# The Molekule Way: **Molekule Consulting Firm Capabilities Dossier** 2019 PERSPECTIVES





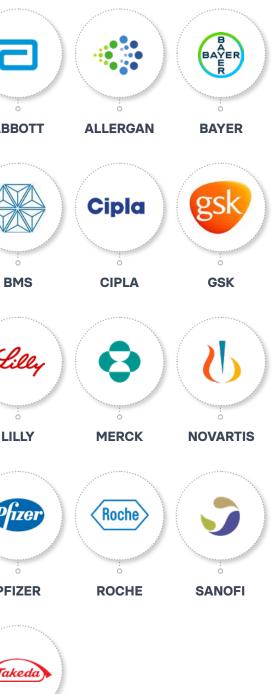
### The Molekule Difference **Core Capabilities**



Molekule delivers long-term consultative partnerships with insights, pricing and market access, franchise and brand partners across the global pharma matrix to develop and deliver insights against brand and franchise strategic imperatives.

We maintain a broad and growing, actively managed, global persistent human source network.

We offer highly customized CI training programs and help educate internal customers and contributors on the value of CI.





**GENERICS AND BIOSIMILARS; MANUFACTURING & SUPPLY CHAIN LOGISTICS** 

- Pre-, Peri- and Post- LoE Assessments
- Manufacturing & COGs Analyses
- Manufacturing and Technology Assessments of Competitor Facilities, Equipment and Technologies
- Supply Chain Logistics Assessments
- Regulatory Landscape **Assessments Regarding Generics** and Biosimilar Threats
- Generic/Biosimilar Landscape Monitoring – Proactive research



 Focused launch logistics including go-to-market strategy assessments

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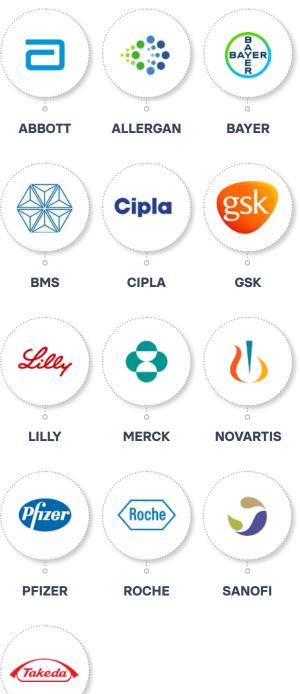
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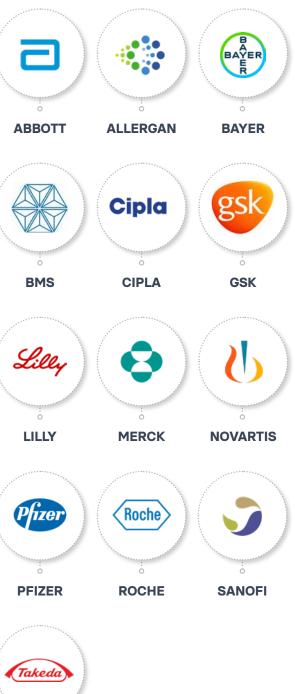
- Strategic pricing and access, contracting and reimbursement research
- Launch prioritization and segmentation research
- Pipeline optimization and competitive assessments
- Licensing and M&A Support
- Payer assessments and competitive landscaping

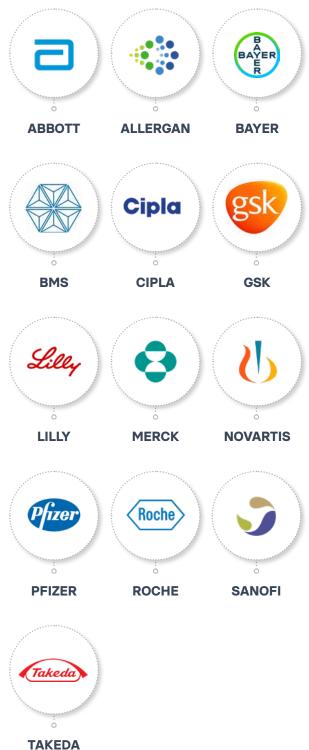


**STRATEGY & COMPETITIVE SCENARIO PLANNING** 

- Competitive Simulation
- Franchise strategy and FMEA (failure mode effects analysis)
- Biopharmaceutical Strategic Consulting
- Positioning









### Molekule Consulting, LLC By the Facts and Numbers

### INCORPORATION

- U.S. Footprint
  - » HQ in Miami, Florida 2012
  - » NJ Office, NY Office

India operations launched in 2016.

European Office in Zürich, Switzerland launched in 2017.

### **STAFFING MODEL**

Employs FTE subject matter experts and seasoned pharmaceutical and management consulting industry professionals. Contractors and affiliates on long-term and ad-hoc engagements as required.

#### **GLOBAL OPERATIONS**

Subsidiaries: physical operations in the EU, CIS/ CEE, Asia-Pacific, LATAM and Israel "Boots-on-the- ground" in 7 core geographies, fluent in 17 languages.



### **ACTIONABILITY DELIVERED**

Molekule drives excellence in strategic competitive intelligence and competitive workshops.

## MOLEKULE & CLIENT PARTNERS

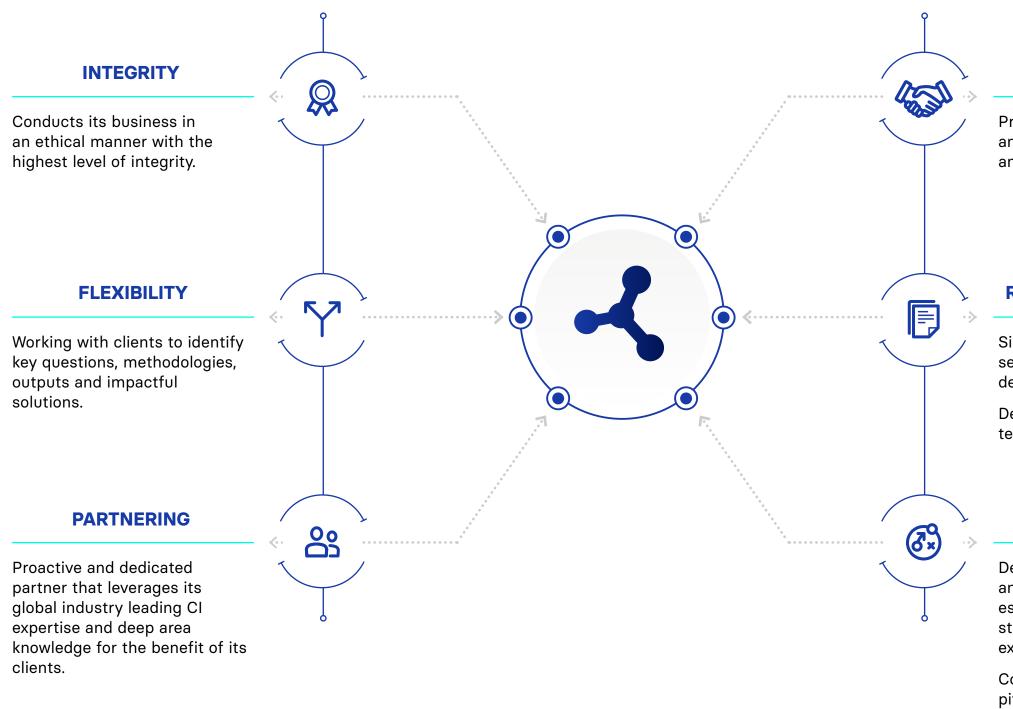
We are continually devoted to client centricity.

### **MOLEKULE & CI**

Employs intelligence industry experts, MDs, Ph.D.s, Pharm.D.s, MBAs and experienced business professionals.



### The Molekule Difference



### COMMITMENT

Providing continuous support and commitment throughout and post engagement.

### **REFINED DELIVERABLES**

Significant involvement from senior leadership in project delivery.

Dedicated graphic design team.

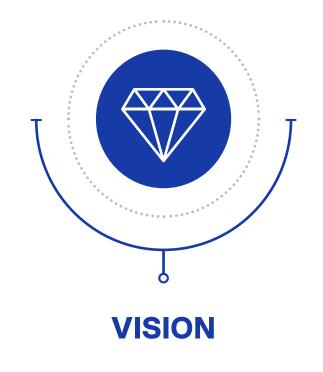
### STRATEGY

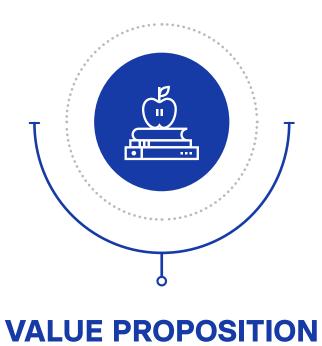
Delivers actionable insights and recommendations essential for decision making, strategy development, and execution.

Committed to identifying pitfalls and helping our partners avoid them.



### The Molekule Way







We aspire to be the premier competitive intelligence and strategy consulting company in the life sciences industry delivering actionable insights and recommendations to our clients, essential for decision making, strategy development, and execution.

Molekule Consulting is a proactive and dedicated partner that leverages its industry leading CI expertise, deep area knowledge and its extensive global network to provide world-class competitive intelligence and strategy services.

As a trusted consultant, Molekule conducts its business in an ethical manner with the highest level of integrity. Molekule Consulting will never compromise on these values.



