Determined to realize a future in which people with cancer live longer and better than ever before

Syndax

4Q AND FY22 CORPORATE PRESENTATION | FEBRUARY 28, 2023

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This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "plan," "anticipate" and similar expressions (as well as other words or expressions referencing future events or circumstances) are intended to identify forward-looking statements. All statements other than statements of historical facts contained in this presentation, including statements regarding future operations, financial results and the financial condition of Syndax Pharmaceuticals, Inc. ("Syndax" or the "Company"), including financial position, strategy and plans, the progress, timing, clinical development and scope of clinical trials and the reporting of clinical data for Syndax's product candidates, the progress of regulatory submissions and approvals and the potential use of Syndax's product candidates to treat various cancer indications and fibrotic diseases, and Syndax's expectations for liquidity and future operations, are forward-looking statements. Many factors may cause differences between current expectations and actual results, including unexpected safety or efficacy data observed during preclinical studies or clinical trials, clinical site activation rates or clinical trial enrollment rates that are lower than expected; changes in expected or existing competition; the impact of macroeconomic conditions (such as COVID-19 pandemic, the Russia-Ukraine war, inflation, among others) on Syndax's business and that of the third parties on which Syndax depends, including delaying or otherwise disrupting Syndax's clinical trials and preclinical studies, manufacturing and supply chain, or impairing employee productivity; failure of our collaborators to support or advance collaborations or product candidates and unexpected litigation or other disputes. Moreover, Syndax operates in a very competitive and rapidly changing environment. Other factors that may cause our actual results to differ from current expectations are discussed in Syndax's filings with the U.S. Securities and Exchange Commission, including the "Risk Factors" sections contained therein. New risks emerge from time to time. It is not possible for Syndax's management to predict all risks, nor can Syndax assess the impact of all factors on its business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied. Except as required by law, neither Syndax nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. Syndax undertakes no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in Syndax's expectations.

2022: A year of growth and execution

Revumenib
Menin-MLL disruption

- Awarded BTD in patients with R/R KMT2Ar acute leukemia
- Presented robust Phase 1 data in two oral sessions at ASH 2022
- Initiated R/R frontline and combination trials in acute leukemias

Axatilimab
Anti-CSF-1R

- Published Phase 1/2 data in cGVHD in the Journal of Clinical Oncology
- Completed enrollment in the AGAVE-201 pivotal trial in R/R cGVHD
- Expanded development in collaboration with Incyte

Corporate and Pipeline

- Hired key leadership and expanded the organization
- Completed a $172.5M follow-on financing; retired debt
- Ended the year with $481.3M in cash

Revumenib and axatilimab on-track to file potential marketing applications in 2023 with several opportunities for expansion

Revumenib

Menin-MLL disruption

FDA BREAKTHROUGH THERAPY

Expand within acute leukemia and beyond to solid tumors

- Expect AUGMENT-101 pivotal data beginning in 3Q23
- Front-line and R/R combo trials ongoing with initial data by YE23
- Initial MSS CRC Phase 1 trial data expected by YE23

Axatilimab

Anti-CSF-1R

Expand into earlier lines of cGVHD and fibrotic disease

- AGAVE-201 pivotal cGHVD data expected mid-23
- Initiate cGVHD 1L combo trial in 2023
- Initiate IPF Phase 2 trial in 1H23

