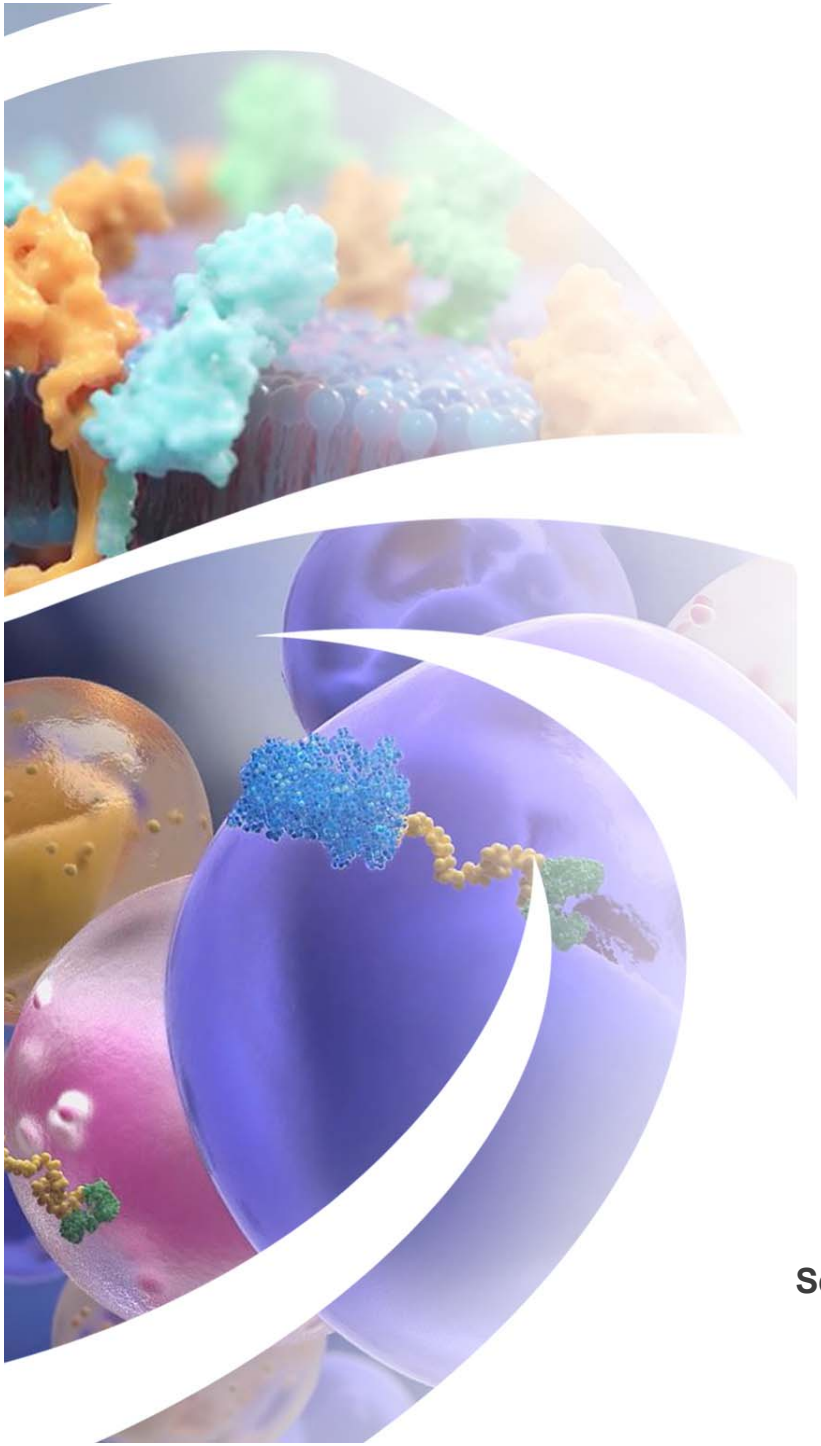


Spectrum Pharmaceuticals

A Biopharmaceutical Company Developing Targeted and Novel Therapies in Oncology

Joe Turgeon | CEO

September 2021 | Investor Presentation

SPECTRUM PHARMACEUTICALS
Redefining Cancer Care

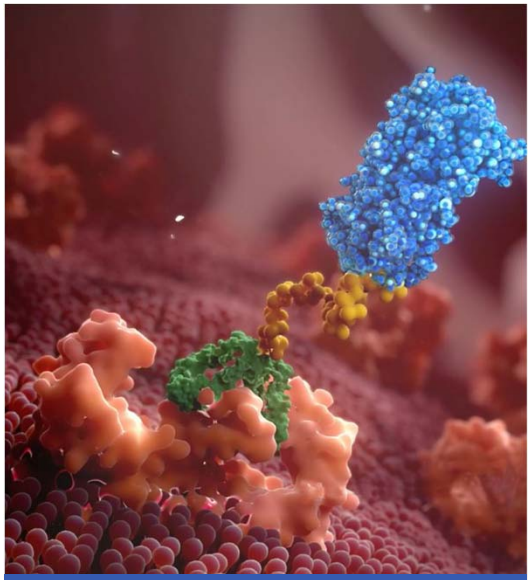
Safe Harbor Statement

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)

