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

Syndax

CORPORATE PRESENTATION | JANUARY 2023

Forward-looking statements disclosure

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.

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

Revumenib

Menin-MLL disruption

Received BTD for KMT2Ar acute leukemia

Axatilimab

Anti-CSF-1R

Corporate and Pipeline

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

Expand into earlier lines of cGVHD and fibrotic disease

- AGAVE-201 pivotal cGHVD data expected mid-23
- Initiate cGVHD 1L combo trial in 1Q23
- Initiate IPF Phase 2 trial in 1H23

Expand pipeline through BD

- Targeting assets in late pre-clin to Phase 1
- Well funded with ~$500 million* in proforma cash following Dec financing

*MSS CRC = Microsatellite Stable Colorectal Carcinoma, IPF = Idiopathic Pulmonary Fibrosis, cGVHD = chronic Graft-Versus-Host Disease, R/R = relapsed/refractory, BTD = Breakthrough Designation Therapy * Includes estimated net proceeds from financing of approximately $161.5 million and cash as of September 30, 2022 of $337.8 million*

Significant unmet need remains in acute leukemia

No FDA-approved therapies targeting KMT2Ar or mNPM1 acute leukemias

BTD

KMT2A Acute Leukemias

Annual global incidence 5,000 - 7,000

~ 10% AML or ALL

- NCCN guidelines denote KMT2Ar predict poor prognosis
- Third-line treatment: Median OS of <3 months; 5% of patients achieve CR

mNPM1 Mutant AML

Annual global incidence ~20,000

~ 30% AML

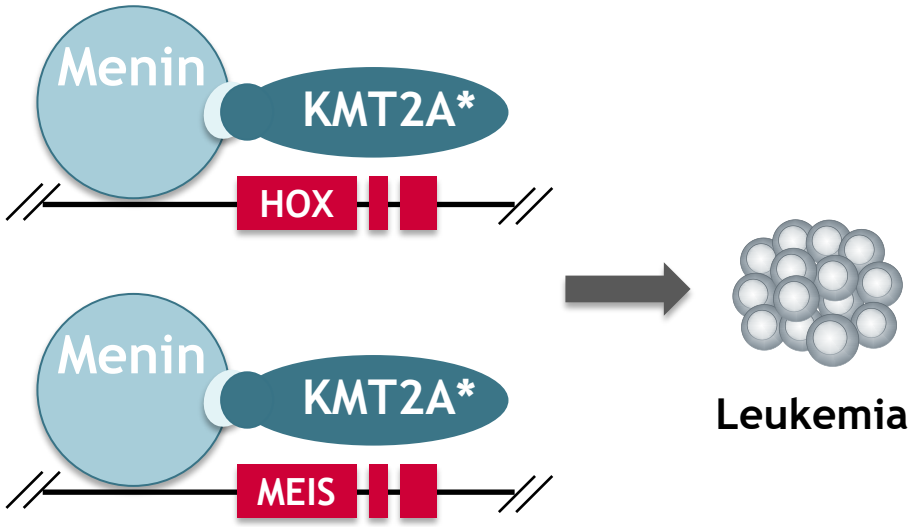
- Most frequent genetic alterations in AML
- Typically associated with favorable prognosis, however beneficial impact decreases with age
- 5-year overall survival rate for adult mNPM1 AML is ~50%

Both KMT2A and mNPM1 acute leukemias are readily diagnosed

Source: Issa, G. C., J. Zarka, K. Sasaki, W. Qiao, D. Pak, J. Ning, et al. (2021). Predictors of outcomes in adults with acute myeloid leukemia and KMT2A rearrangements. Blood Cancer J 11(9): 162. Dohner, H. et al. Blood, 2017; 129(4):424-447; Falini, B.et al. Blood 2011; 117(4):1109-1120. OS = overall response, CR = complete response

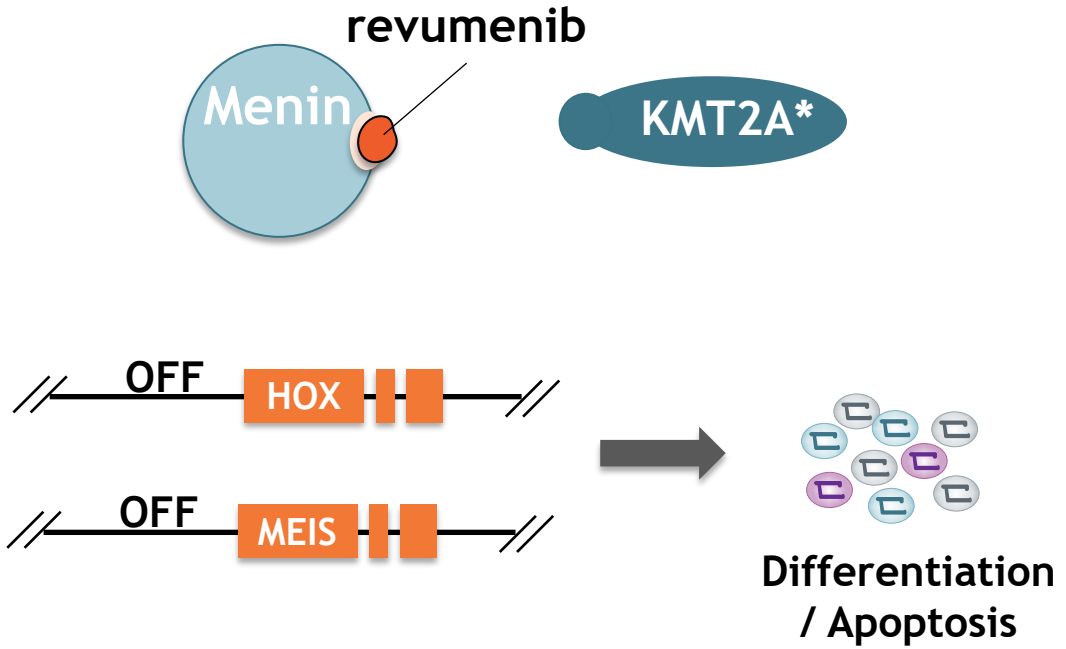
Revumenib turns off leukemic transcriptional programs by binding to Menin and displacing KMT2A (MLL) complexes

