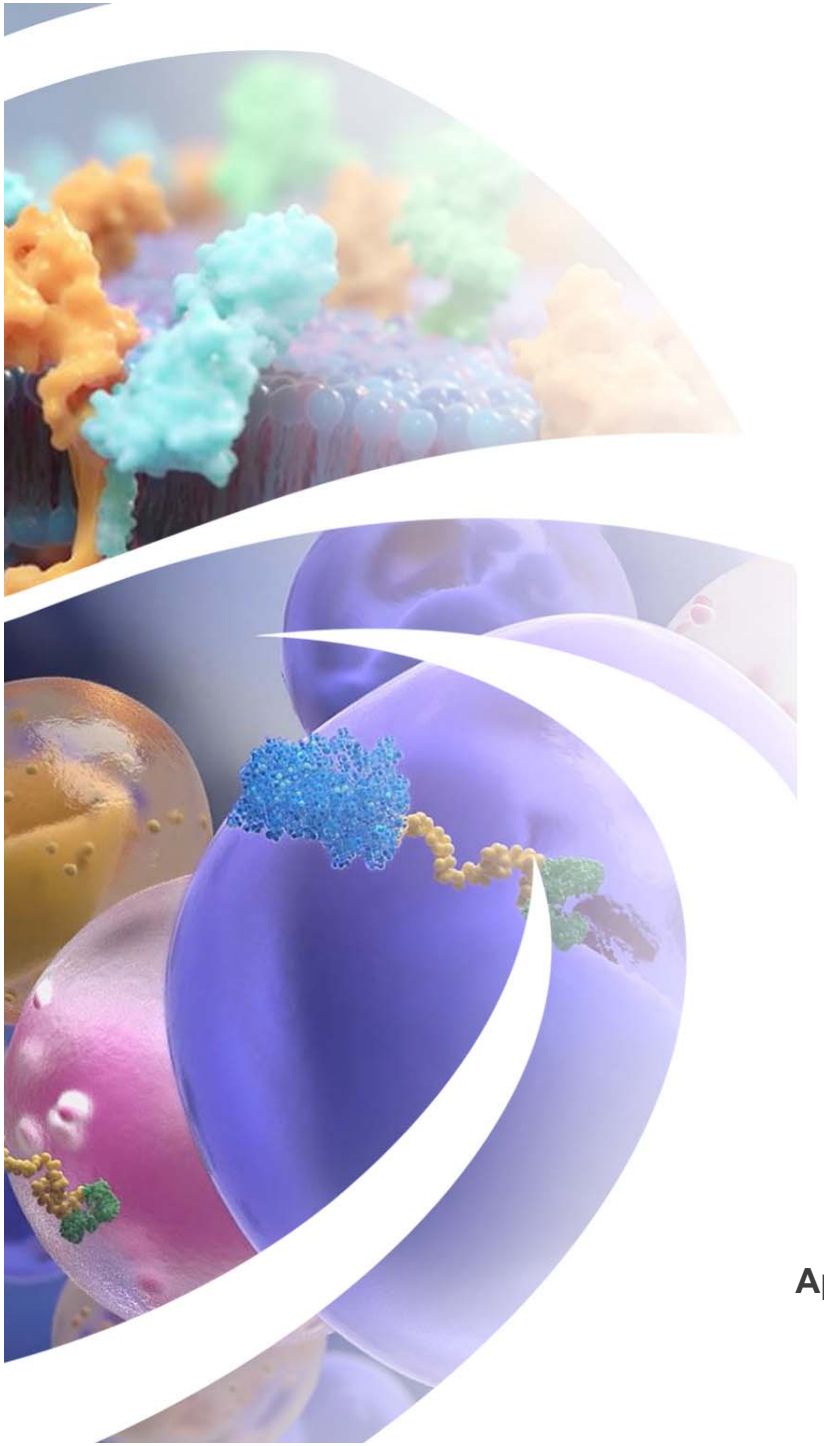


Spectrum Pharmaceuticals

A Biopharmaceutical Company Developing Targeted and Novel Therapies in Oncology

Joe Turgeon | CEO

April 2021 | Investor Presentation

SPECTRUM PHARMACEUTICALS
Redefining Cancer Care

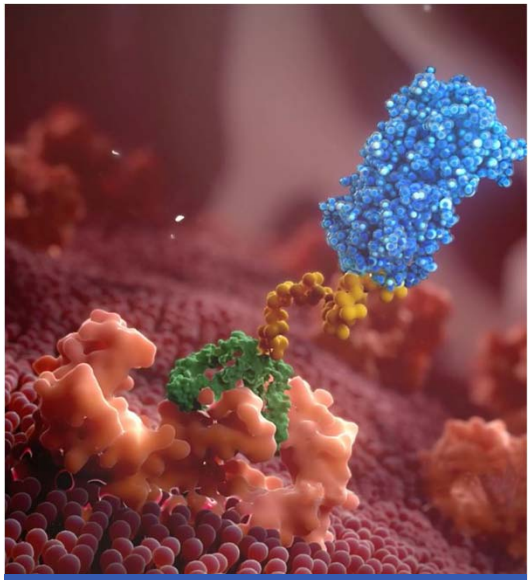
Safe Harbor Statement

This presentation contains forward-looking statements regarding future events and the future performance of Spectrum Pharmaceuticals that involve risks and uncertainties that could cause actual results to differ materially. These statements are based on management's current beliefs and expectations. These statements include but are not limited to statements that relate to our business and its future, our strategy, the success of our drug candidates, the safety and efficacy of our drug products, product approvals, market potential, product sales, revenue, development, regulatory and approval timelines, product launches, product acquisitions, capital resources and any statements that relate to the intent, belief, plans or expectations of Spectrum or its management, or that are not a statement of historical fact.

