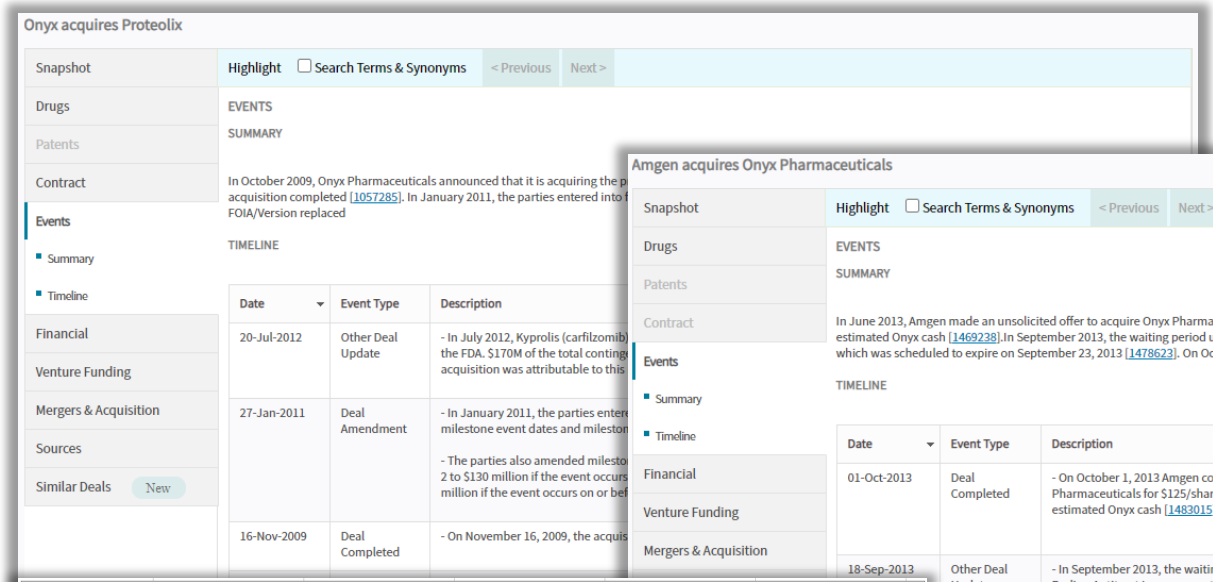
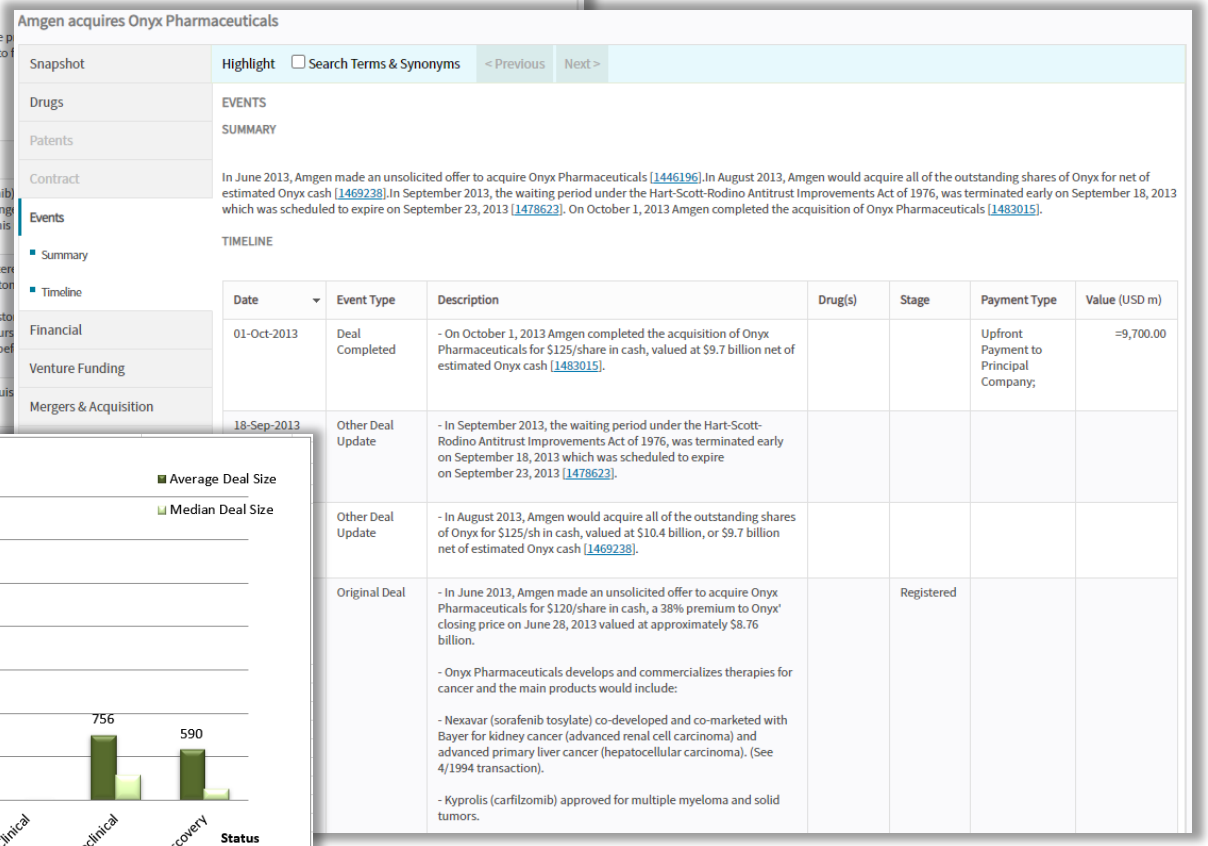
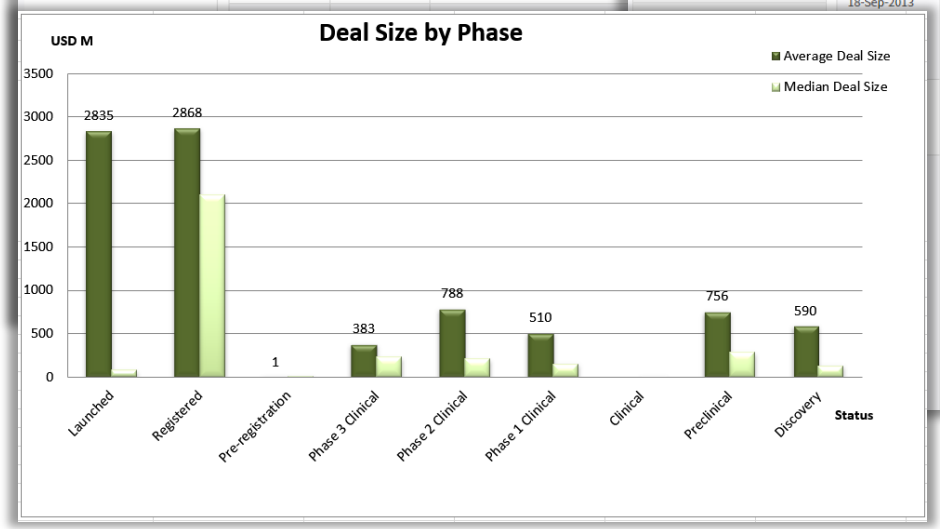
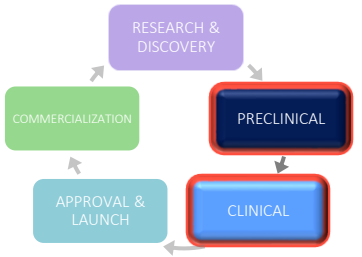
Clarivate Cortellis™