Remediation of CRL Underway

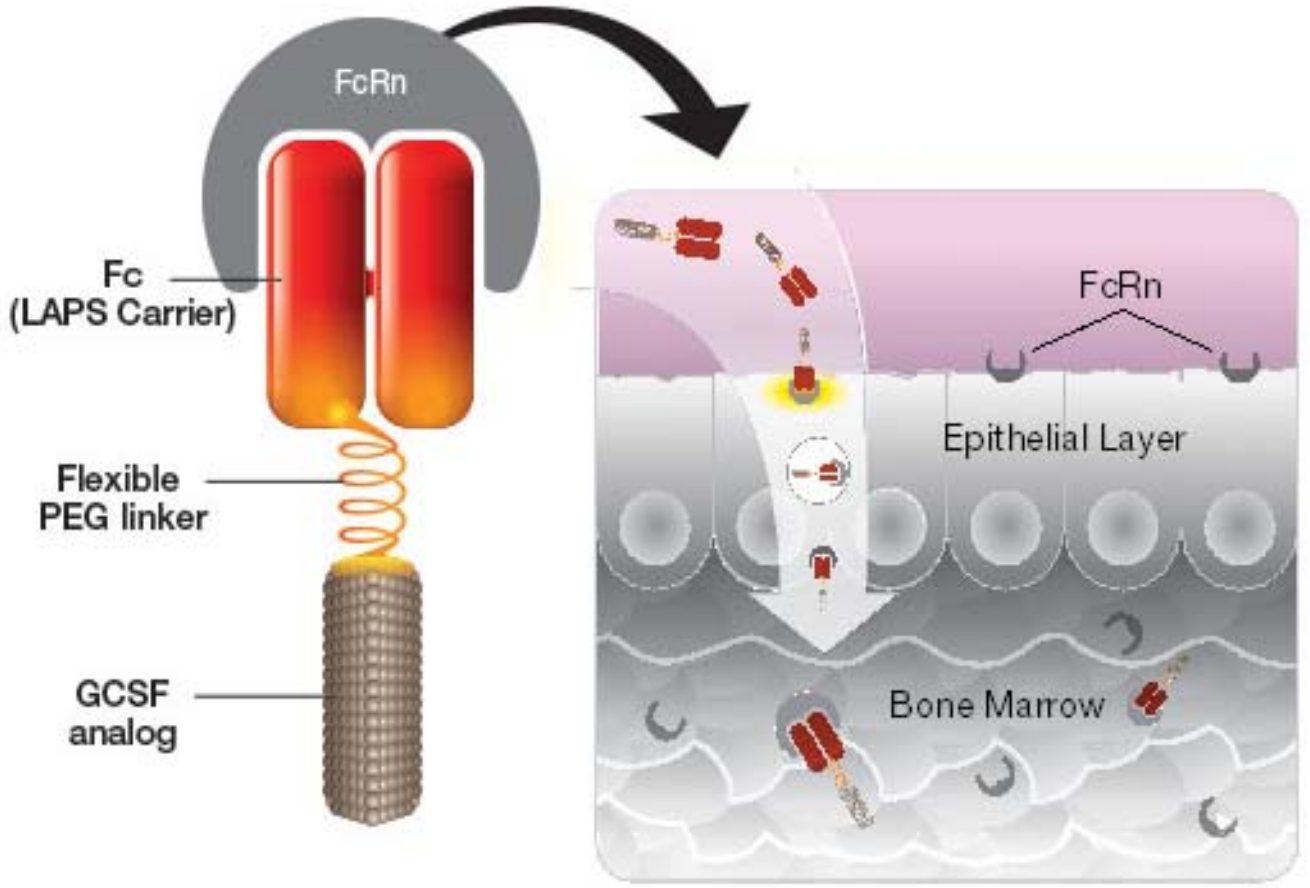
POZIOTINIB

NDA Filing in 2021

Focused Interferon Therapeutics (FIT)

Phase 1 Dose Escalation Study

ROLONTIS is a Novel Product with a Unique Molecular Structure

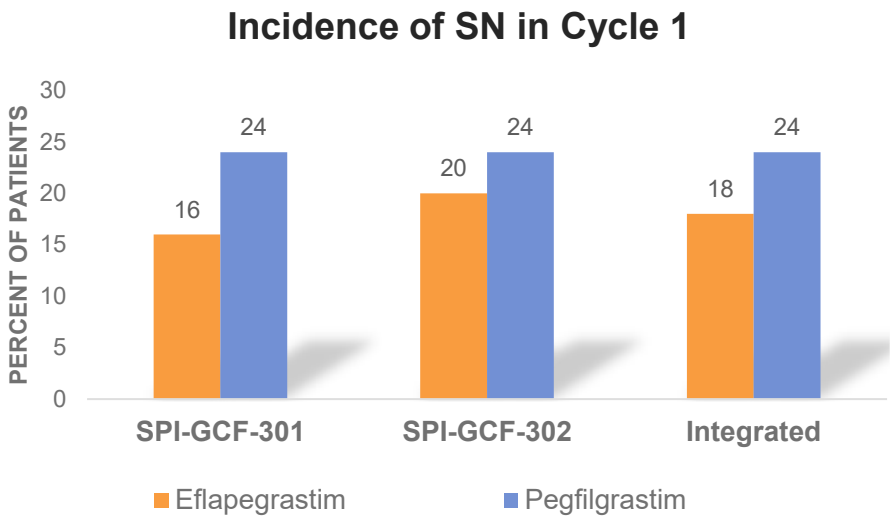


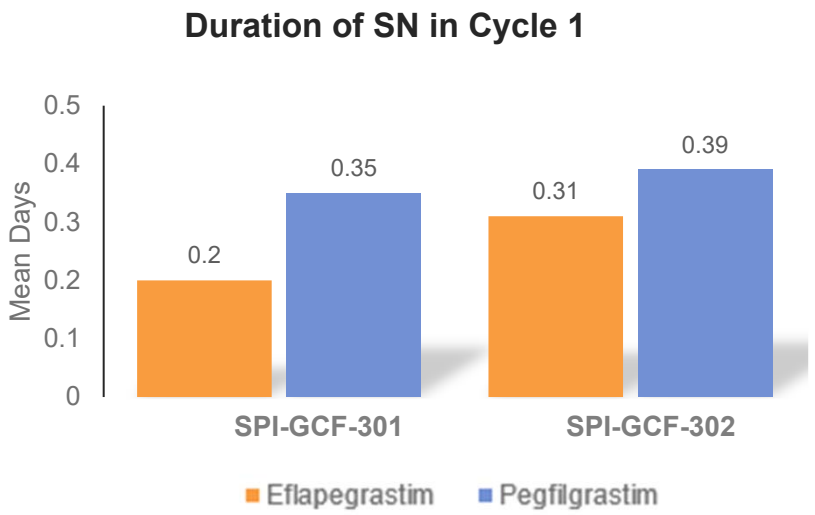
ROLONTIS Demonstrated an Effect on Incidence and Duration of Severe Neutropenia

