

**Corporate Presentation** 



June 2021



NASDAQ: SWTX

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This presentation may contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 relating to our business, operations, and financial conditions, including but not limited to current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our development plans, our preclinical and clinical results and other future conditions. Words such as, but not limited to, "look forward to," "believe," "expect," "anticipate," "estimate," "intend," "plan," "would," "should" and "could," and similar expressions or words, identify forward-looking statements. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. Any forward-looking statements in this presentation are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this presentation, including, without limitation, risks relating to: (i) the success and timing of our product development activities, including the initiation and completion of SpringWorks' clinical trials, (ii) the fact that interim data from a clinical study may not be predictive of the final results of such study or the results of other ongoing or future studies, (iii) the success and timing of our product candidates, (vi) our ability to obtain and maintain regulatory approval of any of our product candidates, (vii) our ability to enter into collaborations for the development of new product candidates, (vii) our ability to meet any specific milestones set forth herein, and (ix) uncertainties and assumptions regarding the impact of the COVID-19 pandemic on SpringWorks' business, operations, clinical trials, supply chain, strategy, goals and anticipated timelines.

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## SpringWorks Therapeutics is a Clinical-Stage Targeted Oncology Company





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- Two late-stage rare oncology programs in potentially registrational trials, each supported by strong clinical data
- Eight programs addressing large opportunities in genetically defined cancers in collaboration with industry leaders
- Leveraging strong development capabilities and shared-value partnerships to enhance portfolio value and become a partner of choice
- Led by an experienced management team with deep expertise in drug development and commercialization
- Well-capitalized to execute important value-driving milestones across both standalone and partnered programs

Our ambition is to ignite the power of promising science to unleash new possibilities for patients



## Advancing Diversified Clinical Pipeline of Targeted Oncology Programs

	Preclinical	Phase 1	Phase 2	Phase 3	Collaborator
Nirogacestat (Gamma Secretase Inhi	bitor)				
	Monotherapy (adult study)			<b>D</b> eFi	
Desmoid Tumors*	Monotherapy (pediatric study)				CHILDREN'S Oncology group
	+ BLENREP (belantamab mafodo (BCMA ADC)	otin)			gsk
	(BCMA CAR-T)				Allogene
	(BCMA CART) + Teclistamab (BCMA Bispecific)				janssen 🕇
Relapsed/Refractory Multiple Myeloma	+ PBCAR269A (BCMA CAR-T)				PRECISION BIOSCIENCES
	(BCMA CART) + Elranatamab (BCMA Bispecific)				<b>P</b> fizer
	(BCMA Bispecific) + SEA-BCMA (BCMA mAb)				©Seagen <sup>®</sup>
Mirdametinib (MEK 1/2 Inhibitor)					
NF1-Associated Plexiform Neurofibromas <sup>†</sup>	Monotherapy (pediatric and adu	lt study)			
RAS/RAF Mutant and Other MAPK Pathway Aberrant Solid Tumors	<b>+ Lifirafenib</b> (RAF dimer inhibitor)				留日 聖隆 BeiGene
Pediatric Low-Grade Gliomas	Monotherapy				St. Jude Children's <sup>®</sup> Research Hospital
BGB-3245 (RAF Fusion and Dimer Inl	hibitor)				
RAF Mutant Solid Tumors	Monotherapy				留台 「」 「」 」 」 BeiGene <sup>(1)</sup>
TEAD Inhibitor					
Hippo Mutant Tumors	Monotherapy				
Note: Nirogacestat = PF-03084014 and Mirdametinib = PD-0324 * Received Orphan Drug, Fast Track and Breakthrough Therap					SpringWeight

4 <sup>†</sup> Received Orphan Drug and Fast Track Designations.
(1) Being developed by MapKure, LLC, jointly owned by SpringWorks and BeiGene.



## Pipeline Provides Multiple Opportunities for Value Creation Across Three Distinct Oncology Segments



#### Late-Stage Rare Oncology

Two registrational trials ongoing, each supported by strong Phase 2 data and with best-in-class potential



#### Nirogacestat

Desmoid Tumors *Phase 3 topline data: 2H21* 



#### Nirogacestat

Pediatric Desmoid Tumors *Phase 2 trial initiated: 3Q20* 



#### Mirdametinib

NF1 Plexiform Neurofibromas Phase 2b full enrollment: 2H21



#### Mirdametinib Pediatric Low-Grade Gliomas Phase 1/2 FPFD: 2H21



Advancing nirogacestat as a cornerstone of BCMA combination therapy across four modalities

#### Nirogacestat + BLENREP BCMA ADC

Phase 1b initial clinical data: 2021



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**Nirogacestat + ALLO-715** BCMA Allogeneic CAR-T *Phase 1 trial initiated: 1Q21* 

**Nirogacestat + Teclistamab** BCMA-CD3 Bispecific *Phase 1 trial initiated: 1Q21* 



**Nirogacestat + PBCAR269A** BCMA Allogeneic CAR-T *Phase 1 trial initiated: 2Q21* 

#### Nirogacestat + Elranatamab BCMA-CD3 Bispecific

BCMA-CD3 Bispecific Phase 1b/2 trial initiation: 2H21



**Nirogacestat + SEA-BCMA** BCMA Monoclonal Antibody *Phase 1 trial initiation: 2H21* 



#### Biomarker-Defined Metastatic Solid Tumors

Precision oncology approach to highly prevalent cancers with near-term clinical POC readouts