Drugs Highest Status (Deal Start)	Data: Deal Counts	Deal Size Counts (Total Projected Current)	Deal Size Sum (Total Projected Current)	Deal Size Average	Deal Size Max	Deal Size Min	Upfront Payment Count	Upfront Sum (USD M)	Upfront Average
Launched	12	12	34024.65	2835.39	11400	4.25	8	23727.08	2965.89
Registered	6	6	17210.5	2868.42	8800	35.5	6	16759.7	2793.28
Pre-registration	1	1	0.56	0.56	0.56	0.56	1	0.56	0.56
Phase 3 Clinical	18	18	6887.3	382.63	1275	0.47	13	1617.87	124.45
Phase 2 Clinical	27	27	21275.63	787.99	10434	0.69	20	3730.9	186.55
Phase 1 Clinical	8	8	4078.46	509.81	1878	0.65	7	144.1	20.59
Preclinical	20	20	15126.27	756.31	5046	0.7	13	339.55	26.12
Discovery	17	17	10022.36	589.55	3665.5	4.87	13	867.83	66.76
	3	3	1535.5	511.83	1080	1.5	1	0.5	0.50
Grand Total	**112**	**112**	**110161.23**	**983.58**	**11400**	**0.47**	**82**	**47188.09**	**575.46**