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

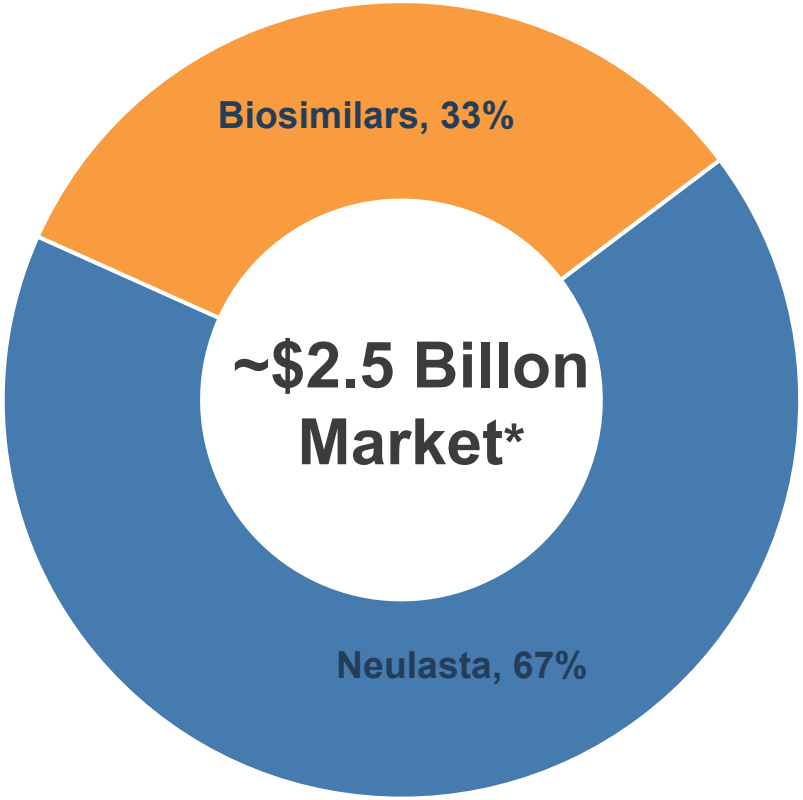




SPECTRUM PHARMACEUTICALS
Redefining Cancer Care

The LA-GCSF Market Presents a Compelling Opportunity

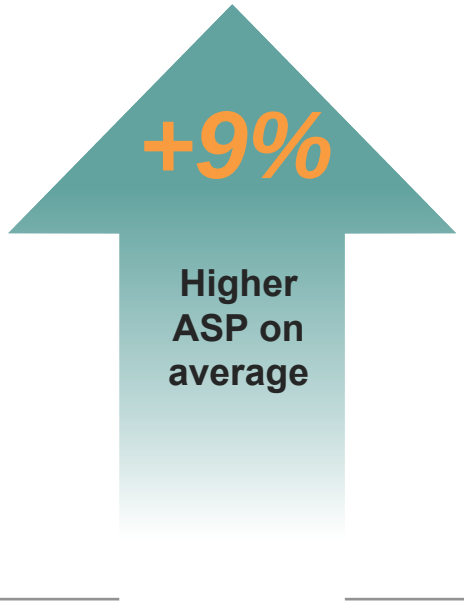
- **Rational Pricing Behavior**
- **Value-driven Decision-Making**
- **NCCN Expands Recommendation**



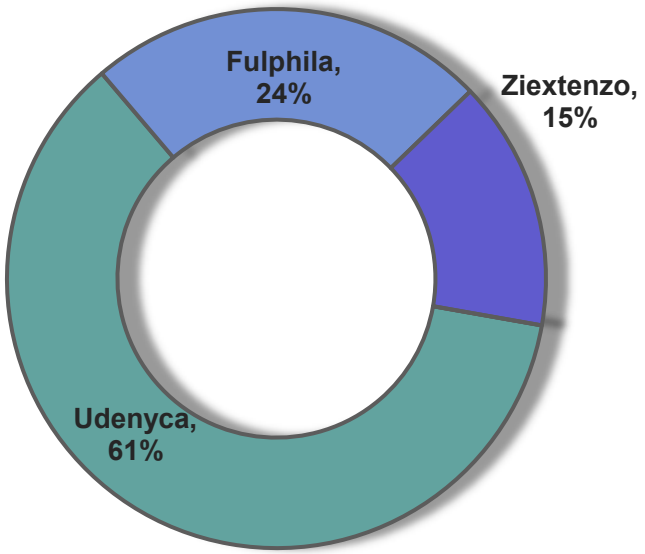
*Source: 2021 Reported Net Revenue

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]

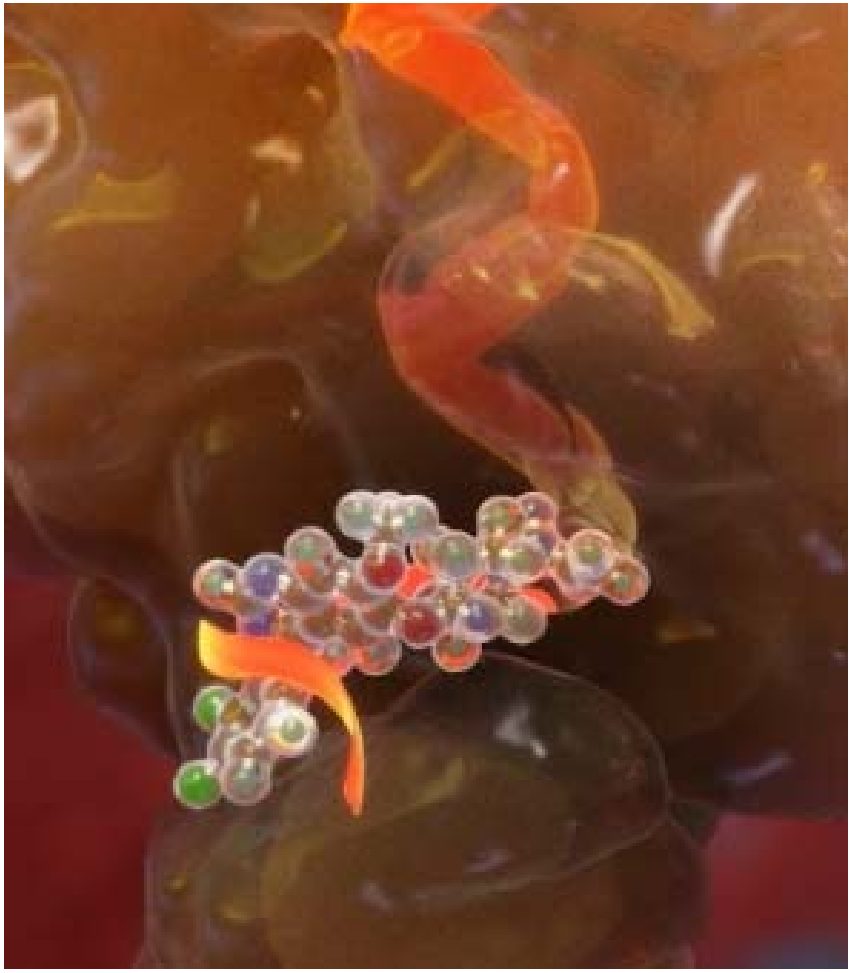


1. Q4 2020 – Q3 202
2. IMS data Q1 2021

Current Status and the Path Forward

- Complete Response Letter (CRL) received in August 2021
- CRL cited deficiencies at both the bulk drug manufacturing and fill/finish facilities
- The FDA indicated that a reinspection would be necessary at the bulk drug facility
- The FDA did not cite the need for any additional clinical trials
- We have met with our contract manufacturers to review remediation plans which we will continue to monitor
- Company is requesting a meeting with the FDA to clarify remediation timelines

