



# *in*Thought Capabilities

September 2020

**Rare Genetic Disease and Rare Disease**



# What Makes *inThought* Unique?

## business intelligence

A multidisciplinary team of 16 subject matter experts with deep therapeutic area expertise that provides business intelligence support to pharmaceutical, biotech, and financial companies.

Our decision support uses a variety of data points, both primary & secondary, combined with analysis & insight. This methodology allows clients to triangulate actionable intelligence and adjust strategy.

## analysis & insight

## business & science

We understand the business and science. *inThought* principals are MDs, PhDs, and MBAs with clinical, research, regulatory, and Wall Street experience.

Our proprietary *inVision* platform allows clients to have all critical intelligence in one place, customized for their particular key questions and topics, and accessible on demand.

## proprietary platform

# inThought Competitive Intelligence Expertise

*inThought is able to support a diverse body of client work.*

## Continuous Monitoring

- **Email alerts** with analysis
- **Competitive Monitoring Reports** (pipeline view, launch timelines, trial design, etc., updated periodically)
- **Landscape Assessments**
- **Social Media Monitoring** (drugs, TAs, KOLs, etc.)
- KIT and KIQ Tracking
- Analyst support
- Ongoing primary interviews with competitors, physicians, & KOLs

## Conference Coverage

- Focus on presenter and attendee feedback
- KOL engagement
- Booth messaging
- Future messaging
- Social Media Monitoring (conference name, TAs, drugs, etc.)
- Address KIQs and KITs

## Ad Hoc Projects

- Trial design analyses
- Primary research
- KOL interviews and social media influencer analysis
- Revenue forecasts
- Probability of approval
- Deep Dive assessments of companies, drugs, & MOAs
- Target Product Profiles
- Licensing opportunities
- Strategy workshops
- BD due diligence

# inVision Dashboard Example

**inThought**

Complement Mediated Diseases

Lead: [Roshni Basu](#)

Topics / KIQs / Alerts / Posts / Documents / Conferences / Settings

SEARCH  
Options  
Hub

**PAROXYSMAL NOCTURNAL HEMOGLOBINURIA (PNH)**

PNH pipeline

PNH Timeline

Soliris

Ultomiris

Akari

[Expand](#)

**GEOGRAPHIC ATROPHY (GA)**

GA pipeline

GA timeline NEW APR 7

Zimura

Other GA therapies in development

**COMPLEMENT 3 GLOMERULOPATHY (C3G)**

LNP023 in C3G

C3G pipeline

C3G timeline

Avacopan

Danicopan NEW APR 7

**AMYOTROPHIC LATERAL SCLEROSIS (ALS)**

ALS timeline NEW APR 9

**DOCUMENTS** [View All](#)

Complement Drugs  
Dec 23, 2019

Alexion Deep Dive  
Dec 18, 2019

ALXN Deep Dive Scope  
Aug 30, 2019

**CONFERENCES**

ASH 2019  
Dec 6, 2019 - Dec 10, 2019

**RECENT ALERTS** [View All](#)

Impact: High Moderate Low

**Alexion to initiate phase 3 study of Ultomiris for patients with severe COVID-19**

Alexion plans to initiate a global phase 3 clinical trial of using Ultomiris to treat patients with severe pneumonia or acute respiratory distress syndrome due to COVID-19. The study is expected to enroll 270 patients and will begin in May 2020.

The FDA has reviewed and accepted Ultomiris' IND application for treatment of severe COVID-19.

**Analysis:**

The trial is based on published preclinical data in animal models with viral pneumonia that suggests inhibition of complement pathway can lower cytokine and chemokine levels which can reduce lung inflammation. Preclinical evidence of patients using Soliris through compassionate use program has also suggested complement inhibition may improve COVID-19-mediated lung injury.

Apr 20, 2020 [Source: Alexion Press Release](#)

**CORIMUNO-19 trial to test Soliris**

The Assistance Publique - Hôpitaux de Paris will test Soliris (eculizumab) in a cohort of about 120 COVID-19

Topic folders organized by theme

Link to up-to-date KIQs

Provides a place to recall alerts and posts

Curated documents for the site

Links to conference data

# Continuous Monitoring Examples (1)

## Email Alerts

*inVision connects CI teams to timely alerts and strategic implications based on therapeutic areas, clinical trials, and MOAs of interest.*

### Phase 2 study of Alexion's danicopan in C3G and IC-MPGN delays completion date

Apr 07, 2020

Source: Clinicaltrials.gov NCT03459443

Alert Sent: on  
Apr 09, 2020

#### Description:

Achillion, now Alexion, delays completion date for its proof-of-concept phase 2 study of danicopan for a 12-month treatment in patients with C3G and IC-MPGN. The study, started in June 2018, is recruiting 22 participants. The primary completion date is anticipated to be in June 2020 instead of December 2019, and the study completion date is pushed back from May 2020 to June 2021.

#### Analysis:

Danicopan has received orphan drug status for C3G in the US and EU. It is also being developed for PNH and has received Breakthrough therapy designation in US and PRIME designation in EU. The delay in the study can be attributed to COVID-19 and will push back the development and approval of danicopan in C3G.

### Seneca Biopharma has positive meeting with FDA regarding phase 3 trial for NSI-566 in ALS

Apr 09, 2020

Source: Seneca Biopharma Press Release

Alert Sent: on  
Apr 09, 2020

Archive

#### Description:

Seneca Biopharma held a Type C meeting with FDA to discuss the clinical development plans for NSI-566 in treating ALS. With positive data and feedback from its phase 1 and phase 2 trials for NSI-566, the company believes the drug can move to phase 3 of clinical study and is currently in the process of developing the protocol for further review. NSI-566 is a spinal-cord derived neural stem cell line therapy that helps rebuild neuronal tissue and secrete growth factors that protect the spinal cord neurons from further damage.

#### Analysis:

NSI-566 has received orphan drug designation in the US for treatment of ALS. It is also being developed for treatment of ischemic stroke and chronic spinal cord injury.

LESS

- inThought analysts continually monitor **corporate press releases, investor presentations, conference abstracts, and clinical trial records** to provide timely analysis of relevant events
- Analysis is customized and includes implications that are specific to the client's portfolio
- These alerts are prioritized on inVision as High, Medium, and Low priorities and emailed to client's CI teams
- inVision allows CI teams to keep a pulse on key therapeutic areas, clinical trials, and MOAs

Impact:

High

Moderate

Low

# News Alert Example



## Biocryst doses first patients in its BCX9930 clinical trial for PNH patients

Mar 05, 2020

Source: Biocryst Press Release

Alert Sent: on  
Mar 05, 2020

### Description:

Biocryst started dosing first PNH patients with its BCX9930 in part 3 of its ongoing phase 1 clinical trial. The study is designed evaluate the safety and efficacy of BCX9930 twice daily (BID) in 16 participants for 28 days. Patients are split into two cohorts treated with either a low dose regiment of 50 mg and 100 mg BID for 14 days each or a high dose regiment with 200 mg and 400 mg BID for 14 days each. Key markers including levels of LDH, hemoglobin and reticulocytes will be evaluated. Data is expected to be reported in 2Q2020. BCX9930 is an oral small molecule factor D inhibitor in the complement pathway.

### Analysis:

In October 2019, Biocryst reported results from the SAD and MAD portions of the phase 1 trial in healthy subjects which showed >90% inhibition of the alternative complement pathway at 1200mg dose. The drug was safe and well tolerated, except occurrence of self-limiting rash in certain subjects in the MAD study. If Biocryst can show successful proof of concept data from this trial, the company would be able to advance the factor D inhibitor program across other target indications in the complement pathway.

LESS

Impact:

High

Moderate

Low

# Continuous Monitoring Examples (2)

## Email Alerts

*inVision connects CI teams to timely alerts and strategic implications based on therapeutic areas, clinical trials, and MOAs of interest.*

### Clinical Trial Monitoring

- Trial results (e.g., press release)
- Trial delays
- Trial completions
- New trials
- Endpoint updates
- Trial size expansions

### Investor Presentations

- Management commentary and strategy
- Q&A capture

### Earnings Coverage

- Revenue tracking
- Industry trends
- Management commentary and strategy
- Q&A capture

#### Roche completes the HIBISCUS I trial of etrolizumab in UC

Mar 30, 2020

Source: [ClinicalTrials.gov record NCT02163799](#)

Alert Sent: on  
Mar 30, 2020

#### Description:

Roche has completed its phase 3 HIBISCUS I trial in ulcerative colitis.

#### Ozanimod phase 3 trials in CD pushed back by 2 years

Mar 25, 2020

Sources: [ClinicalTrials.gov record NCT03440372](#),  
[ClinicalTrials.gov record NCT03440385](#),  
[ClinicalTrials.gov record NCT03464097](#),  
[ClinicalTrials.gov record NCT03467968](#)

Alert Sent: on  
Mar 25, 2020

[Copy URL](#)

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[Edit Analysis](#)

[Archive](#)

#### Description:

Bristol has extended the phase 3 trials of ozanimod for Crohn's disease by 2 years. The primary completion dates of the two pivotal induction studies have been pushed out from February and March 2020 to March 2022, and the primary completion date for the maintenance study has been extended from April 2021 to March 2023. The long-term extension study is also extended and now has a primary completion date of March 2024.