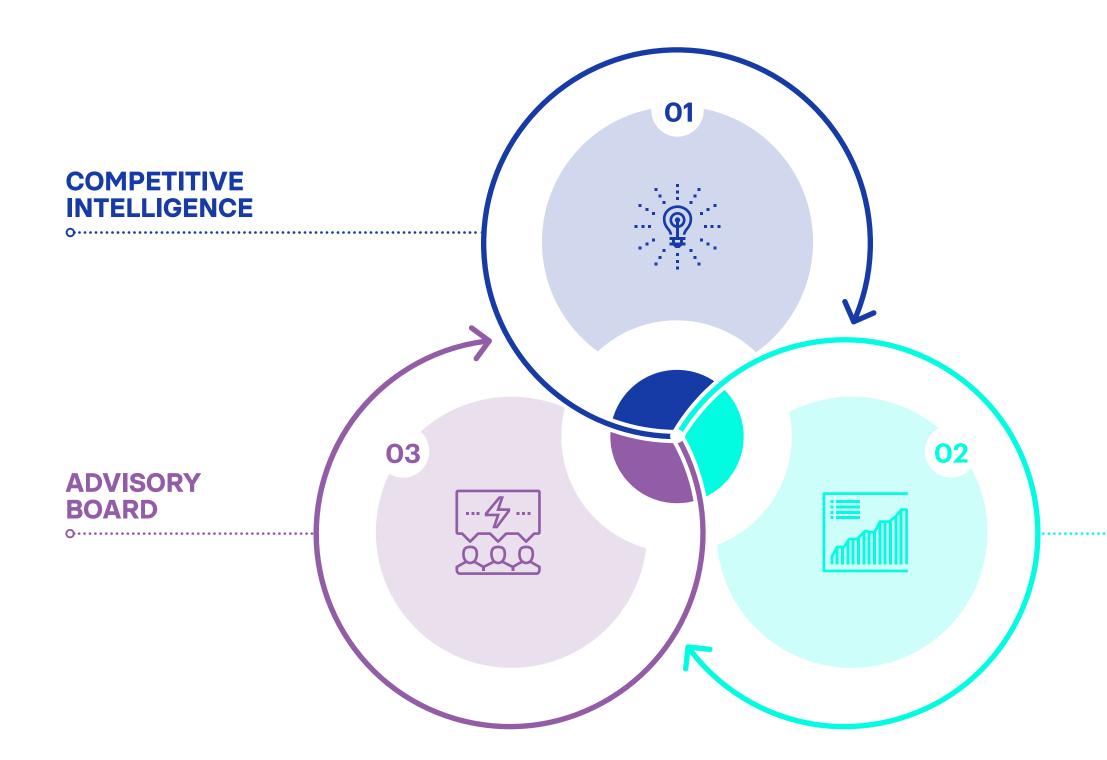
### Molekule Consulting Breadth of Experience Across Functional Customer **Domains in Biotech and Pharma**



2019 Perspectives



## Our Actionable CI Learnings are a Part of a Robust Research Plan for Brand and Lifecycle Maximization



2019 Perspectives





## Molekule Consulting's Proprietary Ethical Research Methodology and **Disclosures Code of Conduct**

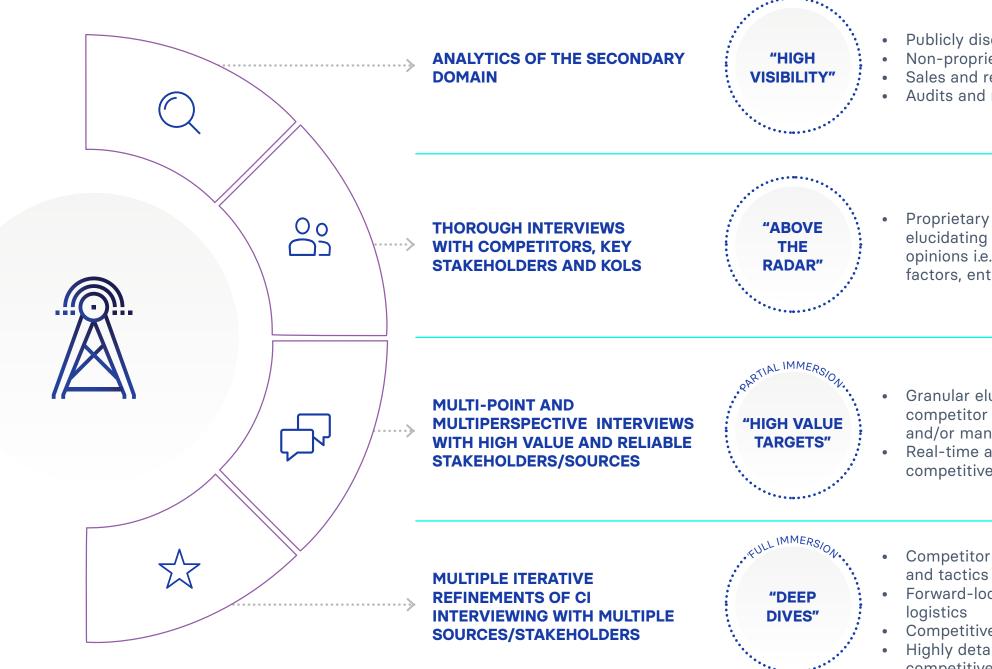
In Particu	ar			$\square$
<b>E</b> ~	We will <b>CONDUCT</b> all business according to the following standards unless the client requests more restrictive constraints, in which case, those standards take precedence.	<u>^</u>	We will <b>NOT</b> engage in activities that will cause harm to individuals, companies, or markets.	Molekule Consulting is committed to the highest standard of ethics throughout
<b>;</b>	We will <b>NOT LIE</b> (by giving any false information, misrepresenting ourselves or using false pretexts).	<b>-</b>	We will <b>NEVER</b> reveal a client's identity.	its global offices and worldwide consulting staff.
<b>(</b> )	We will <b>NOT CHEAT</b> (by attempting to bypass any company's attempts to protect their information).	•	We will <b>ALWAYS</b> protect the confidentiality of sources.	As a firm, Molekule strictly complies with all global, regional and local laws and
 س	We will <b>NOT STEAL</b> (by misappropriating or fraudulently obtaining, intellectual property).	€ <sup>®</sup> •	We will <b>SPEAK UP</b> immediately regarding any legal or ethical concerns.	regulations. Molekule complies with all SCIP rules,
(§) ~-	We will <b>NOT</b> provide inducements (honoraria or gifts) of any kind in exchange for information since this could be interpreted as a bribe to violate confidentiality agreements.	<b>卒</b>	We will <b>NEVER</b> accept work that would create a conflict of interest for the company or our clients.	regulations and guidelines, globally, across all office locations and human capital resources.
<b>₹</b> ~	We will <b>NOT</b> tape source interviews without the source's permission.	₽ ~	We will <b>ALWAYS</b> report truthfully and will provide honest conclusions and recommendations to clients.	Molekule Consulting neither has active, pending, nor prior
 ا	We will <b>NOT</b> use intrusive methods (technical or surreptitious means to penetrate private space or private conversations).	<u>≙</u> ~	We <b>UNDERSTAND</b> that it is better to "fail" than to violate legal and ethical guidelines and thereby create risk for Molekule Consulting and its clients.	litigation or litigious activity against it as a legal entity.



# Competitive intelligence



# Competitive Intelligence Enables Thorough "Drill Down" via Multiple Levels of Asking Key Intelligence Questions ("KIQs")



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Publicly disclosed information
Non-proprietary data
Sales and revenue figures
Audits and reviews

Proprietary custom research elucidating theories and/or opinions i.e.- threat levels, impact factors, enthusiasm levels

Granular elucidation of specific competitor actions, deployments and/or manifestations Real-time and/or near-term

competitive insight and intelligence

Competitor initiatives, strategies and tactics

Forward-looking competitor logistics

Competitive long-range planning

• Highly detailed depiction of the

competitive landscape

• Synthesis and translatability



## Molekule Consulting's Three-Step "CAS" Competitive Intelligence Refinement Funnel

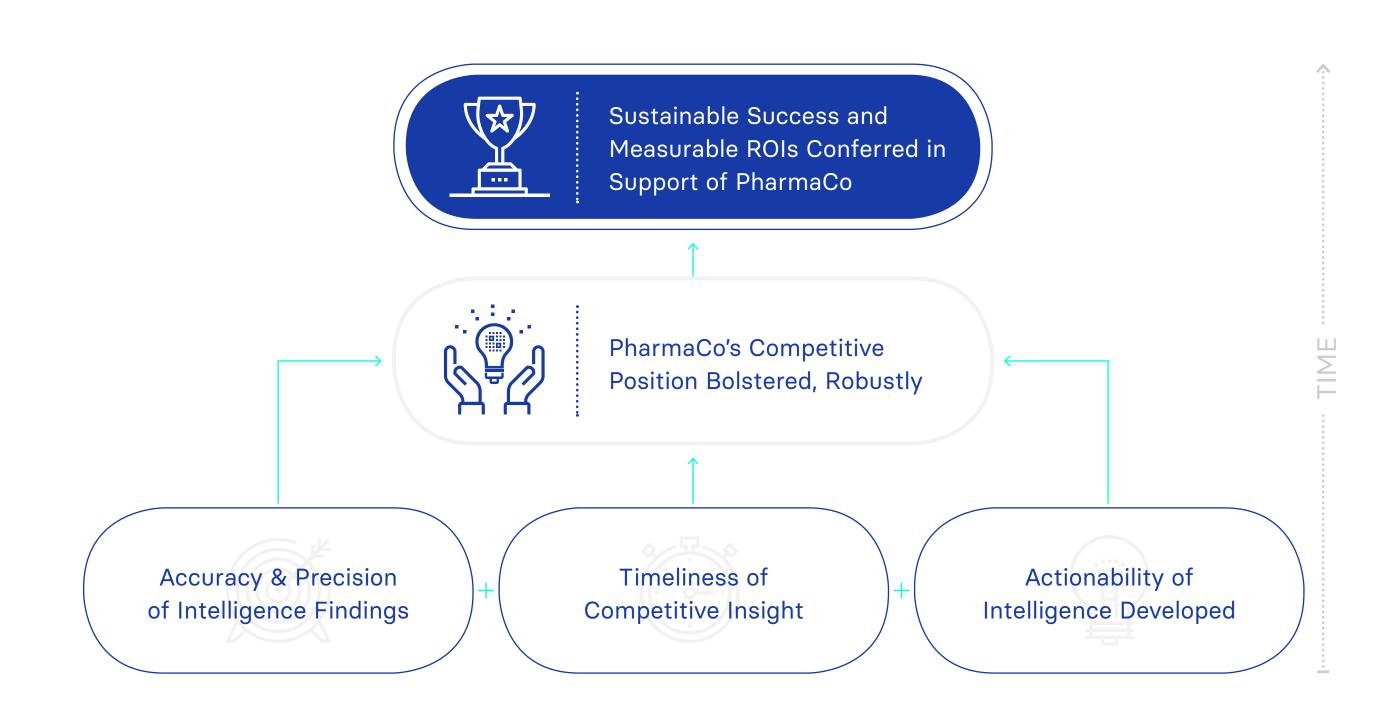
<u>&amp;</u>				
COMPETITIVE DATE ALONE IN A VACUUM ARE NOT INTELLIGENCE				
Actionable Primary Competitive Intelligence is Derived for Robust Contextualization, Analysis and Synthesis.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
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Contextualization		$\bigcirc$		$\mathcal{I}$
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FILTER #2				
Analysis			$\bigcirc$	$\bigcirc$
FILTER #3			<i>→</i>	
Synthesis				D







## CI Strengthens One's Competitive Position Via Accurate, Timely and Actionable Insight





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## **Competitive Intelligence Dissipates the** "Fog of War" & Enables One to Win, Decisively

The synthesis and actionability conferred by accurate and granular primary competitive intelligence in biopharmaceuticals enable key stakeholders to drive informed strategic initiatives thus enabling them to win, decisively.