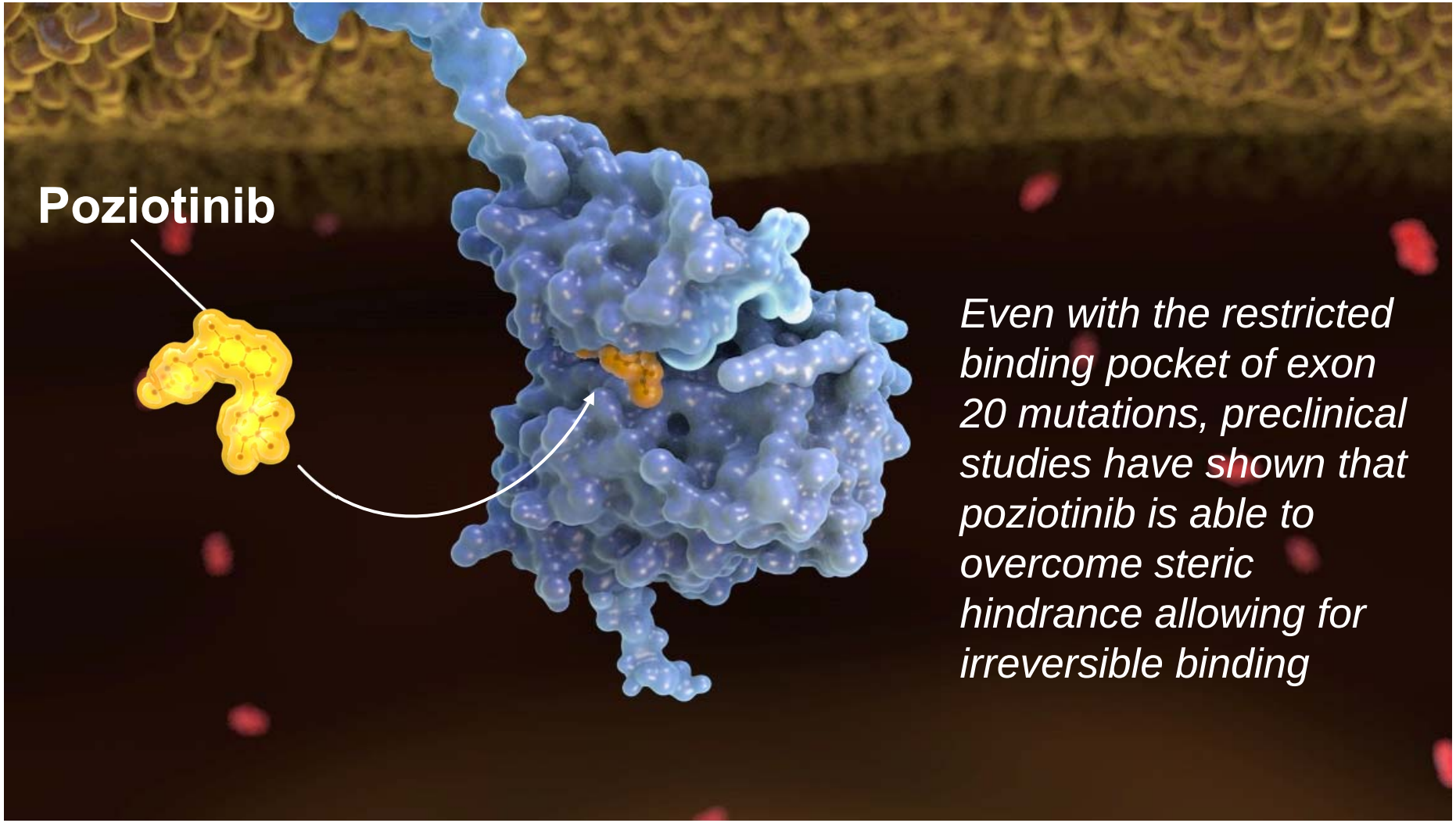
Poziotinib – Multi-Cohort Phase 2 Trial Advancing



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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Redefining Cancer Care

Exon 20 Mutations in Various Tumor Types

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

Estimated Prevalence of Exon 20 In Other Tumors				
Region	Mutation	Exon 20 Frequency (%)	Total Exon 20 (non-Lung) Patients/year	
U.S.*	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**