#### Implications:

An extension of 2 years is unlikely to be solely related to COVID-19, but the impact of the ongoing pandemic likely contributed. The target action date for the resubmitted NDA for ozanimod in multiple sclerosis is today, and increasingly looks to have been missed. The agency's action today was largely viewed as a bellwether for the FDA's ability to approve a drug in the middle of a pandemic. Ozanimod is widely expected to be approved, but any delay to its approval due to the ongoing coronavirus pandemic could have a significant impact on its overall drug development program, especially given the end-of-year approval deadline required to fulfill the Contingent Value Rights (CVR) tied to the Celgene acquisition.

#### Ra Pharma 4Q2019 Earnings: Zilucoplan

Feb 28, 2020

Source: [Ra Pharma Press Release](#)

Alert Sent: on  
Feb 28, 2020

#### Description:

Ra Pharma 4Q2019 earnings report highlighted the events:

- In February 2020, Ra Pharma published results of clinical trial of zilucoplan in patients with gMG.
- Enrollment in phase 3 clinical trial of zilucoplan ongoing, with top-line results expected in early 2021 ([ClinicalTrials.gov NCT04115293](#)).
- In December 2019, first patient dosed in Phase 3 zilucoplan in IMNM, with top-line results expected half of 2020 ([ClinicalTrials.gov NCT04025032](#)).
- In January 2020, Ra Pharma received clearance for the HEALEY ALS Platform Trial at Mass General as one of the first clinical candidates.
- In October 2019, Ra Pharma announced its merger with UCB acquisition of Ra Pharma expected to close first quarter of 2020 with an equity value of approximately \$1 billion.

Attachments: [Ra Pharma 4Q2019 Report.pdf](#)

#### Alexion presents at the Leerink Global Healthcare Conference; phase II study of ALXN1830 (IV) in WAIHA is ongoing

Feb 26, 2020

Sources: [Alexion at Leerink](#), [ClinicalTrials.gov identifier: NCT04365128](#)

[Copy URL](#)

[Edit Analysis](#)

[Archive](#)

#### Description:

No update on plans for ALXN 1830 in ITP. Management confirms they are moving ahead with ALXN 1830, acknowledging they had manufacturing issues in 2019. Study has started and is ongoing, with no safety disclosures warranted at this time.

**Are you really going to participate in FcRn or should we assume that that's something that you're going to sort of - it's going to pass you by.** So we're still moving ahead with 1830. Last year, we did have some CMC manufacturing issues, so we have to redo a whole new loss before we could put that in patients again, and so that study is started and ongoing and we have not seen anything that would warrant any safety or any other disclosure at this point. So, we're moving ahead with that.

#### Analysis:

During Leerink's Global Healthcare conference, a pointed question was posed to the Alexion management team in regards to FcRn. Alexion has confirmed they will be moving forward with ALXN 1830 in WAIHA and noted the delay was due to manufacturing issues. Investors continue to express their frustrations with Alexion's strategic direction, which they feel is reflected by a depressed share price.

# Competitive Intelligence (CI) Landscape

## Sample Work





# Continuous Monitoring Overview

Topic	Slide
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# Catalyst Tracker

## *Sickle Cell Disease*



Event	Expected Timing
NHLBI SCD Advisory Committee meeting	May 31, 2019
Results from full HOPE <b>voxelotor</b> study to be presented at EHA	June 2019
<b>Crizanlizumab</b> regulatory filing	1H19
First SCD patient expected to be infused with <b>CTX001</b>	mid-2019
<b>Voxelotor</b> filing	4Q19
Initiation of confirmatory <b>voxelotor</b> TCD study	2H19
Initiation of phase 3 <b>LentiGlobin</b> HBG-210 study	by end 2019
<b>Inclacumab</b> IND submission	2021
<b>LentiGlobin</b> filing	2022

Note: As of May 31, 2019

## The burden of SCD is significant

- Estimated U.S. prevalence: 100,000 individuals
- Life expectancy (U.S.): 45-58 years
- Annual U.S. healthcare costs: over \$1B

## Current therapies are limited

### Prevention of complications

- Hydroxyurea
- L-glutamine

### Treatment of complications

- Pain management
- Antibiotics

### Curative

- Hematopoietic stem cell transplantation

## Gene editing/replacement and other drug development and regulatory advances have renewed interest in SCD

- Potential for at least 3 new SCD approvals in the next 3 years (crizanlizumab, LentiGlobin, voxelotor)
- FDA's recent willingness to accept hemoglobin levels as a surrogate endpoint is a watershed moment for the field

## SCD may pose unique challenges for marketers of new agents

- Access to higher priced therapies may be an issue for some SCD patients, especially in developing regions
- SCD patients are perceived to be skeptical of the medical establishment and poorly compliant; these observations could be biased or related to the relative lack of acceptable therapies at present

# Pipeline Overview: Sickle Cell Disease

## Preclinical Pipeline

### Pipeline Landscape

Mitapivat; Agiros PKR activator	ARQ 092; PO ArQule, Univ of Illinois Pan-AKT inhibitor	EdX-17; parenteral EpimedX Plant growth factor	DRX-194 DeuteRx Deuterium stabilized single enantiomer	Undisclosed; IV Maxcyte/NIAID Non-viral CRISPR mediated gene therapy
AIC-6020 PHD Biosciences Antioxidant (unspecified)	HBI 002; PO Hillhurst Bio Heme oxygenase modulator	MEDI 6012 (ACP501); IV AstraZeneca Recombinant human LCAT	Anti-inflammatory enzyme inhibitors; PO PHD Biosciences	No designation Homology/Novartis AAV based gene therapy
PNQ 103; PO Impetis Adenosine A2B receptor antagonist	NM-96; PO PHD Biosciences Antioxidant	Vacno SynZyme Technologies Caged NO labeled albumin	No designation; PO Orphagen Pharmaceuticals Orphan nuclear receptor antagonists	No designation Fulcrum Therapeutics Small molecule gamma globin activator
			No designation; IV CSL Behring Plasma derived haptoglobin and hemopexin	No designation; IV Genethon/INSERM, Stanford U Lentiviral gene therapy targeting HBB
			Keap1ASO Ionis Antioxidant genes inducer	No designation; IV Editas CRISPR/CAS9 targeting HBB
			KIF1ASO Ionis gamma-globin inducer through regulation of BCL11A	Sirolimus (rapamycin) Rare Partners, Univ. of Ferrara HbF inducer
			Undisclosed Syros Single gene modulator	




 Antioxidant competitor


Small Molecule	Protein	Polysaccharide	Cell Therapy
Monoclonal Ab	Gene Therapy	RNAi / nucleic acid	Undisclosed

# Pipeline Overview: Sickle Cell Disease

## Clinical Pipeline

Pipeline Landscape

PHASE I	PHASE I/II	PHASE II	PHASE III	MARKETED
<b>Farydak</b> (panobinostat); PO** Novartis <i>HDAC inhibitor</i>	<b>LentiGlobin</b> (BB305); IV Bluebird Bio <i>santi-sickling beta-globin gene</i>	<b>IMR-687</b> ; PO Imara <i>PDE9A inhibitor</i>	<b>Brilinta</b> (ticagrelor); PO AstraZeneca <i>P2Y<sub>12</sub> platelet inhibitor</i>	<b>Droxia</b> (hydroxyurea); PO Bristol-Myers Squibb <i>SC hemoglobin polymerization inhibitor</i>
<b>EPI-01</b> ; PO EpiDestiny/Novo <i>cytidine deaminase inhibitor</i>	<b>CTX-001</b> ; IV CRISPR Therapeutics/Vertex <i>CRISPR/Cas9 targeting BCL11A</i>	 <b>Sanguinate</b> ; IV Prolong <i>dual mode CO and O<sub>2</sub> delivery therapeutic (pegylated Hb)</i>	 <b>rivipansel</b> (GMI-1070); IV Pfizer/GlycoMimetics <i>pan-selectin inhibitor (E, L, P)</i>	<b>Siklos</b> (hydroxyurea); PO Addmedica; age: 2+ <i>SC hemoglobin polymerization inhibitor</i>
<b>PF-04447943*</b> ; PO Pfizer <i>PDE9 inhibitor</i>	<b>inclacumab</b> ; IV Global Blood Therapeutics/Roche <i>pan-selectin inhibitor</i>	 <b>Sevuparin</b> ; IV Modus <i>cell adhesion molecule inhibitor</i>	<b>voxelotor</b> (GBT440); PO Global Blood Therapeutics <i>sickle Hb modulator</i>	<b>Endari</b> (L-glutamine); PO Emmaus <i>antioxidants, protein synthesis modulators</i>
<b>SCD-101</b> ; PO Invenux <i>botanical sickling inhibitor</i>	<b>BIVV-003</b> , IV Bioverativ (Shire)/Sangamo <i>ZFN editing targeting BCL11A</i>	<b>Ilaris</b> (canakinumab); IV Novartis <i>IL-1b mAb</i>	<b>crizanlizumab</b> (SELG1/SEG101); IV Novartis <i>P-selectin inhibitor</i>	
		<b>IW-1701</b> (olinciguat); PO Cyclerion (Ironwood) <i>guanylate cyclase agonist</i>		