> Leveraging secondary reports and data alone - in a vacuum – leads to measurable misconceptions, mistakes and missteps

Aggregating multiple "high quality" triangulated primary human sources who have reason to know the information sought drives a level of informed understanding and insight

When rationalized and combined together, the sum total of primary competitive insights and implications become palpable, meaningful and actionable competitive intelligence

*"IF YOU* **KNOW THE ENEMY AND KNOW YOURSELF,** YOU NEED NOT FEAR THE **RESULTS OF A HUNDRED BATTLES.**"

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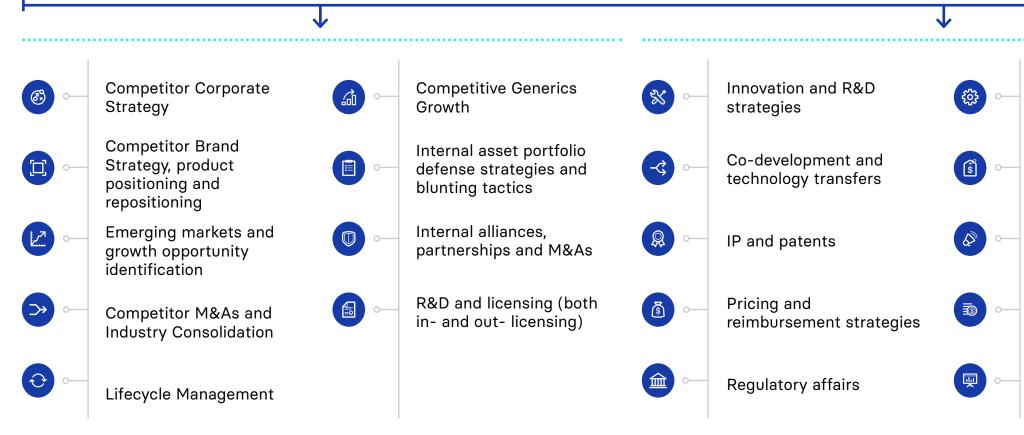
# Sun Tzu



### **Competitive Forces Exerted Upon Biopharmaceutical Players Necessitate Robust Competitive Intelligence Assessments**



## COMPETITIVE FORCES COMMONLY EXERTED ON PHARMACOS



2019 Perspectives





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## Fact: Competitive Intelligence Persists Throughout The Pharmaceutical and Medical Device Lifecycle



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### PHASE 2





# Select team profiles



### David Alderman – President & Partner



#### TEAM MEMBER BIOGRAPHY

David founded Molekule Consulting with an ethos of strategic and actionable and marketing strategies for both pharmaceutical and biotechnology companies, competitive insight combined with client centricity. He is responsible for numerous engagements with varied scopes and objectives in the competitive intelligence and primary market research areas. Project scopes range from preclinical through launch and lifecycle management ("LCM") to supporting clients in clinical and commercial strategy development. His major therapy expertise is in oncology, ophthalmology, cardiovascular, diabetes, autoimmune, and CNS. David attends numerous major medical congresses and scientific congresses globally.

leveraging his skills in intelligence needs identification, collection, analysis and dissemination.

David holds a B.S. in Biology from Trinity College in Hartford, CT, and a M.Sc. in Biomedical Science from Columbia University College of Physicians and Surgeons in New York, NY. Additionally, David pursued doctoral study in Genetic Research, Genomics and the Molecular Biology of Disease at Emory University School of Medicine in Atlanta, GA.

Prior to founding Molekule, David held progressive roles in biopharmaceutical and market intelligence executive leadership, conducting business development, managing projects and personnel, as well as developing primary intelligence in support of client engagements. David has extensive experience developing clinical



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### Dr. Daniel Pascheles – CEO & Partner

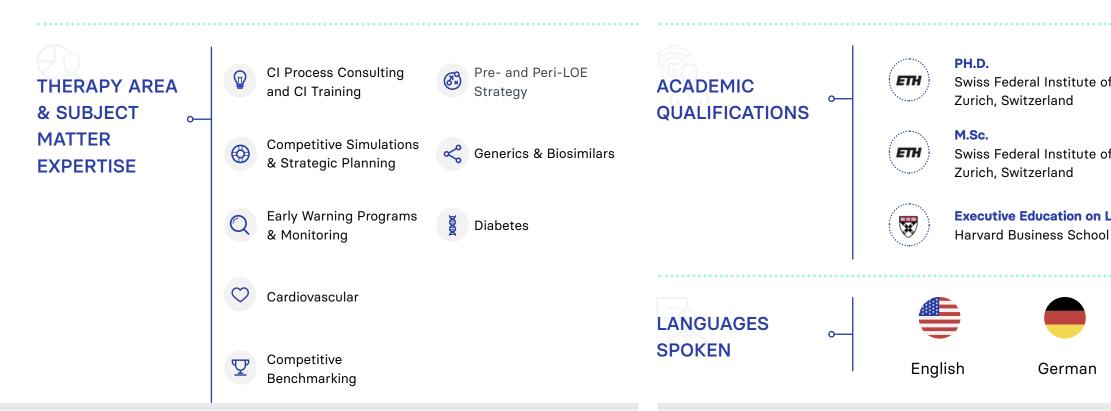


#### TEAM MEMBER BIOGRAPHY

Dr. Pascheles joined Molekule Consulting in early 2017 as Chief Executive Officer and has over 20 years of experience in building world-class global competitive intelligence. As manager of large CI teams, Daniel oversaw and led during his successful career in the biopharmaceutical industry hundreds of primary CI projects, competitive simulations and strategic planning sessions.

Prior to joining Molekule Consulting, Dr. Pascheles was Vice President and Head of Global Competitive Intelligence at Merck & Co /MSD for the last 12 years. Before that he worked for Aventis and its predecessor company (Hoechst Marion Roussel, Marion Merrell Dow) for 14 years in various positions such as Global Head of CI, European Head of Sales and Marketing Administration, European Head of Strategic Planning and General Manager Switzerland.

Dr. Pascheles studied Pharmacy at the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland. He received his Ph.D. in Pharmaceutical Technology from the same university. He did additional studies at the University of Kansas in Lawrence, Kansas. Daniel is Past-President and a current Board member of the Pharmaceutical Business Intelligence & Research Group (PBIRG). He is also a member of the Society of Competitive Intelligence Professionals (SCIP) and the Licensing Executive Society (LES). He is a well-known speaker/chairman of International Conferences on Competitive Intelligence. He is a member of the Editorial Advisory Board member of the Pharmaceutical Executive magazine and publishes regularly in various trade magazines. Daniel is also Visiting Professor at the Rey Juan Carlos University in Madrid teaching a Master Class in Cl.



#### 2019 Perspectives



Swiss Federal Institute of Technology (ETH)

Swiss Federal Institute of Technology (ETH)

**Executive Education on Leadership & Strategy** 





German





### Dr. Michael Marlatt – Director & Head of New York Office



#### TEAM MEMBER BIOGRAPHY

Michael is a uniquely experienced competitive intelligence (CI) and therapeutic area expert, having led significant engagements with both pharmaceutical and biotechnology clients. A seasoned project manager, Michael has a breadth of experience with competitive landscaping, product differentiation, launch preparedness, lifecycle management, and organizational development. His major therapeutic expertise is in CNS, oncology, rare, and infectious diseases. He brings first-hand experience delivering clinical and commercial insights for pipeline and marketed products to a breadth of clients, ranging from Top-20 pharma companies to privately held biotech firms.

he developed further as project manager and functional CI expert. At Deallus, he held major responsibility for delivering global CI and strategy projects across therapeutic areas and diagnostics. From Deallus, Michael was recruited to Occam Global, a retained executive search and strategy firm based in New York, specializing in organizational development for venture capital backed healthcare and technology companies.

Michael completed his BS and MS at Case Western Reserve University in Biochemistry and Pathology respectively. He completed his PhD through a Marie Curie Fellowship at the University of Amsterdam (The Netherlands) and National Institutes of Health (USA).

Michael is a research scientist by training, who began his career with Merck Research Labs in Neuroscience Drug Discovery. Following his PhD, Michael joined Deallus Consulting, a global CI and strategy firm based in London, where



#### 2019 Perspectives



English



### Dr. Oleh Denysyk – Director & Project Manager



#### **TEAM MEMBER BIOGRAPHY**

Dr. Oleh Denysyk is a highly experienced competitive and business intelligence professional with an extensive integrated background in drug development and medical affairs, business development, marketing and marketing research, licensing, sales and competitive intelligence. He has a doctorate in Pharmacy as well as a Master of Business Administration. As part of his pharmacy school training, he externed in Memorial Sloan-Kettering Cancer Center and Lenox Hill Hospital.

