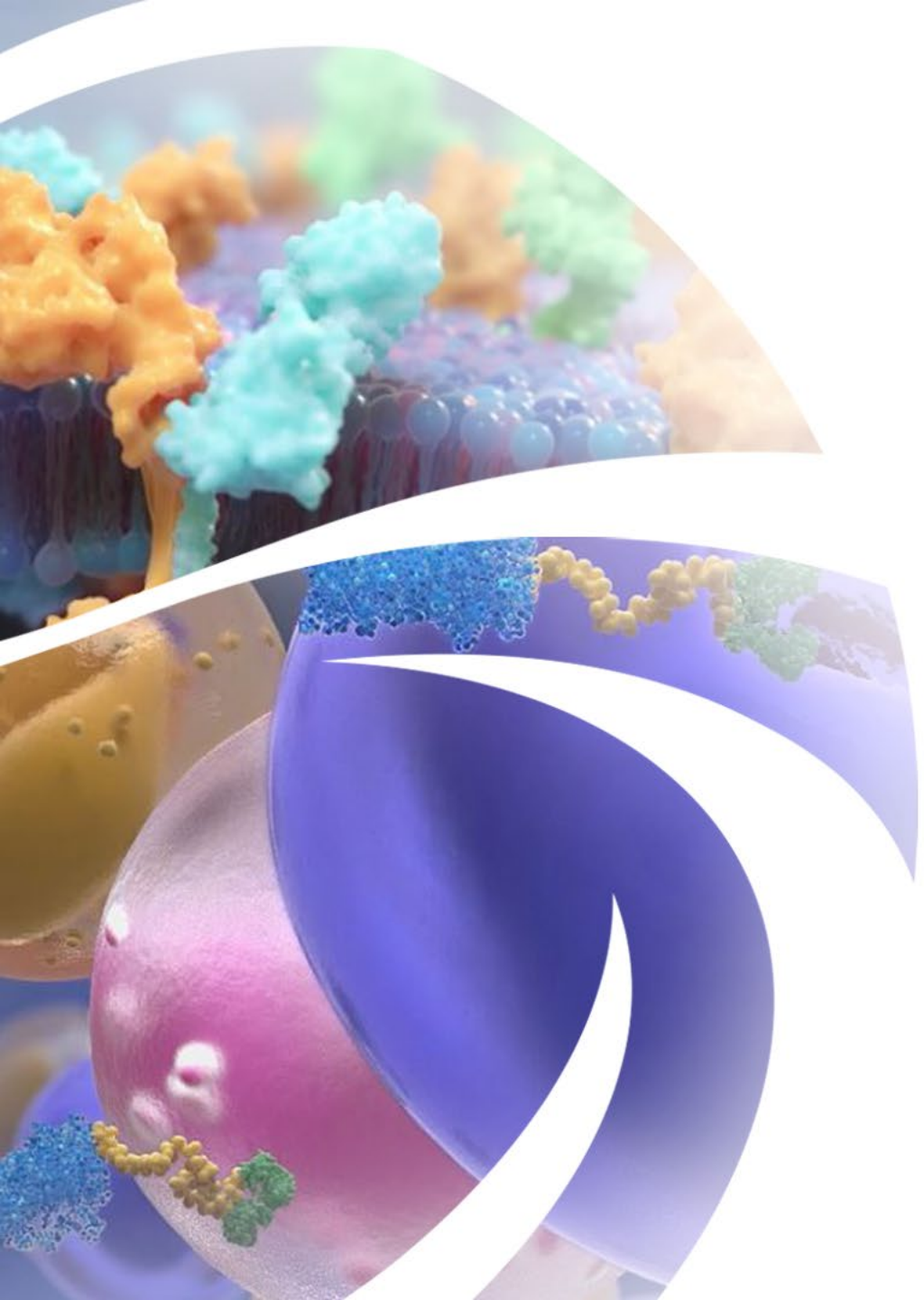


Spectrum Pharmaceuticals

A Biopharmaceutical Company Developing Targeted and Novel Therapies in Oncology

Tom Riga | CEO

May 2022 | Investor Presentation

SPECTRUM PHARMACEUTICALS

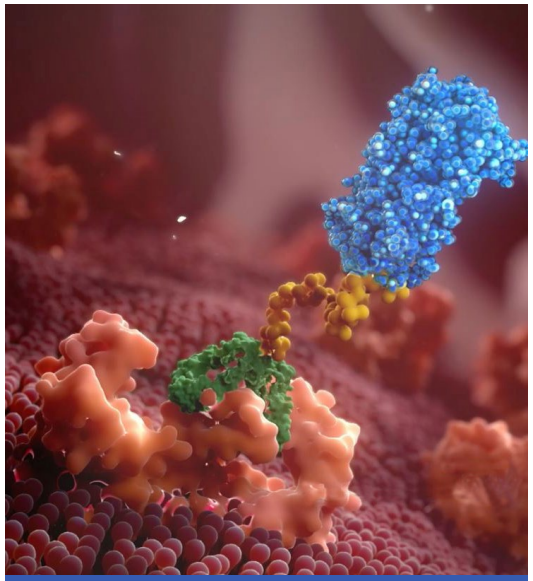
Redefining Cancer Care

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.