 *acute treatment only*

Small Molecule

Monoclonal Ab

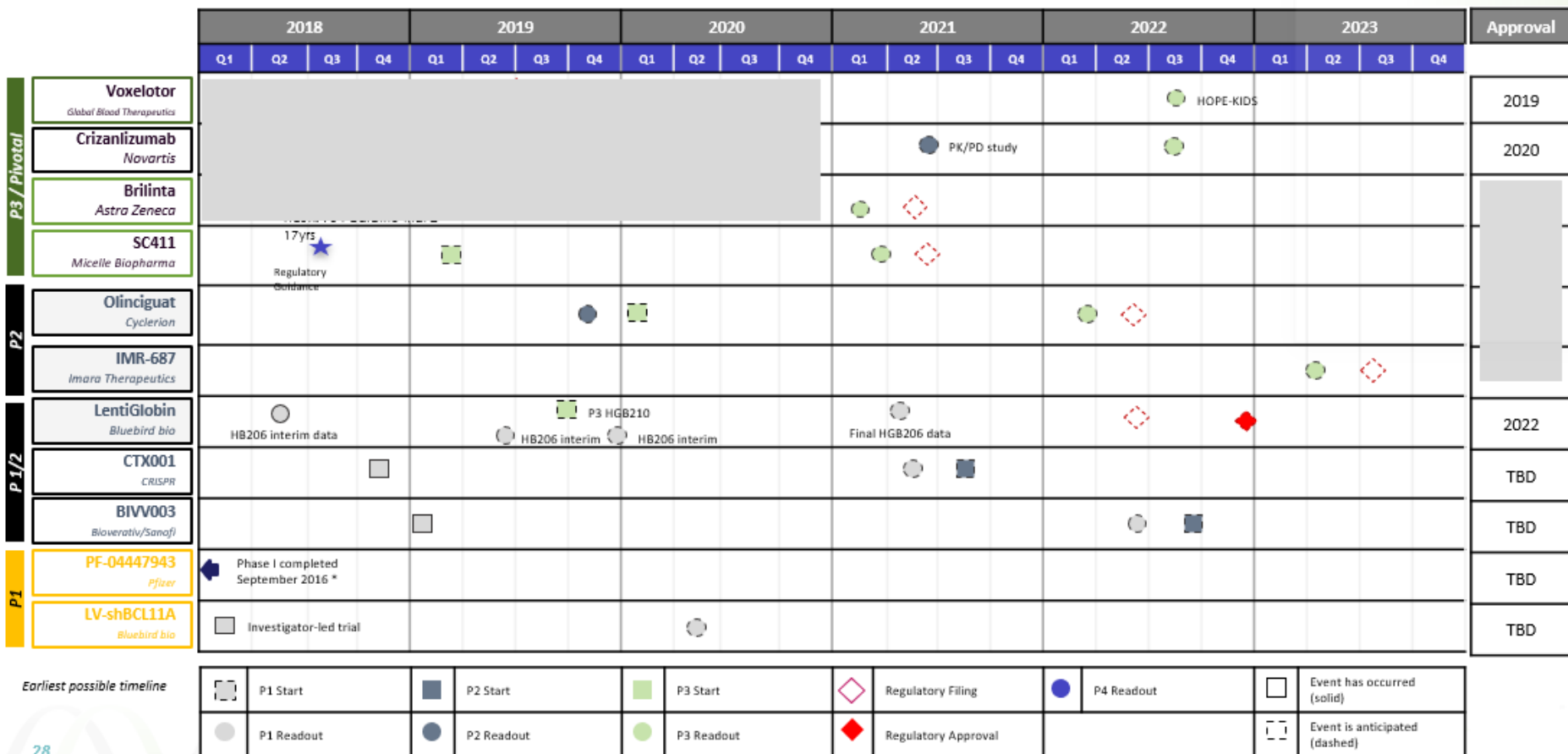
Protein

Gene Therapy

Polysaccharide

# Development Timelines: Sickle Cell Disease

Development Timelines



# Clinical Trial Overview

## Sample Work



# Clinical Trial Overview: Sickle Cell Disease

## Voxelotor (GBT440)

Clinical Trial Overview

Trial ID	Phase	Patient Population	Trial Length	Arms	Key Trial Endpoints
<b>HOPE</b> <a href="#">NCT03036813</a> <i>fully enrolled</i>	3	<b>Inclusion</b> <ul style="list-style-type: none"> <li>Age 12-65</li> <li>At least one episode of VOC in the last 12 months</li> <li>Hb <math>\geq 5.5</math> and <math>\leq 10.5</math> g/dL</li> </ul> <b>Exclusion</b> <ul style="list-style-type: none"> <li>&gt;10 VOCs requiring clinic visit</li> <li>Regular RBC transfusion</li> </ul>	Start Date: Dec. 2016 <b>Primary completion:</b> Oct. 2019  Estimated Length: 2 years, 10 months	<ul style="list-style-type: none"> <li>GBT440 (Dose 1)</li> <li>GBT440 (Dose 2)</li> <li>Placebo</li> </ul> N=300	<b>Primary</b> <ul style="list-style-type: none"> <li>Proportion with increase of Hb &gt; 1g/dL (baseline to 24W)</li> </ul> <b>Secondary</b> <ul style="list-style-type: none"> <li>Change in hemolysis measures (24W)</li> <li>Annual rate of VOCs (72W)</li> </ul>
<a href="#">NCT02850406</a> <i>recruiting</i>	2	<b>Inclusion</b> <ul style="list-style-type: none"> <li>Age 4-17 (child)</li> <li>HbSS or HbS <math>\beta^0</math> thalassemia</li> <li>Hb <math>\leq 10.5</math> g/dL (parts B &amp; C)</li> </ul> <b>Exclusion</b> <ul style="list-style-type: none"> <li>VOC or ACS (within 14 days of signing consent)</li> <li>Requires chronic transfusion</li> <li>Transfusion in past 30 days</li> </ul>	Start Date: May 2016 <b>Primary completion:</b> May 2022  Estimated Length: 6 years	<ul style="list-style-type: none"> <li>Part A – GBT440, PO, 1 day (single dose)</li> <li>Part B – GBT440, PO, QD to 24W</li> <li>Part C – GBT440, PO, QD to 48W</li> </ul> N=125	<b>Primary</b> <ul style="list-style-type: none"> <li>PK (Part A)</li> <li>Change in hemoglobin (Part B, 24W)</li> <li>Change in cerebral blood flow via TAMM TCD velocity (Part C, 48W)</li> </ul> <b>Secondary</b> <ul style="list-style-type: none"> <li>Clinical measures of hemolysis</li> <li>TEAEs</li> <li>PK</li> </ul>
<a href="#">NCT02285088</a> SAD/MAD study <i>completed</i>	1	<b>Inclusion</b> <ul style="list-style-type: none"> <li>18-60 (adult) with SCD</li> <li>Healthy volunteers included</li> </ul> <b>Exclusion</b> <ul style="list-style-type: none"> <li>Alcohol consumption restrictions</li> <li>SCD and hemoglobin level &lt;6 g/dL or &gt;10.4 g/dL</li> </ul>	Start Date: Dec. 2014 <b>Primary completion:</b> Mar. 2017  Estimated Length: 2 years, 3 months	<ul style="list-style-type: none"> <li>GBT440; PO,QD</li> <li>Placebo</li> </ul> N=133	<b>Primary</b> <ul style="list-style-type: none"> <li>AEs</li> </ul> <b>Secondary</b> <ul style="list-style-type: none"> <li>Blood and plasma concentration</li> <li>% of hemoglobin occupied or modified by GBT440</li> </ul>



# Clinical Trial Endpoint Comparison

Clinical Trial Overview

## Sickle Cell Disease

The majority of Phase 3 SCD endpoints focus on VOCs; only voxelotor is using change in hemoglobin levels as a primary endpoint in Phase 3. LentiGlobin is also assessing Hb levels in a Phase 1/2 trial, with plans to do the same in Phase 3.

	Drug	Trial	Age	Size	Estimated Length	Key Endpoints			
						Change in Hb	Days with SCD symptom exacerbation	Rate of VOCs requiring clinic visit	Rate/number of VOCs
Phase 3	voxelotor	HOPE <a href="#">NCT03036813</a>	12-65	400	2 years, 6 months	1°	2°		
	crizanlizumab	STAND <a href="#">NCT03814746</a>	12+	240	3 years, 1 month			1°	2°
	Brilinta	HESTIA3 <a href="#">NCT03615924</a>	2-17	200	2 years, 1 month			2°	1°
	SC411	ASCENT <a href="#">NCT02604368</a>	5-17	210	1 years, 9 month			2°	1°
Phase 1/2	LentiGlobin	HGB-206 <a href="#">NCT02140554</a>	12-50	50	6 years, 5 months	1°			2°

### Other Endpoints of Interest

- Opioid and non-opioid use
- Time to first crisis
- Number of ACSs (Acute Chest Syndrome)
- Overall rates of hospitalization
- Number of days hospitalized

# Primary Research

## Sample Work



# Primary Research: Hemophilia

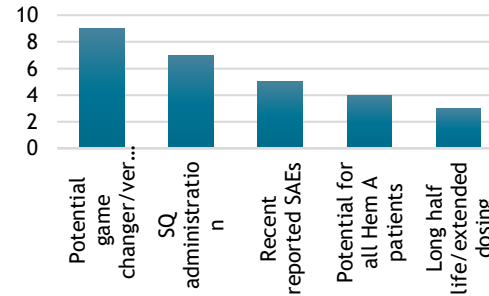
## US/EU Physician Interviews (Perception of Emicizumab)

Potential in inhibitor patients, SQ administration, and the recent reported SAEs were top of mind with physicians (n=15) when asked about their perception of emicizumab.