Risks that could cause actual results to differ include the possibility that our existing and new drug candidates may not prove safe or effective, the possibility that our existing and new drug candidates may not receive approval from the FDA and other regulatory agencies in a timely manner or at all, the possibility that our existing and new drug candidates, if approved, may not be more effective, safer or more cost efficient than competing drugs, the possibility that price and other competitive pressures may make the marketing and sale of our drugs not commercially feasible, the possibility that our efforts to acquire or in-license and develop additional drug candidates may fail, our lack of sustained revenue history, our limited experience in establishing strategic alliances, our limited marketing experience, our customer concentration, the possibility for fluctuations in customer orders, evolving market dynamics, our dependence on third parties for clinical trials, manufacturing, distribution, information and quality control and other risks that are described in further detail in the Company's reports filed with the Securities and Exchange Commission. We do not plan to update any such forward-looking statements and expressly disclaim any duty to update the information contained in this presentation except as required by law.

Spectrum's Pipeline & Key Milestones

Targeted & Novel Medicines



ROLONTIS®
(eflapegrastim)

FDA Deferred Action on BLA (inspection scheduled May 2021)

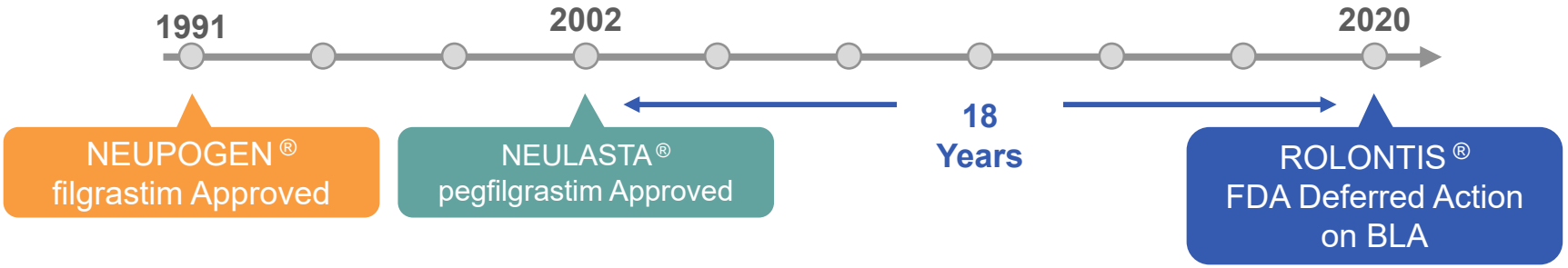
POZIOTINIB

NDA Filing in 2021

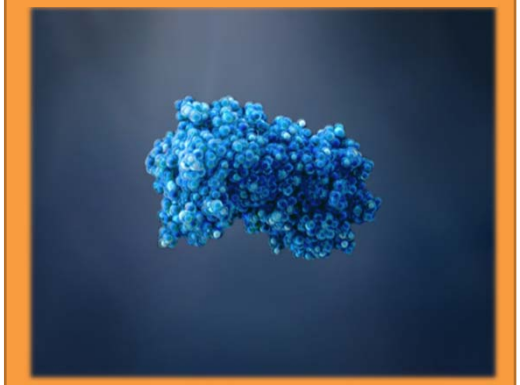
Focused Interferon Therapeutics (FIT)

Phase 1 Dose Escalation Study

Rolontis is the First NOVEL Product in the LA-GCSF Class in Almost Two Decades

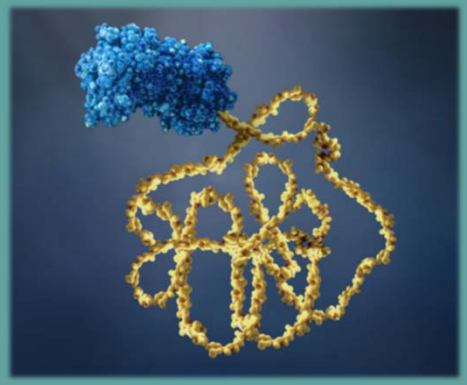


filgrastim



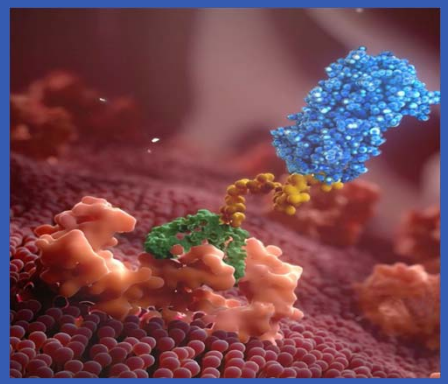
Increased the safety of chemotherapy

pegfilgrastim



Simplified administration

eflapegrastim



Increases uptake and retention

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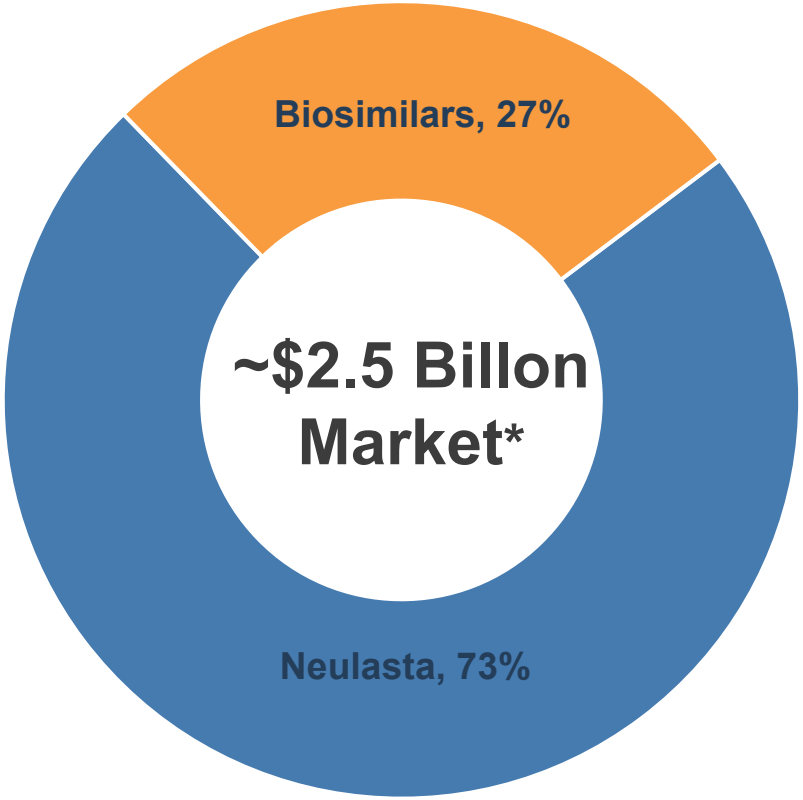
Redefining Cancer Care