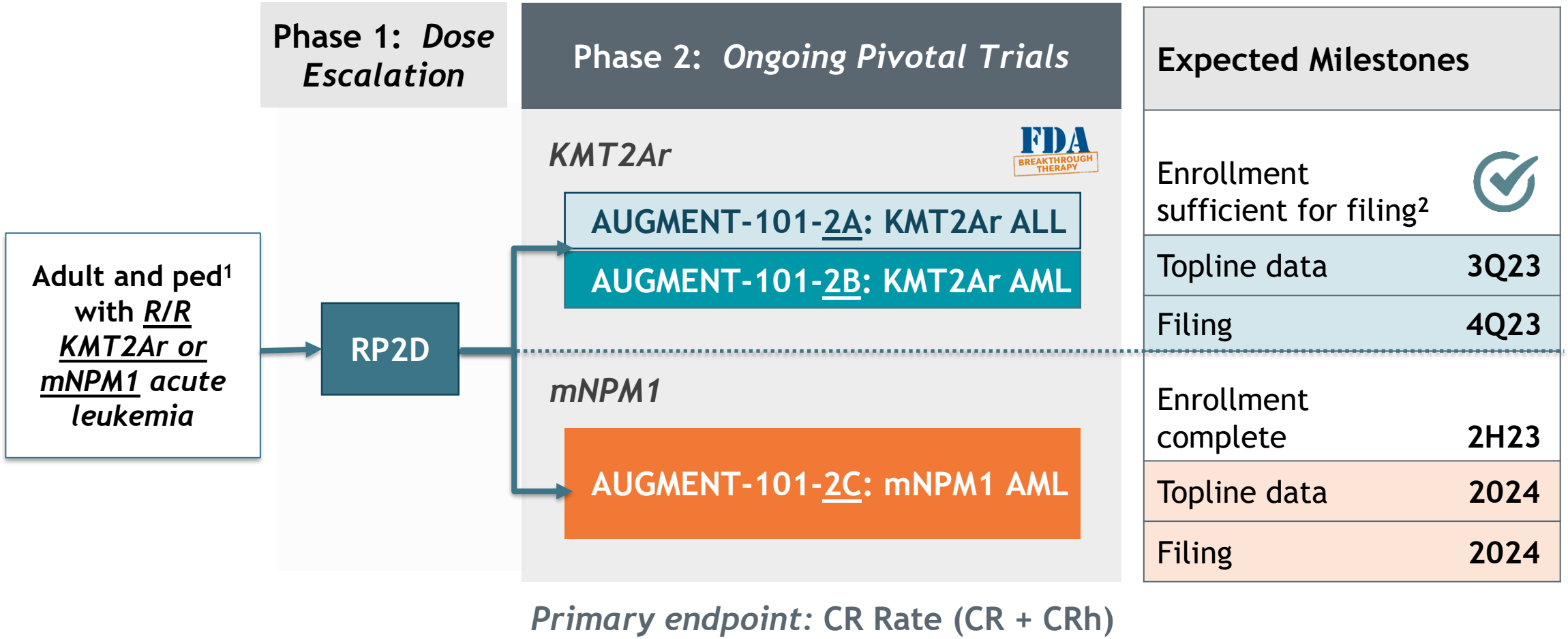
Corporate and Pipeline

Expand pipeline through BD

- Targeting assets in late pre-clin to Phase 1
- Well-capitalized with $481.3M in cash* and no debt

*MSS CRC = Microsatellite Stable Colorectal Carcinoma, IPF = Idiopathic Pulmonary Fibrosis, cGVHD = chronic Graft-Versus-Host Disease, R/R = relapsed/refractory, BTD = Breakthrough Therapy designation * As of December 31, 2022; includes cash, cash equivalents and short- and long-term investments*

Pivotal AUGMENT-101 trial: expecting KMT2Ar topline data in 3Q23, enrollment completion for mNPM1 in 2H23



Note: Patients taken to HSCT can restart treatment with revumenib post-transplant; Abbreviations: KMT2Ar = KMT2A rearrangement; mNPM1 = mutated nucleophosmin
[1]Allows patients ≥30 days of age [2]Completed enrollment of a sufficient number of KMT2Ar patients to support a registration filing

Updated AUGMENT-101 data presented at the ASH meeting continues to support best-in-class profile for revumenib

	Best Response[1]	Efficacy Population n = 60 (%)	Efficacy @ RP2D[4]
Response	**Overall Response Rate[2]**	**32/60 (53%)**	
	CR	12 (20%)	
	CRh	6 (10%)	
	CRp	5 (8%)	
	MLFS	9 (15%)	
MRD^{neg}	**MRD^{neg} Rate[3]**	**18/32 (56%)**	
	within CR/CRh MRD^{neg}	14/18 (78%)	
	within CR/CRh/CRp MRD^{neg}	18/23 (78%)	
KMT2Ar	**Overall Response Rate[2]**	**27/46 (59%)**	
	CR/CRh	15/46 (33%)	10/37 (27%)
mNPM1	**Overall Response Rate[2]**	**5/14 (36%)**	
	CR/CRh	3/14 (21%)	3/11 (27%)