KMT2Ar or mNPM1 acute leukemias



Gene transcription ON

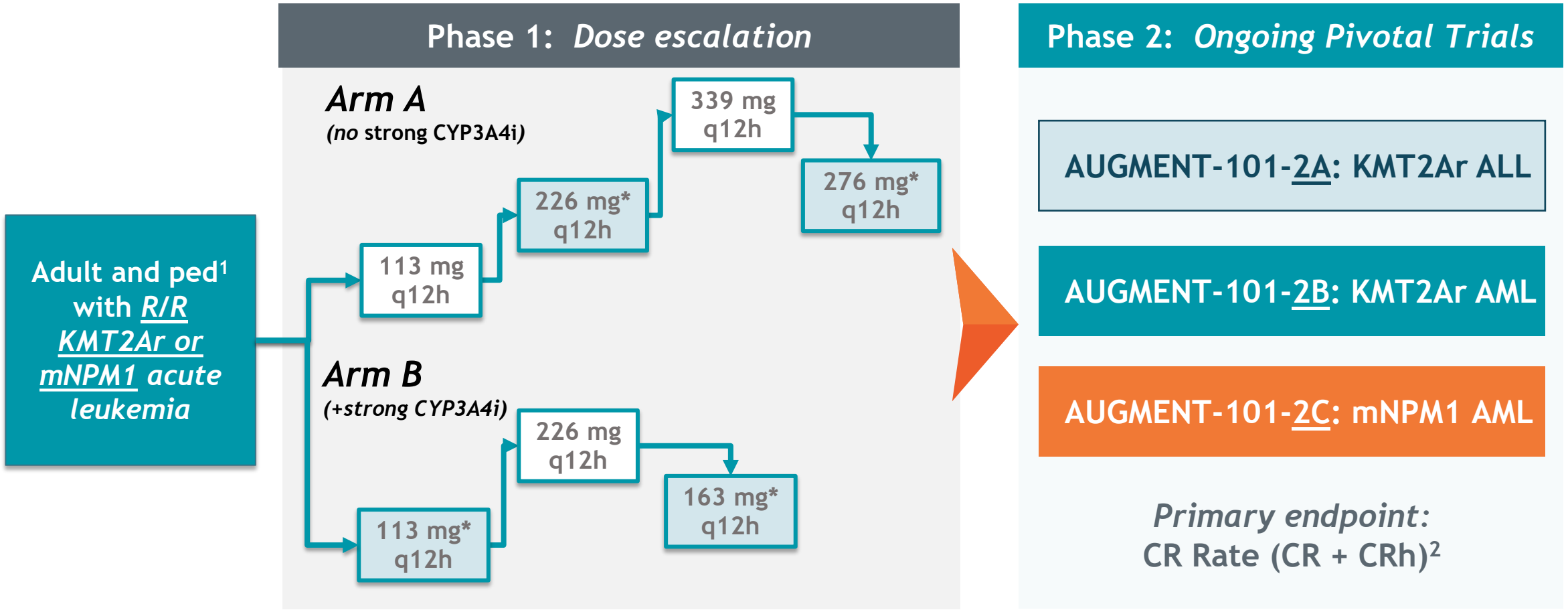
Menin inhibition with revumenib



Gene transcription OFF

KMT2A = KMT2A rearrangement or KMT2A wildtype; Adopted from: Uckelmann HJ, et al. Presented at ASH Annual Meeting, 2018

AUGMENT-101: Phase 1/2 trial of revumenib in patients with acute leukemias; pivotal trials enrolling



[1]Allows patients ≥30 days of age; [2] Patients taken to HSCT can restart treatment with revumenib post-transplant
* Doses that met the predefined RP2D selection criteria; Abbreviations: KMT2Ar = KMT2A rearrangement; mNPM1 = mutated nucleophosmin 1