The LA-GCSF Market Presents a Compelling Opportunity

- Rational Pricing Behavior
- Value-driven Decision-Making
- NCCN Expands Recommendation



*Source: 2019/2020 Reported Net Revenue

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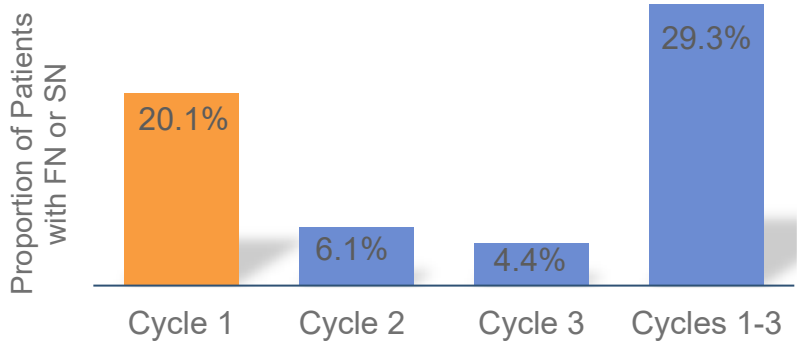
Incidence and Duration of Severe Neutropenia are Key Factors when Considering Patient Care

The highest risk of Severe Neutropenia is in cycle 1

First Incidence of Severe Neutropenia* by Chemotherapy Cycle[1]



Duration of Severe Neutropenia is highly correlated to hospitalization risk

Incremental Risk of Hospitalization[2]

* Includes patients with severe neutropenia (SN) (defined as an absolute neutrophil count (ANC) value of <500/mm^3 without presence of fever or infection) or febrile neutropenia (FN) (defined as the presence of severe neutropenia with the presence of fever/infection)

1. Crawford, J., et al. (2008). Risk and timing of neutropenic events in adult cancer patients receiving chemotherapy: the results of a prospective nationwide study of oncology practice. *J Natl Compr Canc Netw*

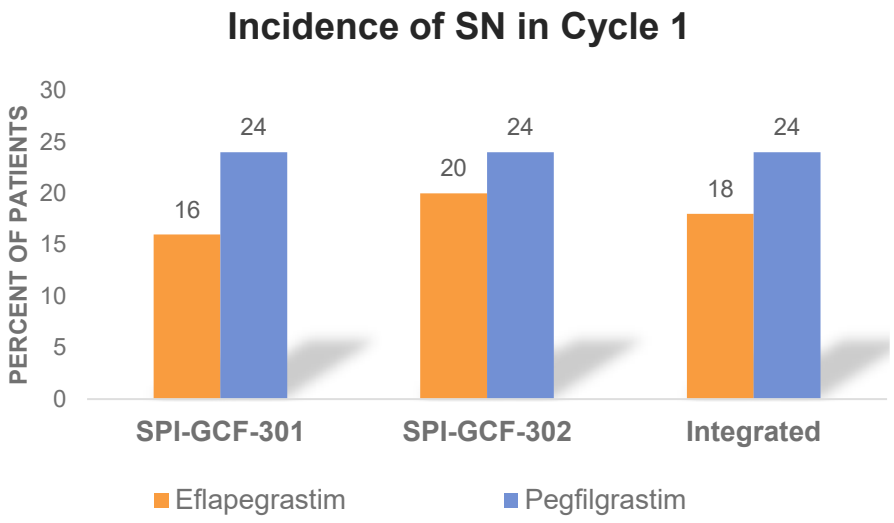
2. Li et al. (2016). Relationship between severity and duration of chemotherapy-induced neutropenia and risk of infection among patients with nonmyeloid malignancies. *Support Care Cancer*

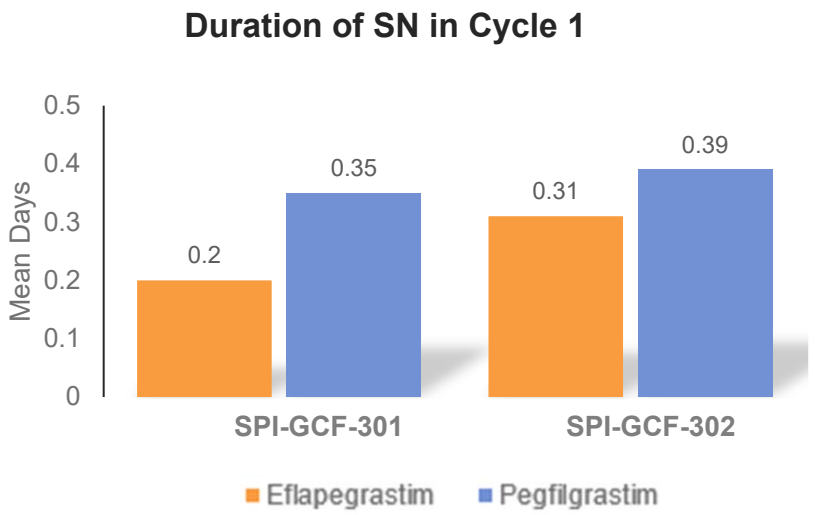
ROLONTIS Demonstrated an Effect on Incidence and Duration of Severe Neutropenia