- Median duration of CR/CRh response of **9.1 mos**
- Median time to CR/CRh response of **1.9 mos**
- Median overall survival of **7.0 mos**

[1] Data Cutoff of March 2022; [2] Overall Response Rate = CR + CRh + CRp + MLFS; [3] MRD status assessed locally by PCR or MCF; [4] RP2D defined as 113mg or 163 mg q12h for patients receiving concomitant strong CYP3A4 inhibitor therapy or 226mg or 276mg q12h for patients not receiving concomitant strong CYP3A4 inhibitor therapy

Trials underway to establish revumenib as a backbone of treatment for mNPM1 or KMT2Ar acute leukemia

	Relapsed/Refractory	Front-Line	Maintenance
Revumenib Development	AUGMENT-101 AUGMENT-102	Beat AML acute myeloid leukemia	AUGMENT-101 INTERCEPT trial
Trial Description	Validates use of menin inhibition in NPM1 and KMT2Ar acute leukemias, in monotherapy and chemotherapy combinations	Validates the use of menin inhibition with venetoclax/azacytidine, the commonly used regimen in older patients	**AUGMENT-101**: allows pts to restart Tx post-transplant **INTERCEPT**: examining conversion of MRD+ to MRD-

Revumenib expansion opportunities in acute leukemia and solid tumors have potential to add meaningful value

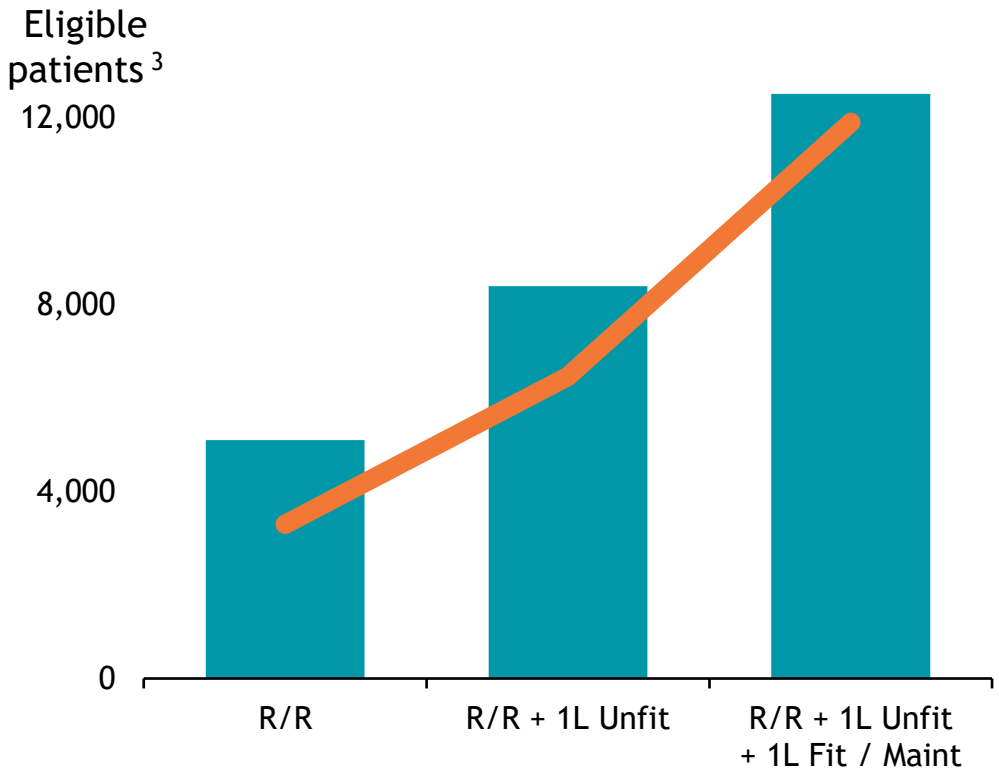
Potential first/best-in-class agent

- Clear activity in refractory, advanced mNPM1 and KMT2Ar acute leukemia
- High percentage of MRD negative responses