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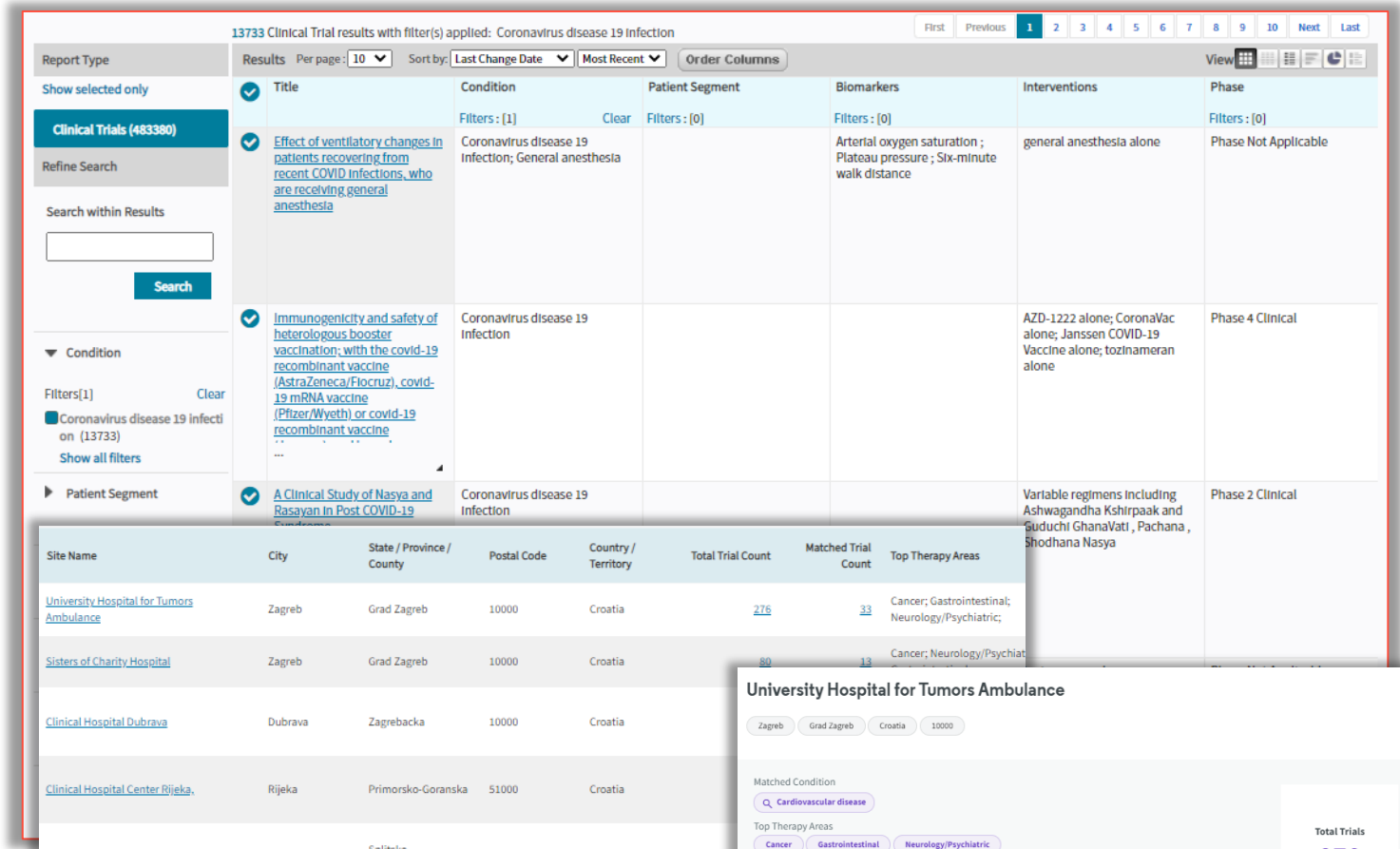
PHASE 3
CLINICAL TESTING

Cortellis Clinical Trials Inntelligence

Insights into the landscape of ongoing clinical trials

- Evaluate the design of precedent studies
- Benchmark patient enrollment and timelines
- Define the right endpoints and select biomarkers
- Pinpoint adverse events
- Monitor competing trials
- Search for experienced sites
- Prioritize sites by performance, availability and competition



400K+ Global clinical trials

2900+ Diseases and therapeutic areas

200K+ Clinical sites across 200+ countries

39 Trial registries

[Download the factsheet →]

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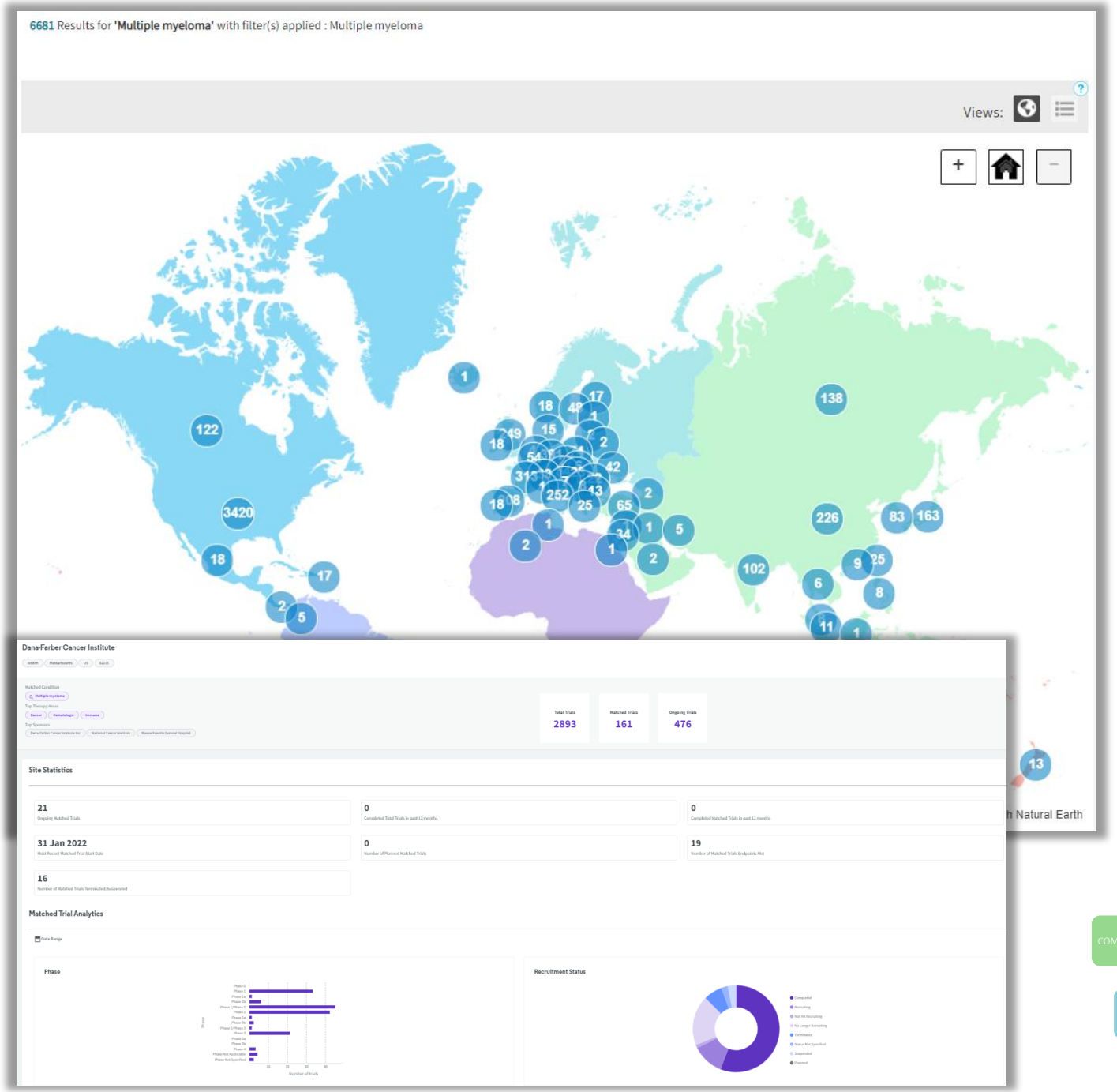
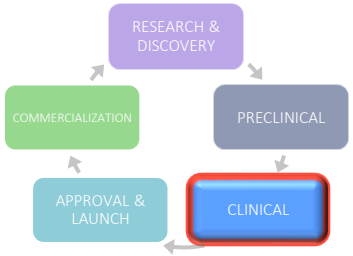
Cortellis Clinical Trials Inntelligence