Two Phase 3 Fixed Dose Non-inferiority Studies with Eflapegrastim and Pegfilgrastim:

ADVANCE-301 (N=406) & RECOVER-302 (N=237)

Primary Endpoint: Duration of Severe Neutropenia





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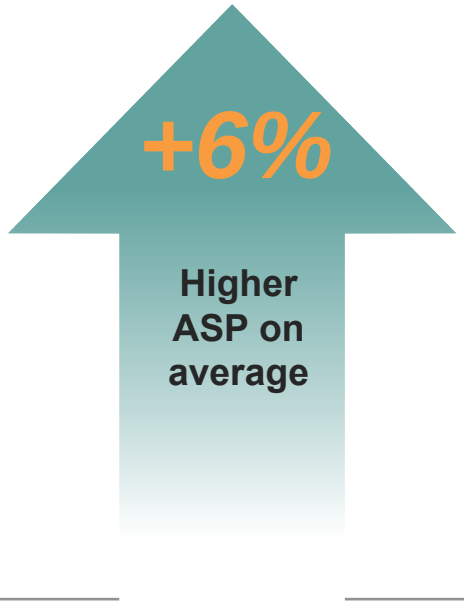
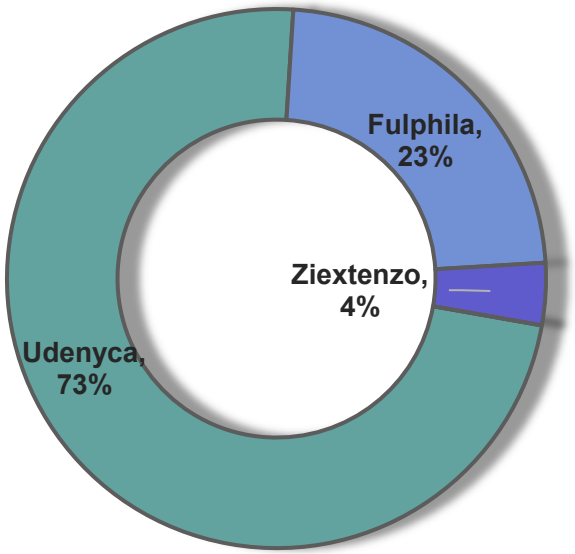
Market Share isn't Determined by the Lowest Price

Udenyca costs more than Fulphila[1]



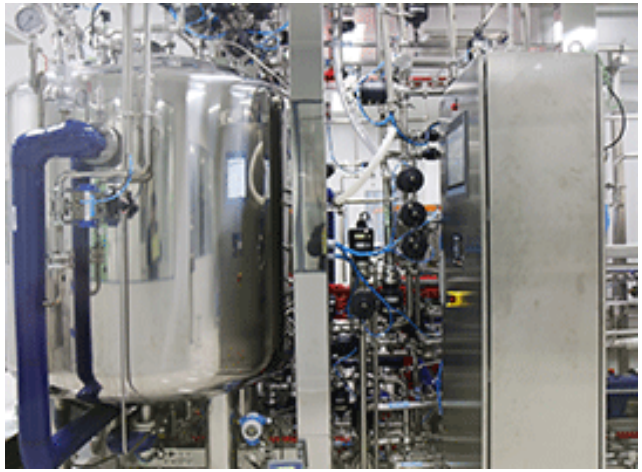
Udenyca has the highest share of the biosimilar market[2]