Dr Denysyk was involved in the oncology portfolio swap between Novartis and GSK, guiding the key immunooncology (IO) assets through this exchange to insure their optimal commercialization. He has been a consultant for QuintilesIMS and for investor capital groups, where he tracked and assessed the role of anti PD1antibodies and other IO agents in lymphoma, breast cancer, melanoma, lung cancer, GU & other indications. He consulted for competitive intelligence firms and attended the Academy of Competitive Intelligence. Dr. Denysyk was president of a research company and headed his own consultancy. His assignments focused on assisting companies in launching, assessing and tracking products in multiple therapeutic areas like oncology,biosimilars, autoimmune diseases, atypical antipsychotics, devices, diagnostics, pricing, distribution channels and others.

LifeCell, leading the global competitive and business intelligence efforts, then transitioning to Allergan into a Business Insights and Analytics role with their purchase of LifeCell. Also, Dr. Denysyk has held positions of increasing responsibilities within Roche, Pfizer/ Pharmacia, sanofi/ HMR, and Novartis/ Ciba Geigy, leading business units in support of oncology, ophthalmology, organ transplantation, CNS, endocrinology and other therapeutic areas. He started his career in the industry with Kline & Company. His responsibilities have included the North American, European, LATAM, APAC and Japanese markets.

Dr. Denysyk is a member of the Academy of Managed Care Pharmacy and a past Vice President of PBIRG and a former guest lecturer at Rutgers Business School and Pfizer Science Academy. Oleh founded the Oncology Business Intelligence group on LinkedIn and the consultancy Pharmaceutical Intelligence, Inc. He maintains his pharmacist license in two jurisdictions and was Pharmacist-In-Charge in a retail setting and pharmacist in a hospital setting and in a facility providing unit dose medications to long term care facilities. Dr. Denysyk earned a B.A. in Biology at New York University, a B.S. in Pharmacy from Arnold & Marie Schwartz College of Pharmacy at LIU and was invited to join the Rho Chi Pharmaceutical Honor Society. He earned an MBA from Rutgers Business School and a Pharm.D. from Creighton University Medical Center where he served his clinical rotations in drug utilization review, supporting the Pharmaceutics & Therapeutics Committee and implementing patient satisfaction surveys into the hospital system.

On the client side, most recently Oleh has been involved in the regenerative medicine area with Acelity/

	THERAPY AREA		Licensing & Business Development		Diagnostics	ACADEMIC		<b>Pharm.D.</b> Creighton U
& SUB IECT		83	Negative Pressure Wound Therapies	<b>A</b> 8968	Spinal Surgeries	QUALIFICATIONS		M.B.A.
	MATTER	(	Market Access/ Reimbursement	Ś	Regenerative Medicine			Rutgers Bus B.A. Biology
EXPERTISE	EXPERIISE	₹	Organ Transplantation	<u></u>	Endocrinology			New York Ur
		A	Aesthetics and Dermatology	٢	Ophthalmology			B.S. Pharma Arnold & Ma
		<u>385</u>	Autoimmune Diseases	$\Diamond$	Hematology		~~	of Pharmacy
			Atypical Antipsychotics	Ų,	Oncology	LANGUAGES		
			Acellular Dermal Matrices	•	CNS	SPOKEN		
	-	Bone Disease			I	English	n Ukrair	

#### 2019 Perspectives



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### Dr. Karim Lakehal – Medical Director



#### TEAM MEMBER BIOGRAPHY

Dr. Karim Lakehal has a unique background as a clinician and scientist offering 8 years of experience in Immunology, Infectious Disease and Transplant. He has worked across multiple therapeutic areas and consulted medical device companies in assessing entry strategies in FDA regulated areas.

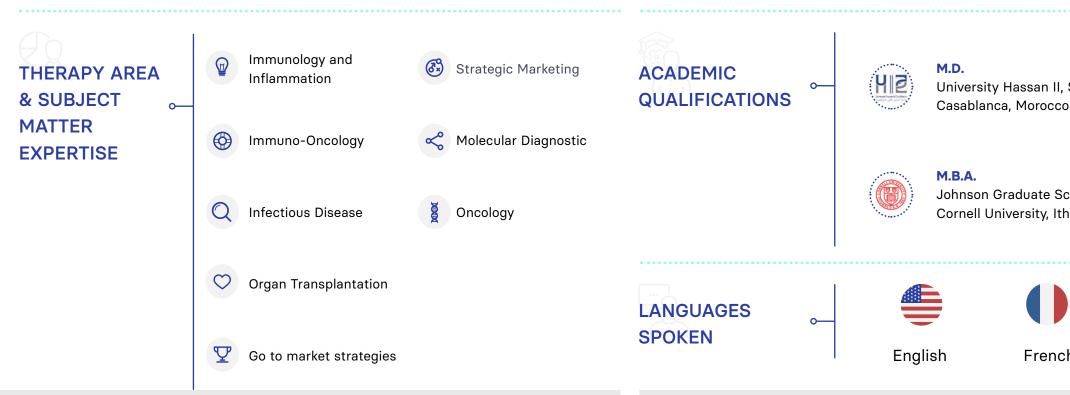
Dr. Lakehal earned his Medical Degree in 2005 from the University of Hassan II in Casablanca, Morocco. In 2007, he moved to the United States, where he joined a tumor immunology lab as a Post-Doctoral Research Fellow at Memorial Sloan Kettering Cancer Center. His work was mainly focused on the development of novel targeted immunotherapeutic treatment strategies for the treatment of melanoma. The targeted therapies have been shown to have efficacy in melanoma as single agents in both preclinical and early clinical trials, two of these treatments have been approved by the FDA.

In 2011, Dr. Lakehal joined the Public Health Research Institute in New Jersey as a Research Associate, where he was responsible for implementing, managing and overseeing the recruiting, screening, and enrolling of patients for participation in multiple clinical studies, while ensuring

compliance with federal, state, and institutional guidelines. He successfully built a foreign clinical site for patient recruitment collaboration. His work in Immunology has led to the development of a new platform for an early diagnostic of Tuberculosis and characterization of activated T cells by combining sm-FISH with Flow Cytometry.

In addition, Dr. Lakehal had the privilege to serve as a House Staff Physician at Jackson Memorial Hospital, one of the largest and most comprehensive programs in the nation. He provided medical and critical care to Solid Organ Transplant patients. He assisted studies led to improve hospital and unit-based policies throughout patient care.

He went on to receive an MBA with a Strategic Marketing Immersion from Johnson Business school, Cornell University. As a consultant, he helped Global Medical Device Companies develop market segmentation analysis and outlined key product-related drivers of market acceptance. Dr. Lakehal conducted a data gap analysis by identifying outstanding questions and knowledge gaps to address with further research and analysis.



#### 2019 Perspectives



University Hassan II, School of Medicine,

Johnson Graduate School of Management, Cornell University, Ithaca, New York



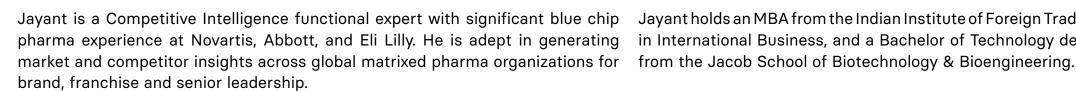






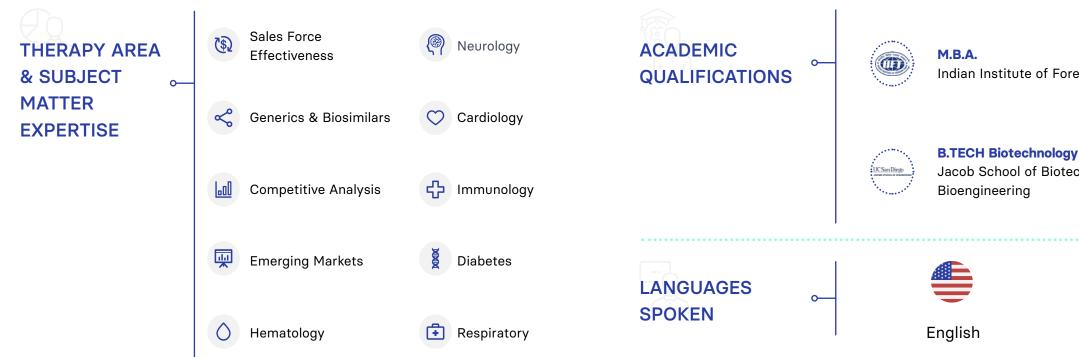
TEAM MEMBER BIOGRAPHY

### Jayant Rana – Associate Director & Head of India Office



Jayant holds an MBA from the Indian Institute of Foreign Trade, with a concentration in International Business, and a Bachelor of Technology degree in Biotechnology

As part of the Global CI team at Novartis, Jayant delivered insights to global and country brand teams across the globe in support of multiple blockbuster brands. As part of the Commercial Excellence team at Abbott, Jayant supported the leadership team in diverse projects related to sales force effectiveness, customer relationship management, and business analytics to achieve strategic objectives profitably and sustainably. At Lilly, Jayant developed market research expertise in support of the Diabetes brand team.



2019 Perspectives



Indian Institute of Foreign Trade

Jacob School of Biotechnology &





### Dr. Noah Wolfson – Engagement Manager



#### **TEAM MEMBER BIOGRAPHY**

Dr. Noah Wolfson joined Molekule Consulting in 2017 as an Engagement Corporation where he managed the development of various lifecycle and pipeline Manager. His experience in competitive intelligence comes from his work in the pharmaceutical industry where he created, positioned, and drove the development of various lifecycle and pipeline products. Noah brings a strong understanding of biochemistry, specifically in angiogenesis, post-translational modifications, enzymology, and protein structure, which he uses to understand and communicate a wide range of fields. Noah also brings his expertise in the ophthalmology and retina fields where he has worked to develop therapeutics, compile actionable intelligence, and seek out new drug opportunities.

products. Most recently, Noah came from his consulting firm, Wolfson Scientific Consulting, where he worked to perform due diligence, drug development, and IP creation.

Noah completed his BS at Brandeis University in Biochemistry and completed his PhD in Biochemistry as a National Science Foundation Graduate Fellow at the University of Michigan.