Insight on global trial sites

- **Search for experienced sites**
- **Prioritize sites by performance, availability and competition**
- **Validate CRO input**
- **Uncover high level incidence and prevalence**
- **Identify experienced investigators** *(2022)*

Position your clinical trials for greater success by selecting the best sites.





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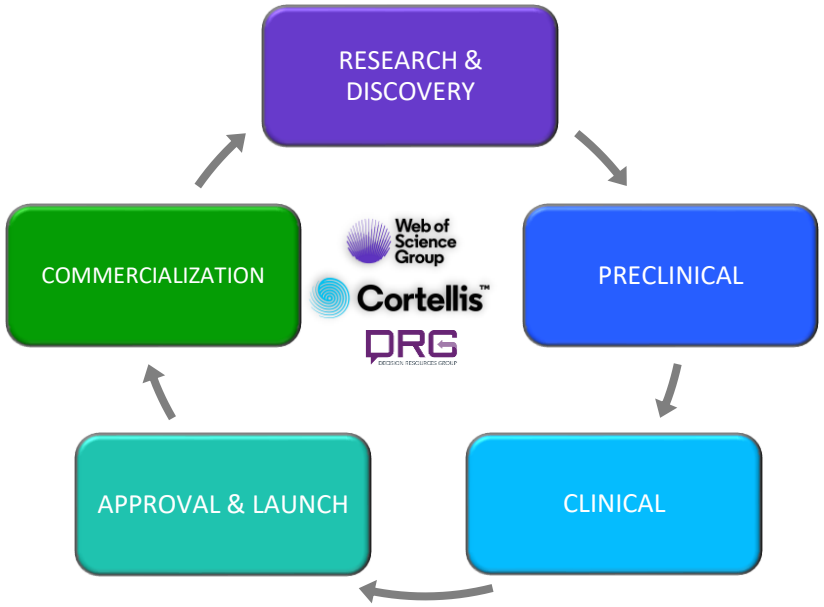
Summary

Unprecedented value from an end-to-end lifecycle perspective that empowers more proactive and better-informed decisions with speed and confidence.



Every product we use, medical treatment we receive and service we consume has been imagined, created and improved in a continuous, connected cycle of innovation.

Clarivate operates at the heart of that lifecycle. We give our customers the lens of clarity—the insights they need to turn bold ideas into life-changing innovations

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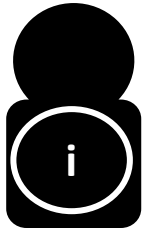
Appendices

Data Citation Index

The Data Citation Index makes it easy to bring research data into your workflow.

Researchers

- **Save time** spent looking for data by searching across content from **over 430** repositories in one place.
- **Track citations to the data and software you have deposited.**
- **10.4 million total items indexed**
- Provides data studies from **1900-present**



Librarians

- **Promote the value and importance of sharing data** & following the best data management practices**.**
- **Provide a trusted reference** for faculty unsure of where to deposit data.

Master Repository List

eurostat
Your key to European statistics

DRYAD

JGI Genome Portal

DRUGBANK

PANGAEA.
Data Publisher for Earth & Environmental Science

hmdb
The Human Metabolome Database

ADA AUSTRALIAN DATA ARCHIVE

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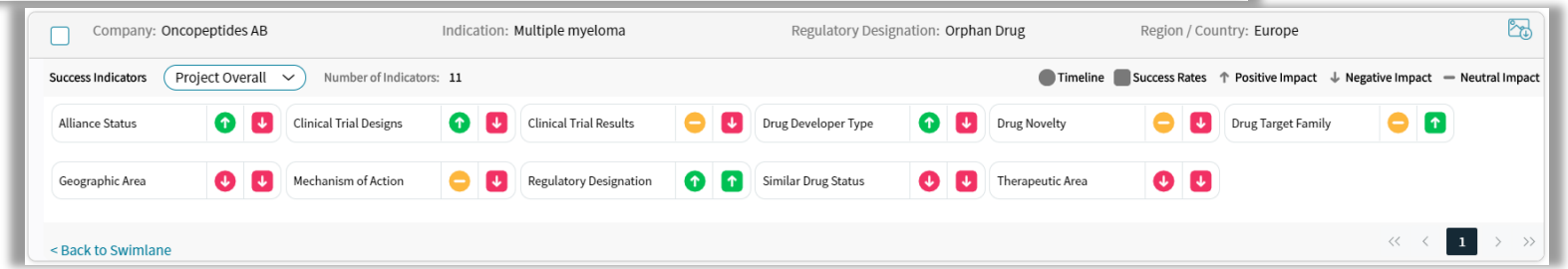
*Statistics as of June 16, 2020