AUGMENT-101 patients heavily pretreated with a poor prognosis

Baseline Characteristics	Safety Population N=68
Median age, years (range)	42.5 (0.8, 79)
Adult (n=60)	50.5
Pediatric (n=8)	2.5
Female, n (%)	42 (62)
Leukemia type, n (%)	
AML	56 (82)
ALL	11 (16)
MPAL	1 (2)
Median prior therapies (range)	4 (1,12)
Stem cell transplant, n (%)	31 (46)
Venetoclax, n (%)	41 (60)

Baseline Characteristics	Safety Population N=68
***KMT2Ar*, n (%)**	46 (68)
t(9;11)	10 (15)
t(11;19)	9 (13)
t(4;11)	6 (9)
t(6;11)	3 (4)
t(11;17)	2 (3)
Other	16 (24)
***mNPM1*, n (%)**	14 (21)
***KMT2A* and *NPM1* wild type, n (%)**	8 (12)
Co-occurring mutations*, n (%)	
FLT3	14 (25)
RAS	12 (29)
TP53	4 (10)

**In patients for whom co-occurring mutation data were available.*
MPAL, mixed-phenotype acute leukemia. Data Cutoff of March 2022

No patients have discontinued due to treatment related adverse events

Any-grade treatment related AE (≥5%)	Safety Population N=68
Patients with ≥1 treatment-related AE, n (%)	53 (78)
ECG QTc prolonged	36 (53)
Nausea	18 (27)
Vomiting	11 (16)
Differentiation syndrome	11 (16)
Diarrhea	7 (10)
Dysgeusia	5 (7)
Decreased appetite	5 (7)

No treatment discontinuations for QTc prolongations, or associated arrhythmias

≥Grade 3 treatment related AE	Safety Population N=68
Patients with ≥Gr 3 treatment-related AE, n (%)	11 (16)
ECG QTc prolonged	9 (13)
Diarrhea	2 (3)
Anemia	2 (3)
Asthenia	1 (2)
Fatigue	1 (2)
Hypercalcemia	1 (2)
Hypokalemia	1 (2)
Neutropenia	1 (2)
Thrombocytopenia	1 (2)
Tumor lysis syndrome	1 (2)

10% of patients (5/52) had Gr 3 QTc prolongation at doses meeting criteria for RP2D

ECG, electrocardiogram; QTc, corrected QT interval. Data Cutoff of March 2022

Updated AUGMENT-101 data 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

Durable remissions in transplant patients treated in the Phase 1 portion of AUGMENT-101 trial

12 patients proceeded to HSCT[1]	
Patients who achieved MRD^{neg} status	11/12 (92%)
Remain in remission (1 receiving maintenance in CU[2])	9/12 (75%)
Remained in remission > 1 year	4/12 (33%)
Median follow-up	12.3 months

2 additional patients were treated under CU[2] with revumenib maintenance post HSCT or stem cell boost, and continue in remission for > 1 year

[1]As of data cutoff in March 2022 [2]CU = treated under compassionate use protocol