Noah has extensive experience as a research scientist in academic and government settings. After earning his PhD, Noah began his industry career at Flagship Ventures as a summer fellow before spending subsequent years at Ophthotech

THERAPY AREA & SUBJECT MATTER EXPERTISE	G	Post-translational modification		Due Diligence				PH.D.	
	IP and	IP and Regulatory Strategy	Ophth	Ophthalmology	QUALIFICATIONS			University of M	
	Q 0	Drug Discovery and Design	C	Enzymology				<b>B.S.</b> Brandeis Unive	
		Go-to-Market Strategy	Ŷ	Oncology					
	Q	Life Cycle Management	Š	Biosimilars		o		;	
	Hedical Devices	Medical Devices		Generics	SPOKEN			E	

#### 2019 Perspectives



Michigan

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English



### Dr. Brett Alcott – Consultant



#### TEAM MEMBER BIOGRAPHY

A biophysicist by training, Dr. Brett Alcott is uniquely positioned as a biopharma industry subject matter expert and brings with him a deep appreciation for the importance of basic research in understanding disease mechanisms and improving human health.

Brett's academic research focused on the protein-lipid interplay underlying the fusion of membrane-enveloped viruses, such as influenza, Ebola and HIV, with their host cells. His work sought to isolate and characterize the fusion pore – a transient lipidic connection between virus and host and a crucial early intermediate in the infection process - using an experimental approach which combined a novel, nanoscale in vitro electrical technique (capable of inferring pore size with millisecond resolution) and radically coarse-grained molecular dynamics simulations. Additionally, Brett developed a novel, robust single-cell

fluorescence technique to report membrane fusion between cells expressing viral fusion proteins and bilayer nanodiscs of controllable size and chemical composition which could serve as a platform for future antiviral drug screens.

A lifelong New Yorker, Brett holds a B.A. in Chemistry and Biochemistry from Cornell University, where he was a Cornell Presidential Research Scholar, and a Ph.D. in Biophysics from Columbia University (2017), where he was an NIH predoctoral fellow in Molecular Biophysics and an Exchange Scholar at Yale University.



#### 2019 Perspectives



English



### Chaitanya Gollakota – Consultant



#### TEAM MEMBER BIOGRAPHY

Chaitanya (Chait) Gollakota has a breadth of experience in bio-pharma, beginning with scientific and analytical analysis supporting bio-production. Chait began his career with Indian Immunologicals Ltd., having been selected from a highly competitive pool of candidates, by the Indian government. In his first role, he proved instrumental in optimizing processes for vaccine purification and development at the firm.

Seeking to broaden himself and establish an understanding for clinical and commercial development, Chait moved to the USA, pursuing his MS from Case Western Reserve University, where he was part of the Renovo Neural business development team. He further enhanced his scientific and analytical acumen during his time as an analyst at Mensch Capital, a private equity firm focusing on healthcare and technology companies. His therapeutic areas of expertise include

CNS, oncology, and infectious diseases.

Before joining Molekule, Chait was recruited by EmPartners, where he gained considerable experience developing commercial and competitive strategy frameworks for blue-chip pharmaceutical clients looking to implement 'big data' strategies throughout the life cycle of their immuno-oncology portfolio development.

Chait holds a BS in biotechnology and chemical engineering. He pursued an MS in entrepreneurial biotechnology from Case Western Reserve University, where he wrote his thesis assessing the commercial feasibility of a nanoparticle-based drug delivery platform for metastatic breast cancer.



#### 2019 Perspectives





### Dr. Paul Nunzio De Santis – Associate Director



#### **TEAM MEMBER BIOGRAPHY**

Paul is a therapeutic expert in immuno-oncology, CAR-T, pharmacogenomics, immunology, and liver diseases (HCV, NASH). He has specialized in providing market research, competitive intelligence, and due diligence on commercial strategy to biotech companies, hedge funds, private equity, and VC firms since 2010.

Having a special interest in immuno-oncology and CAR-T since 2014, Paul has developed a reputation for identifying new sources of strategic importance facilitating competitive advantages for his clients. His therapeutic expertise has been validated and recognized by several Tier-1 consulting firms including the prestigious Gerson Lehrman Group (GLG) where he serves as a "Special Council Member" in immuno-oncology, CAR-T, and pharmacogenomics providing advice to both industry and financial services clients. His work at GLG has focused on commercial planning and intelligence projects for three of the top 20 BioPharma companies, and for funds managing \$145M to \$13B+ in assets under management.

Paul has provided due diligence and provided strategic advisory services on commercialization strategy for pioneering CAR-T companies, where his work has focused on developing innovative solutions to overcome the numerous clinical and commercial obstacles. Seeking to identify and

quantify key barriers to market adoption, he has developed a deep expertise in understanding patient access, treatment capacity, and toxicity management. Additionally, he has developed a broad network of leading CAR-T key opinion leaders that served as a qualitative source of primary research. He continues to maintain this network today for both immuno-oncology and CAR-T related projects.

Paul is a pharmacist by training and earned his doctorate of Pharmacy (PharmD) from the University of New Mexico in 2010. He received his undergraduate education from the University of Denver before returning to the University of New Mexico to complete his doctorate in Pharmacy. His clinical training is supplemented with 5 years of cancer research experience spanning from in-vitro discovery to clinical trials. He also completed research fellowships with Pfizer Global Research and Development and Ionis Pharmaceuticals.

Dr. De Santis has covered PAH since 2014 covering Gilead Sciences, where he conducted market research and commercial analytics on Letairis (Endothelin Receptor Antagonist). In addition, he completed a clinical rotation in a cardiology specialty clinic that managed PAH patients and heart failure patients.

THERAPY AREA & SUBJECT MATTER	(lar	muno-Oncology rge and small molecules) AR-T/adoptive cellular erapies	₽ F	Immunology Reimbursement	ACADEMIC QUALIFICATIONS	s	NY	<b>PharmD</b> University of
EXPERTISE	🛐 Pha	armacogenomics		Commercial Analytics			1	
	F Ph	ysician Education		Addressable Market Analysis				<b>M.A.</b> Molecular Bic
	🗐 Tra	aining in oncology	<u></u>	Advanced Forecasting	• • • • • • • • • • • • • • • • • • • •	I		
	🛞 Liv	ver Diseases	<b>(\$)</b>	Discounted Cash Flow Valuation	LANGUAGES SPOKEN	o—		
	🔏 Mo	olecular Diagnostic	Q	M&A valuation and analysis				English

#### 2019 Perspectives



of New Mexico

iology, University of Denver



Spanish



### Siddharth Subramaniam – Consultant



### TEAM MEMBER BIOGRAPHY

Sid started his career as a molecular biologist in the Translational Medicine Lab at ACTREC (India's foremost cancer research hospital) where the team was trying to identify novel mechanisms for metastasis and ways to prevent it. However, he soon realized that a narrow focus - on a single target/ pathway is not enough and decided to move into consulting to get a more holistic/ bird's eye view of things.

His background in Oncology due to his M.Sc. in Cancer immunology and strong understanding of the mechanics behind the various molecular pathways due to his research experience provided the base required to integrate with the commercial side. His education and experience in CI and market research have molded Sid into a well-rounded therapy area expert with a strong understanding of the developments and current trends in oncology.

Sid specializes in providing quick turnaround projects requiring science driven insights. He is exceptionally capable when it comes to handling requests from the new program/ development teams looking to focus or prioritize indications and combinations. As a team lead at Value Edge (now WNS Global Services), Sid was responsible for handling and maintaining working relationships and providing quality service to blue-chip pharma companies.

THERAPY AREA & SUBJECT MATTER EXPERTISE	Prioritization (Assets & Indications)	Infectious disease & antibiotics	ACADEMIC QUALIFICATIONS		<b>M.SC.</b> Cancer Immu University of
	Clinical & Preclinical data analysis	Solid and Hematological Tumors			<b>B.Tech Biotec</b> Vellore Institu
	Competitive Intelligence	Immunotherapy in oncology			-
	Asset Differentiation		LANGUAGES SPOKEN	English	Hindi

2019 Perspectives



nology & Biotechnology, Nottingham, UK

chnology ute of Technology, India









### Soumitra Vatsal – Consultant



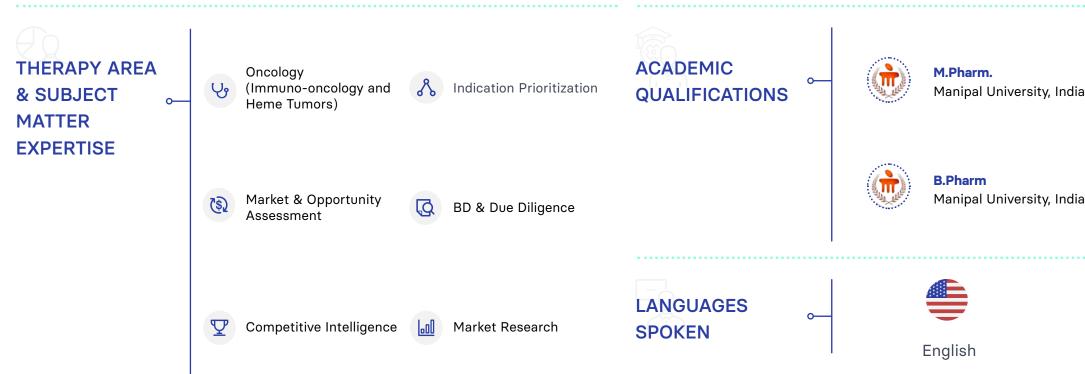
#### TEAM MEMBER BIOGRAPHY

Soumitra has had Competitive and Business Intelligence as the core function of more than 6 years of his market research experience spanning major pharmaceutical companies across therapy areas with a focus on oncology for the last five years working with phamax, Indegene and GSK Knowledge Centre (KC).