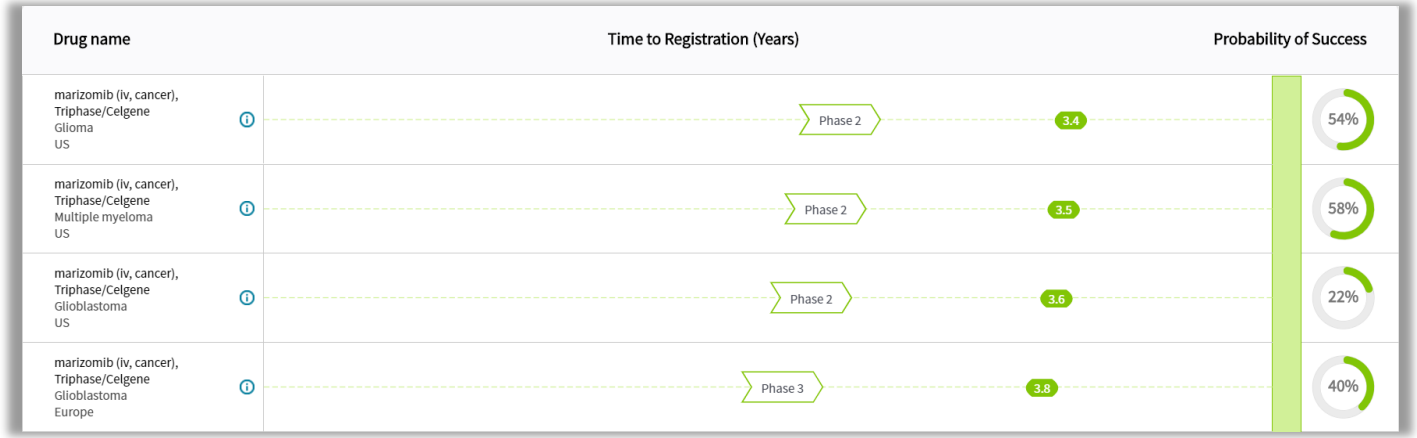
Drug Timeline & Success Rates

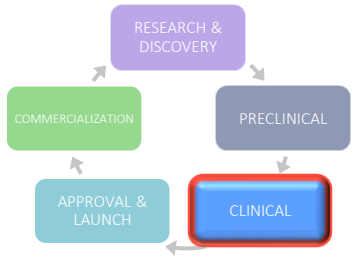
First-to-market machine learning-based predictive analytics tool

- **Confidently make critical portfolio decisions**
- **Monitor competitors' success rates & timelines**
- **Gain a reliable 3rd party validation**
- **Inform portfolio planning & prioritization.**

Yield smarter portfolio planning and R&D investment decisions for long term success.







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Decision Resource Group (DRG)

Find out what impact Covid-19 is having on the medtech/phama markets.

COVID-19 | Notifications Off

At a Glance | COVID-19 | Meet The Team

Table of contents | Expand all

Search within Content

GEOGRAPHIES

- US Trend Tracking
- Healthcare Facility Targeting
- US Market Forecast Updates
- Canada Market Forecast Updates
- **Europe Market Forecast Updates**
  - Europe Impact Assessment Summary
  - Aesthetics

COVID-19 Market Impact Forecast Methodology

DISPLAY All 3 0 0

Last updated 29 January 2021

Determining and forecasting the impact on medtech markets

MARKET IMPACT OF COVID-19: MEDTECH 360 FORECAST METHODOLOGY / DECISION RESOURCES GROUP

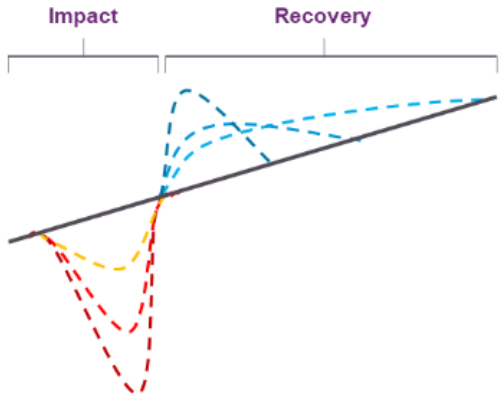
COVID-19: Determining and forecasting the impact on medtech markets

The forecast within each Medtech 360 market analysis was created using these primary modeling components:

COVID-19 Impact Forecast: Primary Modeling Components

Determining initial procedure deferral during the time of peak pandemic impact

Estimating the proportion of deferred procedures that will be recovered after the impact peak



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COVID-19 Impact Assessment Summary, by Therapy Area, Europe

Factor	Aesthetics	Cardiovascular	Dental	Endoscopy and Open Surgery	Gynecology	Imaging	Orthopedics
Procedure Volumes	Strong	Moderate	Strong	Strong	Moderate	Moderate	Moderate
ASPs	Strong	Weak	Moderate	Weak	Weak	Moderate	Weak
New Product Launches	Moderate	Moderate	Moderate	Moderate	Weak	Weak	Strong
Clinical Trials	Moderate	Strong	Moderate	Moderate	Moderate	—	Moderate
Supply Chain	Weak	Moderate	Weak	Moderate	Moderate	Moderate	Moderate

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BioWorld

With writers and editors around the globe, BioWorld reports the breaking news. Providing key perspectives on: medicines; companies; business transactions; and regulatory information.