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

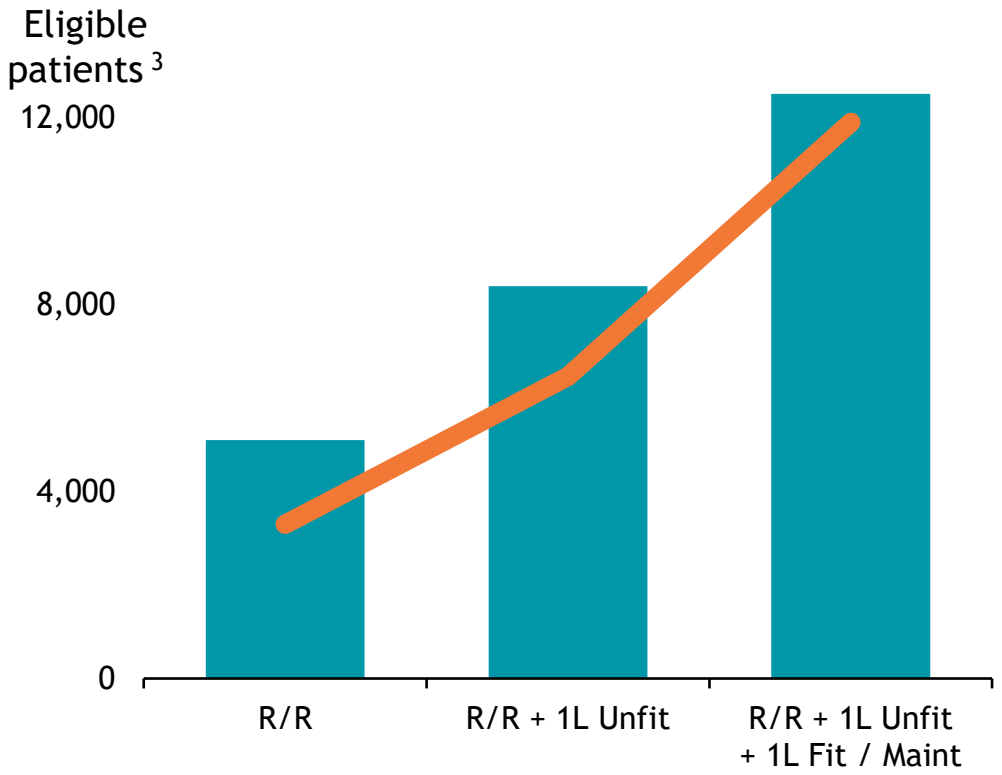
Potential first/best-in-class agent

- 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

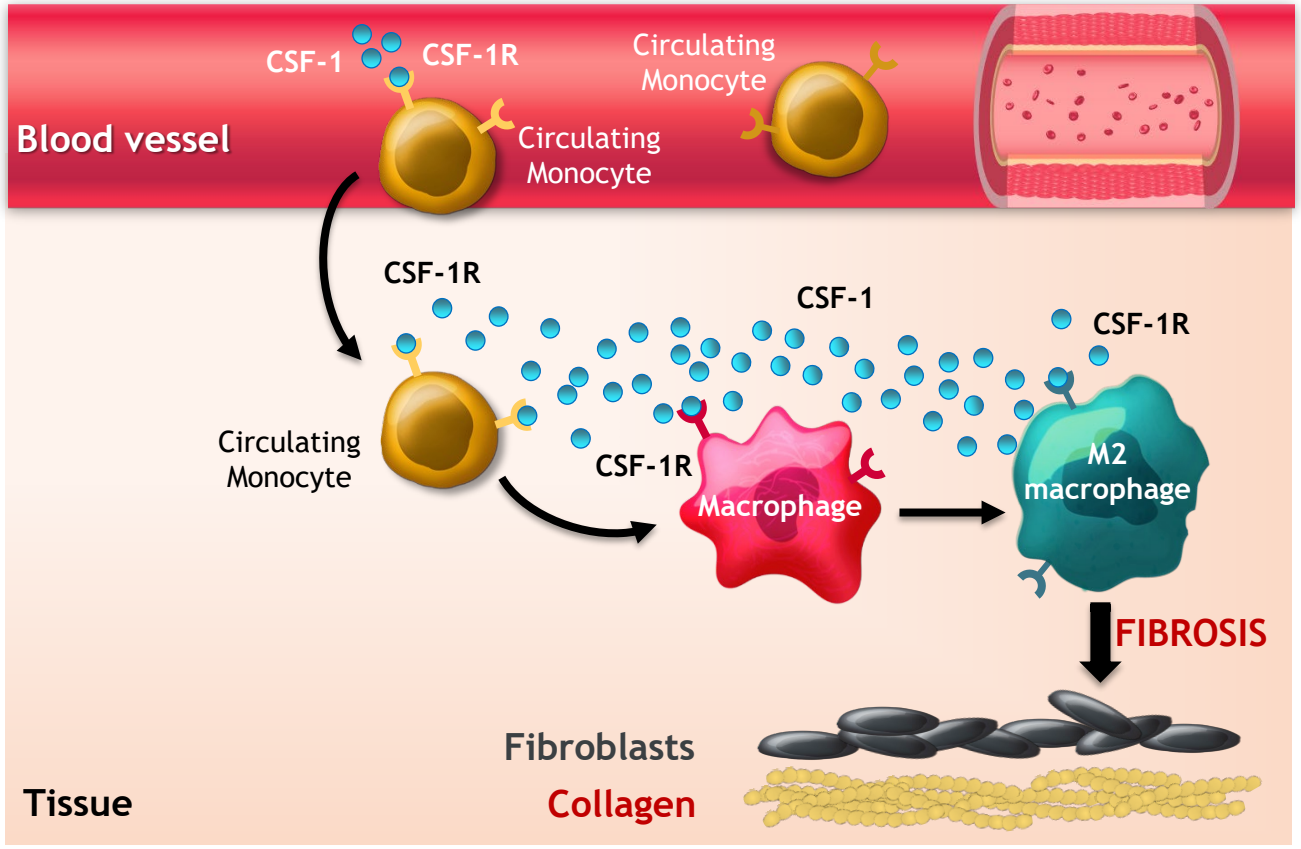


Expansion into solid tumors represents another significant opportunity for value

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

Axatilimab: CSF-1R mAb with potential best-in-class profile

Axatilimab inhibition reduces pathogenic monocytes and macrophages

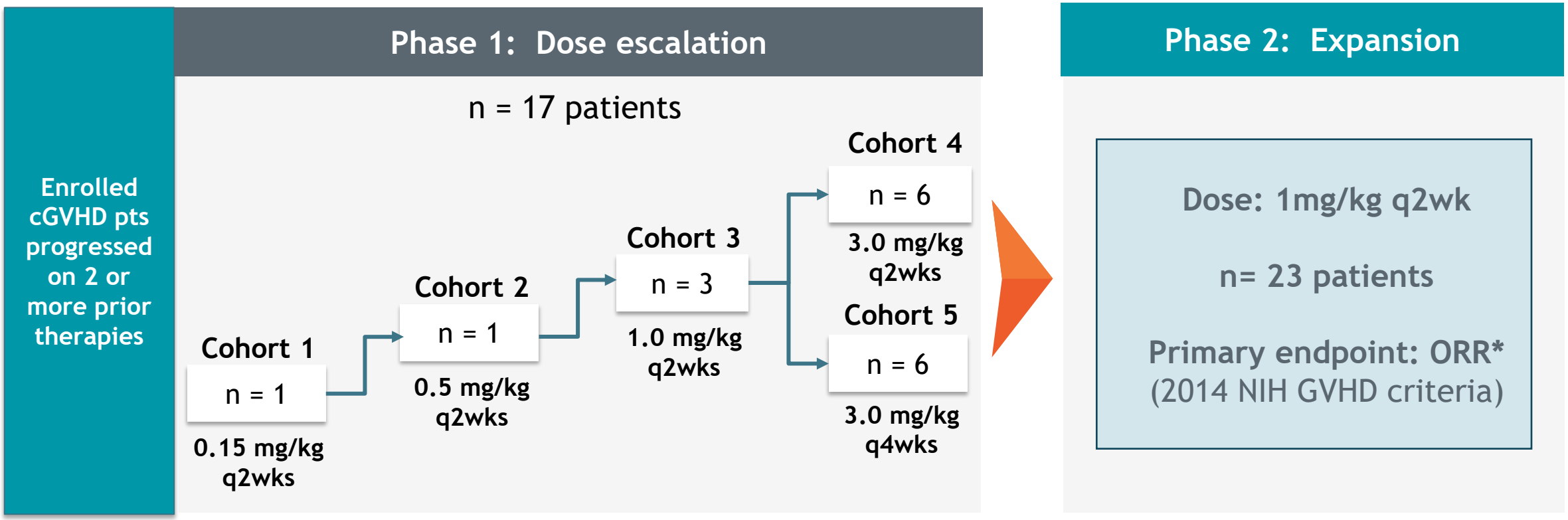


Chronic graft versus host disease:

- Develops in 40% of HSCT[1]; estimated US prevalence ~14,000[2]
- Immune-mediated systemic disease with inflammatory and fibrotic features
- Manifests in multiple organs, with skin and lung being most common
- Preclinical models suggest symptoms driven by CSF-1 dependent circulating monocytes and macrophages

1. SMARTAnalyst 2020 cGVHD report; 2. Bachier, CR., ASH 2019 abstract #2109. Figure Adopted from MacDonald, K.P.A. et al., BLOOD, 5 (129) 13-21; HSCT - Hematopoietic stem cell transplantation.

Phase 1/2 trial highlights the therapeutic benefit of axatilimab for patients with R/R cGVHD



*ORR at cycle 7 day 1; Data cutoff: 22Oct2021; Source: Kitko, C. L., M. Arora, et. al. J Clin Oncol. 2022, December. DOI: 10.1200/JCO.22.00958

Baseline characteristics suggest heavily pre-treated population

	Ph 1, n=17 ALL DOSES	Ph 2, n = 23 1mg/kg Q2W	TOTAL N=40