Pipeline & Key Milestones



Eflapegrastim

PDUFA: September 9th

Poziotinib

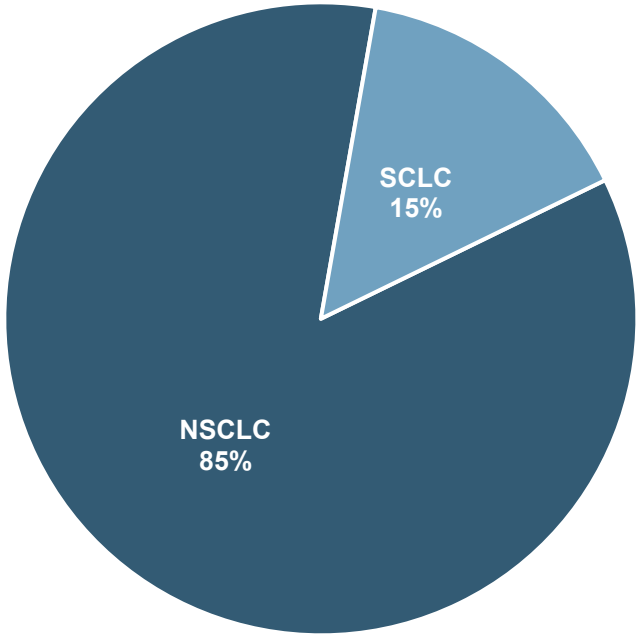
ODAC: September 22-23
PDUFA: November 24th

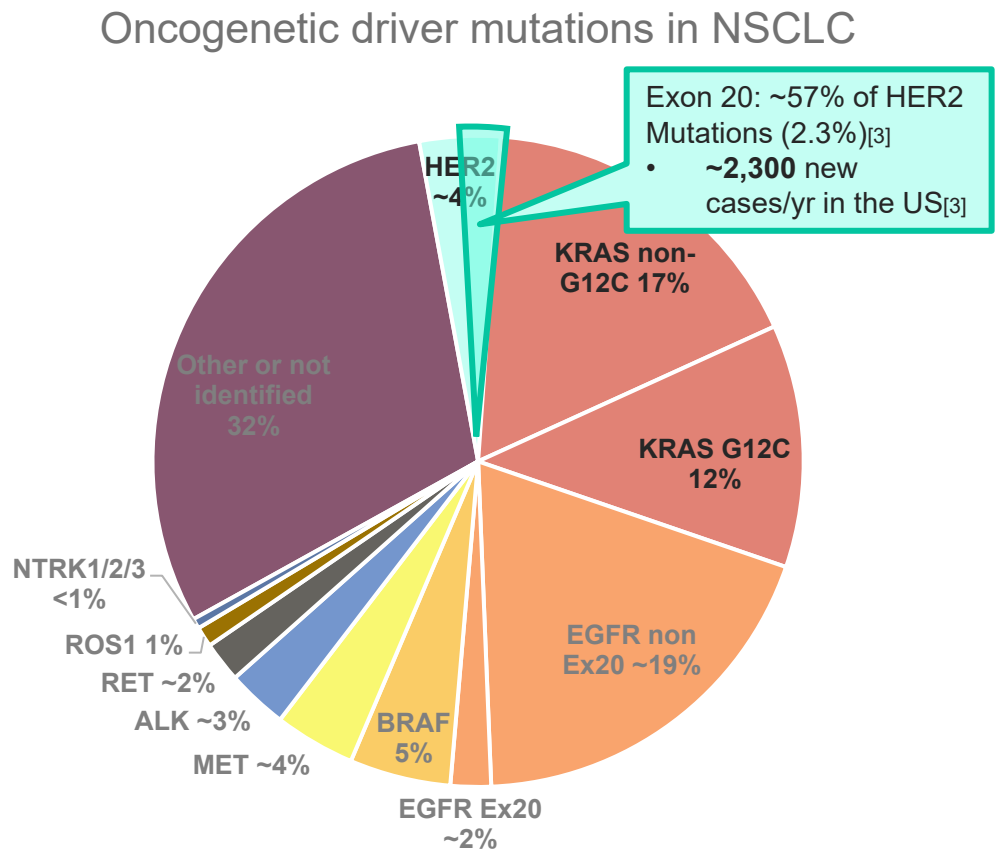
Poziotinib

Pan ErbB inhibitor targeting mutations in lung cancer

NDA submission based on positive study results in patients with previously treated metastatic NSCLC harboring HER2 exon 20 insertion mutations

NSCLC Mutations





[1] Thai et al, Lancet 2021
[2] Trinity, US Epi of NSCLC mutations
[3] Robichaux 2019; Eng 2016; Patil 2020; Li 2018; Buttita 2006

ZENITH20 Registrational Cohorts

Registrational Studies

Cohort 1
(n=115)
Previously treated NSCLC with **EGFR** exon 20 insertions
Fully Enrolled

Cohort 2
(n=90)
Previously treated NSCLC with **HER2** exon 20 insertions
Fully Enrolled

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

Cohort 3
(n=79)
First-line NSCLC with **EGFR** exon 20 insertions
Fully Enrolled

Cohort 4
(n=70)
First-line NSCLC with **HER2** exon 20 insertions
16mg QD/8mg BID
Fully Enrolled

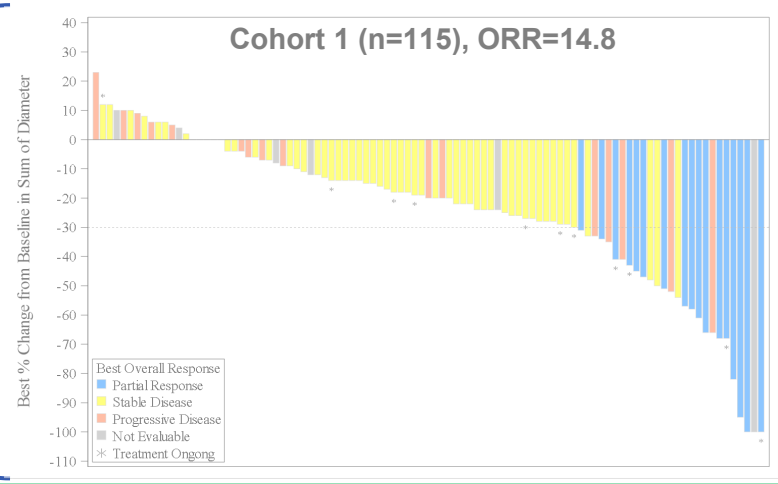
Exploratory cohorts:

- Cohort 5: Dose exploration of poziotinib in patients with previously-treated or treatment-naïve NSCLC with EGFR or HER2 mutations randomized to either QD or BID dosing
- Cohort 6: Patients with acquired EGFR mutations who progressed on first-line osimertinib
- Cohort 7: Patients with atypical EGFR or HER2 activating mutations

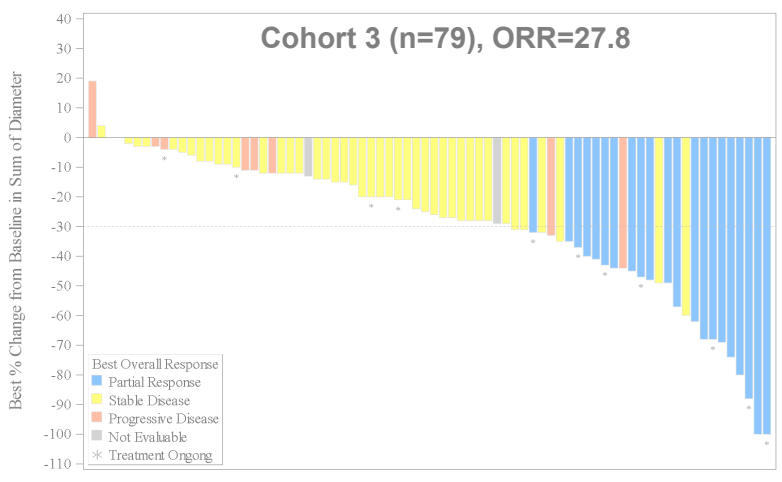
Poziotinib has Demonstrated Clinical Activity Across ZENITH20 Registrational Cohorts