In response to an initial question about their overall perception of emicizumab:

- 9 of 15 physicians viewed the drug as a potential game changer or potentially very beneficial for patients with inhibitors
  - Only 4 physicians initially discussed emicizumab's potential for all hemophilia A patients
- Many physicians also highlighted SQ administration as well as the potential for extended dosing
  - Relative to extended dosing, most physicians and nurses discussed emicizumab as a once weekly drug
- 5 physicians mentioned the reported thrombotic SAEs up front, for some this was the first topic mentioned

Overall Perception



### DETAILED FINDINGS

#### QUOTES

- “Will be a fabulous drug for patients with inhibitors. Safety is a major issue, with current information will not use it in patients without inhibitors” – *German physician*
- “Efficacy reports are good. Sub Q. Patients who have been in trial like the drug. Recent AE report have shaken some of the enthusiasm about the drug” – *U.K. Physician*
- “Home run for inhibitor patients. For non-inhibitor patients, already have a safe and effective therapy. ACE 910 needs to as safe and effective. Sub Q very important advantage” – *U.S. Physician*
- “Will be a big splash when it comes out, but still lot of details to be ironed out that could make a difference on how much it's utilized.” – *U.S. physician*

# Primary Research: Gastroenterology

## KOL Interviews (n=5)

	KOL 1	KOL 2	KOL 3	KOL 4	KOL 5
8. What type of physician sees these patients? Who is the lead treater?	Many come straight to the gastro. This allows the XX to get more attention. Some might mention it to a PCP during a physical or have it noticed incident to something else	I think the majority see a primary care doc. Those seeing a gastroenterologist are going to be the severe ones.	It depends on insurance coverage. Some don't have a choice and are forced to see a PCP, while others have direct access. If XX is the primary complaint, then best to see a gastro.	I'm in private practice and because of insurance the types of patients I see are not going to the PCP for this	Definitely <u>gastros</u> see the more severe cases. Sometimes PCPs feel comfortable and some still refer to gastro practices.
Consensus	Severe XX patients are most likely to be treated by their gastroenterologists. Mild cases, the majority, are handled by a PCP.				
9. Is XX their primary complaint?	We see it as both a primary complaint and secondary issue. It is probably evenly distributed.	There are some, but mostly only the severe ones. <u>The majority of folks</u> are diagnosed incidentally to something else.	Often it is a secondary situation, especially for mild patients. If XX is the main feature you'd want to see gastro.	If it's effecting the lower <u>quadrant</u> I would say 80% of the time they are coming in for something else. 20% of patients come in just for XX.	Severe patients usually bring it up, however I think it's more common that patients don't since most are mild.
Consensus	Severe patients and some moderate will present with XX as their primary complaint. For mild cases, XX is commonly observed incident to other medical issues. KOLs suggest possibly a 20%/80% split for XX being a primary complaint vs. secondary complaint for patients.				

# Earnings Coverage Sample Work



# Earnings Coverage (1)

## Executive Summary

Coverage of quarterly earnings calls provides key insights on management strategy, pipeline updates, and details from sell-side analyst Q&A.

### Executive Summary: AbbVie 4Q19 Earnings

abbvie

#### Topline Financials

- **FY2019:** sales for AbbVie totaled \$33.3 billion, up 2.7%
- **4Q19:** sales for AbbVie totaled \$8.7 billion, up 5.3%
- **FY2019:** sales for Immunology were \$15.2 billion, down (0.8%)
- **4Q19:** sales for Immunology were \$5.17 billion, up 5.5%

#### Product Performance

- **Humira:** FY2019 sales were \$19.2 billion, representing 0.5% growth. 4Q19 sales were \$4.92 billion, down (2.9%).
  - 4Q19: U.S net revenues of \$3.97B, up 9.8%; international net revenue of \$948M, down (27%). Notable unfavorable impact of international biosimilar competition.
  - FY2019: U.S. sales up 8.6%
- **Skyrizi:** FY2019 sales were \$355 million. 4Q19 sales were \$216 million.
- **Rinvoq:** FY2019 sales were \$33M. 4Q19 sales were \$47M.

#### Guidance

- AbbVie expects to deliver standalone adjusted diluted EPS for the full-year 2020 of \$9.61 to \$9.71, representing growth of 8.1% at the midpoint.

- AbbVie expects standalone revenue growth approaching 8.0% on an operational basis
- AbbVie to provide combined guidance with Allergan after the close of the deal

#### Pipeline

- **Rinvoq:** 2Q20, PsA regulatory submission
- **Rinvoq:** 2H20, AS submission based on positive data presented at ACR 2019
- **Rinvoq:** mid-2020, phase 3 data in AD with submission plans for later in 2020
- **ABBV-3733:** TNF-steroid conjugate – early clinical efficacy data expected later this year (2020). Has the potential to serve as a platform across a wide range of indications for RA, IBD, and lupus. AbbVie is excited about this asset.
- **Skyrizi:** 2021, regulatory submissions for PsA and CD (phase 3 data anticipated in 2020)

#### Q&A

- Management states that Skyrizi and Rinvoq launches are ahead of schedule and therefore anticipated to outperform prior estimates.
- Management notes that ABBV-3733, a TNF-steroid conjugate, could deliver transformational results in its phase 2 proof-of-concept trial. This asset is deemed to have tremendous potential.

WW Sales	2017 actual (\$M)	2018 actual (\$M)	2019 actual (\$M)	2020 consensus (\$M)	2021 consensus (\$M)
Humira	18,427	19,936	19,169	↑ 19,209 (6)	↑ 19,396 (6)
Skyrizi	---	---	355	↑ 1,088 (6)	↓ 1,830 (6)
Rinvoq	---	---	47	↓ 393(5)	↓ 885 (6)

Consensus estimates compiled by Bloomberg. US\$M (# analysts)

\*Arrows signify the direction of change for estimates from the previous quarter to the current one.

*Comprehensive details are provided for revenue drivers, pipeline updates, key presentation slides, and relevant Q&A.*

Management notes that ABBV-3733, a TNF-steroid conjugate, could deliver transformational results in its phase 2 proof-of-concept trial in RA. This asset was deemed to have great potential.

Q&A

• Q: "6 PoCs (proof-of-concept) listed this year, which do you see as most transformational?"

– A: "ABBV-3733, TNF-steroid conjugate. If you look at the basic biology, **the ability to drive to deliver this very, very high potency steroid directly to the activated in the cells that are doing the damage in these diseases really has tremendous potential** in our preclinical work in our model systems we see results that are really unlike anything we've ever seen with other sorts of agents and we can deliver that kind of impact in those systems **without systemic steroid effects.**"

• [Redacted]

Pipeline Updates

abbvie

In 2020, regulatory submissions are anticipated for **Rinvoq** in **PsA** and **AS**. Further, pivotal data is anticipated for **Skyrizi** in **PsA** and **Crohn's disease**.

**Pipeline Highlights**

- **Rinvoq**: Q2'20, **PsA** regulatory submission
- **Rinvoq**: 2H'20, **AS** (ankylosing spondylitis) submission based on positive data presented at ACR 2019
- **Rinvoq**: mid-2020, phase 3 data in **AD** with submission plans for later in 2020

**Recent Events**

- **Brazilkumab**: AbbVie and Allergan announced that Allergan has entered into definitive agreements to divest **brazilkumab**, AstraZeneca will acquire **brazilkumab**, an investigational IL-23 inhibitor in Phase 2b/3 development for Crohn's Disease and in Phase 2 development for ulcerative colitis, including global development and commercial rights. This events require FTC and EC approval. Deal is expected to close 1Q'20.
- **Rinvoq**: Presented at ACR, data from the Phase 2/3 SELECT-AXIS 1 trial in which twice as many adult patients with active AS treated with RINVOQ achieved the primary endpoint of ASAS40 response at week 14 versus placebo.
- **Skyrizi**: positive head-to-head data from phase 3 study evaluating Skyrizi (**risankizumab**) compared to Cosentyx in adult patients with moderate to severe plaque psoriasis. Skyrizi met the primary endpoint of superiority for PASI90 at 52 weeks, when compared to Cosentyx.

[illegible]

# Strategy Workshops

*inThought* can lead competitive workshops. The exact focus and scope of these workshops will be determined by the client but could include focusing on competitive position in a specific TA, preparation for a new launch, or for a competitor launch.

## Workshop Design

*inThought* will work with the client to develop the design of the workshop so that it is appropriate for the attendees and effective at developing insights for the potential market

## Pre-read Materials

*inThought* will prepare pre-read material for the workshop participants that will include clinical data, trial design, competitor strategy assessments, and other relevant data

## Workshop Deck and Material

*inThought* will develop, in consultation with the client, the workshop deck as well as any graphics or materials necessary for the performance of the wargame

## Pre-workshop Prep

*inThought* team members will conduct onsite preparations either the day of or day prior to the workshop

## Workshop Execution

*inThought* will provide a report of the key findings and summaries from the workshop discussions one week after the workshop completion



## Conference Coverage Capabilities



# inThought's Unique Conference Coverage Technology

In this uncertain environment, conventions and other events are taking precautions amid the COVID-19 outbreak. Some conferences are postponing, while others are providing virtual access. Many companies are restricting travel for employees, preventing them from attending conferences. In addition, many speakers are unable to attend as several leading academic institutions have restricted physician travel for months.

inThought's web-based technology platform, inVision, can help clients **stay on top of cutting-edge scientific information and presentations, in this fluid situation.**

inVision's Conference Module is uniquely suited for biopharma companies to access relevant congress data and analysis, even if they are not attending the convention onsite. Available for an in-person or virtual conference, the system provides organized access to slide decks, presentation notes, and Q&A highlights. Data is maintained on your customized project site for an unlimited number of users. Since the COVID-19 outbreak, we have been adding **new functionality to inVision to accommodate virtual conferences and virtual debriefs.**

inThought can cover the conference for you, or we can work with your current vendor to use only the technology platform.