Age, median (range),yrs	60 (29, 73)	57 (16, 69)	59 (16, 73)
Female, n (%)	6 (35)	9 (39)	15 (38)
Myeloablative transplant, n (%)	9 (53)	17 (74)	26 (65)
Related Donor, n (%)	9 (53)	9 (39)	18 (45)
Peripheral blood transplant, n (%)	16 (94)	21 (91)	37 (93)
KPS at enrollment, median (range)	80 (60, 100)	80 (60, 90)	80 (60, 100)
# organs involved, median (range)	4 (1, 5)	4 (1, 9)	4 (1, 9)
≥4 organs involved, n (%)	10 (58)	16 (70)	26 (65)
Prior treatment, median n (range)	4 (1, 9)	3 (2, 11)	4 (1,11)
Ibrutinib, n (%)	13 (77)	13 (57)	26 (65)
Ruxolitinib, n (%)	10 (59)	11 (48)	21 (53)
Belumosudil, n (%)	6 (35)	2 (9)	8 (20)
cGVHD→C1D1, median (range), yrs	3.5 (0.11, 15.6)	3.0 (0.35, 6.7)	3.2 (0.11, 15.6)

No significant differences in baseline characteristics across Ph 1 & Ph 2

Abbreviations: KPS=Karnofsky Performance Score, Q=every.
Data cutoff: 22Oct2021; Source: Kitko, C. L., M. Arora, et. al. J Clin Oncol. 2022, December. DOI: 10.1200/JCO.22.00958

Axatilimab clinical profile demonstrates tolerability

AE Overview, No. (%)

	Ph 1, n=17 ALL DOSES	Ph 2, n = 23 1mg/kg Q2W	TOTAL N=40
Any AE	17 (100)	22 (96)	39 (98)
≥ grade 3 AE	13 (77)	7 (30)	20 (50)
TRAE	15 (88)	15 (65)	30 (75)
SAE	9 (53)	7 (30)	16 (40)
Deaths[1]	1 (6)	--	1 (2.5)
≥ grade 3 TRAE	6 (35)	2(9)	8 (20)
Related SAE	1 (6)	3 (13)	4 (10)
AE leading to dose modification	6 (35)	7 (30)	13 (33)
AE leading to discontinuation	5 (29)	2 (9)	7 (18)

Any ≥ grade 3 AE in ≥ 2 patients, No. (%)