Profile supports potential use in front-line and maintenance

- Well-tolerated safety profile, no discontinuations due to treatment related AE
- Preclinical data supports combos with venetoclax[1], chemotherapy[2]

Est. US market opportunity for mNPM1 and KMT2Ar AML



Expansion into solid tumors represents another significant opportunity for value

[1] SMARTAnalyst 2020 [1] Carter, B., et al., Blood 2021; [2] Data on file; [3] SEER + Roche IR presentation Sept 2020 AML incidence estimates.

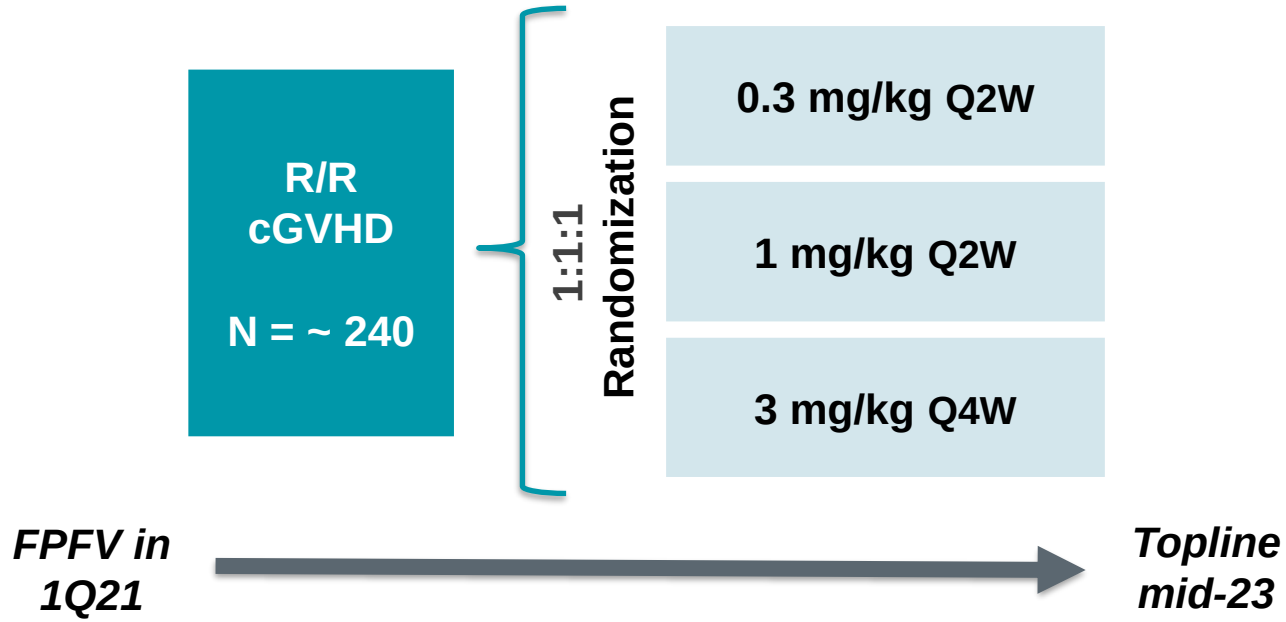
AGAVE-201: Axatilimab pivotal trial enrollment complete; data expected in mid-23

Inclusion criteria:

- 2 years and older[1]
- Recurrent or refractory active cGVHD after ≥ 2 lines of systemic therapy

Stratification factors:

- Prior therapy (ibrutinib, ruxolitinib, belumosudil)
- Severity of cGVHD



Initiation of front-line combination trial in cGVHD expected in 2023

[1] *Age inclusion criteria differs by country; Front-line combination trial being conducted by Incyte*
Primary Endpoint: Objective Response Rate (ORR) by 2014 NIH GVHD Criteria; Key Secondaries: Duration of response, improvement in modified Lee Symptom Scale