EGFR

2L+ Exon 20 insertion mutations

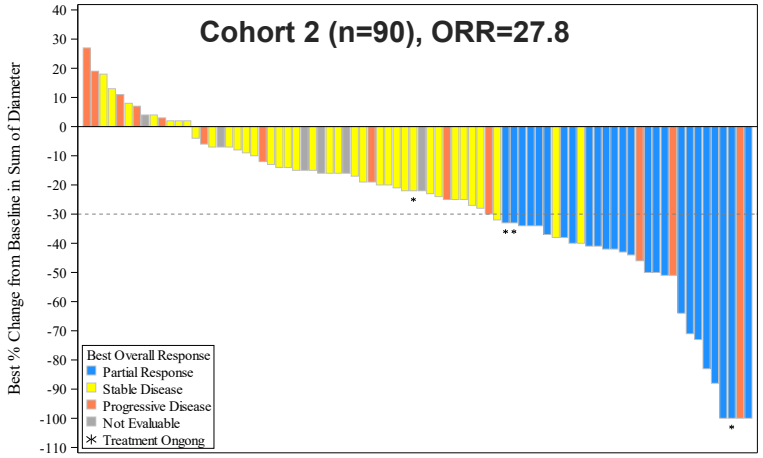


1L Exon 20 insertion mutations

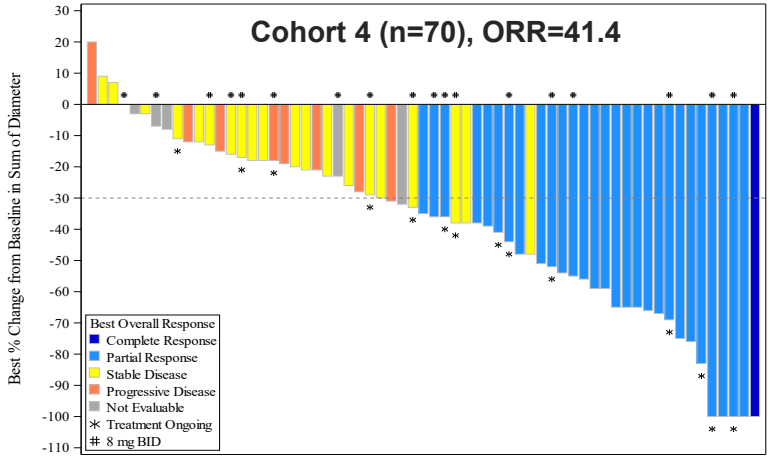


HER2

2L+ Exon 20 insertion mutations



1L Exon 20 insertion mutations



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Redefining Cancer Care

NDA Submission Based on Positive Cohort 2 Results

	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**

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

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

Exposure and Safety of HER2 First-line

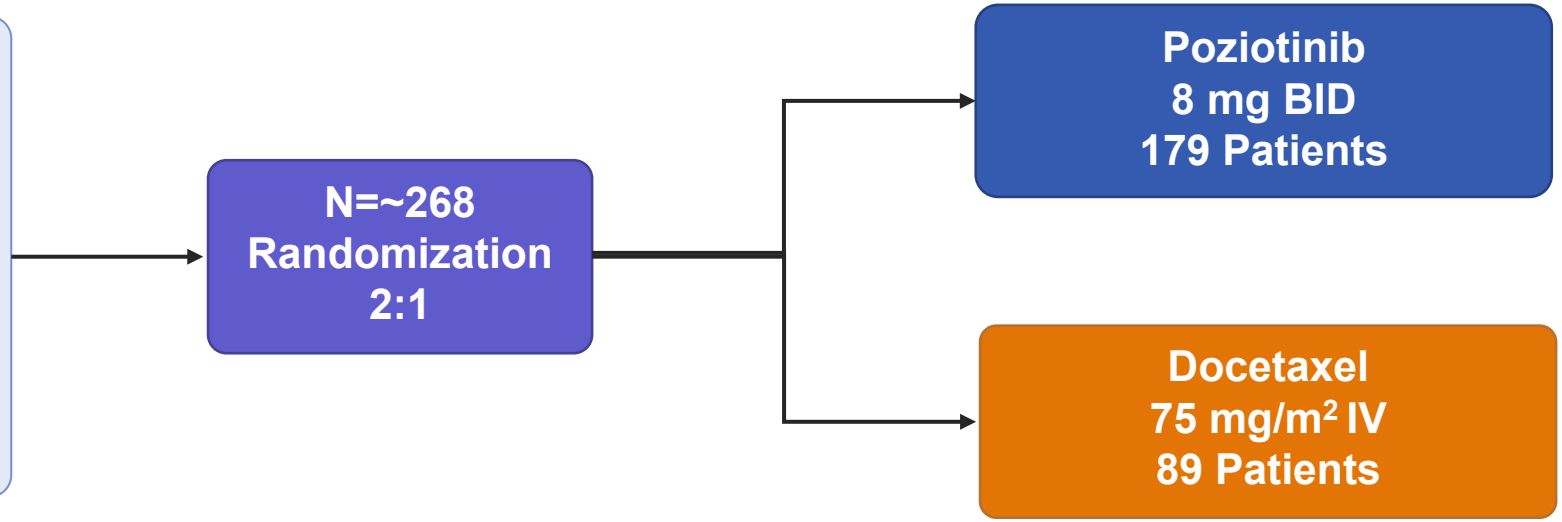
	QD (n=48)	BID (n=22)	Total (N=70)
Drug interruption, n (%)	43 (90%)	15 (68%)	58 (83%)
Median days to first interruption	19	26	23
Dose reduction, n (%)	38 (79%)	14 (64%)	52 (74%)
Median days to first reduction	36	33	36
Grade ≥3 TRAEs of special interest, n (%)			
Diarrhea	7 (15%)	3 (14%)	10 (14%)
Rash	17 (35%)	4 (18%)	21 (30%)
Stomatitis / Mucosal Inflammation	10 (21%)	3 (14%)	13 (19%)
Paronychia	4 (8%)	1 (5%)	5 (7%)
Pneumonitis	1 (2%)	1 (5%)	2 (3%)

Grade 4 TRAEs were reported in 2 patients in the BID cohort (*hypokalemia,hyponatremia*).
MedDRA preferred terms shown.

Global Confirmatory Study Initiated (PINNACLE)

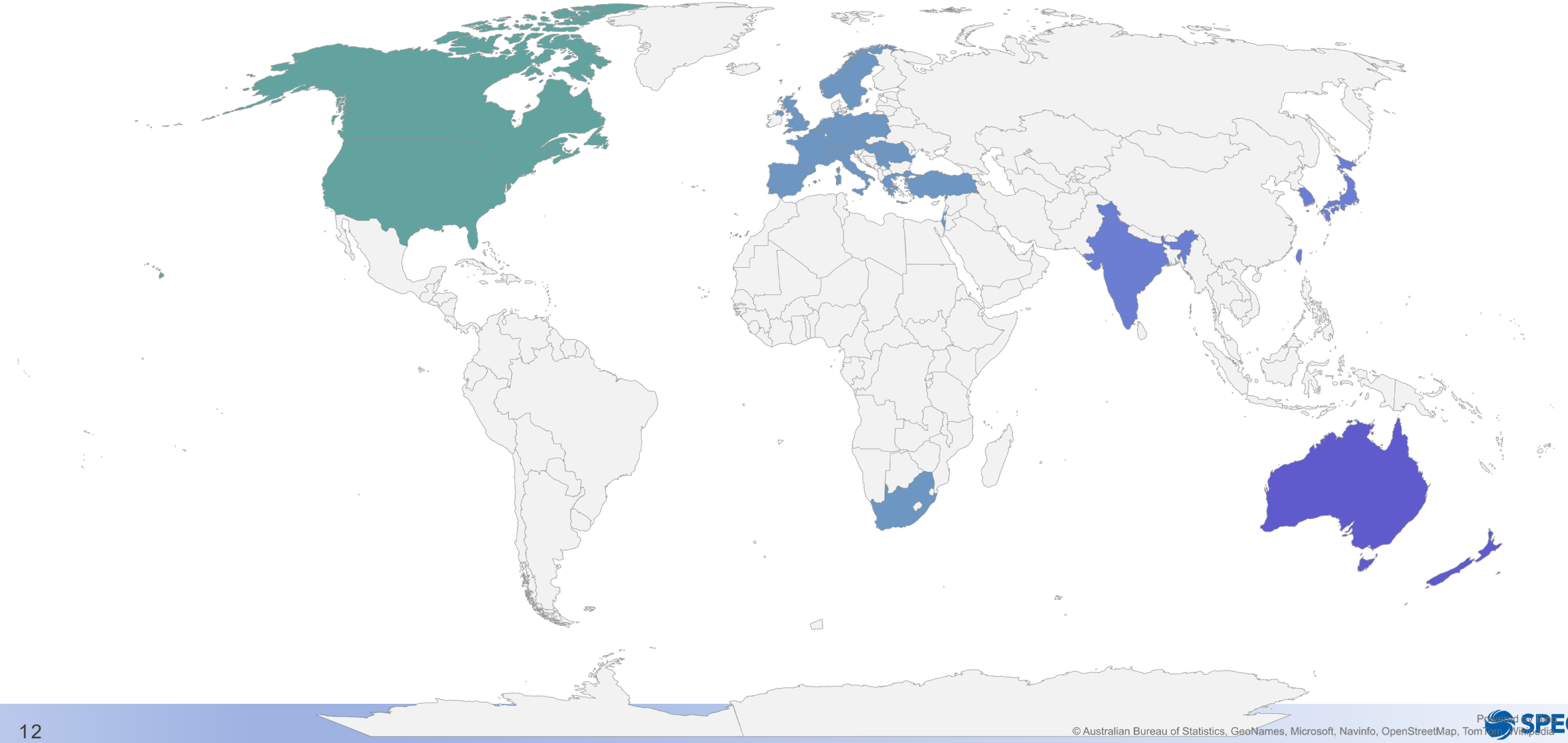
Phase 3, randomized, two-arm, active-control, open label, global-multicenter study