Mirdametinib + Lifirafenib RAS/RAF Mutant Solid Tumors

Phase 1b/2 initial clinical data: 2021

#### BGB-3245



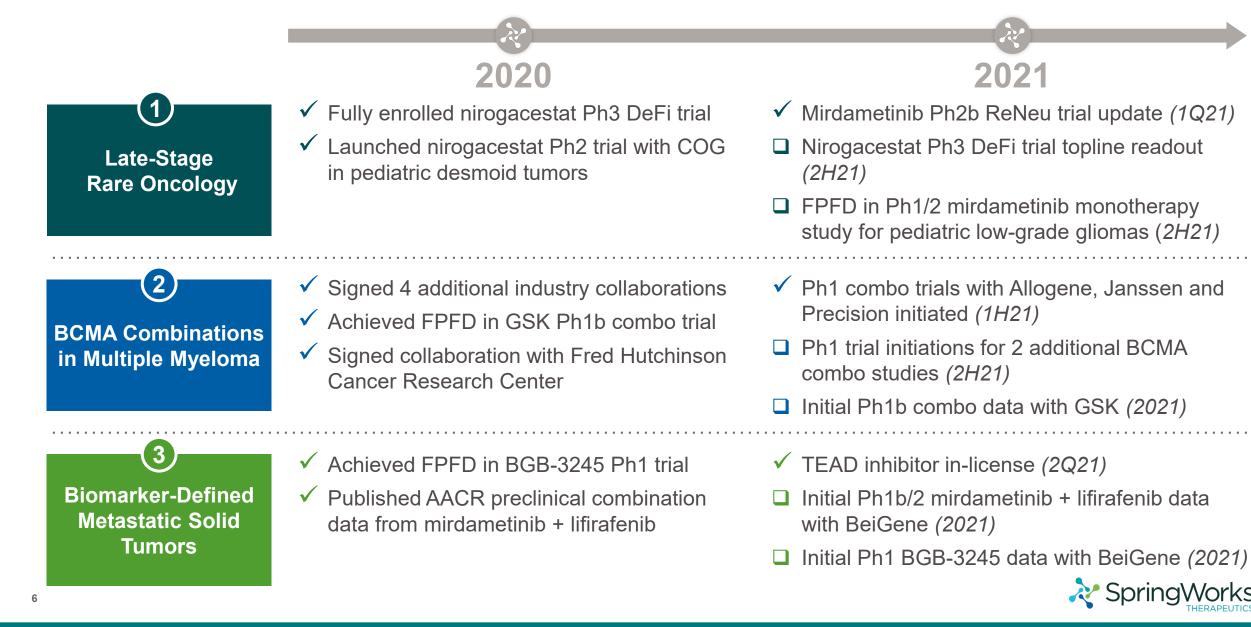
RAF Mutant Solid Tumors Phase 1 initial clinical data: 2021



**TEAD Inhibitor** Hippo Mutant Tumors *DC nomination: 2022* 



Successful Clinical and Operational Execution in 2020 Has Positioned SpringWorks for Multiple Important Data Readouts in 2021



# Late-Stage Rare Oncology





Desmoid Tumors are Highly Morbid Soft Tissue Tumors that are Poorly Responsive to Surgical Interventions and Off-Label Therapies

#### **Desmoid tumor patients present with significant morbidities**

- Can manifest throughout the body including in the extremities, the head and neck region, intra-abdominally, and the thoracic region
- Patients can experience long-lasting pain due to nerve compression or tumor pressure, disfigurement, and restricted range-of-motion

#### No currently approved therapies and limited treatment options

- Post-surgical resection recurrence in up to 70%
- Off-label systemic therapies are poorly tolerated with inconsistent efficacy
- Physicians often adopt a watchful waiting approach

#### ~1,000-1,500 newly incident patients per year in US

- Young patient population, with tumors more commonly diagnosed in the third and fourth decades of life
- ~5,500-7,000 patients actively receiving treatment in the US in any given year

Source: Penel et al., *European Journal of Cancer*, 2017; Tsagozis et al., *Annals of Medicine & Surgery*, 2017; SpringWorks market research.



## Nirogacestat: A New Paradigm for Patients With Desmoid Tumors



Nirogacestat is an oral, selective gamma secretase inhibitor with over 10 years of clinical experience (approximately 300 subjects exposed)



Clinical activity observed in Phase 1 and Phase 2 trials in desmoid tumors independent of prior lines of therapy and underlying mutation



Generally well tolerated compound with evidence of being suitable for multi-year daily dosing



Received Fast Track and Breakthrough Therapy Designations from FDA and Orphan Drug Designation from both FDA and European Commission