Axatilimab: Phase 1/2 POC trial in cGVHD showed rapid and durable responses

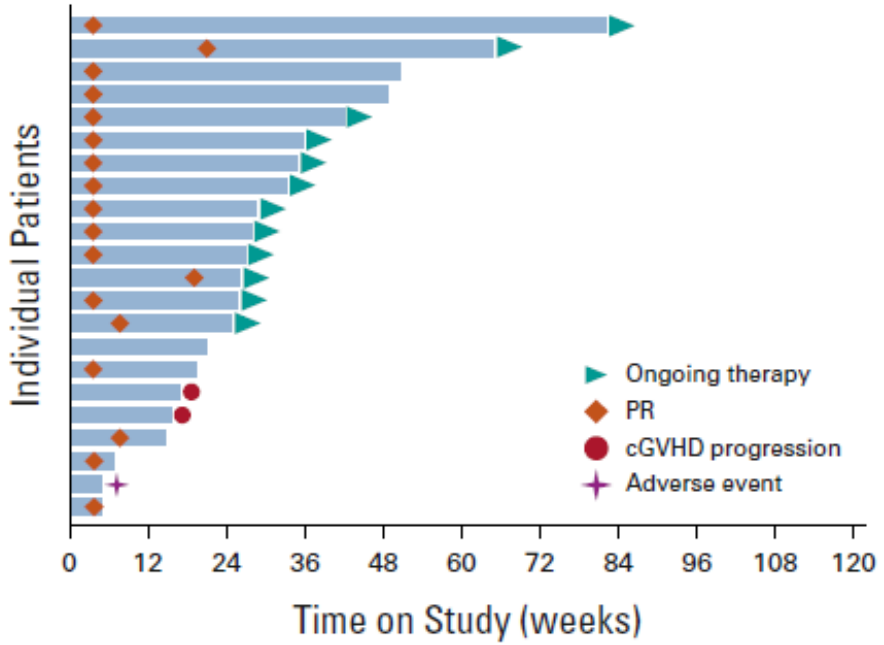
Phase 2 cohort highlights

82% ORR by cycle 7 day 1

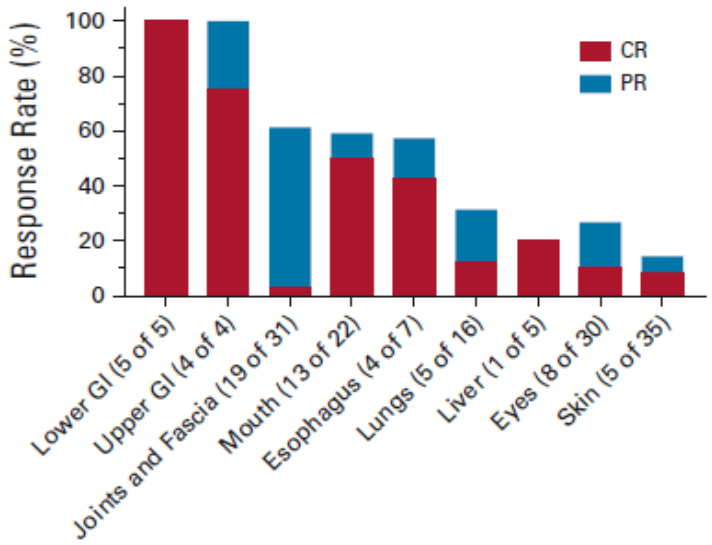
77% FFS at 12 months

4 wks Median time to response

Individual responses and durability of Phase 2 cohort



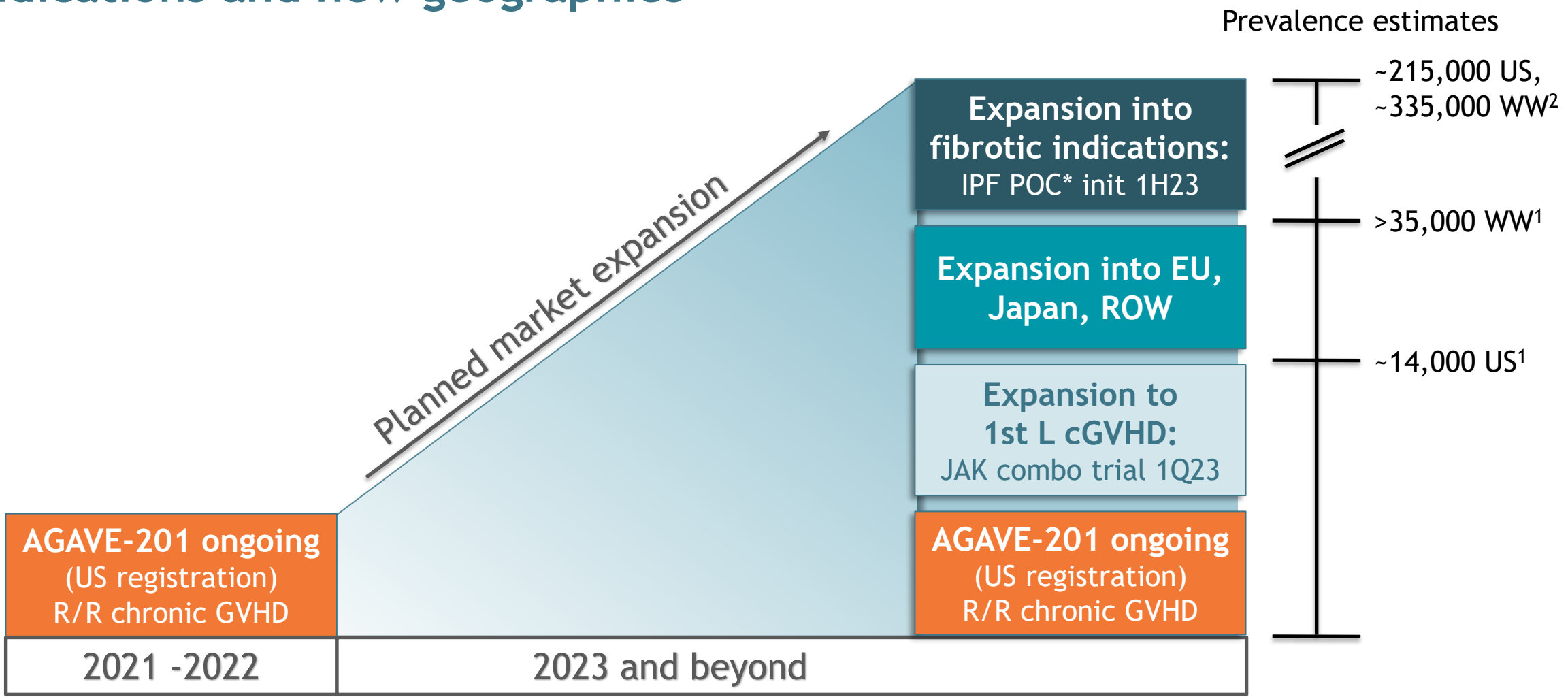
Cumulative response rate in cGVHD-involved organs



Responses observed across all organ systems

Data cutoff: 22Oct2021; Source: Kitko, C. L., M. Arora, et. al. J Clin Oncol. 2022, December. DOI: 10.1200/JCO.22.00958; FFS = failure-free survival using a broadened failure definition that incorporate toxicity-related discontinuation and cGVHD progression not included in the standard cGVHD FFS reporting; ORR = overall response rate

Axatilimab has the potential to expand into additional high value indications and new geographies



[1] *SmartImmunology Insights cGVHD report March 2020;* [2] *SmartImmunology Insights IPF report March 2020* * *IPF trial will be conducted and funded by Syndax*

Financial highlights and 2023 financial guidance

Ticker	SNDX (NASDAQ)
Cash and equivalents (as of December 31, 2022)	$481.3 million
Shares outstanding* (as of December 31, 2022)	69.3 million

2023 Operating Expense Guidance		
	Q1 2023	FY 2023
Research and development	$30 – $35 million	$160 – $175 million
Total operating expenses^	$40 – $45 million	$225 – $240 million

* *Includes pre-funded warrants to purchase 1.1 million common shares (rounded)*
^ *Includes ~$30 million non-cash stock compensation expense for the full year*

Thank you. Questions?

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