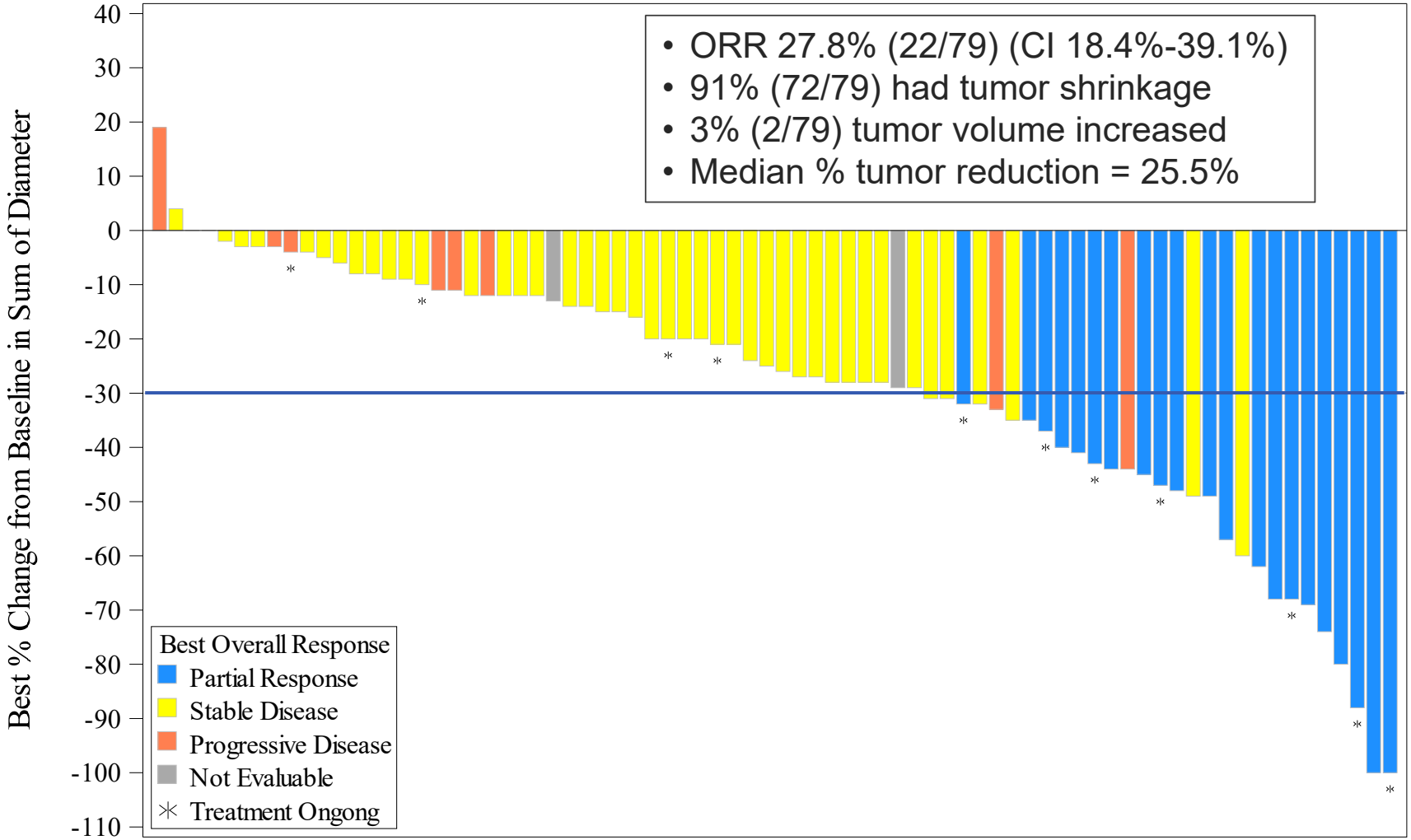
NDA submission planned in 2021

Safety Profile for Cohort 2 In-line with TKIs

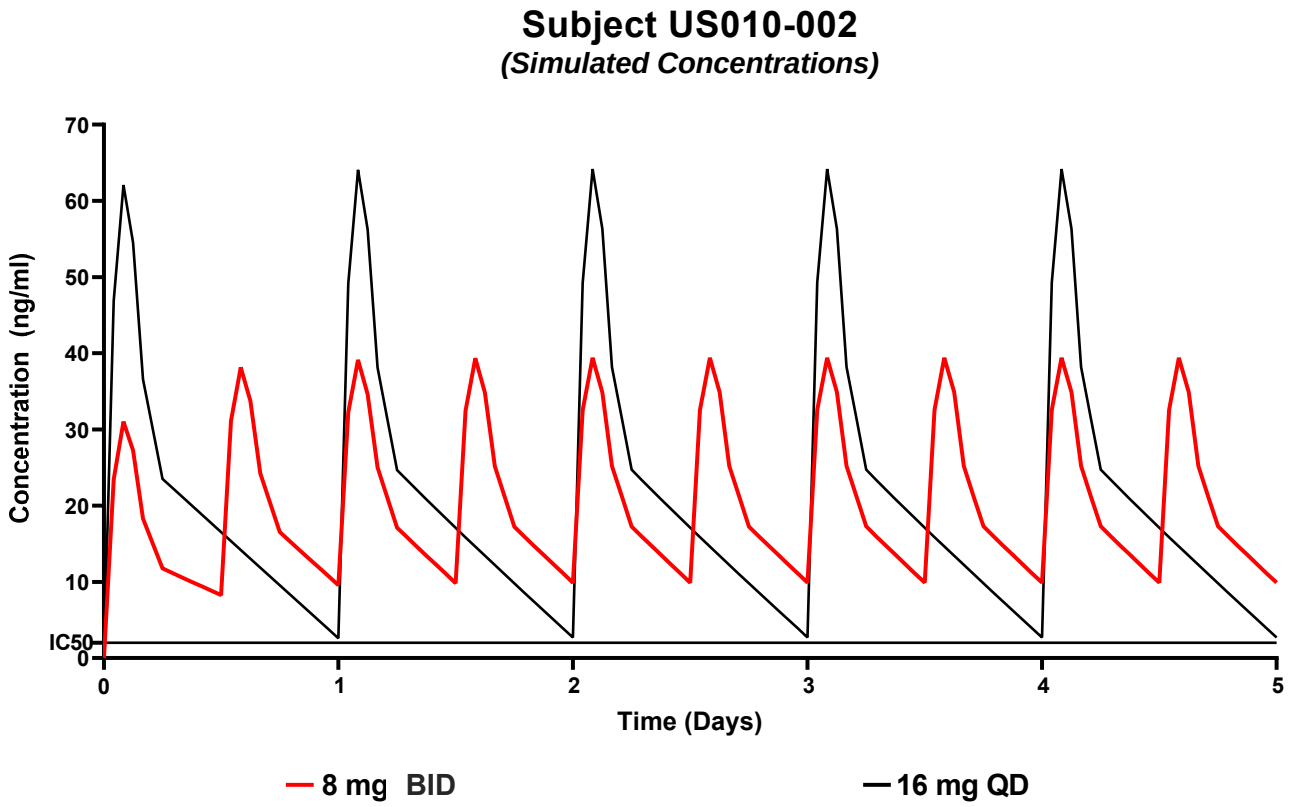
- Cohort 2 starting dose 16 mg QD
- Safety profile was in-line with the type of adverse events seen with other second-generation EGFR TKIs
- Grade 3 incidence of rash was 30%
- Grade 3 incidence of diarrhea was 26%
- 11 patients (12%) permanently discontinued study due to adverse events