Before joining Molekule Consulting, he was at the helm of CI support at GSK KC, Gurgaon, India establishing and providing regular CI support to the Early Pipeline Commercial Strategy (EPCS) team at GSK across its interest areas: Epigenetics, Cell & Gene Therapy, and Immuno-oncology. The stint meant working as the single point of contact at GSK KC for the EPCS Directors handling CI support for early pipeline assets across heme and solid tumors. He supported the positive Portfolio Investment Board review for the now breakthrough anti-BCMA asset from GSK while serving as onsite member for close to 3 months at GSK Upper Providence site in the US. He was also involved in CI support to various ongoing and recently concluded BD opportunities.

Before this, he worked in projects across therapy areas for different pharma clients. Starting off as a medico-marketing intern in Biocon's Diabetology division as a part of his master's program, he worked through primary research and as a Trainee Analyst at phamax, he worked through secondary CI research supporting identification and profiling of KOLs, company profiling, and market assessment. He was extensively involved in onsite and offsite conference coverages working at Indegene and was responsible for covering and delivering start-to-end AACR 2015 and 2016 coverage report among other market & opportunity assessment projects.

Soumitra studied pharmacy pursuing bachelor's and master's degree from Manipal University, Manipal, Karnataka, India.



#### 2019 Perspectives







### Dr. Kamal Jain – Analyst



#### TEAM MEMBER BIOGRAPHY

in oncology and autoimmune disorders. He is proficient in trial data analysis and Delhi, India in Life Sciences and computational biology respectively. competitive intelligence.

As a Principal Analyst at InveniAI, Dr. Jain was responsible for providing scientific insights for new product development and combination therapy. Dr. Jain also provided data for development of AI driven platform for novel signal detection in drug development.

Prior to consulting Dr. Jain worked at Institute of Microbial technology (one of India's foremost research institute) on identifying novel activity modulators of SIRT1, a protein vastly involved in multiple indications.

Dr Kamal Jain is a scientific and clinical data analysis expert having experience Dr. Jain completed his Master's and PhD from Jawahar Lal Nehru University, New



2019 Perspectives



Computational Biology and Biophysics: Jawahar

Life Sciences: Jawahar Lal Nehru University

Biology : Maharaja Ganga Singh University





### Madhur Bhardwaj – Associate Consultant



TEAM MEMBER BIOGRAPHY

Madhur is a passion driven, committed and enthusiastic consulting professional with 5 years of experience in the pharmaceutical and life sciences industry. He has an exposure to myriad functions like competitive intelligence, market research, pharmaceutical product development, product strategy consulting, clinical trial analytics and epidemiology.

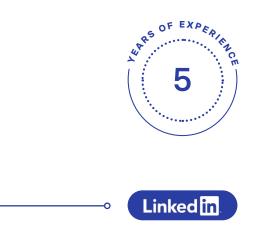
Prior to joining Molekule, Madhur worked with Prescient Healthcare Group where he was responsible for the development of Prescient's Global Analytics Centre (GAC) by bringing in innovative research methods in Immunology and Oncology. He provided direction in terms of analytical approaches and methodologies, insight development, best practices, and created standard operating procedures for the GAC team. He was also responsible for building, coaching, and managing a team of associates and generating frameworks and solutions for the team.

Starting off as an analyst at BioXcel Corporation as a part of technical analysis team, he worked through multiple CI projects supporting pipeline and custom analysis by assessing clinical trial results and designing pan-indication analytical frameworks. Also, during his tenure at Value Edge (WNS), he was extensively involved in market assessment for orphan and ophthalmic indications providing coverage on disease overview, epidemiology, key competitors, trial timelines, launch timelines, market size and CI landscape monitoring.

He studied biotechnology in pursuing bachelor's and master's degree in biotechnology from Jaypee University of Information Technology, Himachal Pradesh, India.



#### 2019 Perspectives



Jaypee University of Information Technology,

Jaypee University of Information Technology,





### Ravi Joshi – Associate Consultant



Ravi Joshi has always been fascinated by complex designs & systems, logical analysis, and innovation. He believes that healthcare is multidimensional and therefore a multidisciplinary approach is key to solve healthcare's toughest problems. He seeks to understand underlying principles and connect the dots to create the big picture.

Ravi has a work experience of 5.5 years with expertise in competitive intelligence, secondary and primary market research and corporate consulting on various pharmaceutical and life sciences projects. He started his career as a business analyst at Manthan Services where he was involved into conducting competitive intelligence, market segmentation, opportunity analysis and thereafter worked as senior business analyst with SmartAnalyst and Evalueserve. He was working as project lead in strategic and consulting division with Moody's Analytics where he was responsible for end-to-end project delivery.

Ravi went to receive Post Graduate Certificate in Healthcare Management (PGCHM) from Indian Institute of Management, Calcutta and completed his master's degree in Pharmaceutical Chemistry from Birla Institute of Technology and Science, Pilani.

He has also completed Post Graduate Diploma in Health Economics and Policy from Public Health Foundation of India, Gurugram and Post Graduate Diploma in Patent Laws from National Academy of Legal Studies and Research, Hyderabad.

THERAPY AREA & SUBJECT MATTER EXPERTISE	у С Ф	Oncology Cardio-vascular diseases Respiratory disease Competitive Intelligence		Indication prioritization Literature review Generics Biosimilars	ACADEMIC QUALIFICATIONS	o—	Post Gradua Management Indian Institu Masters in P Birla Institut
	Š	Strategic Product Positioning		Go-to-Market Strategy	LANGUAGES	_	É
	P	Product label analysis	ŝ	Strategic & Competitive Benchmarking	SPOKEN		English

#### 2019 Perspectives



te Certificate in Healthcare ute of Management, Calcutta

Pharmaceutical Chemistry (Hons.) te of Technology and Science, Pilani





### Kazumi Fujikawa – Senior Consultant



Kazumi Fujikawa is a strategically-focused global pharmaceutical industry executive with more than 30 years of experience, expertise and passion in the art & science of marketing Competitive Intelligence and market research. Kazumi was successful in uncovering breakthrough insights that inspired building practical marketing strategies for Global pharma brands.

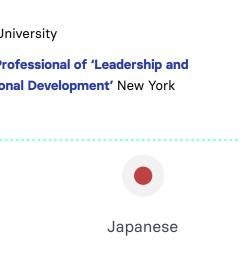
Most recently, Kazumi was Vice President, Global Customer Insight at Takeda Pharma in Tokyo, Japan. She established the new global division to enable insights generation and recommendations to Takeda commercial leadership utilizing evidence based insights and validated data management. She built the first Global Insights function at Takeda with experts located across Tokyo, Singapore, Chicago, Boston and Zurich.

Kazumi is a well-known industry speaker at global market research & competitive intelligence conferences. She is a board member of EphMRA Tokyo Chapter, cochair of the CI Pharma Asia Conference and an established member of the Japan Pharmaceutical Research Association. She is the Chairperson of the Japan Pharma Delegates, an organization with a 60 year history and over 170 members of the senior executives in the Japanese health care industry. Kazumi has also published and co-translated in Japanese several books on Pharmaceutical Marketing.

THERAPY AREA & SUBJECT MATTER -	×	Competitive Intelligence Analytics		Go to market strategies New Product Planning	ACADEMIC QUALIFICATIONS	o		MBA Leicester U Certified Pr Organizatio University
EXPERTISE		Forecasting		Change Management Organizational	LANGUAGES	<u> </u>		
		Customer Insights	2 <b>0</b> 2	Development	SPOKEN	Ŭ		English

#### 2019 Perspectives







### Dr. Friederike Wirtz-Brugger – Consultant



#### TEAM MEMBER BIOGRAPHY

pharmaceutical industry and is currently consulting for Pharma/Biotech and Universities.

During the last 15 years she has developed expertise in competitive intelligence across several therapeutic areas covering both research and development. As a global manager of Competitive Intelligence teams at Sanofi, Friederike directed diverse CI projects contributing to top management decisions on strategic initiatives and processes for risk reduction in research and development.

Dr. Wirtz-Brugger has more than 25 years of global experience within the research positions for Aventis and its predecessor companies (Hoechst Marion Roussel, Hoechst AG Germany) leading projects in drug discovery targeting various inflammatory CNS disorders.

> Dr. Wirtz-Brugger studied engineering at Giessen Fachhochschule, Germany receiving a Diplom Ingenieur degree in biomedical engineering. She then transferred to the US where she received her Ph.D. in Neurobiology and Physiology from Rutgers University and UMDNJ in New Jersey. Friederike is a member of the Society of Competitive Intelligence Professionals (SCIP) and is a frequent speaker at conferences on Competitive Intelligence

As Senior Director at Sanofi, Dr. Wirtz-Brugger was responsible for managing Scientific Competitive Intelligence teams for several therapeutic areas including CV/Diabetes, Oncology, MS and rare diseases. Prior to that she held various

THERAPY AREA & SUBJECT MATTER EXPERTISE		2000X	Competitive Intelligence Processes Diabetes	CV	ACADEMIC QUALIFICATIONS	0	<b>Ph.D.</b> Rutgers Univ <b>M.Sc.</b> Fachhochscl
		÷	Oncology			LANGUAGES SPOKEN	o—

#### 2019 Perspectives







# Client testimonials



### **Client Testimonials**



#### **ASSOCIATE DIRECTOR**

"It takes a lot of coordination and effort to drive home consistency and quality in terms of high impact deliverables and high quality, accurate and precise intelligence. The folks over at Molekule Consulting have an amazing ability to do that time in and time out."



#### DIRECTOR

"I must compliment Molekule [Consulting] on their ability to develop sources and track down individuals, globally, who are difficult-to-reach. As a firm, Molekule [Consulting] can develop some of the best primary [competitive intelligence] out there and they synthesize it quite well. Their deliverables are well refined and to the point of a 'MBBstyle' consultancy."



#### **ASSOCIATE DIRECTOR**

"The dedication and real, twoway communication between the Molekule team and us was stellar - and helped better fulfill the engagement objectives. Communication is key in any services industry - even down to the consultancy level - and they knocked it out of the park in terms of the intelligence and deliverables - when you get that synergized with the communication, it is great!"

Competitive Strategic Insights, Top-10 Biotech, U.S.