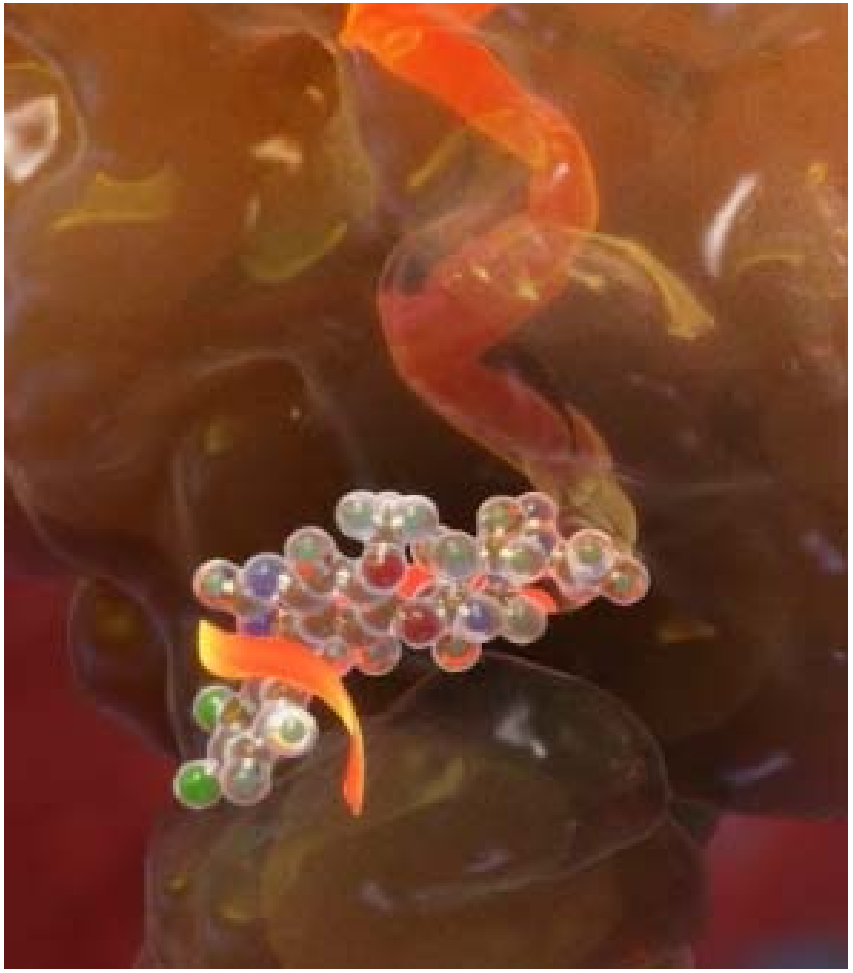
1. Q2 2019 – Q1 202
2. IMS data Q3 2020

We are Ready to Compete

- FDA pre-approval inspection scheduled for May 2021
- Rolontis is manufactured in a cGMP plant by Hanmi Pharmaceuticals in a world-class facility
- Rolontis is a NOVEL asset that is NOT a biosimilar
- Rolontis has strong head-to-head clinical data
- We are building a world class TEAM who will be ready to compete



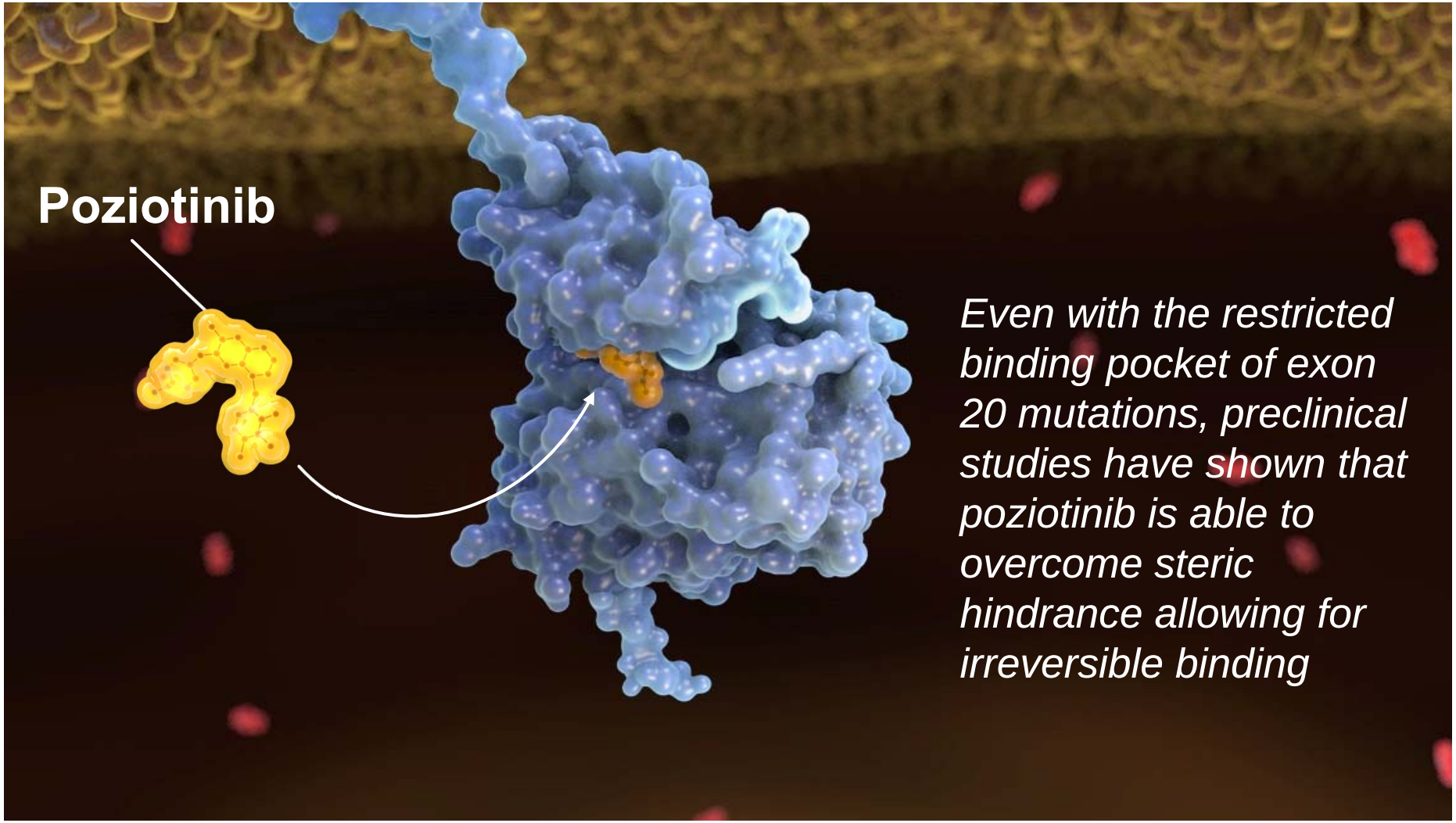
Poziotinib – Multi-Cohort Phase 2 Trial Advancing



Tyrosine Kinase Inhibitor targeting mutations in lung cancer

NDA Filing in 2021 based on positive ZENITH20 Cohort 2 results

Unique Structure Demonstrates Irreversible Binding in Preclinical Studies



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Exon 20 Mutations in Various Tumor Types

Estimated Prevalence of Exon20 NSCLC				
Region	Mutation	Exon 20 Frequency (%)	Total Number of Exon-20 NSCLC Patients/year	
US*	EGFR	2.1%	3.6%	7,700
	HER2	1.5%		

Estimated Prevalence of Exon20 In Other Tumors				
Region	Mutation	Exon 20 Frequency (%)	Total Exon 20 (non-Lung) Patients/year	
US*	EGFR	3,710 (0.2%)	0.6%	8,400
	HER2	4,691 (0.4%)		