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



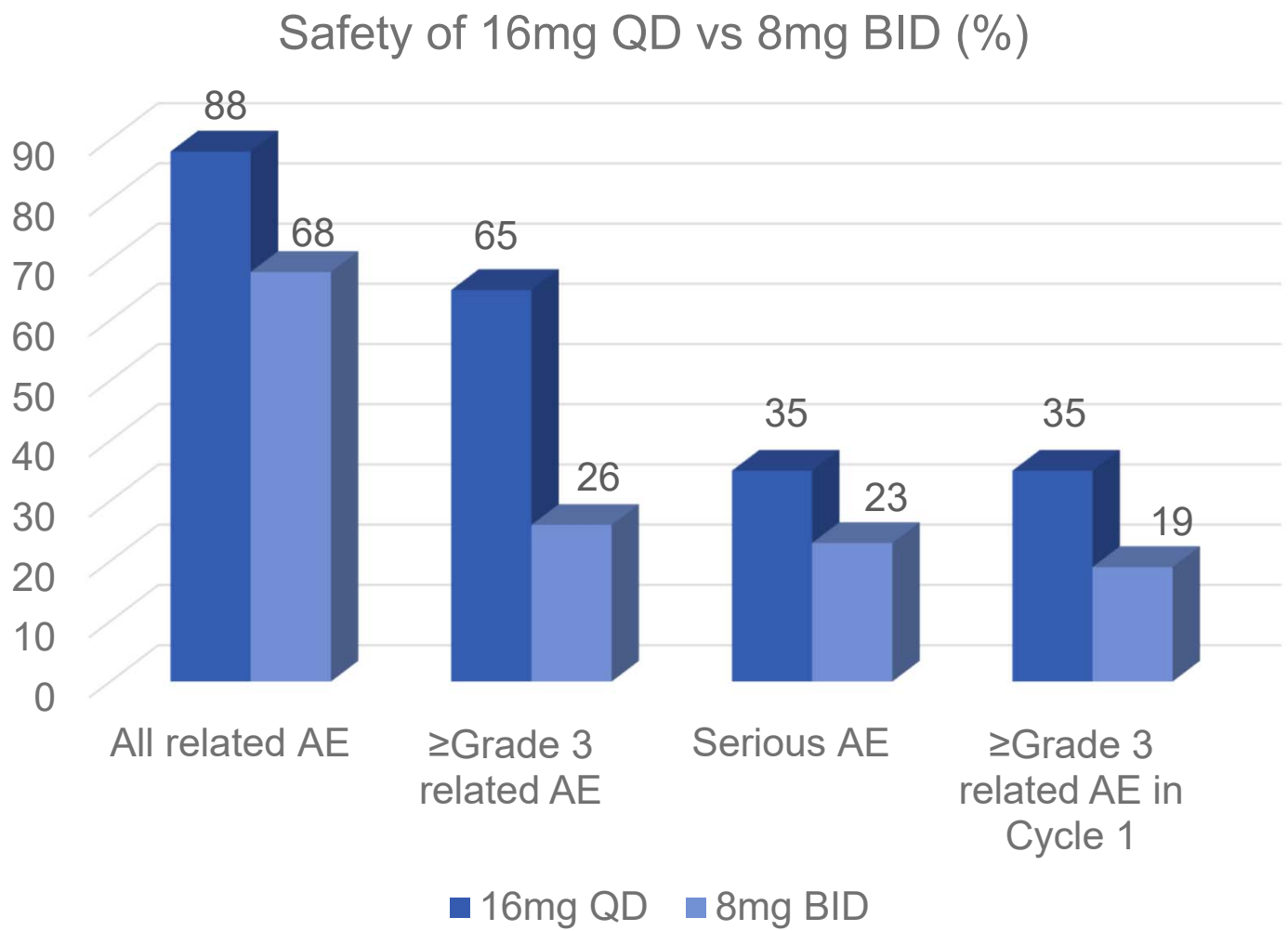
- Pozi plasma ½ life is 7.9 hours
- BID dosing
  - Decreases Cmax
  - Maintains Ctrough above IC50
- Pozi IC50 4nM (2ng/ml)-T790m

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 Also Showed Improved Safety



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 4 continuing to enroll well (48 patients QD, but current enrollment at BID)
- Cohort 5 – Preliminary data from 8 mg BID dosing meaningfully improved tolerability leading to fewer dose interruptions and increased efficacy and will now enroll exclusively at 8 mg BID dose