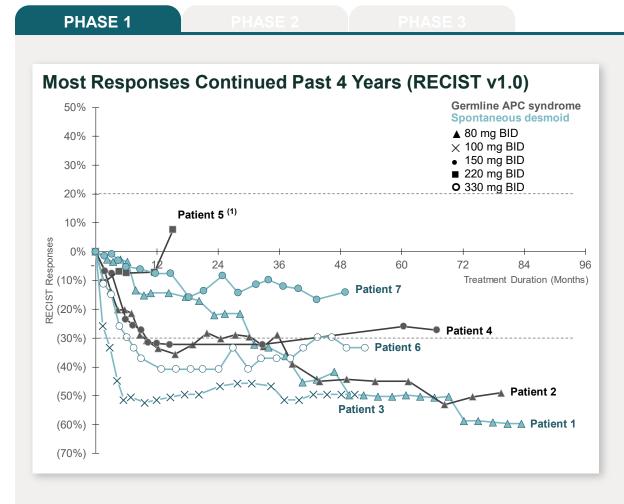


US Composition of Matter and Method of Use patents provide protection to 2039

Phase 3 DeFi trial fully enrolled and topline data anticipated in 2H21



## Initial Clinical Activity of Nirogacestat Observed in Desmoid Tumors



- All evaluable desmoid tumor patients in the study responded to nirogacestat treatment <sup>(1)</sup>
  - Disease Control Rate (DCR): 100%
  - Objective Response Rate (ORR): 71.4%
     (5/7 evaluable desmoid patients)
  - Median PFS (mPFS): Not reached by publication date due to lack of tumor progression events
- Median Duration of Treatment was 49.5 months at publication
  - Of the 7 evaluable desmoid patients on study, none discontinued due to AEs <sup>(2)</sup>

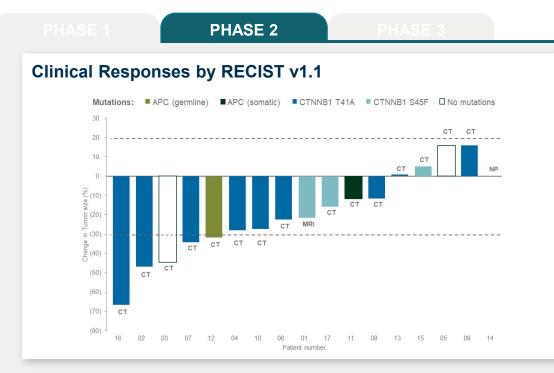
Note: Disease control rate is percentage of patients experiencing objective response or stable disease on therapy as measured by RECIST v1.0. Source: Villalobos, *Annals of Surgical Oncology*, 2018; Messersmith, *Clinical Cancer Research*, 2015.

(1) Per investigator "the only patient with clinical progression received PF-03084014 (220 mg BID) for 15.2 months and exhibited significant clinical improvement on therapy."

(2) Across the entire 64 patient Ph1 there were four discontinuations due to treatment-related AEs with a majority occurring during cycle 1.

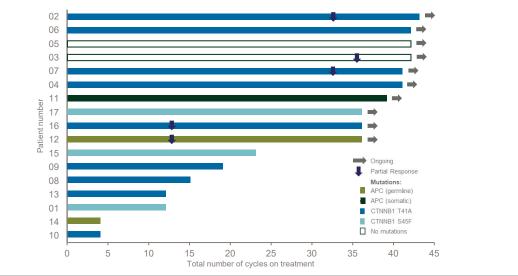
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## Encouraging Clinical Activity and Tolerability Observed in NCI-Conducted Phase 2 Trial in a Heavily Pre-Treated and Progressing Patient Population



- mPFS: Not reached by publication date due to lack of tumor progression events
  - At time of enrollment, all patients had progressing tumors
  - Patients failed a median of 4 prior lines (1-9) of systemic therapy<sup>(1)</sup>
  - ORR of 29.4% (5/17) with no Progressive Disease





- 59% of patients remained on treatment >2 years and 71% of patients stayed on drug for >1 year
  - Median Duration of Treatment was >25 months at publication, with 5 patients continuing as of January 2021 (treatment duration of 5+ years in these patients)
  - Well tolerated; only 1 discontinuation due to AE (2)

Note: Per RECIST 16/17 patients were evaluable. One treatment cycle = 150 mg BID continuously for 21 days. Patient #1 had a missing baseline measurement (but had MRI). Patient #14 was not evaluable per protocol, withdrew from study after cycle 1 due to travel requirements.

Source: Kummar et al., Journal of Clinical Oncology, 2017.

(1) 71% had received chemotherapy, 65% NSAIDs, and 59% TKIs; 4/5 partial responses had previously failed imatinib or sorafenib.
 (2) Discontinuation due to grade 2 urticaria not responsive to dose reduction. No grade 4 events, all grade 3 events related to hypophosphatemia, a known class effect easily reversible with oral supplements



## Double-Blind, Placebo-Controlled Phase 3 DeFi Trial Is Fully Enrolled

#### PHASE 1

PHASE 3

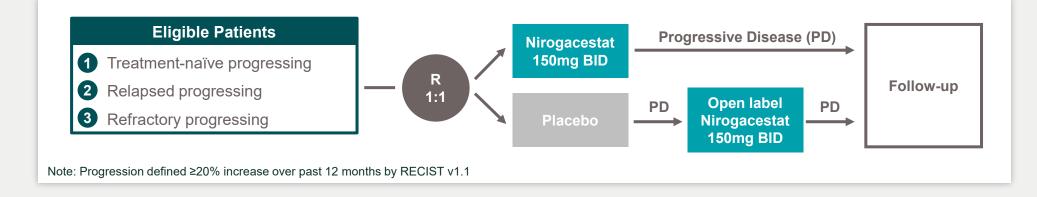
#### **Trial Summary**

- ~140 patients at ~50 sites in North America and Europe
- Open label extension for patients progressing on placebo
- 90% powered to show ~12 month PFS difference between nirogacestat and placebo<sup>(1)</sup>

#### **Summary of Endpoints**



- Primary Endpoint: Progression-free survival <sup>(2)</sup>
  - ~50% of placebo patients expected to progress by 8 months <sup>(3)</sup>
- Secondary: Safety and tolerability, ORR, duration of response, volumetric tumor change (MRI), patient-reported outcomes