#### **SENIOR MANAGER**

"Wargaming may no longer be politically correct – but let us be true – it is a war game. Strategy workshops conducted by Molekule Consulting are standout – they are well prepared and facilitated. The level of engagement with our internal key stakeholders was extremely good and the key takehomes were solid. Overall, I was very impressed with the job the Molekule group did and would definitely re-engage with them"

Top 5 Global Pharmaceutical Company, Switzerland

Global Commercial Strategy, MNC Biopharmaceutical Company, U.S. Global Commercial Insights, Top-5 Pharmaceutical Company, U.S.



#### **SENIOR DIRECTOR**

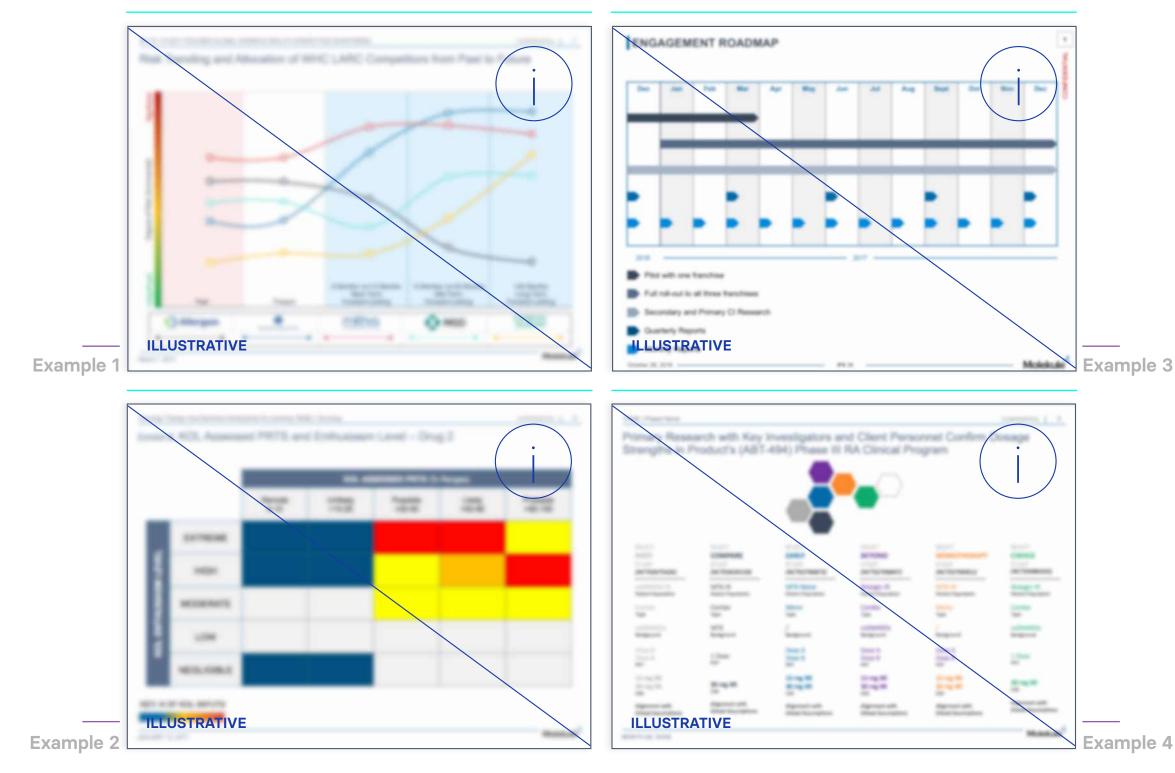
"There are few and far between [competitive intelligence] agencies that do the job ethically and right - collecting solid intelligence findings and reporting it properly, strategically and actionably. Molekule Consulting does just that - after 23 years in the industry on the client-side, inside the walls of Pharma, I can wholeheartedly endorse the Molekule [Consulting] team."

Global Competitive Intelligence, Major Pharma, Europe



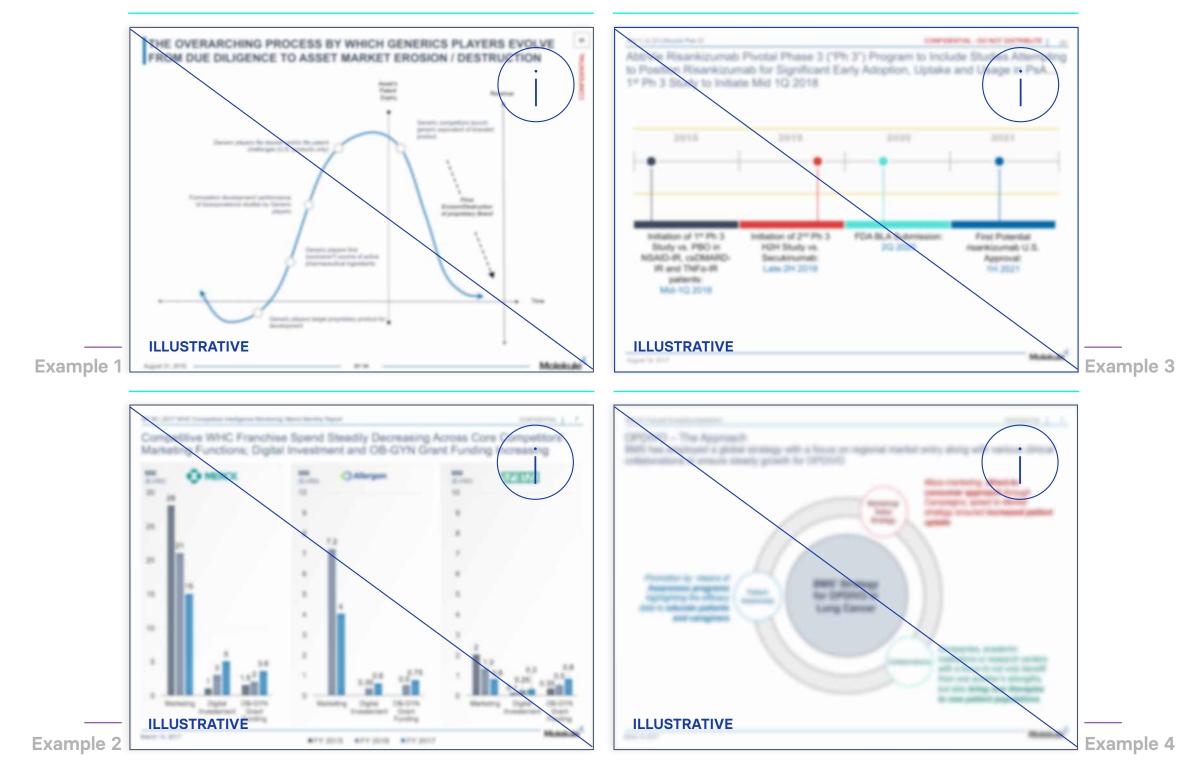
# Sample framework





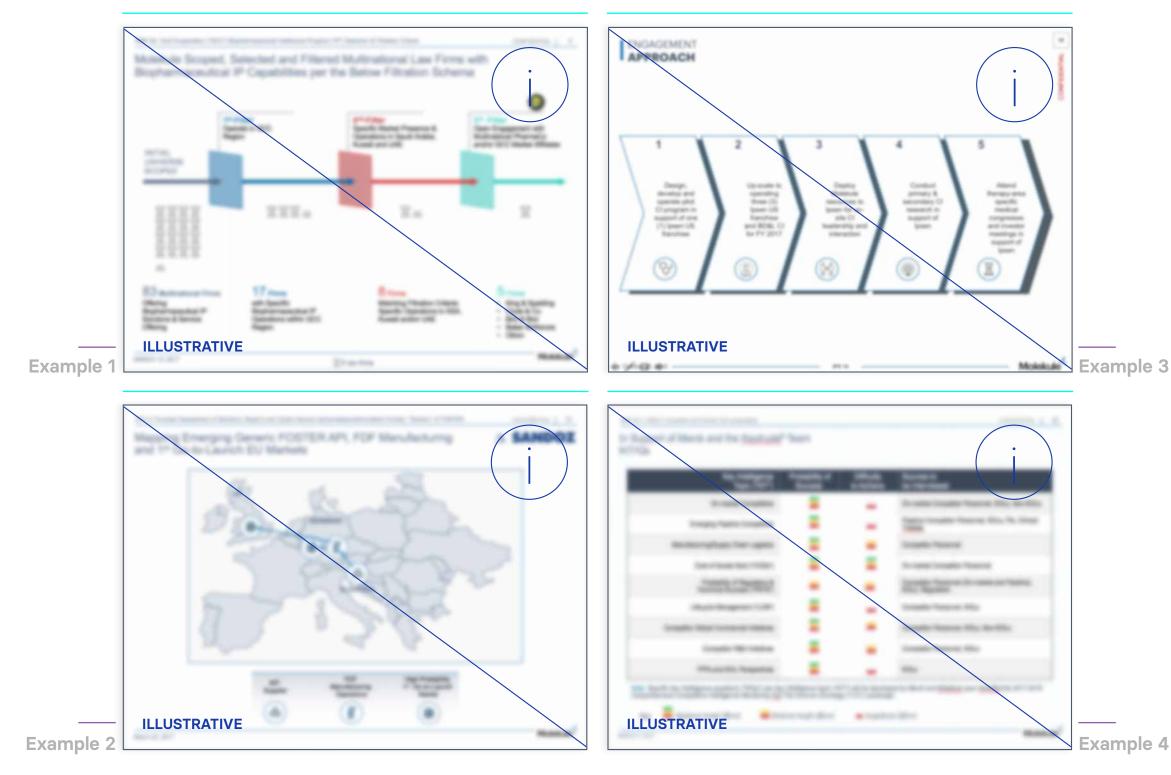
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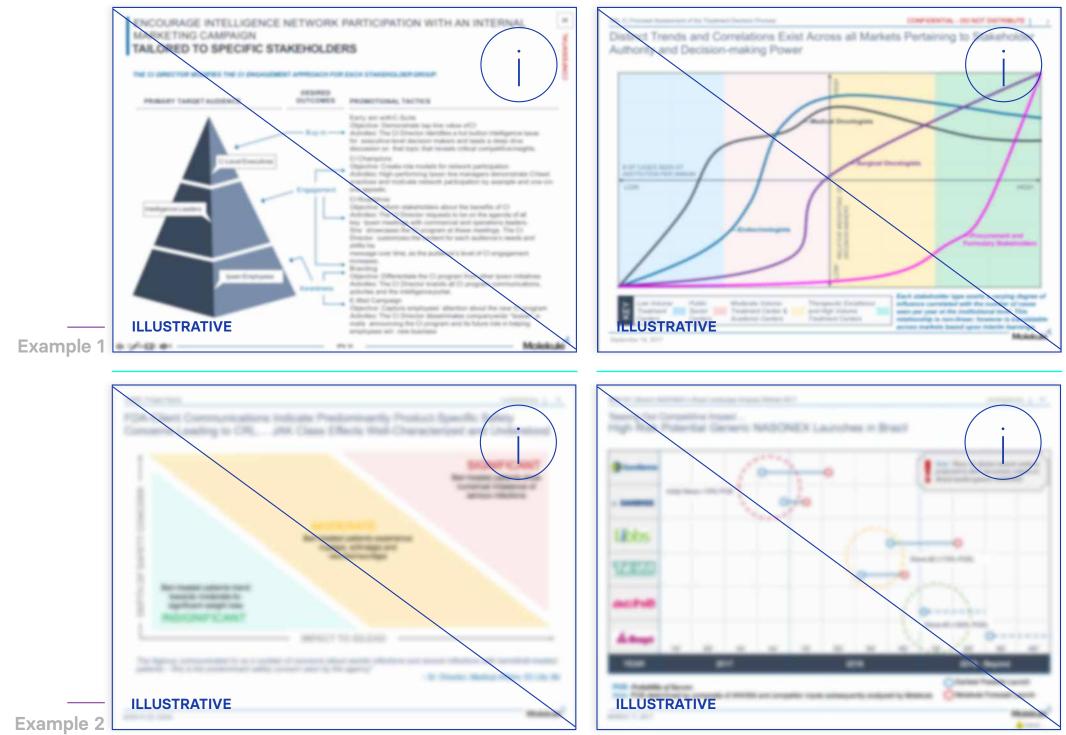
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Example 4