# Conference Coverage

## Customized inVision Homepage

The inVision conference homepage is customized based on the client's key intelligence themes (KITs) and key intelligence questions (KIQs).

### Overview

- Conference coverage schedules are customized based on client keywords and KIQs
- Schedules are uploaded to the inVision platform to allow the inThought analyst to capture presentation/poster images and notes
- Attending internal client members can also access inVision to input their own notes and images
- Presentations/posters are organized by key themes on inVision

### inVision Conference Layout

The screenshot displays the inVision Conference Layout for the FABRY > WORLD Symposium, Analyst: Matt Presby. The interface includes a top navigation bar with tabs for Sessions, Posts, Documents, Topics, KIQs, and Settings. A search bar is located in the top right corner. The main content area is divided into several sections:

- Location:** Hyatt Regency Orlando, 9801 International Drive, Orlando, Florida, USA, 32819.
- SCHEDULE:** A section with filters (Not Set) and a table of sessions. The table has columns for Time, Room, and Session. The sessions listed are:
  - 07:30AM - 11:30AM: Basic Science II: Developing Therapeutic Approaches in the Laboratory. Attending: Matt Presby.
  - 01:00PM - 04:30PM: Translational Research I. Attending: Matt Presby.
  - 04:30PM - 06:30PM: Posters (Tuesday). Attending: Matt Presby.
  - 06:30PM - 08:30PM: Satellite Symposia (Tuesday Evening). Attending: Matt Presby.
- KEY LINKS:** A section with a link to the WORLD Symposium 2020 Homepage.
- DOCUMENTS:** A section with links to various documents, including Daily Summaries for Feb 11th, 12th, and 13th, a Hard Copy Schedule, and Key Posters (WORLD 2020).
- DAILY HIGHLIGHTS:** A section with links to Daily Highlights for Feb 11th, 12th, and 13th.
- KEYWORDS:** A section with a list of keywords: Fabry, Gaucher, Pompe, CNS, and All.

### Key Themes

#### KEYWORDS

Fabry  
Gaucher  
Pompe  
CNS  
All

#### COMPETITORS

Abeona  
Audentes  
Freeline  
Denali

Topic folders to organize presentations by theme

inThought®

# Conference Coverage

## Session / Poster Overview

Conference coverage is centralized on inVision, allowing both inThought analysts and internal client team members to simultaneously contribute images, notes, and view schedules.

### Overview

- Posts are color coded based on importance and tagged to key themes
- The analyst's notes and images are compiled in one central location within the relevant session
- These notes/images can be searched on inVision by keyword, priority, and type
- Team members can view the entire post, review images, and download or email images to colleagues

### Session Title / Speaker / Time / Location

Conference Sessions

Conference Posts

Conference Documents

Conference Topics

Conference KIGs

Settings

Efficacy and Safety of Anifrolumab in Patients with Moderate to Severe Systemic Lupus Erythematosus: Results of the Second Phase 3 Randomized Controlled Trial

Tuesday  
Nov 12, 2019  
4:30pm - 4:45pm

Abs #:  
L17

Room:  
Hall B1

Session Name: Late-Breaking Abstract Session

Edit Post

Topics/KIGs 03

Add Highlight

Add Images 08

Add Notes 1

Copy URL

Type: Late-Breaking Abstract Session

Authors & Speakers:  
Eric Morand et al

Abstract Link: <https://acrabstracts.org/abstract/efficacy-and-...>

Keywords:

- anifrolumab
- AstraZeneca

Attending: Adam Schaffner

Abstract:

Background/Purpose: Anifrolumab, a human monoclonal antibody to the type I IFN receptor subunit 1, had robust efficacy in a phase 2 study in patients with active SLE. The first phase 3 trial, TULIP-1, did not meet its primary endpoint. SLE responder index (SRI4), but multiple other endpoints, including BILAG-based Composite Lupus Assessment (BICLA), suggested clinical benefit. We report results of the second phase 3 trial of anifrolumab. Methods: TULIP-2 (NCT02445899) is a randomized, double-blind, placebo-controlled trial that evaluated efficacy and safety of IV anifrolumab 300 mg vs placebo every 4 weeks for 48 weeks in patients with moderate to severe SLE despite standard-of-care (SOC) treatment. Patients met ACR SLE criteria and had SLEDAI-2K at baseline and BILAG at baseline. The primary endpoint was BICLA response at week 52. SOC was stable except

### Analyst Analysis

#### Notes

Add Note

November 12 2019 04:53PM, Adam Schaffner:

N=362 received therapy, 1:1 randomization 300mg Anifrolumab, IV, Q4W.

Primary endpoint: BICLA response at week 52. Steroids were tapered mandatorily, with no taper allowed between weeks 40 to week 52.

Primary endpoint in TULIP 2 was amended from SRI(4) to BICLA before unblinding.

BICLA response defined as:

15% of patients discontinued ani treatment while almost double discontinued placebo.

Efficacy:

BICLA reached 48% on treatment vs. 32% placebo. Separation occurred by 4 weeks.

### Presentation / Poster Images

Conference Images

Email Images


View Gallery

Manage Images

Download All Images

Download PPT

Copy URL



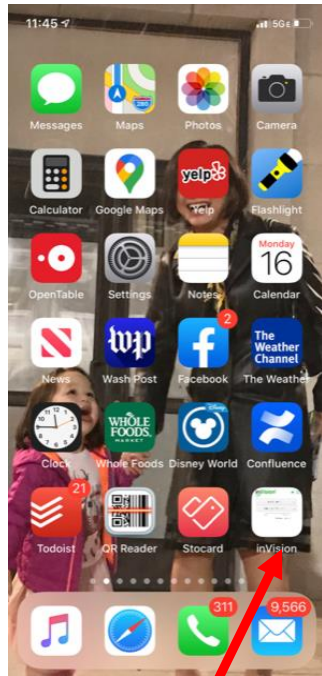
28

inThought

# Conference Coverage on Mobile Device

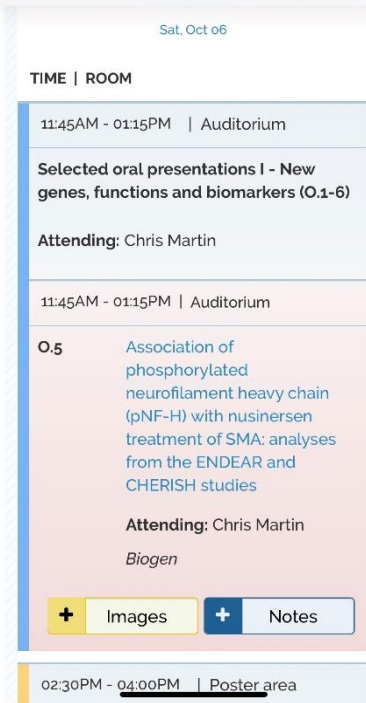
The inVision conference coverage on a mobile device is similar to the web-based layout. Notes can be directly drafted in inVision or cut and pasted from other apps, such as Notes. Images can be taken in inVision or added through photos on the mobile device.

## Icon on mobile homepage

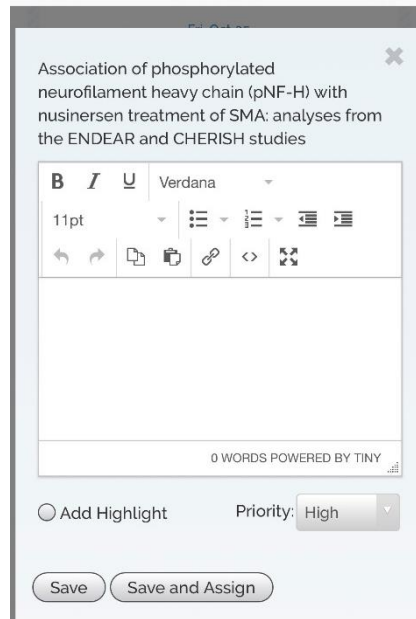


inVision icon

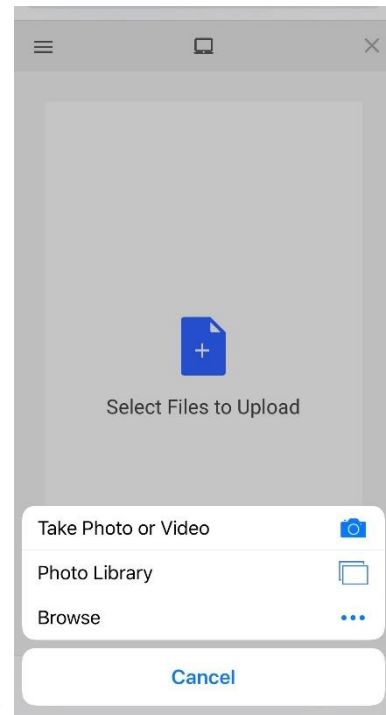
## Mobile layout



## Notes function



## Adding images



# Conference Coverage

## Booth Coverage

Booth coverage allows the inThought analyst to capture key messaging themes that are stored on inVision.