#### Full enrollment achieved in July 2020 and topline data anticipated in 2H21

- (1) A total of 51 events will provide 90% power and a 1-sided type 1 error rate of 0.025 (1-side hypothesis) to detect a difference between nirogacestat and placebo, assuming the median PFS is 20 months in the nirogacestat group and 8 months in the placebo group.
- (2) PFS is defined as the time from randomization until the date of assessment of radiographic progression as determined using RECIST v1.1, the date of assessment of clinical progression or death by any cause. Radiographic or clinical progression will be determined by blinded independent central review.
- Spring Works

- (3) Assumption based on placebo arm from sorafenib Phase 3 trial (Gounder et al., New England Journal of Medicine, 2018), literature review and chart review.
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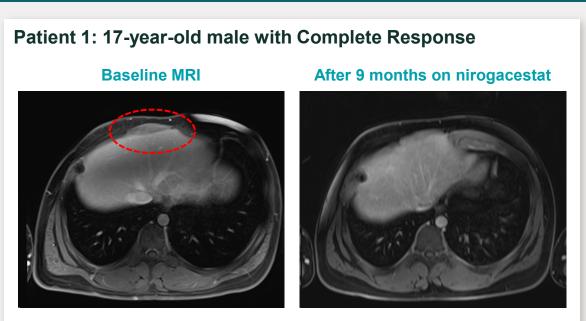
## Nirogacestat Clinical Activity Also Demonstrated in Pediatric and Young Adult Desmoid Tumor Patients

#### **EXPANDED ACCESS PROGRAM**

 Clinical benefit shown in four pediatric and young adult desmoid tumor patients who received nirogacestat (1 CR, 2 PR, and 1 SD)

	Patient 1	Patient 2	Patient 3	Patient 4
Age / Sex	17 yo male	4 yo male	19 yo female	2.5 yo female
APC Mutation	No	Yes	Yes	Yes
Prior Treatments	<ul> <li>Complete resection at 12 years old</li> <li>Sorafenib</li> </ul>	<ul> <li>Celecoxib</li> </ul>	<ul> <li>None</li> </ul>	<ul> <li>8 prior lines incl. sorafenib, pazopanib, chemo, cryo</li> </ul>
Tumor Response	CR	PR	SD	Initial PR; subsequent PD
Duration of Benefit	18 months <sup>(1)</sup>	17 months <sup>(1)</sup>	10 months <sup>(1)</sup>	6 months

- Nirogacestat was well tolerated; no grade 3 or 4 AEs
  - 90 mg/m<sup>2</sup> per dose BID (max. 150 mg per dose BID)



- Prior treatments include complete resection at 12 years old (experienced recurrence) and sorafenib (intolerable AEs and PD after discontinuation)
- Tumor volume regressed by 15% on MRI within 6 months of starting nirogacestat; tumor undetectable on imaging by 9 months

Announced collaboration with Children's Oncology Group in September 2020; Patients being enrolled in single arm Phase 2 trial to evaluate nirogacestat in pediatric desmoid tumors





## Plexiform Neurofibromas Are Painful, Disfiguring Tumors That Grow Along Peripheral Nerve Sheaths

# NF1-associated plexiform neurofibromas (NF1-PN) patients present with significant morbidities

- NF1 mutations cause loss of neurofibromin, a key MAPK pathway repressor, leading to uncontrolled tumor growth across the body
- NF1-PN grow along nerves and can lead to extreme pain and disfigurement
- NF1 patients can experience neurocognitive deficits and developmental delays

#### **MEK** inhibitors have emerged as a validated class for NF1-PN treatment

 Surgical resection is challenging due to the infiltrative tumor growth pattern along nerves and can lead to permanent nerve damage and disfigurement

#### ~100,000 NF1 patients in the United States

- ~30-50% lifetime risk of developing plexiform neurofibromas in NF1 population
- NF1-PN can malignantly transform into MPNST, a diagnosis that has a 12-month survival rate of under 50%

Source: Kim et al., *Sarcoma*, 2017. MPNST = malignant peripheral nerve sheath tumor



## Mirdametinib: A Potentially Best-in-Class Therapy for Patients with NF1-PN



Mirdametinib is a potent, oral, allosteric small molecule MEK1/2 inhibitor with clinical validation and over 250 subjects exposed to date



Encouraging safety and anti-tumor activity observed in Phase 2 investigator-initiated trial in adolescents and adults with NF1-PN



Granted Orphan Drug Designation for NF1 by FDA and European Commission and Fast Track Designation for NF1-PN by FDA