- Advanced or metastatic NSCLC harboring HER2 Exon 20 mutations
- Baseline imaging
- Genotyping Report from either tissue or plasma



- **Primary Objective: PFS**
- Secondary Objectives: OS, ORR, DCR, Safety & tolerability
- Exploratory Objective: Circulating ctDNA in subset of patients

Global Confirmatory Study with 100-150 Sites



Poziotinib Summary

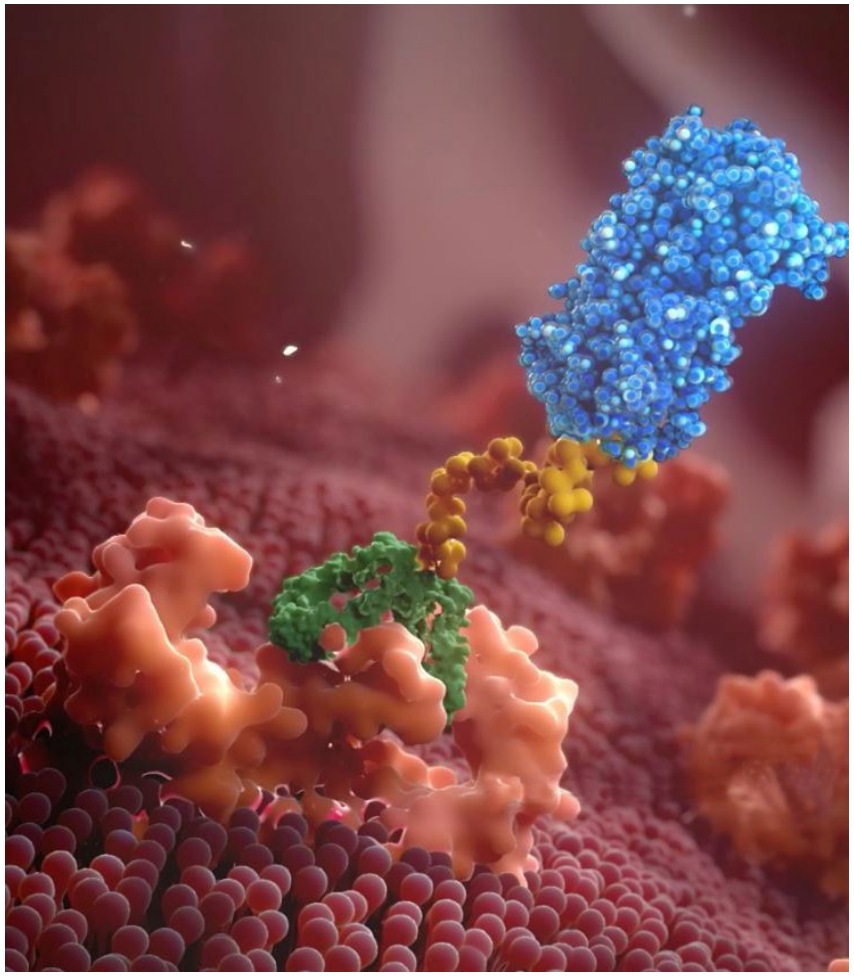
Review is under a Fast-Track Designation

NDA accepted based on the positive results in previously treated NSCLC patients harboring HER2 exon 20 insertion mutations