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BioWorld | BioWorld MedTech | BioWorld Asia | BioWorld Science | Data Snapshots | Special reports

See today's BioWorld

Novavax's COVID-19 vaccine shows 100% protection against severe disease

Credit: Novavax Inc.

By Lee Landenberger March 12, 2021

Data from two Novavax Inc. clinical trials show its COVID-19 vaccine had 100% protection against severe disease, including hospitalization and death, paving the way for an emergency use authorization submission in the U.S.

Mild and moderate COVID-19 was dramatically reduced in both studies, according to the data, and some efficacy was confirmed in variant strains.

Final efficacy numbers from Novavax's phase III study of NVX-CoV2373 revealed the vaccine was 96.4% effective against mild, moderate and severe disease caused by the original COVID-19 strain. The efficacy numbers are very close to those

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Discovery & Translational Science (DTS) Consulting, Data & Insights

Accelerate your research with advanced analytics and actionable insights

Deep domain knowledge and advanced data science capabilities

Innovation Monitoring

- Predict an emerging technology that has the potential to be the next blockbuster

❑ **RWD-based KOL Identification**

- Find the top thought leaders to uncover unmet medical needs and emerging research areas

Target Identification / Biomarker Discovery

- Identify and systematically prioritize targets and biomarkers for higher chances of drug development success.

❑ **Patient Stratification**

- Classify patient subgroups by drug response & resistance

Computational Biology Methods for Drug Discovery (CBDD)

- Discover novel approaches to network and pathway analysis through collaboration with industry leaders & Innovators

Indication Prioritization

- Systematically find the most meaningful indications for a given target of interest

Mechanism Reconstruction

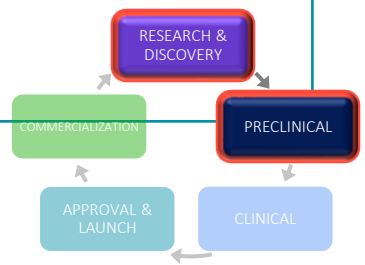
- Reconstruct biological mechanisms from OMICs data

Toxicity Prediction

- Understand the potential safety risk and rank-order your lead compounds relative to potential toxicity

Drug Repurposing

- Find other disease areas for your existing product to extend revenues and patent life



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Consulting Services for Clinical Development

Transform and accelerate your clinical trials

Deep domain knowledge and hands-on industry expertise

RWD-based Integrated Patient Journey

- Understand drug performance in the real world in contrast to clinical setting through real world data
- Uncover where in the patient journey the therapy can be introduced to address the unmet medical need or patient pain points
- Identify adverse events experienced by the patients and what the clinical and economic impacts are from those
- Pinpoint influence levers to inform commercial and patient engagement strategies

Intelligent Trials: Study & Site Optimization

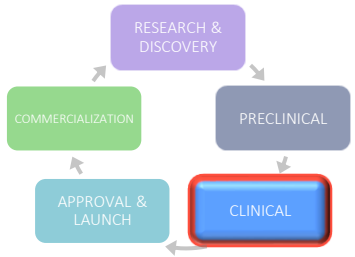
- Optimize your study design, pick the best performing sites, and accurately size and locate your target populations

Pricing & Reimbursement

- Inform clinical development strategy and avoid costly amendments by understanding the current value-based pricing and contracting strategies and activities

Health Economics Outcomes Research (HEOR)

- Avoid costly protocol amendments by incorporating economic endpoints into the trial design for evidence of the product's economic value for reimbursement decisions
- Conduct an evidence gap analysis and develop patient outcomes assessments for successful market access



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Consulting Services for Clinical Operations

Optimize your clinical performance

Deep domain knowledge and hands-on industry expertise

RWD-based KOL Identification

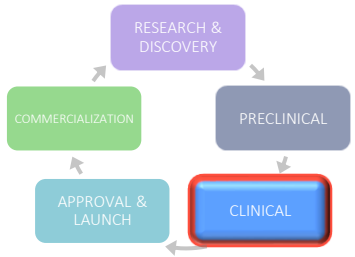
- Discover and profile the best thought leaders in your disease area to consult with
- Segment physicians based on location, disease area, patients treated, procedures performed, hospital or care facility affiliations as well as their referrals

RWD-based Patient Finder

- Identify hospitals or practices that have the highest patient groups of interest, and physicians that manage patient groups within the trial inclusion criteria
- Influence physicians to enroll patients into your clinical study

Center for Medicines Research (CMR) International

- Benchmark clinical performance of peers to optimize operations and cycle times
- Inform feasibility analysis and clinical strategy by leveraging country, study, and site level performance data