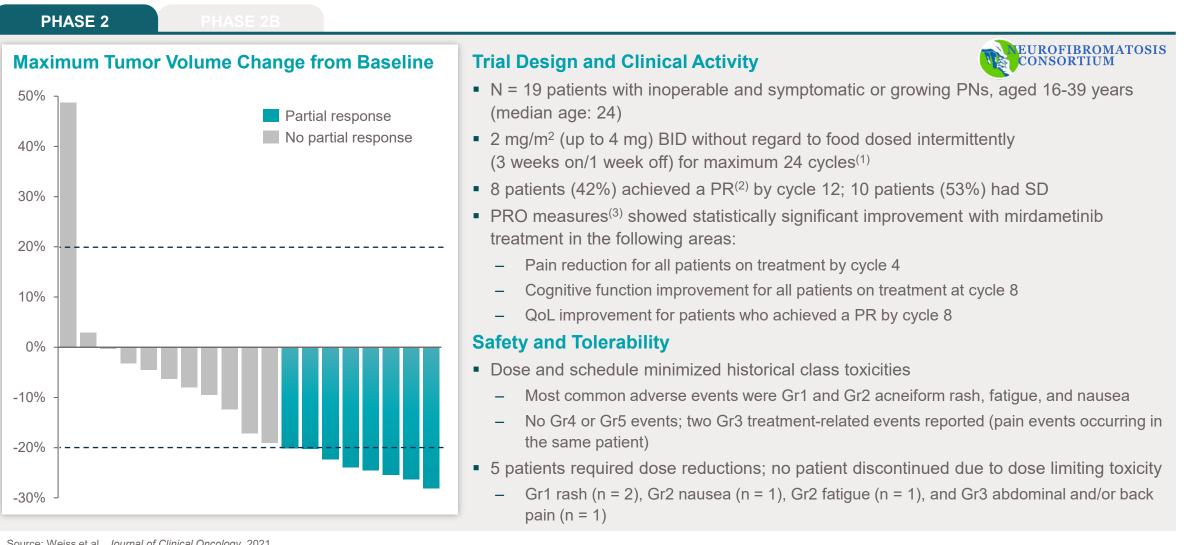


Compound potency, optimized dose/schedule, and lack of food effect may allow for a potentially differentiated profile compared to other MEK inhibitors

Phase 2b ReNeu trial is expected to complete enrollment in 2H21



## Mirdametinib: Encouraging Phase 2 Results with Potentially Differentiated Safety Profile vs. Other MEK Inhibitors



Source: Weiss et al., Journal of Clinical Oncology, 2021.

(1) Patients without at least 15% reduction in target tumor volume after 8 courses or at least 20% reduction after 12 courses were removed from therapy.

(2) Partial response (PR) defined as a  $\geq$ 20% reduction in the volume of the target plexiform neurofibroma lesion for  $\geq$ 4 weeks.

(3) Patient-reported outcome (PRO) measures include the Numerical Rating Scale-11 to assess pain intensity, Brief Pain Inventory Pain Interference subscale to assess impact of pain on daily functioning, and the Pediatric Quality of Life (QoL) Inventory NF1 module to assess disease-specific health-related QoL measures.



## Potentially Registrational Pediatric and Adult Phase 2b ReNeu Trial in Progress

PHASE 2

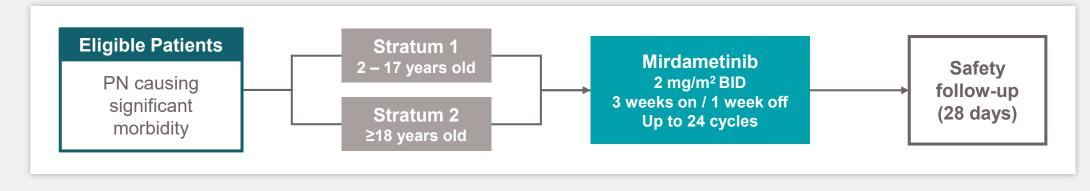
PHASE 2B

#### **Trial Summary**

- Enrolling ~100 patients in 2 strata (pediatrics, adults) across ~50 sites in the US
- 2 mg/m<sup>2</sup> BID dosing with intermittent course (4-week cycles of 3 weeks on, 1 week off) for up to 24 cycles
  - Maximum dose of 4 mg BID
  - Treatment duration designed to evaluate longer-term benefit of mirdametinib in NF1-PN

#### **Summary of Endpoints**

- Primary Endpoint: Objective response rate
- Secondary Endpoints: Safety and tolerability, duration of response, and quality of life assessments



Expect to provide update on overall program timelines upon achieving full enrollment in 2H21



ReNeu

### ReNeu Trial Status as of June 2021



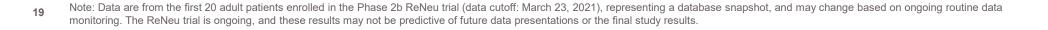
- The ReNeu trial began enrolling patients in November 2019 and has reached >70% of its final enrollment target we anticipate completing enrollment in 2H 2021
- Enrollment of adult stratum is ahead of pediatric stratum due to a planned safety analysis after the first 5 pediatric patients (9-17 years of age) were administered at least 2 cycles of mirdametinib
  - Safety analysis was conducted in April 2020 and DMC concluded that in these 5 pediatric patients, mirdametinib's safety profile was comparable to adults
  - The DMC then recommended that the study should proceed, fully opening the pediatric stratum to enroll patients ≥2 years of age aided by the availability of a pediatric mirdametinib formulation
- Robust clinical infrastructure is in place
  - -47 sites activated in the US (targeting ~50 sites in total)
  - Broad site distribution helps to raise awareness and experience with mirdametinib



## Updated Interim Data Summary from Adult Stratum Presented at CTF



- An updated safety and efficacy analysis is of the first 20 adult patients treated in the ongoing study was presented at the Children's Tumor Foundation Conference on June 15, 2021
  - Data cutoff of March 23, 2021
  - Median time on treatment for these 20 patients was 13 cycles (approximately 12 months)
- Blinded Independent Central Review (BICR) was used for tumor assessments
  - BICR was implemented to both reduce potential effect of bias as well as ensure consistency in how tumor measurements were conducted across study
- Objective responses are defined as ≥20% reduction in tumor volume
  - Objective response definition has been endorsed by REiNS (Response Evaluation in Neurofibromatosis and Schwannomatosis), has been discussed with the FDA for the ReNeu trial and has previously been used to support FDA approval in the indication