ODAC Meeting September 22-23, 2022

PDUFA date November 24, 2022

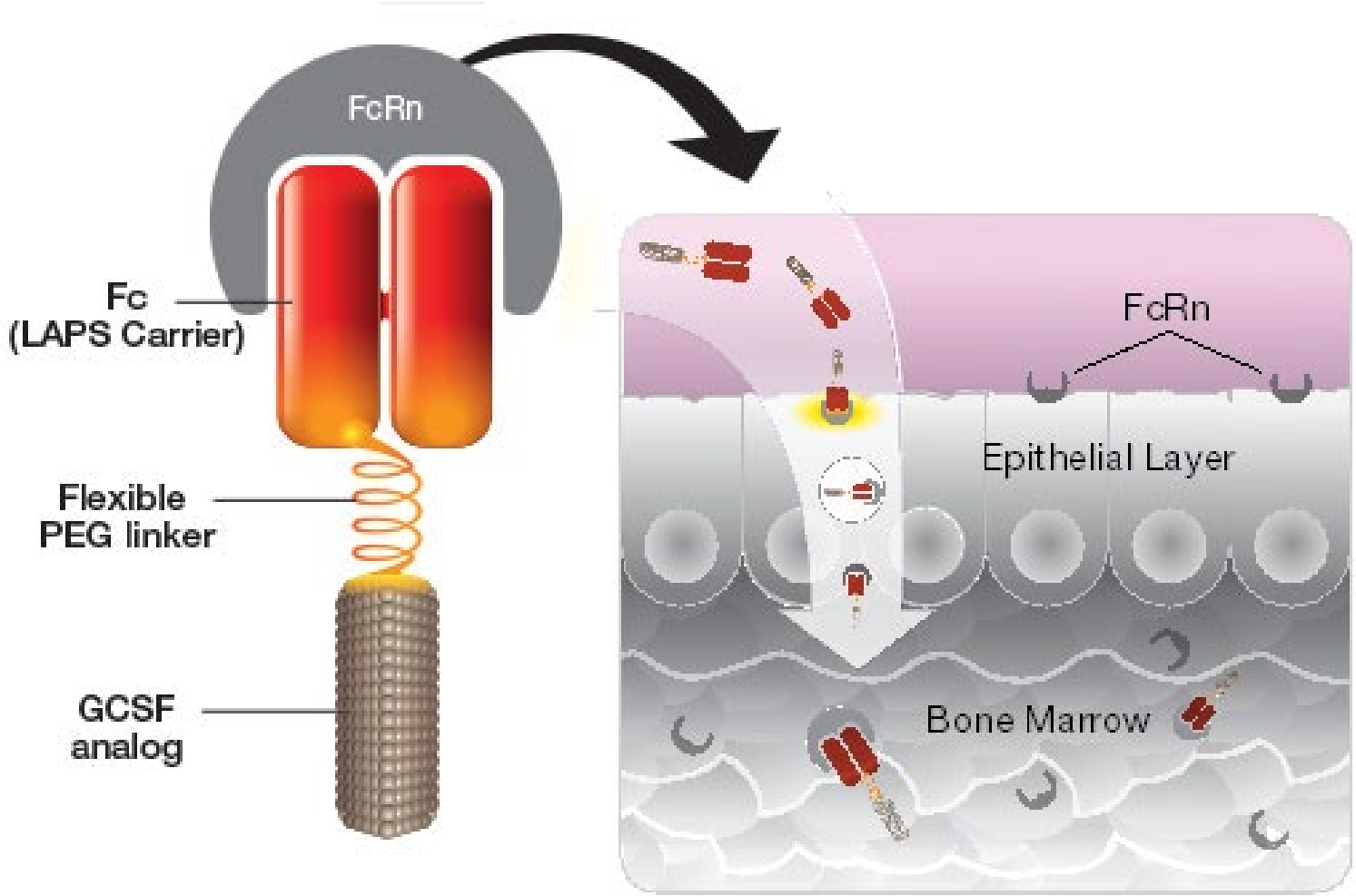
Eflapegrastim



Novel LA-GCSF developed with proprietary LAPSCOVERY technology

BLA submission based on two large phase 3 head-to-head non-inferiority studies vs. pegfilgrastim (n=643)