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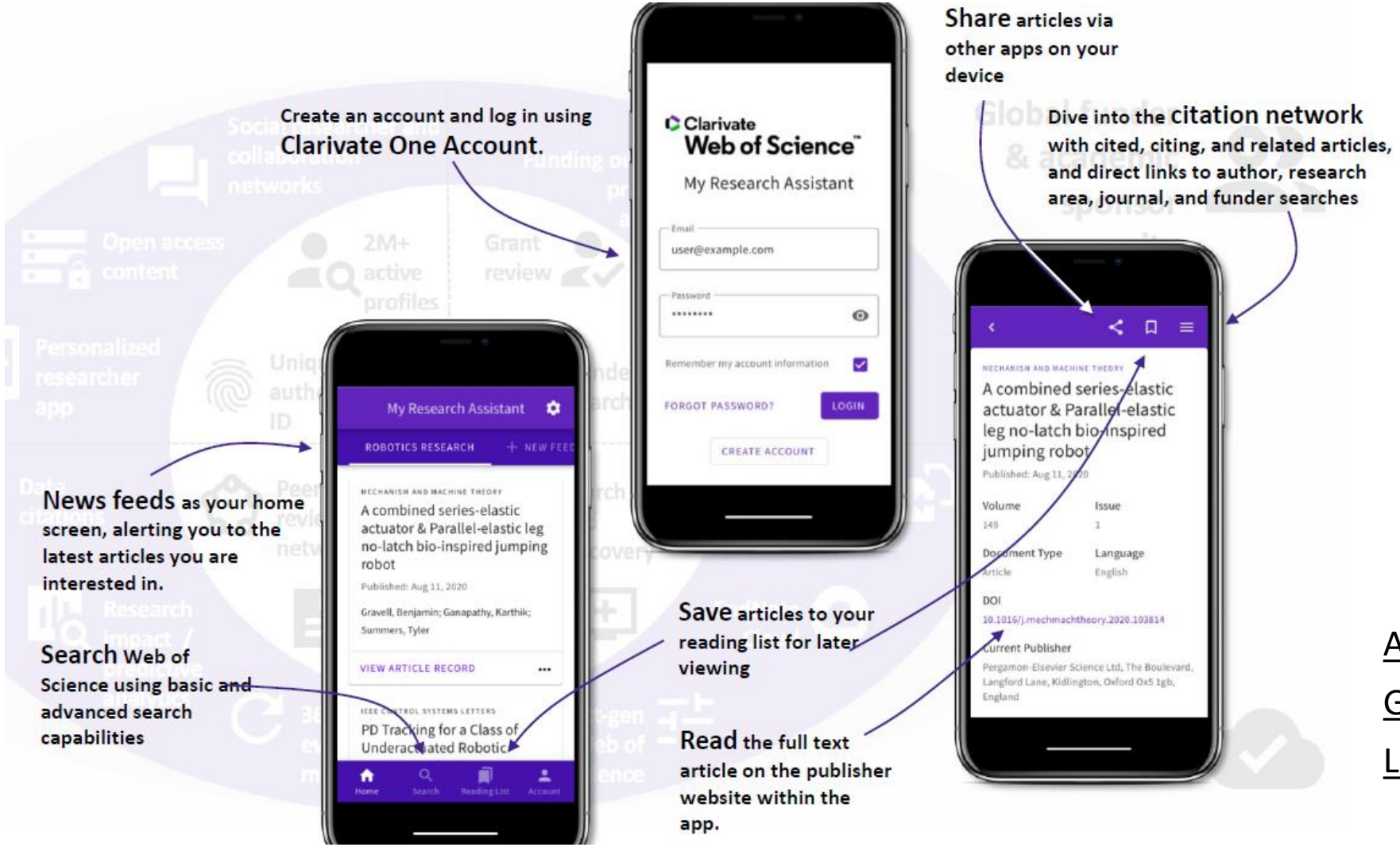
Additional Resources

Web of Science Mobile App -My Research Assistant “MyRA” brings the Power of WoS to the Palm of your Hand



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Additional resources

Web of Science Learning >

Web of Science Academy >

Events & Webinars >

LibGuides >

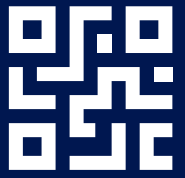
Videos >

Web of Science Blog >

Web of Science news hub >

Researcher Recognition >

Cortellis information



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support.clarivate.com/ScientificandAcademicResearch

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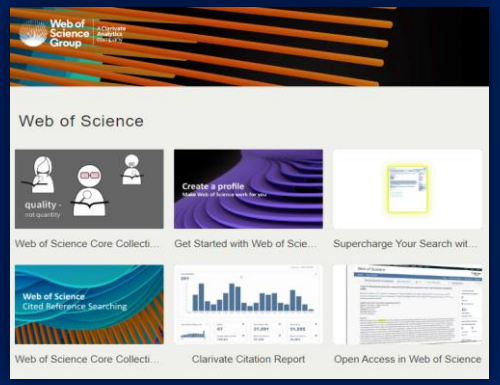
EMAIL or WEBFORM	WoSG.support@clarivate.com or click here to send us a Webform
KNOWLEDGE BASE	Click here to visit our extensive Knowledge Base Links to popular articles include: Remote Access to WoS, h-index Information

Resources for teaching and learning

Stay up to date on product developments, and provide on-demand support for students and faculty

Web of Science Learning Page

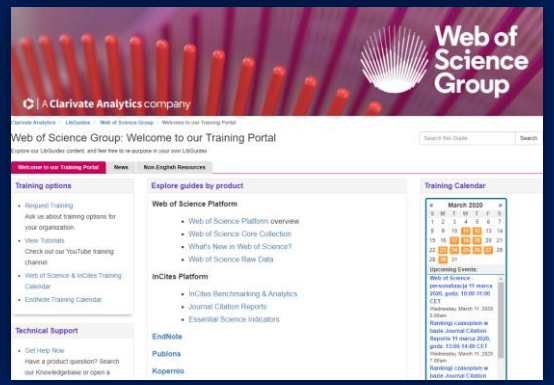
Point students and faculty to “how to” content available 24/7.