N= 390,000 patients

** Heymach J. Phase II trial of poziotinib for EGFR and HER2 exon 20 mutant NSCLC Presented at IASLC 19th World Conference on Lung Cancer; Sept. 2018 Toronto CAN*

ZENITH20 Study Design

Registration

Cohort 1
(n=87)
Previously treated NSCLC with **EGFR** exon 20 insertions
Fully Enrolled

Cohort 2
(n=87)
Previously treated NSCLC with **HER2** exon 20 insertions
Fully Enrolled

Cohort 3
(n=70)
First-line NSCLC with **EGFR** exon 20 insertions
Fully Enrolled

Cohort 4
(n=70 to 140)
First-line NSCLC with **HER2** exon 20 insertions
16 mg QD
8 mg BID (enrolling)

Primary Endpoint

- Objective Response Rate

Secondary Endpoints

- Disease Control Rate
- Duration of Response
- Safety & Tolerability

Key Eligibility Criteria

- NSCLC EGFR or HER2 exon20 insertions
- Point mutations, including T790M, are not allowed
- Brain mets are allowed if stable

Exploratory

Cohort 5
(n=194)
EGFR or **HER2** exon 20 insertions

Randomized to:
10, 12, 16 mg QD or
6, 8 mg BID

Cohort 6
(n=30)
EGFR osimertinib failures
Enrolling (8 mg BID)

Cohort 7
(n=30)
Atypical **EGFR** or **HER2** mutations
Enrolling (8 mg BID)

Cohort 2 will be the Basis of the NDA Submission

Cohort 2 met Primary Efficacy Endpoint: Observed lower bound of 18.9% exceeded the pre-specified lower bound of 17%

	Intent to treat (N=90) N (%)
Objective Response Rate (ORR) 95% Confidence Interval	**27.8%** **(18.9 – 38.2%)**
Disease Control Rate (DCR=CR+PR+SD)	**70%**
Duration of Response, Median (months)	**5.1**
Progression-free Survival, Median (months)	**5.5**