## **Baseline Demographics and Patient Disposition**



Characteristic	n (%)
Patients enrolled	20
Median age at enrollment [range] - yr	33.5 [19 – 69]
Sex	
Male	4 (20)
Female	16 (80)
Location of target neurofibroma	
Head and Neck	9 (45)
Lower Extremities	6 (30)
Chest Wall	1 (5)
Paraspinal	1 (5)
Upper Extremities	1 (5)
Other	2 (10)
Type of neurofibroma-related complication	
Pain	20 (100)
Major Deformity	10 (50)
Motor Dysfunction/Weakness	10 (50)
Lower Extremity	7 (35)
Upper Extremity	3 (15)
Progression of PN at Entry	6 (30)
Optic Glioma	2 (10)
Airway Dysfunction	1 (5)
Other	3 (15)

Disposition	n (%)
Patients enrolled	20
Treated	20 (100)
On study at time of data cutoff	16 (80)
Discontinued treatment	4 (20)
Adverse Event (1)	1 (5)
Progressive Disease	1 (5)
Participant Decision	1 (5)
Other <sup>(2)</sup>	1 (5)

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(2) Patient unable to undergo required MRI imaging due to titanium rod implant from non-treatment related worsening of scoliosis.

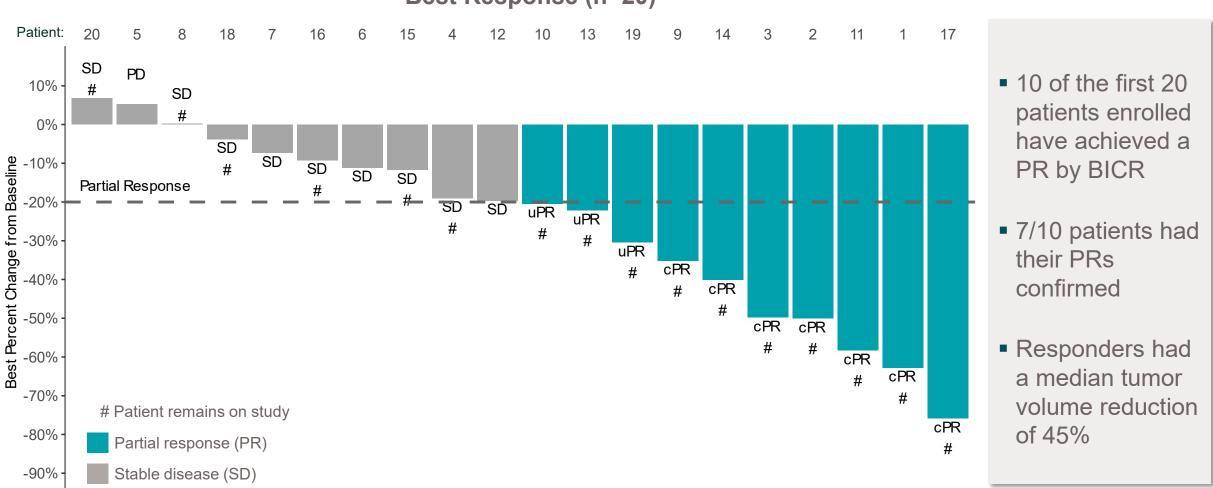
Note: Data are from the first 20 adult patients enrolled in the Phase 2b ReNeu trial (data cutoff: March 23, 2021), representing a database snapshot, and may change based on ongoing routine data

monitoring. The ReNeu trial is ongoing, and these results may not be predictive of future data presentations or the final study results.



<sup>(1)</sup> Due to Grade 1 diarrhea.

### 50% of Patients Have Achieved an Objective Response by BICR



#### Best Response (n=20)

BICR: Blinded Independent Central Review; cPR: confirmed partial response; PD: progressive disease; PR: partial response (defined as a ≥20% reduction in tumor volume); SD: stable disease; uPR: unconfirmed partial response

Note: Data are from the first 20 adult patients enrolled in the Phase 2b ReNeu trial (data cutoff: March 23, 2021), representing a database snapshot, and may change based on ongoing routine data

monitoring. The ReNeu trial is ongoing, and these results may not be predictive of future data presentations or the final study results. Confirmed PR means subsequent scan confirmed (20%) reduction in tumor volume.