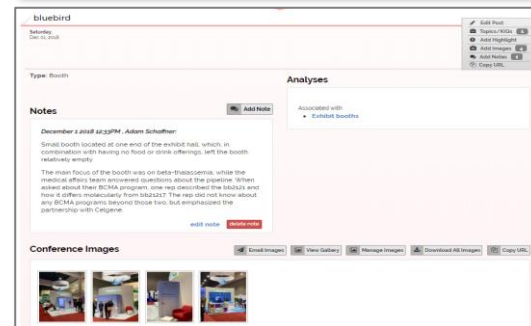
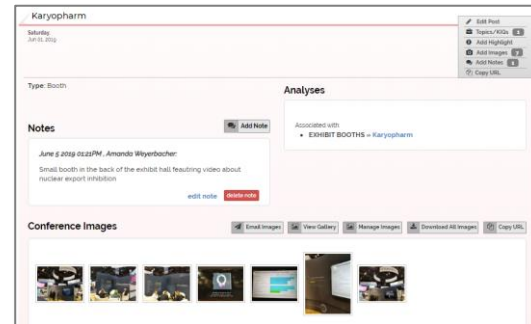
### Photos



### Commentary

- Boehringer Ingelheim has 3 booths. One main booth focused on Spiriva and it is also one of the largest in the hall.
- A mist from a large Respimat inhaler flows in the booth.
- Key messaging highlighted that *"50% of patients remain symptomatic" and promotes add on TIO."*
  - "Spiriva significantly reduced the risk of asthma worsening - 31% risk reduction"*
  - "Stay in front of asthma"*
  - "New Spiolto Respimat for further improvement beyond Spiriva Respimat"*
- Even the floor is a video of growing tree roots and huge curved screens rise from this presenting information on Spiolto. The metaphor is that Spiriva was the roots. A key message of Spiolto is "An advance in COPD care built on strong roots".
- Messaging on the screens focused on the rapid onset and improvement in LF compared to Spiriva.
- A wall focused on Respimat had a screen highlighting a study Respimat with other devices (TurboHaler etc.) and this indicated a > 50% deposition to the lungs, much better than any other device. The booth also highlights all of the drugs available with Respimat (Spiriva, Spiolto, Striverdi, CombiVent, etc.) Respimat is the only inhaler promoted.
- 30-35% of the booth focused on IPF.

### inVision Cloud Storage





# Conference Coverage

## Key Intelligence Questions (KIQs)

inVision maintains a repository of client's KIQs and relevant answers.

KEY INTELLIGENCE QUESTIONS	
Question	Answer
<a href="#">Are the results seen in the EMPA-REG OUTCOME trial considered a SGLT-2 class effect?</a>	The CVOT results in the canagliflozin CANVAS trial, which were similar to the empagliflozin CVOT results, suggest that the CV benefits seen in both trials may be viewed as a SGLT2 inhibitor class...
<a href="#">How does the diabetes community think about changing CVOTs?</a>	Potential changes include: using a lower risk population including primary prevention patients, longer follow-up, modifying endpoints including including heart failure as a primary endpoint and the...
<a href="#">How will CVOTs affect the prescribing of diabetes drugs?</a>	Presenters recommended treating diabetes patients with CVD or high CVD risk as a specific category when choosing 2nd line therapy by prescribing a diabetes drug which as shown a CVD risk reduction...
<a href="#">How will diabetes drug CVOTs affect guidelines?</a>	Presenters advocated changing ADA guidelines to include diabetes drug CVOTs and CV risk in the choice of a second line therapy after metformin.

### How will diabetes drug CVOTs affect guidelines?

**Answer:** Presenters advocated changing ADA guidelines to include diabetes drug CVOTs and CV risk in the choice of a second line therapy after metformin.

Export to Excel

Date (newest first)

Sort

Legend: High Impact Moderate Impact Low Impact Collapse All

#### Effects on Cardiovascular Outcomes

June 12, 2017

Source:

**Session Name:**  
The Integrated Results of the CANVAS Program: 2

**Date:** Mon, Jun 12  
**Time:** 03:31PM - 03:39PM  
**Description:**  
**Abstract Links:**

**Analysis:**  
The efficacy results support the hypothesis that the CV benefit is a class effect. Additionally, there was a trend towards benefit in primary prevention patients, which may support preventative use of SGLT2s over other therapies in this patient population.

#### Notes

On September 12 2017 04:13AM, Chris Martin said:

- A total of 10,142 patients were in the ITT dataset
- Canagliflozin demonstrated superiority in the primary MACE endpoint with a HR of 0.86 (0.75-0.97) as well as hospitalization for heart failure and CV death or hospitalization for heart failure
- Canagliflozin also demonstrated a potential renoprotective effect
- Unlike the empagliflozin outcome trial in which 99% of patients had CVD, only 65% of patients had CVD in the CANVAS program. The CANVAS program showed a clear benefit for patients with CVD but also a trend towards benefit in primary prevention patients.

Edit Note

# Virtual Conference Coverage

The **inVision** conference site has features enabling coverage of virtual conferences. These features also allow for attending conferences “virtually” as well as conducting virtual conference debriefs

## Overview

- inVision provides **links to virtual presentations**, whether the conference is virtual or if team members are attending “virtually.”
- The **debrief function** allows the selection of key information, including pictures of data, to be combined with summary text and analysis in a virtual debrief. Insights from the debrief can be incorporated into the conference project.
- A **virtual conference tour** can be constructed with key summaries and pictures to provide a quick summary of conference highlights with the ability to delve into more detailed information

## Virtual Debrief/Conference Summary

SUNFISH Part 1: RG7916 treatment results in a sustained increase of SMN protein levels and the first clinical efficacy results in patients with type 2 or 3 SMA

Friday, Oct 05, 2024  
3:00pm - 3:00pm

Abs #:  
P256

Session Name: Poster session 3

[View Full Post](#) [Next Post](#)

Type: Posters

Authors & Speakers:  
E. Mercuti

### Summary

The first data was presented on SUNFISH Part 1 with a data cutoff of July 6th

- 25/30 (76%) had improvement in MF-M-32 (a change from baseline in MF-M-32 score ≥1 point) after 12 months of Risdiplam treatment: 13/17 (76.5%) in the 2-11 yrs old group and 8/13 (61.5%) in the 12-24 yrs old group
- Median change in MF-M-32 at 12 months of treatment was 3.13 points: 4.17 points in the 2-11 yrs old group and 2.08 points in the 12-24 yrs old group
- A review of currently available safety data did not show any clinically significant adverse findings compared with baseline

### Key Slides

SMA Type 2 & 3 patients showed improvements in motor function

### Risdiplam treatment leads to stabilization or improvements in motor function in patients with Type 2 or 3 SMA

Endpoint : (At 12 months of treatment)	>12 months Treatment		
	All patients (n=30)*	Aged 2-11 (n=17)	Aged 12-24 (n=13)
<b>MF-M</b>			
Total MF-M change from baseline, mean (SD)	2.47 (4.17)	3.31 (4.5)	1.36 (3.57)
Total MF-M change from baseline, median (range)	3.13 (-7.3-11.5)	4.17 (-8.3-11.5)	2.08 (-7.3-5.2)
Proportion of patients who achieve improvement (i.e., a change from baseline in MF-M score ≥1), % (n)	70 (21/30)	76.5 (13/17)	61.5 (8/13)

## Virtual Presentations

### VIRTUAL PRESENTATIONS

Thu Oct 04

Avexis symposium - Gene Replacement Therapy: Treatment Paradigm Shift in Spinal Muscular Atrophy.

2:00pm - 3:30pm

[Virtual Presentation »](#)

Biogen symposium - Spinal Muscular Atrophy: Expanding Our Knowledge from Basic Science through the Multidisciplinary Team.

7:30am - 9:00am

[Virtual Presentation »](#)

Fri Oct 05

PTC Therapeutics symposium - The evolving treatment landscape in DMD and SMA.

2:00pm - 3:30pm

[Virtual Presentation »](#)



# Conference Coverage

## Daily Debrief Example



American Society of Hematology

Helping hematologists conquer blood diseases worldwide

### December 8<sup>th</sup> Highlights

Sunday highlights from ASH included NHL data on the combination of obinutuzumab/lenalidomide and the Genentech/Roche CD20:CD3 bispecific mosunetuzumab (Plenary Session).