Learning Page

LibGuides

Save time updating your LibGuides by reusing pages from ours.



clarivate.libguides.com/home

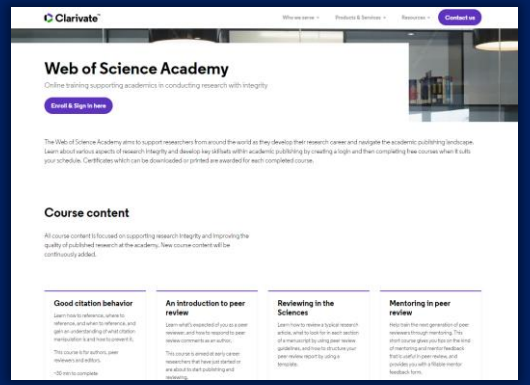
Librarian Toolkit

Quick links to individual databases, factsheets, and more.

View Toolkit

Web of Science Academy

Online training supporting academics in conducting research with integrity



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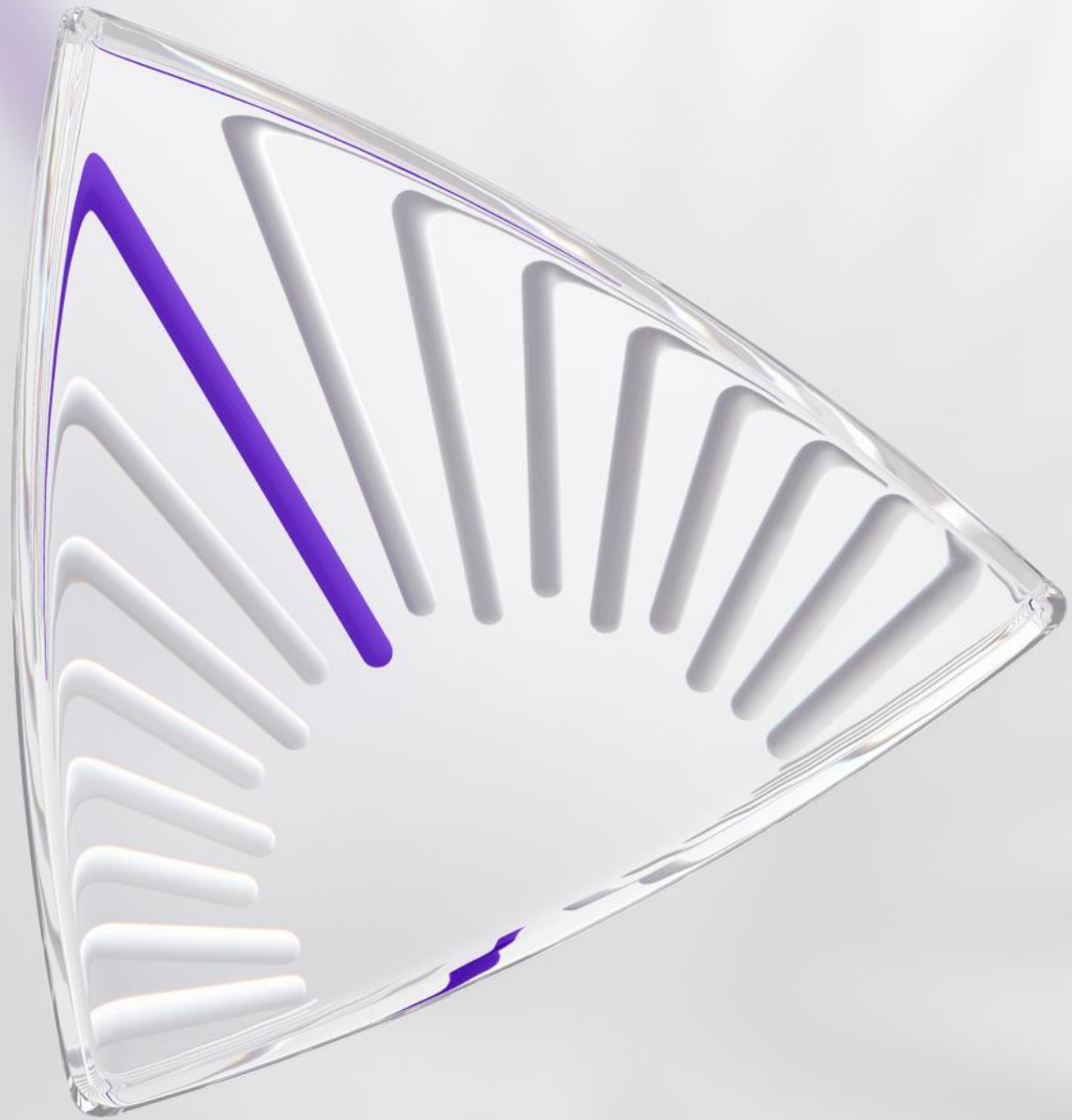
Köszönöm!



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