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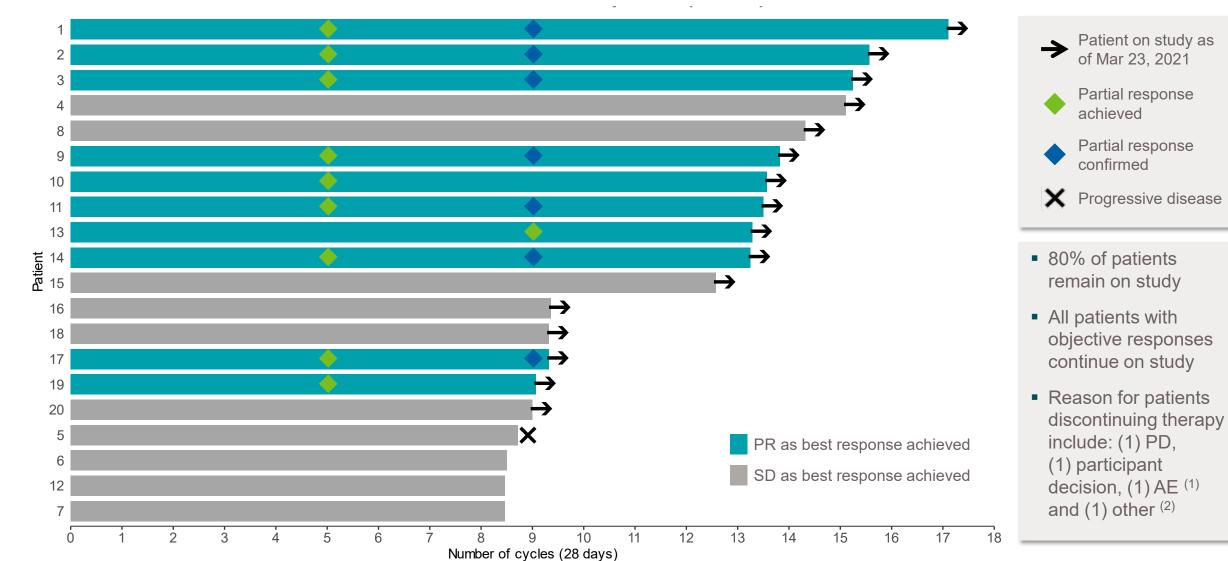


ReNeu

2021 CTF Presentation

#### **Treatment Duration and Response**





#### (1) Due to Grade 1 diarrhea.

22

(2) Patient unable to undergo required MRI imaging due to titanium rod implant from non-treatment related worsening of scoliosis.

AE: adverse event; PD: progressive disease; PR: partial response (defined as a ≥20% reduction in tumor volume); SD: stable disease

Note: Data are from the first 20 adult patients enrolled in the Phase 2b ReNeu trial (data cutoff: January 22, 2021), representing a database snapshot, and may change based on ongoing routine data

monitoring. The ReNeu trial is ongoing, and these results may not be predictive of future data presentations or the final study results. Scans occur following cycle 5, 9 and 13.

SpringWorks

## Safety Summary: Treatment-Emergent and Treatment-Related AEs

Treatment-Emergent AEs (≥15% of patients)

Grade 3

n (%)

3 (15)

1 (5)

-

-

Grade 4

n (%)

-

-

-

-

Grade 3

n (%)

1 (5)

1 (5)

\_

-

-

-

All Grades

n (%)

20 (100)

18 (90)

12 (60)

10 (50)

6 (30)

**Adverse Event** 

Dermatitis acneiform/Rash maculopapular

At least 1 AE

Nausea

Diarrhea

Abdominal Pain



- Most adverse events (AEs) have been Grade 1 or 2
- Only one Grade 3 treatment-related AE (rash) and no Grade 4 or Grade 5 AEs
- One patient had a dose reduction required due to Grade 3 rash



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Fatigue	6 (30)	-	-	-	-
Vomiting	5 (25)	-	-	-	-
Dry skin	4 (20)	-	-	-	-
Ejection fraction decreased	4 (20)	-	-	-	-
Constipation	3 (15)	-	-	-	-
Dyspnea	3 (15)	1 (5)	-	-	-
Gastroesophageal reflux disease	3 (15)	-	-	-	-
Arthralgia	3 (15)	-	-	-	-
Ear pain	3 (15)	-	-	-	-
Urinary tract infection	3 (15)	-	-	-	-
Coronavirus infection	-	1 (5)	-	-	-
Coronavirus test positive	-	1 (5)	-	-	-
Headache	-	1 (5)	-	-	-
Non-cardiac chest pain	-	1 (5)	-	-	-
Scoliosis	-	1 (5)	-	-	-

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## Phase 2 Trial in Pediatric Low-Grade Glioma Provides Additional Expansion Opportunity for Mirdametinib

#### PHASE 1

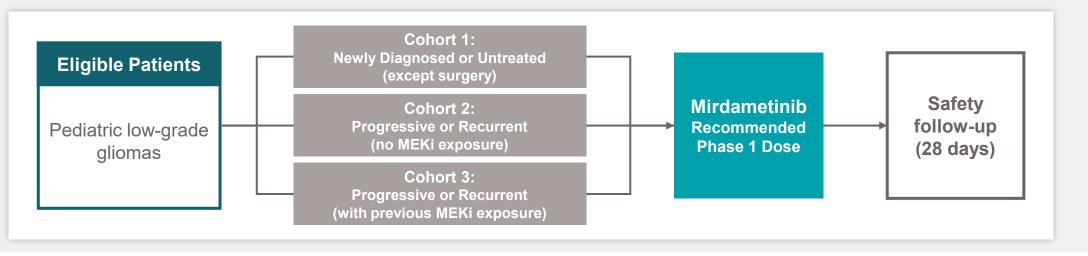
PHASE 2

#### **Trial Summary**

- Open-label, multi-center study evaluating single agent mirdametinib, a brain penetrant MEK 1/2 inhibitor, in pediatric low-grade gliomas
- Recommended dose from Phase 1 dose-finding/doseescalation study will be used (2-4 mg/m<sup>2</sup>, BID continuous)

#### **Summary of Endpoints**

- Primary Endpoint: Objective response rate
- Secondary Endpoints: Safety and tolerability, duration of response, and quality of life assessments