Example 3



# Case studies



#### Molekule Case Studies: In Support Of A Top-10 Ethical MNC Biopharma

## SITUATION

Our client faced near-term direct competition from both generic and novel FDC HIV ARV assets.

## ACTION

In support of a Top-10 ethical MNC biopharma player, Molekule conducted a comprehensive landscape monitoring of the HIV market for FDC ARV generics – either direct ANDA competitors to established brands of novel FDCs of generics components. We worked with a Director of Strategic Planning to assess the impact and implications of generic threats to established ARV agents, as well as novel FDC ARV agents.

### RESULTS

Molekule accurately identified a short list of key generic competitors poised to enter the FDC ARV market. Accordingly, our client was able to correlate its manufacturing of product to scale with the forthcoming genericization, conferring significant cost savings to our client.

#### MOLEKULE CONDUCTED **COMPREHENSIVE LANDSCAPE** MONITORING





Congress Coverage

\$

..... **Payer Interviews** 

**INCLUSIVE OF:** 



**KOL Interviews** 

.....

Competitor Interviews



Regulatory Stakeholder Interviews



#### Molekule Case Studies: In Support Of A Top-5 MNC Ethical Pharma

## SITUATION

Our client sought high value antibiotic targets for in-licensing, acquisition and/or partnership.

## ACTION

Molekule was engaged by a Top-5 MNC U.S.-based ethical pharmaceutical player to conduct a targeted assessment of the market dynamics and associated implications of novel antibiotics and associated potential licensing partnerships/ agreements in select markets including the U.S., Big-5 EU and Japan. Our client was an Associate Director of Business Development and Licensing and the overall engagement enabled our client to elucidate BD&L opportunities in the U.S., Big-5 EU and Japan markets for key antibiotic assets.

### RESULTS

Molekule assessed a wide-spanning universe of potential BD&L targets and opportunities. We winnowed this universe to high and moderate potential opportunities. Thereafter, we developed a short-list of warm, high potential BD&L targets, for which our client's BD team performed internal due diligence and negotiations.

#### **MOLEKULE CONDUCTED A BUSINESS DEVELOPMENT & LICENSING DUE DILIGENCE TARGETED CI ASSIGNMENT**



..... **Congress Coverage** 



.....

2019 Perspectives

**INCLUSIVE OF:** 



**KOL Interviews** 

**BD&L** Target Interviews



#### Molekule Case Studies: In Support Of A Especialty Biopharma

### SITUATION

Our client was engaged in the highly competitive IBD space and needed a focused and robust universe of KIT/Qs answered to better address emerging competitive dynamics.

## ACTION

Molekule was engaged by a specialty gastroenterology player to conduct comprehensive congress coverage of the UEGW and ACG congresses in support of a blockbuster anti-TNF asset. Our client was a Senior Manager of Global Competitive Intelligence. Engaging together, Molekule depicted clear answers to the client's high, medium and low priority KIT/Qs, enabling the client company to position itself for robust success in the gastroenterology space, forward-looking in the U.S. and EU.

## RESULTS

Molekule furnished our client high impact, accurate, timely and actionable strategic insight and intelligence leveraging congresses as venues flush with high value human sources resulting in our client hardening competitive pinch points and elucidating blind spots

#### MOLEKULE WAS ENGAGED TO CONDUCT **COMPREHENSIVE CONGRESS COVERAGE**



2019 Perspectives

#### **INCLUSIVE OF:**



**KOL Interviews** 



**Competitor Interviews** 



#### Molekule Case Studies: In Support Of A Major EU Biopharma

### SITUATION

Our client wanted to understand competitive commercial strategies across global mid-sized biopharmaceutical players.

## ACTION

Molekule was engaged by a large cap EU-based biopharmaceutical player to conduct a targeted assessment of novel strategic implementation models across mid-sized (i.e.- \$300MM - \$750MM market capitalization) biopharmaceutical players' approaches to global market access and go-tomarket strategy. Our client was a Senior Director of Marketing Analytics and Business Insights.

## RESULTS

Partnering together, Molekule and client developed keen insights and market intelligence regarding middle market capitalization competitors' global market access and go-to-market access strategies, worldwide.



Competitor Interviews

.....

#### MOLEKULE WAS ENGAGED TO **CONDUCT A TARGETED CI ASSEMENT MARKET** ACCESS & GO-TO-MARKET STRATEGY ASSESSMENT

**INCLUSIVE OF:** 



**KOL Interviews** 



**Internal Stakeholder** Interviews



#### Molekule Case Studies: In Support Of A Top-3 MNC Biopharma

### SITUATION

Our client sought market intelligence regarding competitive blunting strategies and tactics across key players and markets.

## ACTION

Molekule was engaged by a global Top-3 ethical MNC biopharmaceutical player to conduct an elucidation of competitor strategies and tactics that are leveraged to driver and/or blunt market uptake and traction of novel biopharmaceutical products in North America, LATAM and the Big-5 EU markets. Our client was a Senior Manager of Global Commercial Insights.

## **RESULTS**

Molekule developed clear, concise and actionable intelligence regarding the drivers and key factors leverageable to blunt market uptake and traction of competitor novel biopharmaceutical assets in North America, LATAM and Big-5 EU markets.

#### **MOLEKULE CONDUCTED COMPETITIVE LANDSCAPE MONITORING & CONGRESS COVERAGE**



Competitor Interviews

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2019 Perspectives

**INCLUSIVE OF:** 



..... **KOL Interviews** 



**Internal Stakeholder** Interviews



#### Molekule Case Studies: In Support Of A Boutique Biotech

## SITUATION

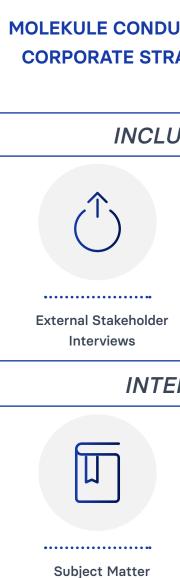
Our client sought overall firm-wide diversification via a new business and commercial model.

## ACTION

Molekule was engaged by a niche/specialist U.S.-based biopharmaceutical company with a midsized market capitalization to develop a new business plan for strategic diversification from a "onestop-shop" biopharmaceutical player into a diversified specialty pharmaceutical company. Our client was a VP of Global Strategy.

### RESULTS

Partnering together, Molekule and client developed a concerted growth and development plan including decisive diversification for the client across three (3) key therapeutic areas of potential pipeline growth opportunity.



**Expert Interviews** 

2019 Perspectives

#### MOLEKULE CONDUCTED A COMPETITIVE CORPORATE STRATEGY ASSESSMENT





Therapy Area Expert Interviews

•••••



#### Molekule Case Studies: In Support Of A Product Protection Department at Leading Japan Pharma

#### SITUATION

Our client sought a comprehensive assessment of pharmaceutical counterfeiting and illegal diversion of several key products throughout the globe.

## ACTION

Molekule was engaged by a major MNC pharmaceutical player to understand and elucidate the scope, scale and impact of global biopharmaceutical counterfeiting, parallel trade and illegal diversion as it pertains to several of its high profile products in Emerging Markets in A-P, EEMA and LATAM. Our client was a Director of Global Product Protection.

## RESULTS

Molekule developed a comprehensive assessment of product security issues affecting the client's key products globally. The assessment highlighted the impact of illicit activities for each product, listed the main players involved, and provided illicit product flow mapping to better understand regional risks. The report was used by the client to prioritize and focus its investigative efforts as well as plan out appropriate supply chain security measures to mitigate risks.

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Review of secondary domain

..... Global product flow mapping

MOLEKULE CONDUCTED COMPREHENSIVE LANDSCAPE MONITORING

**INCLUSIVE OF:** 



**Primary interviews** with relevant stakeholders

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