	Ph 1, n=17 ALL DOSES	Ph 2, n = 23 1mg/kg Q2W	TOTAL N=40
Hypertension	3 (18)	1 (4)	4 (10)
CPK increase	4 (24)	--	4 (10)
Pneumonia	3 (18)	--	3 (8)
Acute kidney injury	1 (6)	1 (4)	2 (5)
AST increase	2 (12)	--	2 (5)
GGT increase	2 (12)	--	2 (5)
Lipase increase	2 (12)	--	2 (5)
Fever	1 (6)	1 (4)	2 (5)

- Serum enzyme elevations may reflect on-target effect of axatilimab on Kupffer cells in the liver
- No evidence of end-organ damage, myositis/pancreatitis with enzyme elevations

[1] *Only death that occurred on study was unrelated to study intervention*

Data cutoff: 22Oct2021; Source: Kitko, C. L., M. Arora, et. al. J Clin Oncol. 2022, December. DOI: 10.1200/JCO.22.00958

Axatilimab Phase 1/2 trial showed rapid and durable responses

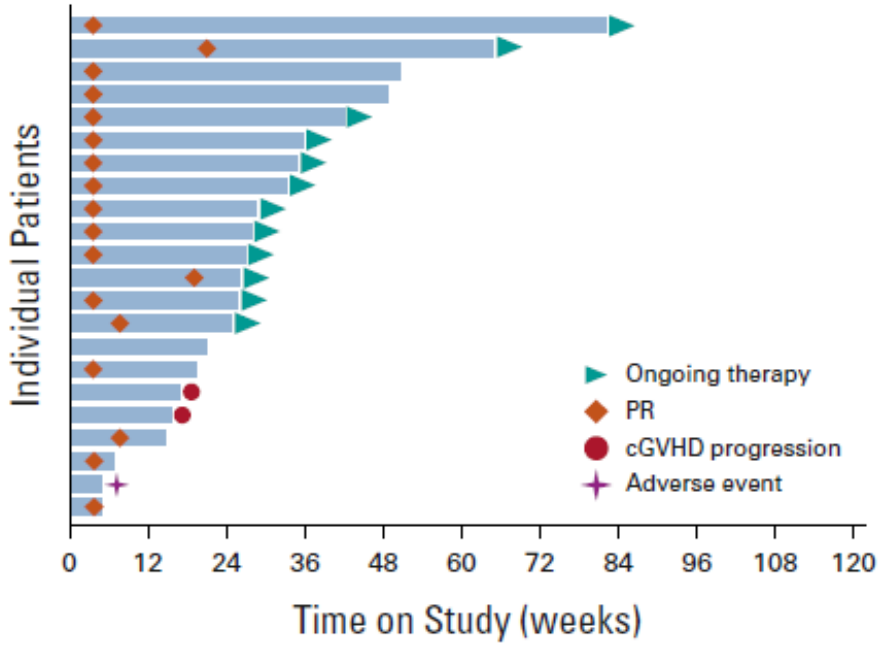
Phase 2 cohort highlights

82% ORR by cycle 7 day 1

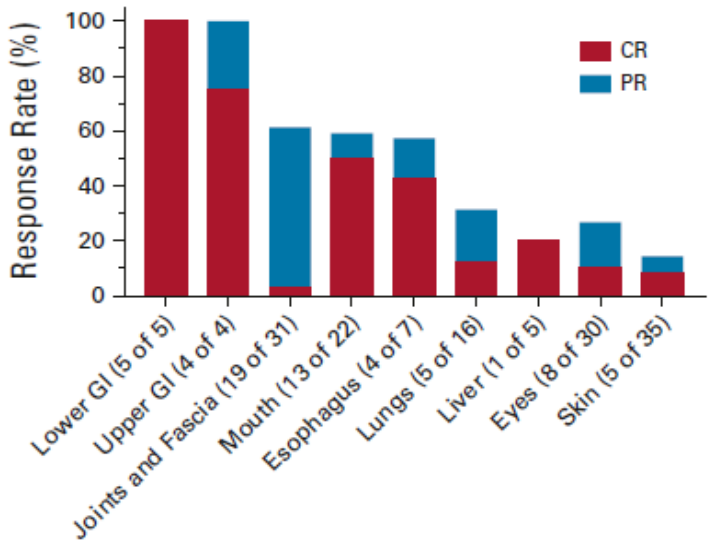
77% FFS at 12 months