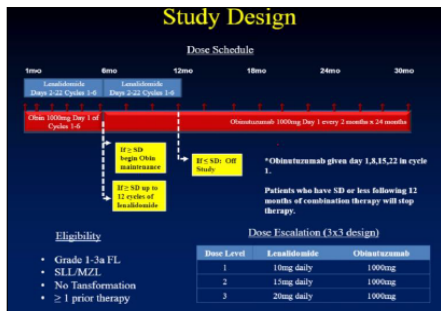
#### Indolent non-Hodgkin Lymphoma

##### Abs. 348: A Phase I/II Study of Lenalidomide Plus Obinutuzumab in Relapsed Indolent Lymphoma

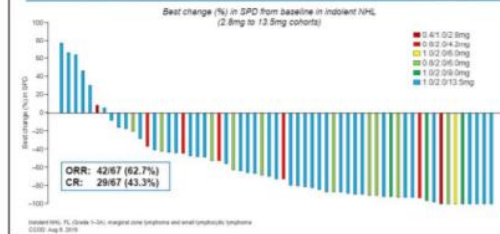
Nathan Fowler (MD Anderson Cancer Center) gave a morning presentation on a Phase I/2 trial studying lenalidomide plus obinutuzumab in relapsed indolent lymphoma patients. 86% of enrolled patients had FL (n=57) with a minority of MZL and SLL patients also under study. The majority of patients were on their 3<sup>rd</sup> line of therapy or greater. Very impressive responses were observed in FL with an ORR of 100% (CR rate 75%) and 74% of patients experiencing PFS at 24 months. For the overall indolent NHL population the OS at 24 months was 94%. Additionally, the following subset analyses were provided for the overall indolent NHL population:

- POD24: ORR = 96% (CR rate 66%)
- ≥3 lines: ORR = 97% (CR rate 68%)
- Rituximab refractory: ORR = 100% (CR rate = 63%)

The toxicity profile was manageable with the most common Grade 3-4 AEs being neutropenia (21%), infection (14%), and thrombocytopenia (11%).



### Objective response rate in indolent NHL



#### Product Theater: The Role a New Combination Therapy in Previously Treated Follicular Lymphoma

Sponsor: Celgene

Attendance was moderate for this Celgene product theater, with only about 50% of seats filled. During this talk the AUGMENT trial data assessing the combination of lenalidomide/rituximab (R<sup>2</sup>) in previously treated FL was reviewed. Key commentary from the presenter mentioned that neutropenia was easily managed with dose modifications and growth factor support. It was noted that the associated neutropenia was not necessarily considered a direct toxicity but more of a maturation risk. Further, the presenter commented that, "there was not much in the way of Grade 3-4 AEs with this treatment." No new efficacy or safety data was presented.

**Hematologic Adverse Reactions (Safety Population)**

Body System Adverse Reaction	All Adverse Reactions		Grade 3/4 Adverse Reactions	
	FL (n = 174)	Non-FL (n = 188)	FL (n = 174)	Non-FL (n = 188)
Blood and lymphatic disorders, n (%)				
Neutropenia <sup>a</sup>	102 (58)	41 (22)	80 (46)	23 (12)
Lymphopenia <sup>a</sup>	36 (20)	17 (9)	12 (7)	3 (2)
Anemia <sup>a</sup>	28 (16)	13 (7)	8 (5)	1 (0.5)
Thrombocytopenia <sup>a</sup>	26 (15)	8 (4)	4 (2)	1 (0.5)
Lymphopenia	8 (5)	14 (8)	5 (3)	3 (2)
Platelet neutropenia <sup>a</sup>	5 (3)	1 (0.5)	5 (3)	1 (0.5)

<sup>a</sup> In the AUGMENT trial, neutropenia was managed by dose modifications and/or growth factor support.  
<sup>b</sup> Growth factors were administered for the management of neutropenia to 58% patients in the FL arm and 10% in the non-FL arm.  
<sup>c</sup> All incidences of grade 3 or 4 neutropenia in the FL arm recovered to grade 1 or less, with a median time of 8.8 days.

# Social Media Monitoring

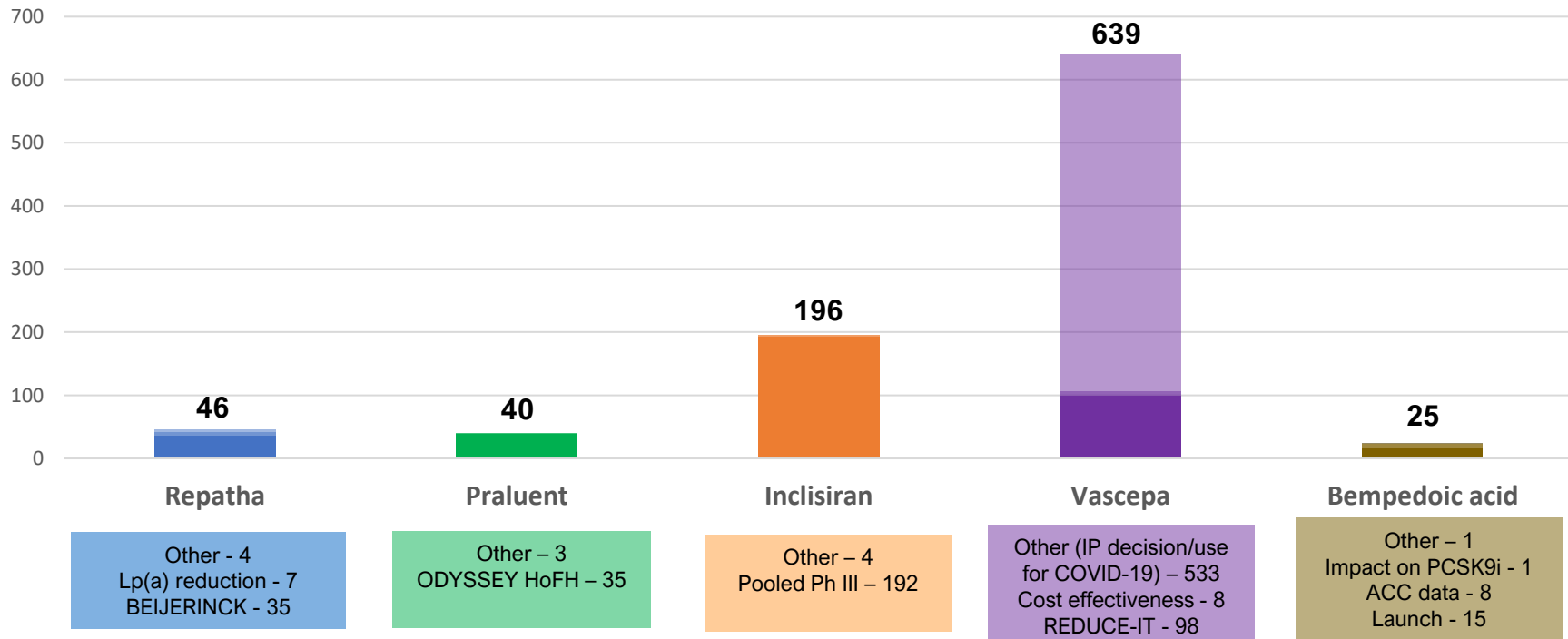
## Sample Work



# Drug-Specific Social Media Metrics

*Tailoring the information monitored to your needs allows you to better understand your overall market.*

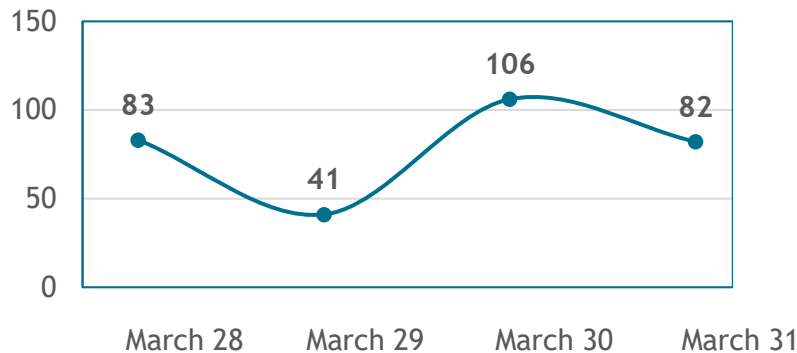
## Overall Tweet Volume During ACC 2020\*



# Social Media Details by Drug

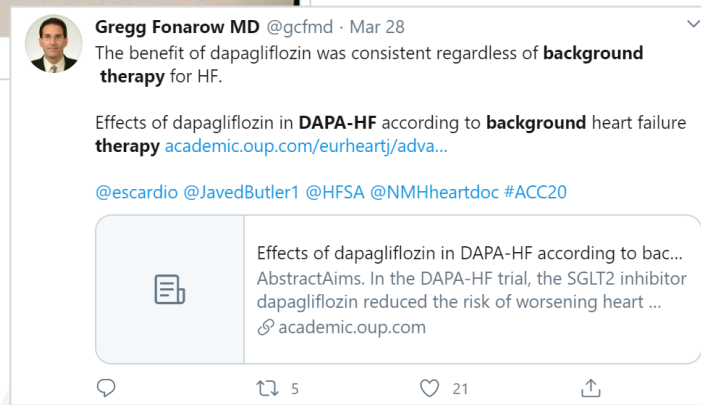
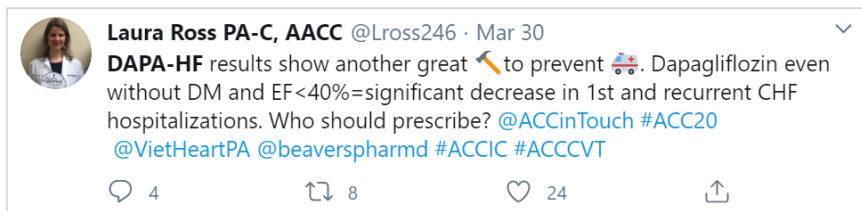
*During medical meetings, following data volume by day as well as what is being said can allow you to understand how your data are being received and stay on top of competitors.*

**Dapagliflozin Tweet volume**  
N=312\*



## ACC 2020 Dapagliflozin Key Tweets

*Twitter activity was largely neutral or positive*



# inThought Contact Information



**Ben Weintraub, PhD**

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1.646.331.9234

After completing his training in immunology and biochemistry, Dr. Weintraub began work as a financial analyst in 2000. Collaborating with Dr. Henderson, Dr. Weintraub co-founded BiotechTracker, an online tool for investors. In 2004, he became a licensed security analyst with Hibernia Southcoast Capital covering the biotechnology sector, and later performed the same role at Variant Research. In 2006, Dr. Weintraub joined Dr. Henderson and Dr. Zuckerman at Reuters Insight, providing analysis of drug development and trends in medicine to professional investors. Dr. Weintraub's team moved to inThought in January 2009. Through a divestiture by Wolters Kluwer, inThought and Source Healthcare Analytics became part of Symphony Health Solutions, a healthcare information company. inThought Research LLC formed a stand-alone company in May 2014.