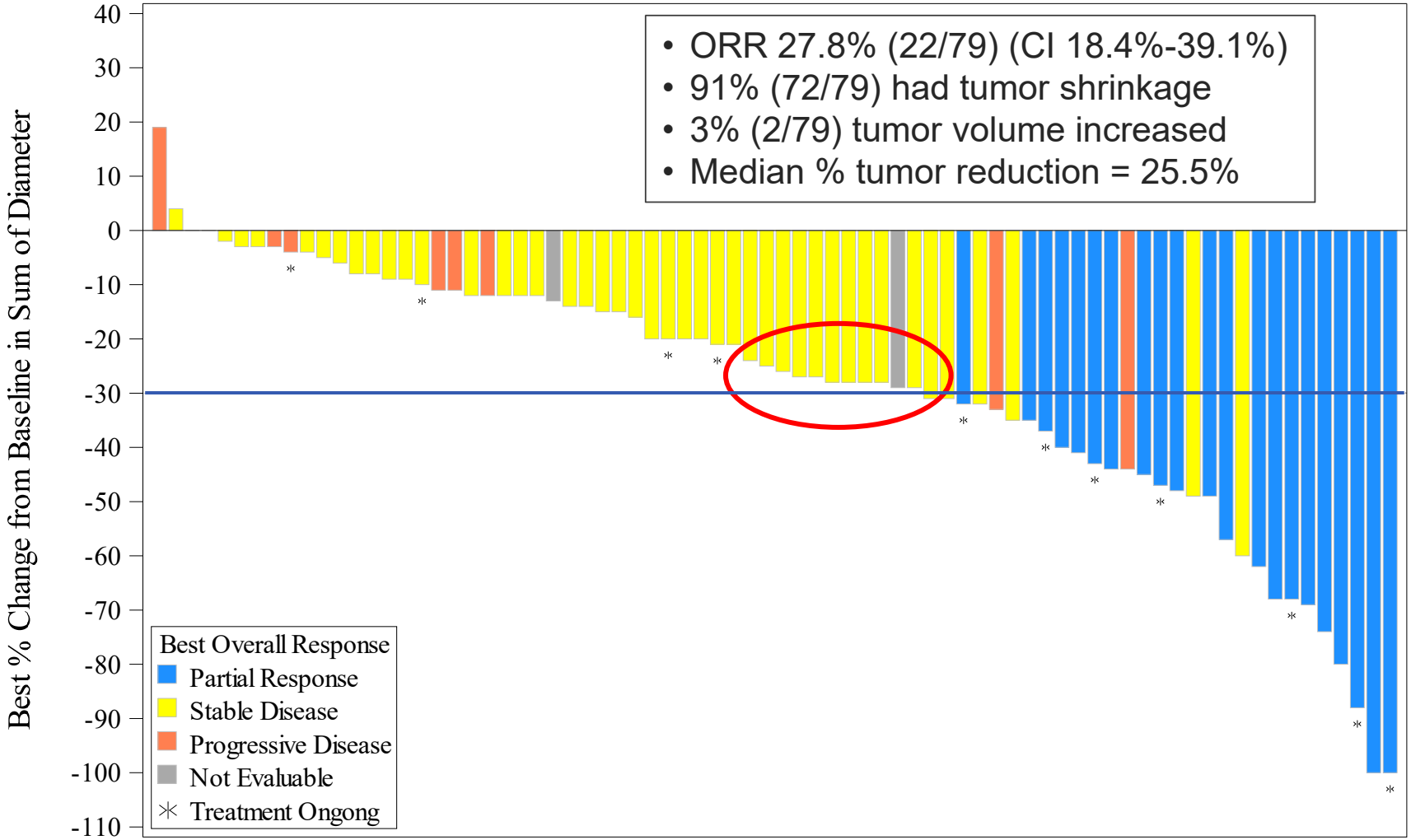
NDA submission planned in 2021

Safety Profile for Cohort 2 In-line with TKIs

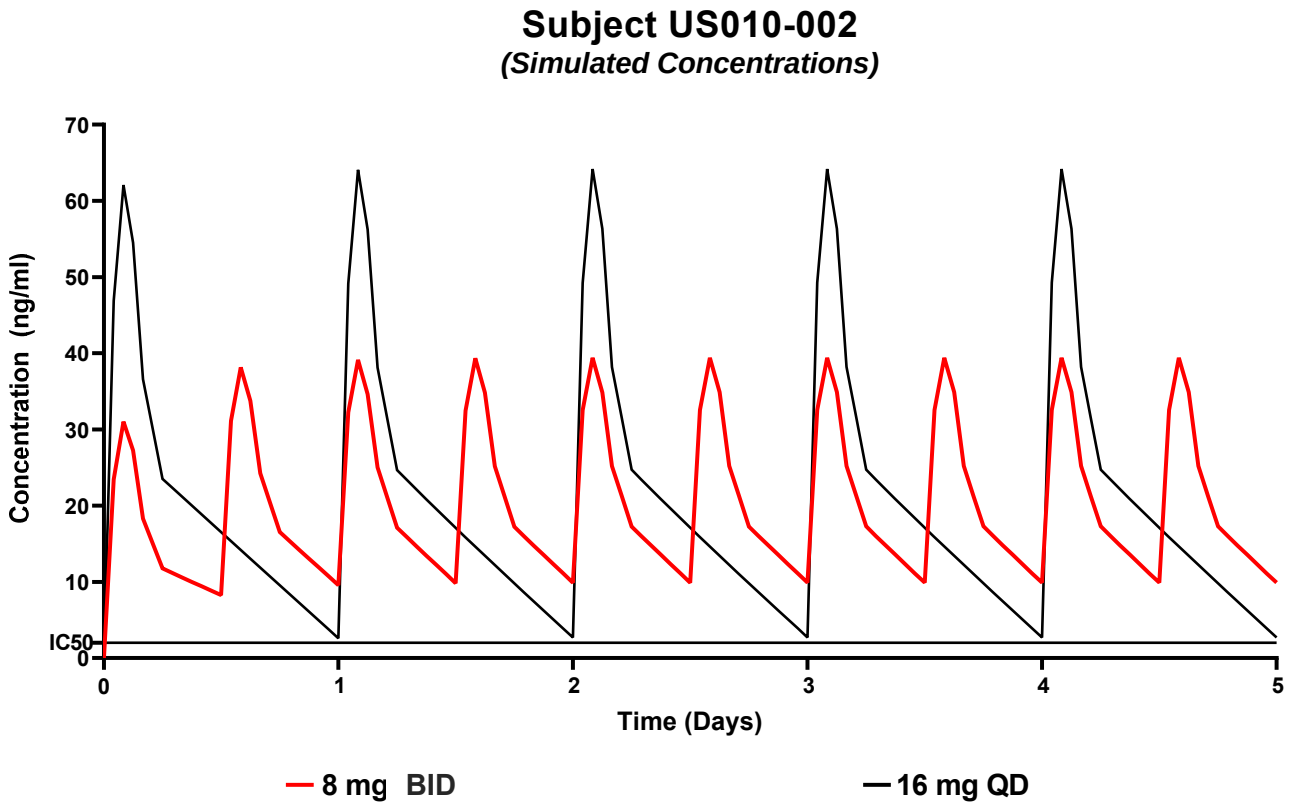
- Cohort 2 starting dose 16 mg QD
- Safety profile was in-line with the type of adverse events seen with other second-generation EGFR TKIs
- Grade 3 incidence of rash was 30%
- Grade 3 incidence of diarrhea was 26%
- 11 patients (12%) permanently discontinued study due to adverse events

Waterfall Plot - Cohort 3 (EGFR First-Line)

Best Change from Baseline in Tumor Volume



Hypothesis: BID Dosing Would Increase Tolerability Leading to Increased Dose Intensity



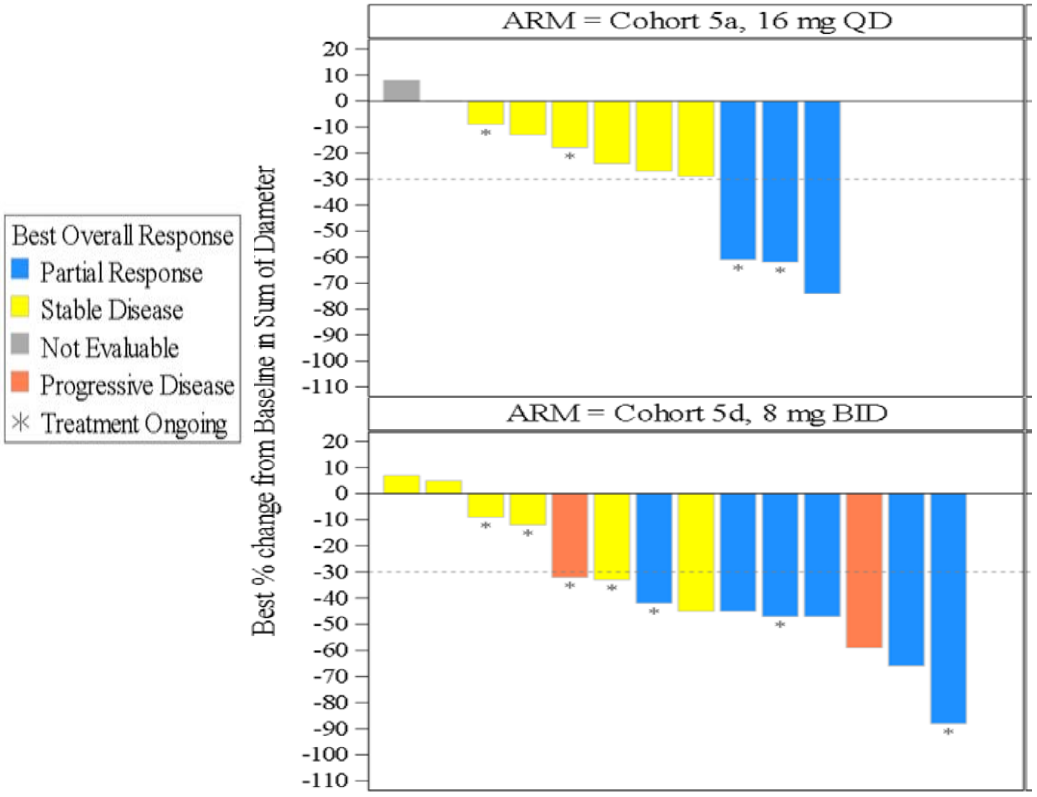
- Pozi plasma ½ life is 7.9 hours
- BID dosing
  - Decreases Cmax
  - Maintains Ctrough above IC50
- Pozi IC50 4nM (2ng/ml)-T790m