4 wks Median time to response

Individual responses and durability of Phase 2 cohort



Cumulative response rate in cGVHD-involved organs

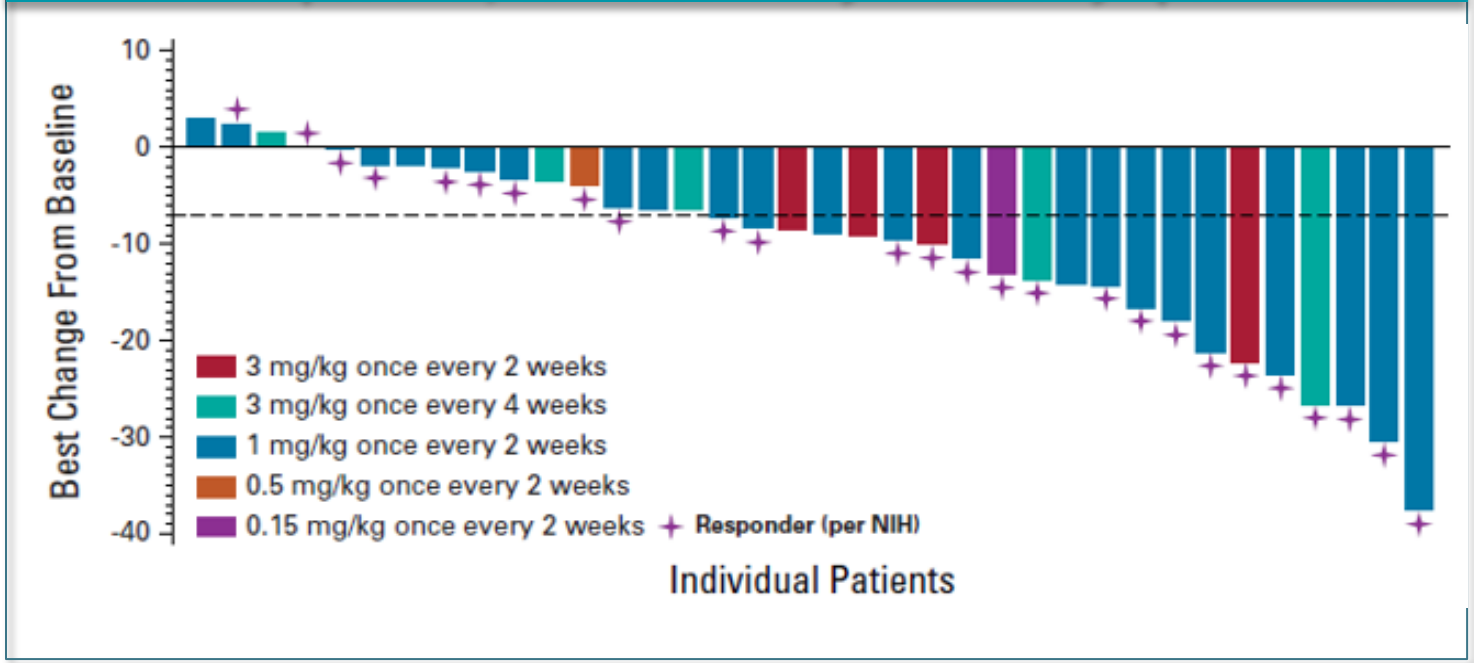


Responses observed across all organ systems

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 clinical responses were accompanied by a reduction in cGVHD symptom burden and improvements in all affected organs

Change in cGVHD symptoms from baseline in all evaluable patients, as measured by the Lee Symptom Scale



58% Of evaluable patients had a >7 point improvement in the Lee Symptom Scale

52% Of responding patients decreased glucocorticoid doses

Data cutoff: 22Oct2021; Source: Kitko, C. L., M. Arora, et. al. J Clin Oncol. 2022, December. DOI: 10.1200/JCO.22.00958

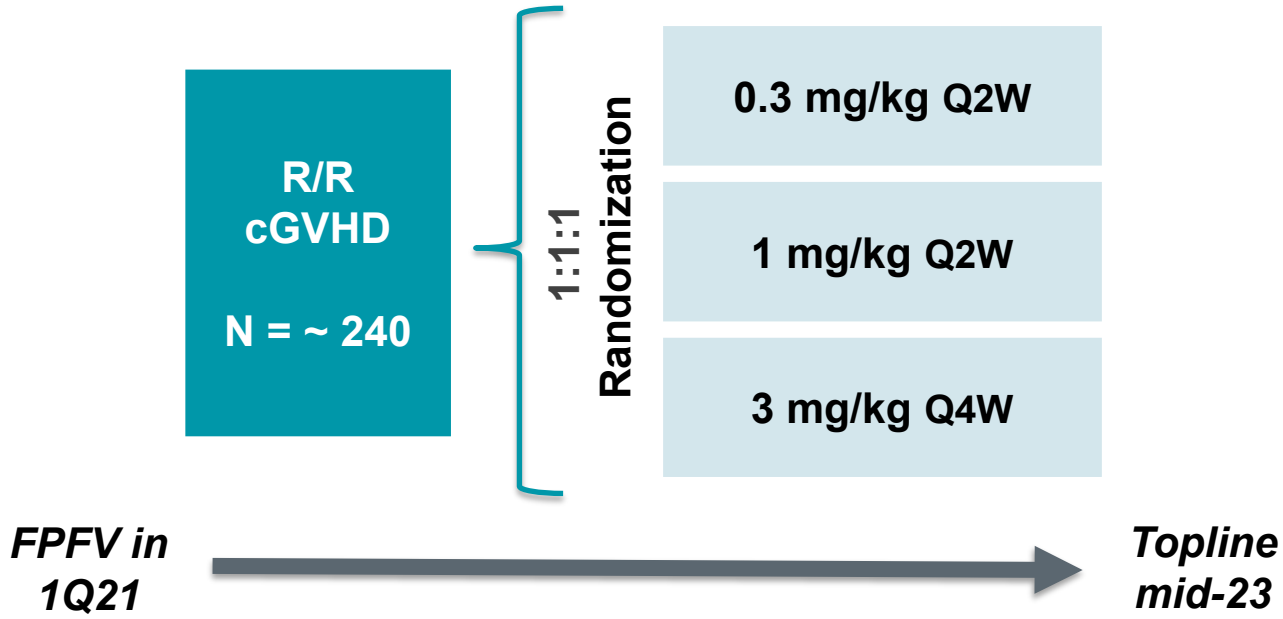
AGAVE-201: Axatilimab pivotal trial enrollment complete; data expected in mid-23