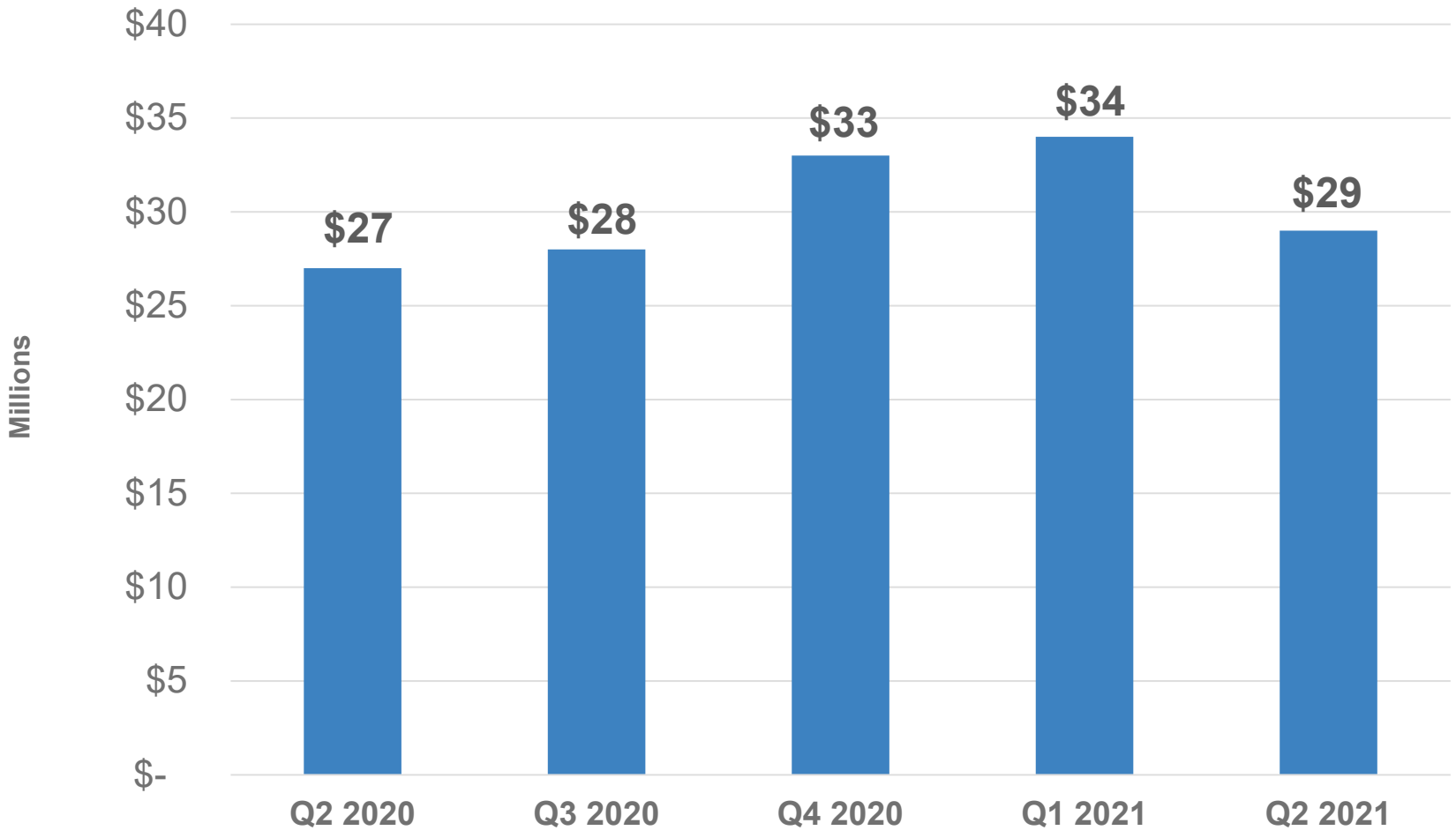
Focused Interferon Therapeutics

FIT Platform

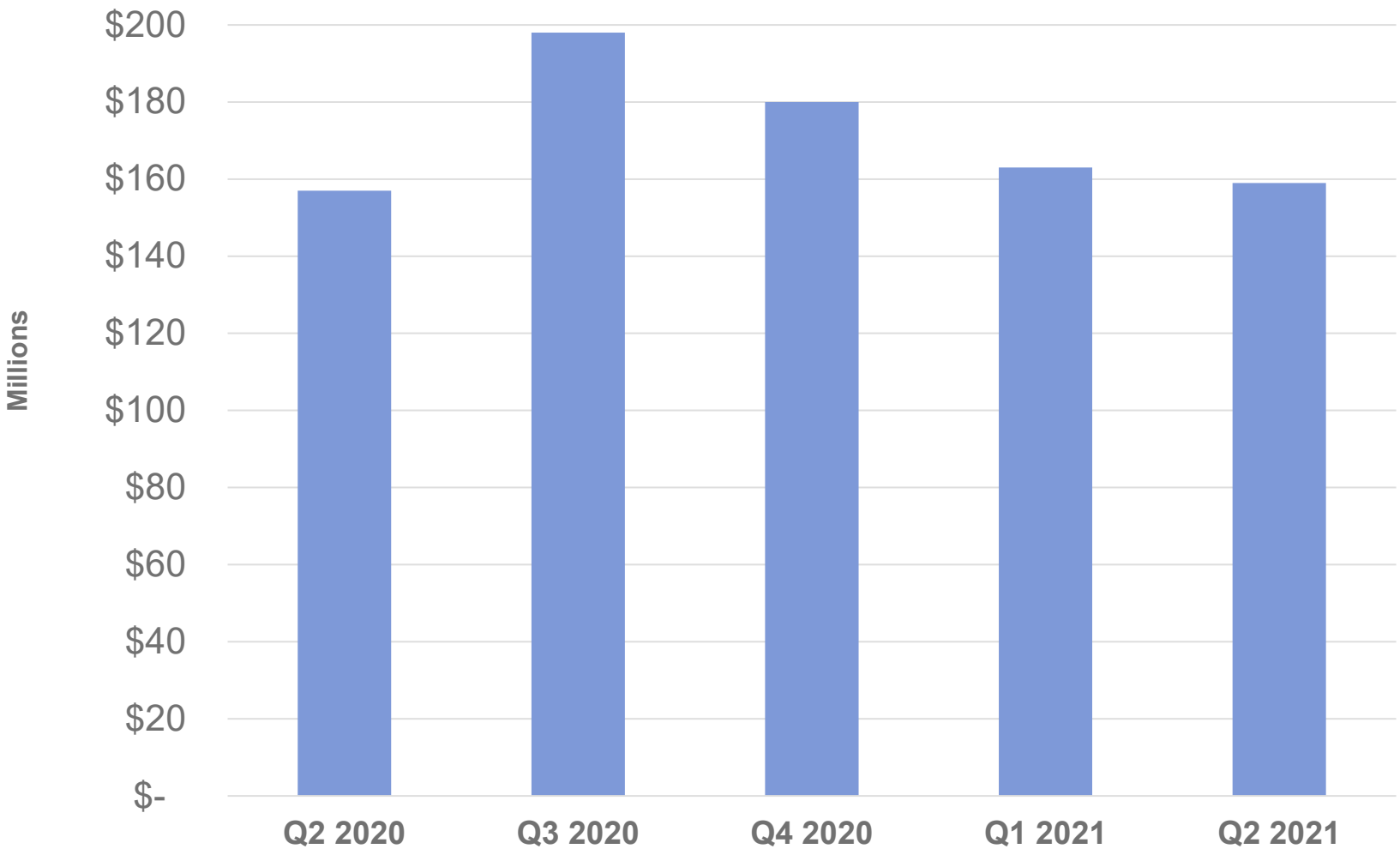
Targeted Antibody-Interferon Fusion Technology

- 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

Operating Cash Burn



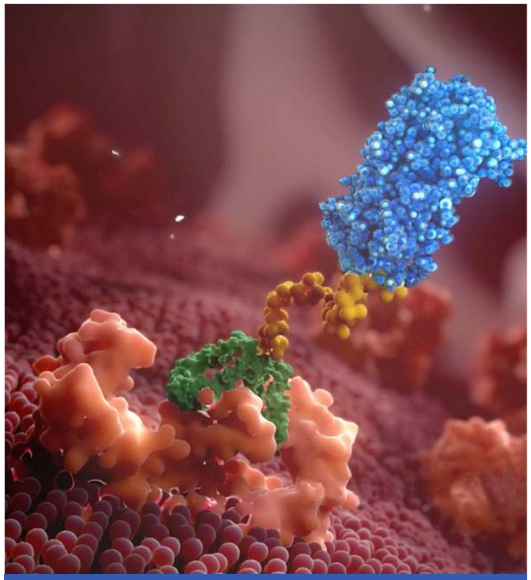
Cash & Marketable Securities Balance



SPECTRUM PHARMACEUTICALS
Redefining Cancer Care

Spectrum's Pipeline & Key Milestones

Targeted & Novel Medicines



ROLONTIS®
(eflapegrastim)

Remediation of CRL Underway

POZIOTINIB

NDA Filing in 2021

Focused Interferon Therapeutics (FIT)