Prior to 2000, Dr. Weintraub was senior scientific editor for the biology research journals Cell and Molecular Cell. Dr. Weintraub performed biochemistry and immunology research at Stanford University and at the John Curtin School of Medical Research in Canberra, Australia. He earned his doctorate in Biology from the University of California, San Diego, and a Bachelor of Science in Life Science from the Massachusetts Institute of Technology.



**Adam Schaeffer, MBA**

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1.301.602.3297

Mr. Schaeffer is a founding partner of inThought Research. He is responsible for identifying and developing new business opportunities, as well as expanding the presence of the company and its brand. Mr. Schaeffer has over 20 years of experience in healthcare industry consulting.

Prior to inThought, he served as Director of Institutional Sales at Symphony Health Solutions where he oversaw key pharmaceutical accounts and launched the Wall Street practice. Mr. Schaeffer also served as Business Development Manager at Wolters Kluwer Health. In this role, he helped to build an independent research group and life science consulting business. He was previously US Director of Sales and Marketing at Informa. Mr. Schaeffer received his Master in Business Administration from the Robert H. Smith School of Business and has a Bachelor of Arts in Sociology from the University of Maryland.



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# inThought Contact Information



**Doug Foster**

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1.508.414.9819

Doug Foster is focused on the development and improvement of the inVision system. An MIT graduate, Doug brings a unique combination of entrepreneurial experience, knowledge and learning management system knowledge, and enterprise system integration experience. Before joining inPhronesis, Doug led teams at InterSystems and Boston Scientific, where he was responsible for implementing and managing learning and knowledge management systems for employees, partners and customers for as many as 25,000 users globally. Previously, Doug was the VP of Services for Click2Learn (now SumTotal Systems) where he led a team responsible for the development of custom eLearning for clients including Fidelity and Microsoft.



**Chris Martin, MSc, MBA**

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1.703.725.5820

Mr. Martin has over 18 years of experience in healthcare industry consulting, finance, and healthcare policy. He previously served in health policy roles at the White House Office of Management and Budget. These roles included Medicare Desk Officer for the Office of Information and Regulatory Affairs, where he was responsible for providing recommendations to senior White House policy officials on healthcare policies and regulations.

Mr. Martin was the Vice President of Research at Lese Investments LLC, a healthcare focused investment company, and co-portfolio manager at Cameron Capital. He has also performed consulting in the healthcare industry at Biotech Tracker and McKinsey and Company. Mr. Martin has a Master in Business Administration from Harvard Business School, a Master in Engineering from Villanova University, and a Bachelor of Science, with distinction, in Mechanical Engineering from Cornell University.



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Prior to joining *inThought*, Dr. Weyerbacher was a scientific consultant to biotechnology companies, providing scientific and regulatory analysis of compounds and distinct therapeutic combinations. She has previously worked as a Senior Scientist at L'Oreal Research and Development. In this role, she managed the clinical testing program of multiple consumer products and supported cross-functional teams with scientific leadership and expertise to facilitate blockbuster product launches.

Dr. Weyerbacher graduated from Skidmore College with a Bachelor's degree in Biology-Chemistry before receiving a PhD in Pharmacology from Weill Cornell Medical College. Her dissertation research focused on the identification of critical pain signaling proteins, cytokines and immune/central nervous system interactions as relevant pharmacological targets for clinical pain control. In between college and graduate school, Dr. Weyerbacher was a Clinical Research Study Assistant at Memorial Sloan Kettering Cancer Center. In this role, she managed an active clinical trial program, defining and monitoring project scope, timelines and deliverables from project initiation to close-out. She has presented her research in pharmacology, neuroscience and oncology at several scientific conferences. Dr. Weyerbacher is the immediate past President and active member of the MetroNY Chapter of the Association for Women in Science (AWIS).



**Adam Schaffner, PhD**  
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Dr. Schaffner joined *inThought* in 2017 after earning his PhD in Biomedical Sciences at the Mount Sinai School of Medicine in New York, where he developed novel therapeutic strategies to target Parkinson's Disease and other neurodegenerative disorders.

While completing his dissertation, he worked as a venture intern at Celdara medical, where he conducted due diligence on academic innovations for partnership, development, and investment opportunities. Beyond the science, Dr. Schaffner has held various leadership roles as a student at Mount Sinai, and served as Co-founder and Co-chair of the Trainee Health and Wellness (THAW) Committee, which tackles systemic issues endangering the mental well-being of academic research trainees. He earned his Bachelor of Science in Biochemistry at the University of California, Los Angeles.



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Ms. Hoggatt covers the medical technology, women's health, aesthetics and some infectious disease indications. Ms. Hoggatt comes from Noble Financial where she was the Senior Medical Technology analyst. Prior to Noble, Ms. Hoggatt helped start the independent research firm, Variant Research with Dr. Weintraub and Dr. Henderson.

Before Variant she worked at Hibernia Southcoast Capital, where she was also a Medical Technology Analyst and a Vice President of Equity Research. Ms. Hoggatt began in the investment industry as an associate equity analyst at Morgan Keegan & Company covering medical devices and earned the title Associate Vice President of Equity Research. Her professional career has been focused on the healthcare sector and has included in-depth coverage of over thirty different companies in the Medical Technology and Medical Device industries, allowing her to share a wealth of knowledge and insight with our clients. Ms. Hoggatt received her Bachelors of Business Administration and Master of Accountancy from Millsaps College in Jackson, Mississippi.



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Dr. Rivera joined inThought in early 2019. She completed her PhD research at Columbia University Medical Center in Pathobiology and Molecular Medicine. Her work at the Center for Motor Neuron Biology and Disease focused on drug development for the neuromuscular pediatric disorder, Spinal Muscular Atrophy (SMA).

Prior to Columbia, Dr. Rivera was a research associate at Cold Spring Harbor Laboratories, where she specialized in molecular research of pre-mRNA splicing mechanisms. She also earned an MBA in Finance and a Master of Science in Biophysics from the University of Barcelona.



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Dr. Basu joined inThought in 2015, after completing her post-doctoral studies in Immunology at Memorial Sloan-Kettering Cancer Center, where she studied mechanisms potentiating cytotoxic T cells. While at MSKCC, she also worked as a Life Science Analyst for a boutique consulting firm, providing due diligence on diverse therapeutic areas to hedge funds and mutual funds.

In addition to research, Dr. Basu has regularly been involved in several public health and science education projects in the New York City area. She earned her PhD in Cell Biology from Columbia University in New York and a B.Sc. in Biology from McGill University in Montréal.



**Samantha Crofskey, BSc**  
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Ms. Crofskey has over 12 years of experience in medical writing, account management and pharmaceutical industry consulting. She provides coverage for the immunology and neurology sectors, including everything from emerging targets and drug development to market analysis and customized business intelligence.

Prior to joining inThought, Ms. Crofskey worked as a medical writer for Wolters Kluwer in Auckland, New Zealand before moving to London to work as an Editorial Project Manager at Current Medicine Group, a Springer Healthcare company, and later, as an Editorial Project Manager at BioScience Communications. Ms. Crofskey returned to Wolters Kluwer in 2010 and subsequently joined the inThought team as a consultant in 2011. Ms. Crofskey earned her Bachelor of Science in Neuroscience and Pharmacology from the University of Otago in New Zealand.



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Dr. Presby joined inThought in 2019. Previously, he worked for a boutique biopharma consulting firm and also completed an internship in equity research at Leerink Partners. In these roles, he has developed experience in business development assessments, forecasting, and market access.

Dr. Presby received his Ph.D. in Immunology from the Johns Hopkins School of Medicine where his thesis work focused on the discovery of biomarkers in autoimmune disease and T Cell functionality. Additionally, while at Hopkins he was a co-founder of the Johns Hopkins Biotech Investment Group (JHBIG) which focuses on preparing students for careers in equity research and venture capital. He earned his B.S. in Biology from Gettysburg College.



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Dr. Khandan joined inThought Research in 2019. He has held previous positions as a Fellow at a life science consulting firm and as a Scientist at Editas Medicine. In these roles, Dr. Khandan built expertise in asset scouting, evaluating rare diseases and therapeutic areas, and building market access and commercial viability assessments.

Dr. Khandan received his Ph.D. in Molecular, Cellular, and Developmental Biology from the University of Colorado, Boulder. His doctoral research focused on signaling and growth factors governing retinal vascularization. He has extensive experience in CRISPR/Cas9 gene editing, stem cell differentiation, and cell therapies. Dr. Khandan received his A.B. in Chemistry from Dartmouth College.



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