Eflapegrastim is a Novel Product with Unique Molecular Structure

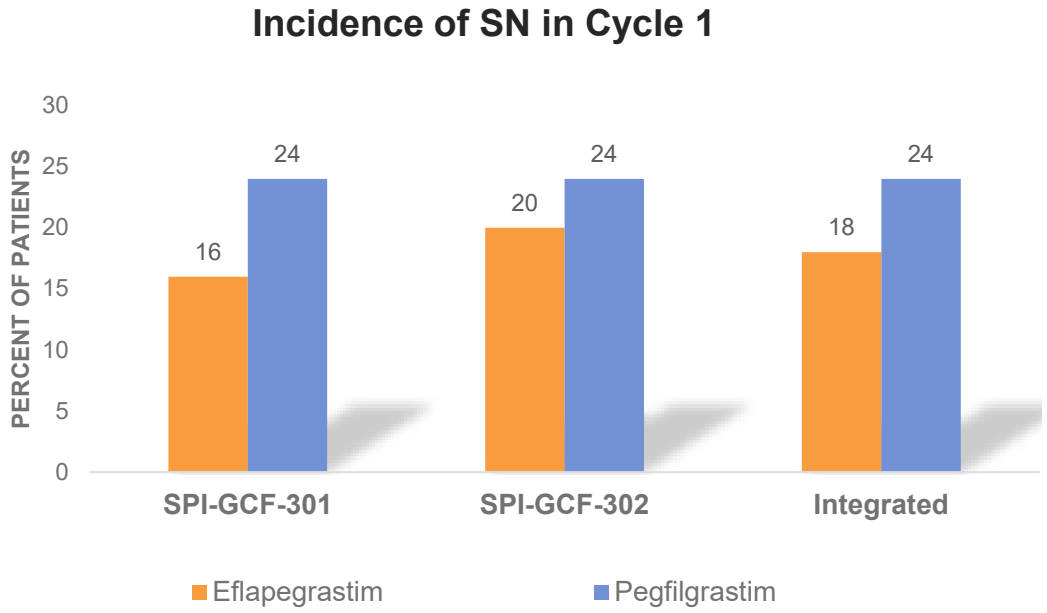


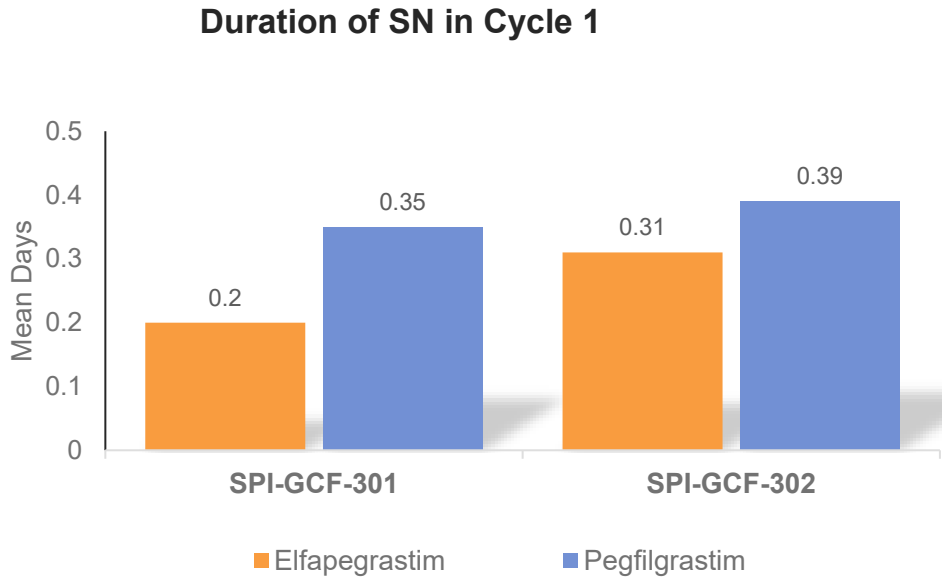
Eflapegrastim Demonstrated an Effect on Incidence and Duration of Severe Neutropenia

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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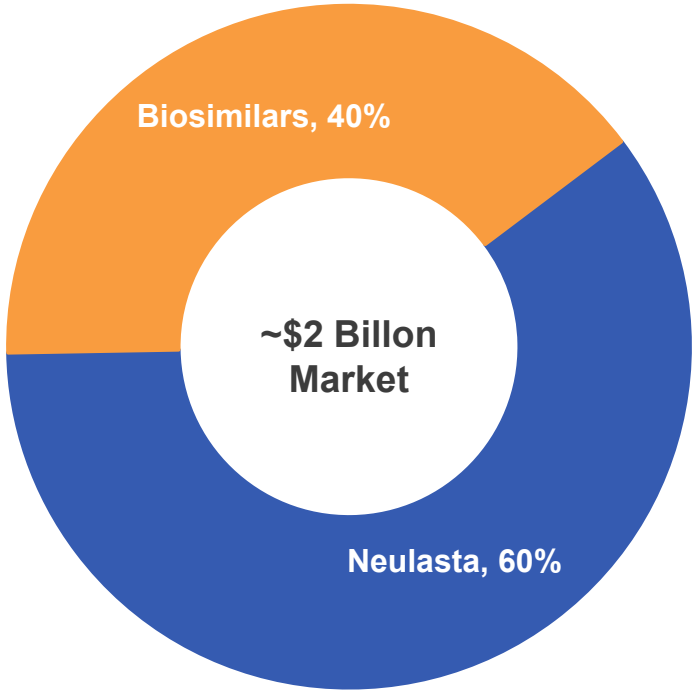
Redefining Cancer Care

The LA-GCSF Market Presents a Compelling Opportunity

Eflapegrastim will be the first new novel LA-GCSF in more than 20 years



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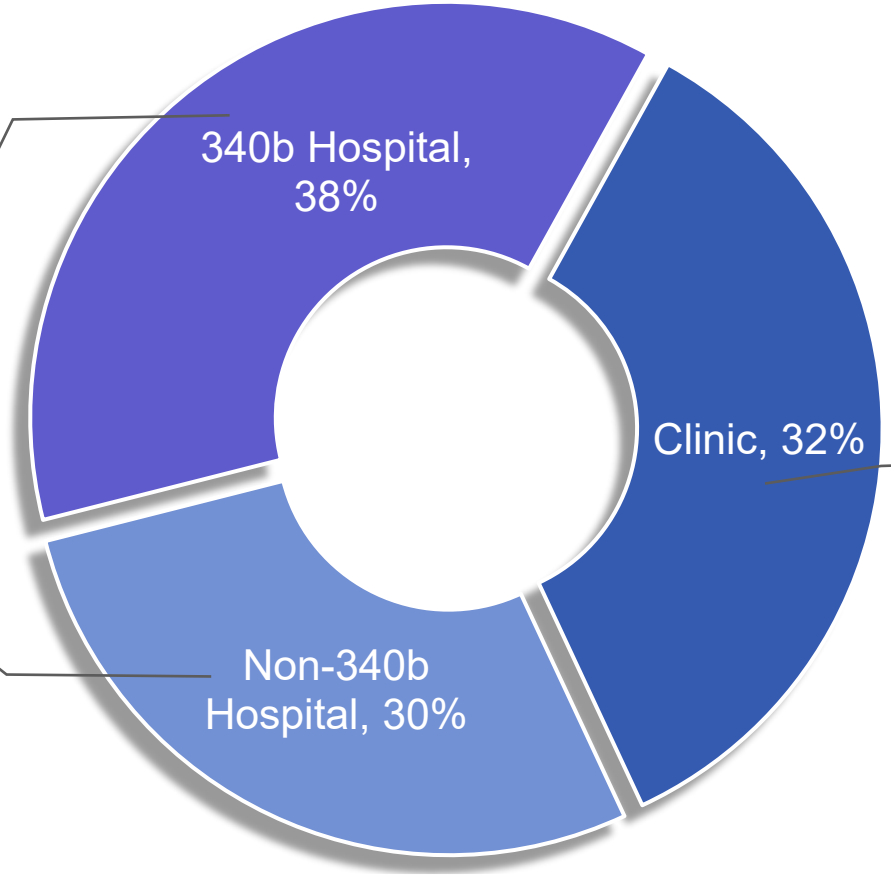
LA-GCSF Business Segmentation

340b Hospitals

- **Pass through** status impacts 340b reimbursement
  - ASP + 6% vs. ASP – 22.5%