Inclusion criteria:

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

Stratification factors:

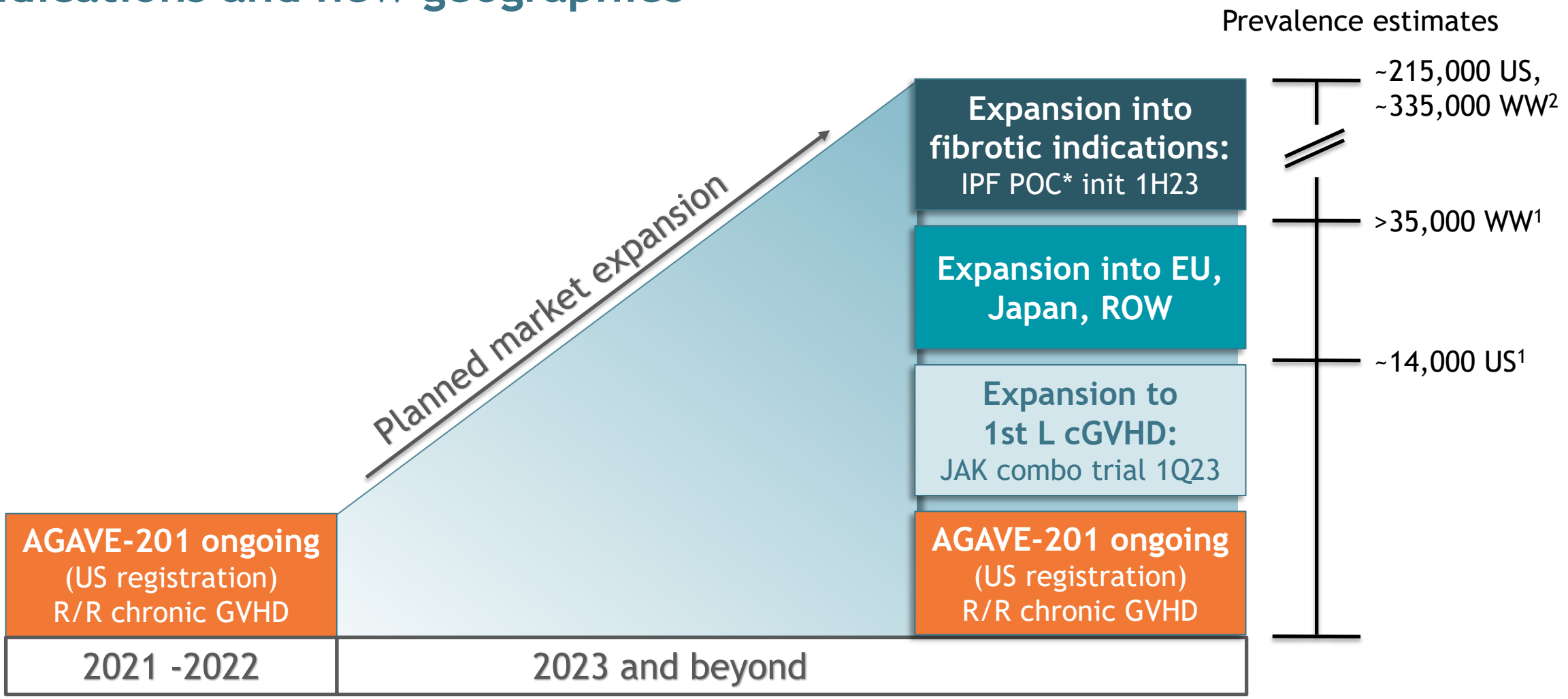
- Prior therapy (ibrutinib, ruxolitinib, belumosudil)
- Severity of cGVHD



Initiation of front-line combination trial in cGVHD expected in 1Q23

[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 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 FY 2022 financial guidance

Ticker	SNDX (NASDAQ)
Cash and equivalents (as of September 30, 2022)	$337.8 million
Approximate net proceeds from 4Q22 follow-on offering★	$161.5 million
Shares outstanding* (as of December 14, 2022)	69.2 million
2022 Operating Expense Guidance	
	FY 2022
Research and development	$115 – 125 million
Total operating expenses^	$145 – 155 million

* *Includes pre-funded warrants to purchase 1.1 million common shares (rounded)*
^ *Includes ~$15 million non-cash stock compensation expense for the full year*
★ *Approximate net proceeds a*fter deducting underwriting discounts and commissions and estimated offering expenses payable by us

Thank you. Questions?

Syndax