Ongoing Phase 1 Dose Escalation Study

SPECTRUM PHARMACEUTICALS, INC.
Condensed Consolidated Statements of Operations
(In thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	**2020**	**2021**	**2020**
Revenues	$ —	$ —	$ —	$ —
Operating costs and expenses:				
Selling, general and administrative	14,957	14,744	29,272	29,538
Research and development	29,114	21,746	48,485	37,739
Total operating costs and expenses	44,071	36,490	77,757	67,277
Loss from continuing operations before other income (expense) and income taxes	(44,071)	(36,490)	(77,757)	(67,277)
Other income (expense):				
Interest income, net	26	325	110	1,029
Other income (expense), net	(5,876)	3,945	(7,957)	(6,589)
Total other income (expense)	(5,850)	4,270	(7,847)	(5,560)
Loss from continuing operations before income taxes	(49,921)	(32,220)	(85,604)	(72,837)
Provision for income taxes from continuing operations	(16)	(9)	(9)	(9)
Loss from continuing operations	$ (49,937)	$ (32,229)	$ (85,613)	$ (72,846)
Income (loss) from discontinued operations, net of income taxes	(195)	144	(216)	189
Net loss	$ (50,132)	$ (32,085)	$ (85,829)	$ (72,657)
Basic and diluted loss per share:				
Loss from continuing operations	$ (0.32)	$ (0.29)	$ (0.57)	$ (0.65)
Income (loss) from discontinued operations	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Net loss per share, basic and diluted	$ (0.32)	$ (0.28)	$ (0.57)	$ (0.65)
Weighted average shares outstanding, basic and diluted	155,243,402	112,615,744	150,334,548	112,199,229

SPECTRUM PHARMACEUTICALS, INC.
Condensed Consolidated Balance Sheets
(In thousands, expect per share and par value amounts)
(Unaudited)

	June 30, 2021	December 31, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	$ 114,573	$ 46,009
Marketable securities	44,244	134,016
Accounts receivable, net	—	67
Other receivables	3,532	2,394
Prepaid expenses and other current assets	3,357	4,161
Total current assets	165,706	186,647
Property and equipment, net	3,580	3,577
Facility and equipment under lease	1,432	2,247
Other assets	4,327	4,327
Total assets	$ 175,045	$ 196,798
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and other accrued liabilities	$ 50,295	$ 43,771
Accrued payroll and benefits	6,404	9,375
Total current liabilities	56,699	53,146
Other long-term liabilities	9,758	9,409
Total liabilities	66,457	62,555
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, $0.001 par value; 300,000,000 shares authorized; 164,106,060 and 146,083,110 issued and outstanding at June 30, 2021 andDecember 31, 2020, respectively	164	146
Additional paid-in capital	1,082,875	1,021,221
Accumulated other comprehensive loss	(3,327)	(1,829)
Accumulated deficit	(971,124)	(885,295)
Total stockholders' equity	108,588	134,243
Total liabilities and stockholders' equity	$ 175,045	$ 196,798

Non-GAAP Financial Measures (from Continuing Operations)

Spectrum reports certain historical results that have not been prepared in accordance with generally accepted accounting principles (GAAP), including non-GAAP selling, general and administrative expenses, non-GAAP research and development expenses, non-GAAP net loss and non-GAAP net loss per share. Non-GAAP financial measures are reconciled to the most directly comparable GAAP financial measures in the tables of this press release and the accompanying footnotes. The non-GAAP financial measures contained herein are a supplement to the corresponding financial measures prepared in accordance with GAAP. The non-GAAP financial measures presented exclude the items summarized in the below table.

Management believes that adjustments for these items assist investors in making comparisons of period-to-period operating results and that these items are not indicative of the company's on-going core operating performance. Management uses non-GAAP net income (loss) in its evaluation of the company's core after-tax results of operations and trends between fiscal periods and believes that these measures are important components of its internal performance measurement process. Management believes that these non-GAAP financial measures are useful to investors in providing greater transparency to the information used by management in its operational decision-making. Management believes that the use of these non-GAAP financial measures also facilitates a comparison of the company’s underlying operating performance with that of other companies in its industry, which use similar non-GAAP measures to supplement their GAAP results.

The non-GAAP financial measures presented herein have certain limitations in that they do not reflect all of the costs associated with the operations of the company's business as determined in accordance with GAAP. Therefore, investors should consider non-GAAP financial measures in addition to, and not as a substitute for, or as superior to, measures of financial performance prepared in accordance with GAAP. In addition, other companies, including other companies in our industry, may calculate non-GAAP financial measures differently than we do, limiting their usefulness as a comparative tool. Investors and potential investors are encouraged to review the reconciliation of our non-GAAP financial measures contained within this news release with our GAAP financial results.

SPECTRUM PHARMACEUTICALS, INC.

Reconciliation of Non-GAAP Adjustments for Condensed Consolidated Statements of Operations

(In thousands, expect per share amounts)

		CONTINUING OPERATIONS ONLY Three Months Ended June 30,		CONTINUING OPERATIONS ONLY Six Months Ended June 30,	
		2021	2020	2021	2020
(1)	**GAAP selling, general and administrative**	**$ 14,957**	**$ 14,744**	**$ 29,272**	**$ 29,538**
	Non-GAAP adjustments to SG&A:				
	Stock-based compensation expense	(3,005)	(2,877)	(5,803)	(6,755)
	Depreciation expense	(71)	(112)	(134)	(218)
	Lease expense	26	5	49	14
	Non-GAAP selling, general and administrative	**$ 11,907**	**$ 11,760**	**$ 23,384**	**$ 22,579**
(2)	**GAAP research and development**	**$ 29,114**	**$ 21,746**	**$ 48,485**	**$ 37,739**
	Non-GAAP adjustments to R&D:				
	Stock-based compensation expense	(1,355)	(1,110)	(2,769)	(2,508)
	Depreciation expense	(2)	(31)	(4)	(65)
	Non-GAAP research and development	**$ 27,757**	**$ 20,605**	**$ 45,712**	**$ 35,166**
(3)	**GAAP net loss from continuing operations**	**$ (49,937)**	**$ (32,229)**	**$ (85,613)**	**$ (72,846)**
	Non-GAAP adjustments to net loss from continuing operations:				
	Adjustments to SG&A and R&D, as noted above	4,407	4,125	8,661	9,532
	Adjustments to other income (expense)	6,197	(3,667)	8,569	6,582
	Adjustments to benefit for income taxes	16	9	9	9
	Non-GAAP net loss from continuing operations	**$ (39,317)**	**$ (31,762)**	**$ (68,374)**	**$ (56,723)**
(4)	**GAAP net loss from continuing operations - per basic and diluted share**	**$ (0.32)**	**$ (0.29)**	**$ (0.57)**	**$ (0.65)**
	Non-GAAP net loss from continuing operations - per basic and diluted share	**$ (0.25)**	**$ (0.28)**	**$ (0.45)**	**$ (0.51)**
	Weighted average shares outstanding, basic and diluted	155,243,402	112,615,744	150,334,548	112,199,229