Non-340b Hospitals

- Largely **acquisition cost** sensitive



Clinics

- Responsive to **tailored contracting**
- Value **ASP stability & predictability**
- High utilization of **Patient Access** & Support Programs

Commercial Effectiveness

Efficacious & Safe

Unique clinical profile with proven safety and efficacy

Compelling Value Proposition

Tailored contracting & independent reimbursement

Access and Reimbursement

Prepared to partner with providers to ensure eflapegrastim is an available option

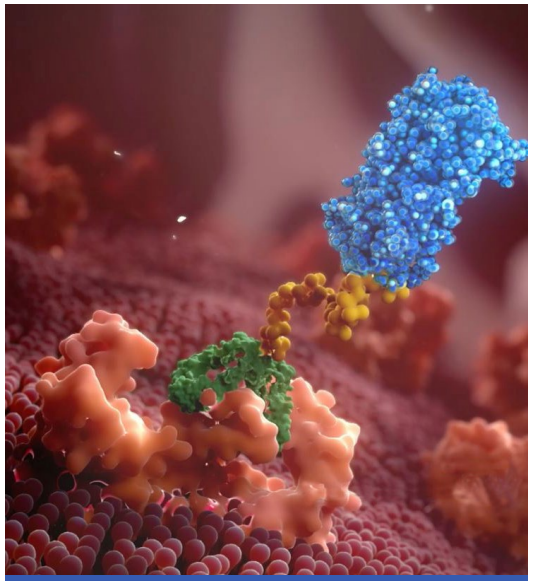
Exceptional Customer Support

Best in class support programs with fully integrated field team

Cash Runway into 2023

Cash and marketable securities as of Mar 31, 2022:	$89.2M
Q1 2022 Operating Expenses:	$14.1M
Q1 2022 Net Loss:	($15.4M)
Weighted Average Shares Outstanding as of Mar 31, 2022:	169.7M

Pipeline & Key Milestones



Eflapegrastim

PDUFA: September 9th

Poziotinib

ODAC: September 22-23
PDUFA: November 24th

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

	Three Months Ended March 31,	
	2022	**2021**
Operating costs and expenses:		
Selling, general and administrative	$ 9,870	$ 14,315
Research and development	4,193	19,371
Total operating costs and expenses	14,063	33,686
Loss from continuing operations before other income (expense) and income taxes	(14,063)	(33,686)
Other income (expense):		
Interest income, net	11	84
Other expense, net	(1,334)	(2,081)
Total other expense	(1,323)	(1,997)
Loss from continuing operations before income taxes	(15,386)	(35,683)
Benefit for income taxes from continuing operations	(16)	7
Loss from continuing operations	$ (15,402)	$ (35,676)
Loss from discontinued operations, net of income taxes	(40)	(21)
Net loss	$ (15,442)	$ (35,697)
Basic and diluted loss per share:		
Loss from continuing operations	$ (0.09)	$ (0.25)
Loss from discontinued operations	$ 0.00	$ 0.00
Net loss per share, basic and diluted	$ (0.09)	$ (0.25)
Weighted average shares outstanding, basic and diluted	169,735,019	145,371,657

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

	March 31, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 78,679	$ 88,539
Marketable securities	10,535	12,108
Other receivables	639	1,028
Prepaid expenses and other current assets	3,328	2,277
Total current assets	93,181	103,952
Property and equipment, net	418	455
Facility and equipment under lease	2,107	2,505
Other assets	4,348	4,636
Total assets	$ 100,054	$ 111,548
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and other accrued liabilities	$ 32,575	$ 41,258
Accrued payroll and benefits	6,633	11,971
Total current liabilities	39,208	53,229
Other long-term liabilities	5,590	10,766
Total liabilities	44,798	63,995
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; 178,827,485 and 164,502,013 issued and outstanding at March 31, 2022 and December 31, 2021, respectively	179	165
Additional paid-in capital	1,117,350	1,094,353
Accumulated other comprehensive loss	(2,908)	(3,042)
Accumulated deficit	(1,059,365)	(1,043,923)
Total stockholders' equity	55,256	47,553
Total liabilities and stockholders' equity	$ 100,054	$ 111,548

Non-GAAP Financial Measures (from Continuing Operations)

In this press release, 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 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, except share and per share amounts)

		CONTINUING OPERATIONS ONLY Three Months Ended March 31,	
		2022	2021
(1)	**GAAP selling, general and administrative**	$ 9,870	$ 14,315
	Non-GAAP adjustments to SG&A:		
	Stock-based compensation expense	(1,905)	(2,799)
	Depreciation expense	(71)	(63)
	Lease expense	39	23
	Severance expense	(408)	—
	Non-GAAP selling, general and administrative	$ 7,525	$ 11,476
(2)	**GAAP research and development**	$ 4,193	$ 19,371
	Non-GAAP adjustments to R&D:		
	Stock-based compensation expense	(1,090)	(1,414)
	Depreciation expense	(2)	(2)
	Severance expense	(1,040)	—
	Non-GAAP research and development	$ 2,061	$ 17,955
(3)	**GAAP net loss from continuing operations**	$ (15,402)	$ (35,676)
	Non-GAAP adjustments to net loss from continuing operations:		
	Adjustments to SG&A and R&D, as noted above	4,477	4,255
	Adjustments to other expense	1,329	2,072
	Adjustments to benefit for income taxes	16	(7)
	Non-GAAP net loss from continuing operations	$ (9,580)	$ (29,356)
(4)	**GAAP net loss from continuing operations - per basic and diluted share**	$ (0.09)	$ (0.25)
	Non-GAAP net loss from continuing operations - per basic and diluted share	$ (0.06)	$ (0.20)
	Weighted average shares outstanding, basic and diluted	169,735,019	145,371,657