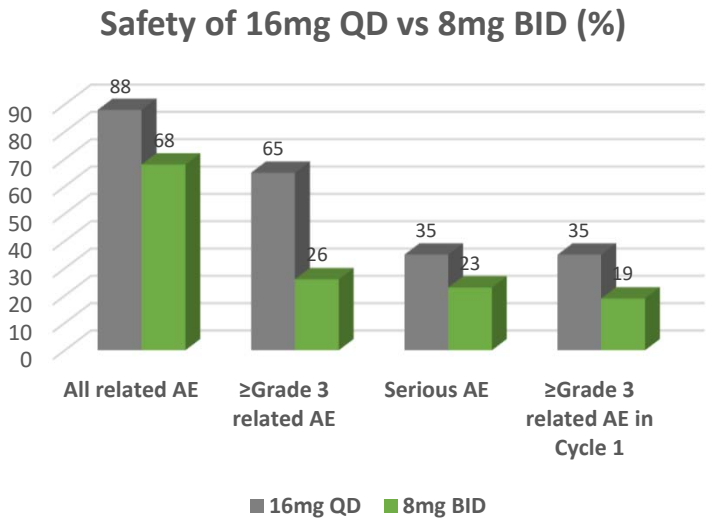
Cohort 5: Preliminary Efficacy

	16mg QD (N=19)	8mg BID (N=19)	12mg QD (N=19)	6mg BID (N=19)	10mg QD (N=19)
Overall Response Rate, n (%)	**3 (15.8)**	**6 (31.6)**	**3 (15.8)**	**1 (5.3)**	**1 (5.3)**
PR - Partial Response	3 (15.8)	6 (31.6)	3 (15.8)	1 (5.3)	1 (5.3)
SD - Stable Disease	7 (36.8)	7 (36.8)	9 (47.4)	12 (63.2)	8 (42.1)
PD - Progressive Disease	0	2 (10.5)	3 (15.8)	1 (5.3)	7 (36.8)
NE- Not Evaluable	9 (47.4)	4 (21.1)	4 (21.1)	5 (26.3)	3 (15.8)
Disease control Rate, n (%)	**10 (52.6)**	**13 (68.4)**	**12 (63.2)**	**13 (68.4)**	**9 (47.4)**

Response evaluated using blinded central image review using RECIST v1.1

Cohort 5: Efficacy and Safety Comparison of 16mg QD vs 8mg BID





Patients not evaluable for tumor measurement are not included in the waterfall plot

Poziotinib Summary

- NDA submission for poziotinib planned for 2021
- Cohort 2 data will be the basis for the NDA in previously treated NSCLC patients with HER2 exon 20 insertion mutations
- Cohort 5 – Preliminary data from 8 mg BID dosing meaningfully improved tolerability leading to fewer dose interruptions and increased efficacy
- Cohort 5 will now enroll exclusively at 8 mg BID dose
- Cohorts 4, 6 & 7 continue to enroll at 8mg BID dose

Focused Interferon Therapeutics

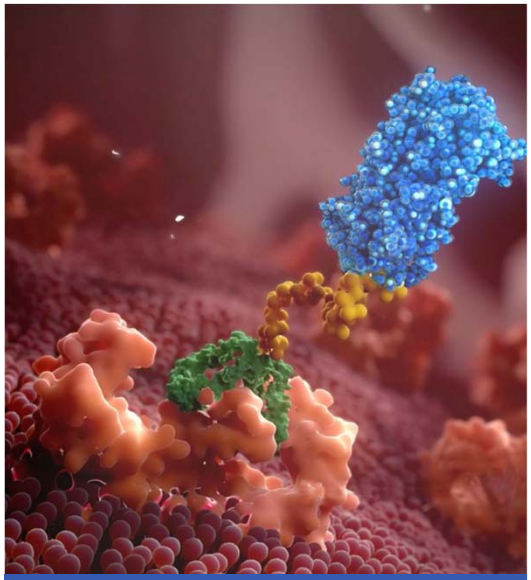
FIT Platform

Targeted Antibody-Interferon Fusion Technology

- IFNa is an approved treatment for cancer
- But systemic IFNa therapy has limitations due to dose limiting toxicity
- Focused IFNa Therapeutics (FIT) Technology seeks to overcome the toxicity while maintaining efficacy
- By attaching IFNa to an antibody, FIT targets delivery of IFNa to tumor microenvironment
- IGN002 open label dose escalation study initiated

Spectrum's Key Milestones

Targeted & Novel Medicines



ROLONTIS®
(eflapegrastim)

Awaiting FDA Action

POZIOTINIB

NDA Filing in 2021

Focused Interferon Therapeutics (FIT)

Ongoing Phase 1 Dose Escalation Study