Favorable safety profile and blood-brain barrier penetration properties set the stage for a potential best-in-class profile for pediatric low-grade gliomas



## **BCMA Combinations in Multiple Myeloma**



Nirogacestat has the potential to be a cornerstone of BCMA combination therapy

## Nirogacestat in Multiple Myeloma: A Potentially Best-in-Class Potentiator of BCMA Therapies

- Significant unmet need in multiple myeloma (MM), with ~27,000 new patients in the relapsed/refractory setting in the US each year
- Gamma secretase directly cleaves membrane-bound BCMA, a clinically validated multiple myeloma target across modalities (ADC, CAR T, bispecific, mAb)

 Strong preclinical results and emerging clinical data support combining gamma secretase inhibitors with BCMA therapies

- Pursuing broad collaboration strategy with industry-leading BCMA developers to advance potentially best-in-class combinations using nirogacestat
- Entered into a sponsored research agreement with Fred Hutchinson Cancer Research Center to further evaluate nirogacestat as a BCMA potentiator in MM

US Composition of Matter patents provide protection to 2039

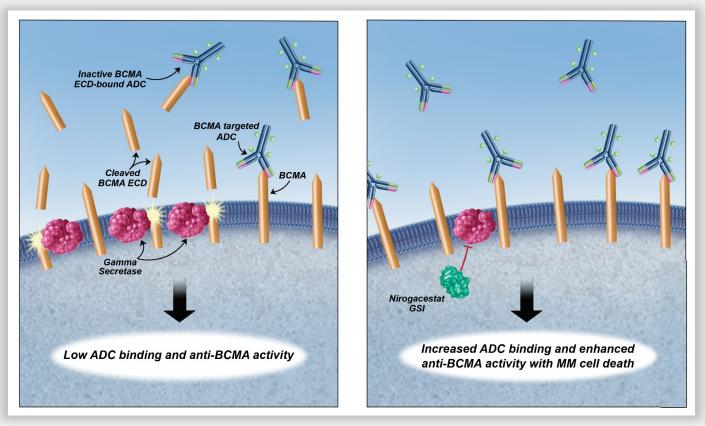


# Gamma Secretase Inhibition is Emerging as a Clinically Validated Mechanism to Potentiate BCMA Therapies

- Gamma secretase directly cleaves membrane-bound BCMA
  - BCMA has emerged as a promising target in multiple myeloma across modalities
- GSI can reduce cleavage of BCMA to improve activity of BCMA-directed therapies
  - GSI can limit soluble BCMA levels, which can interfere with the activity of BCMA-directed therapies
  - GSI can dramatically increase levels of BCMA expression on the cell surface, including in patients that have failed prior BCMA-directed therapies

 Preclinical and clinical data support combination approach

#### **MECHANISM OF ACTION OF NIROGACESTAT + BCMA THERAPY** (ADC SHOWN)

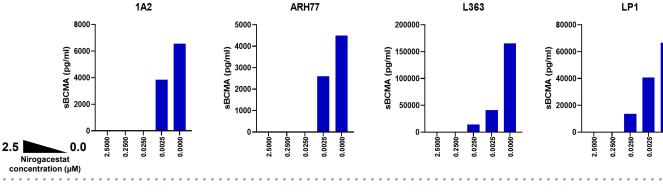


Source: Cowan et al., Abstract #204 "Efficacy and Safety of Fully Human BCMA CAR T Cells in Combination with a Gamma Secretase Inhibitor to Increase BCMA Surface Expression in Patients with Relapsed or Refractory Multiple Myeloma", ASH 2019; Eastman et al., Abstract #4401 "Synergistic Activity of Belantamab Mafodotin (anti-BCMA immuno-conjugate) with Nirogacestat (PF-03084014, gamma-secretase inhibitor) in BCMA-Expressing Cancer Cell Lines", ASH 2019; Green et al., Abstract #1856 "Response to BCMA CAR-T Cells Correlates with Pretreatment Target Antigen Density and Is Improved By Small Molecule Inhibition of Gamma Secretase", ASH 2019; Laurent et al., *Nat. Comm.*, 2015; Pont et al., *Blood*, 2019.



# Nirogacestat Inhibited BCMA Shedding, Upregulated BCMA Expression, and Enhanced Activity of BCMA ADC Up to ~3,000-Fold

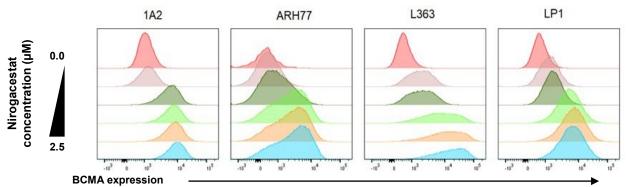
Nirogacestat inhibited cleavage of membrane-bound BCMA and shedding of soluble BCMA ECD



Nirogacestat rapidly and significantly upregulated BCMA cell surface expression levels

2

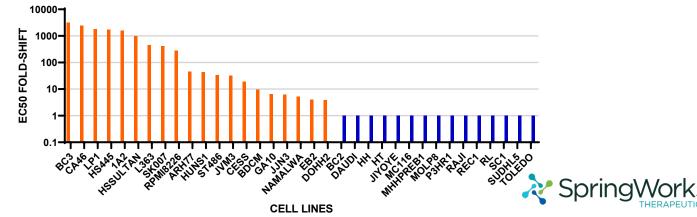
3



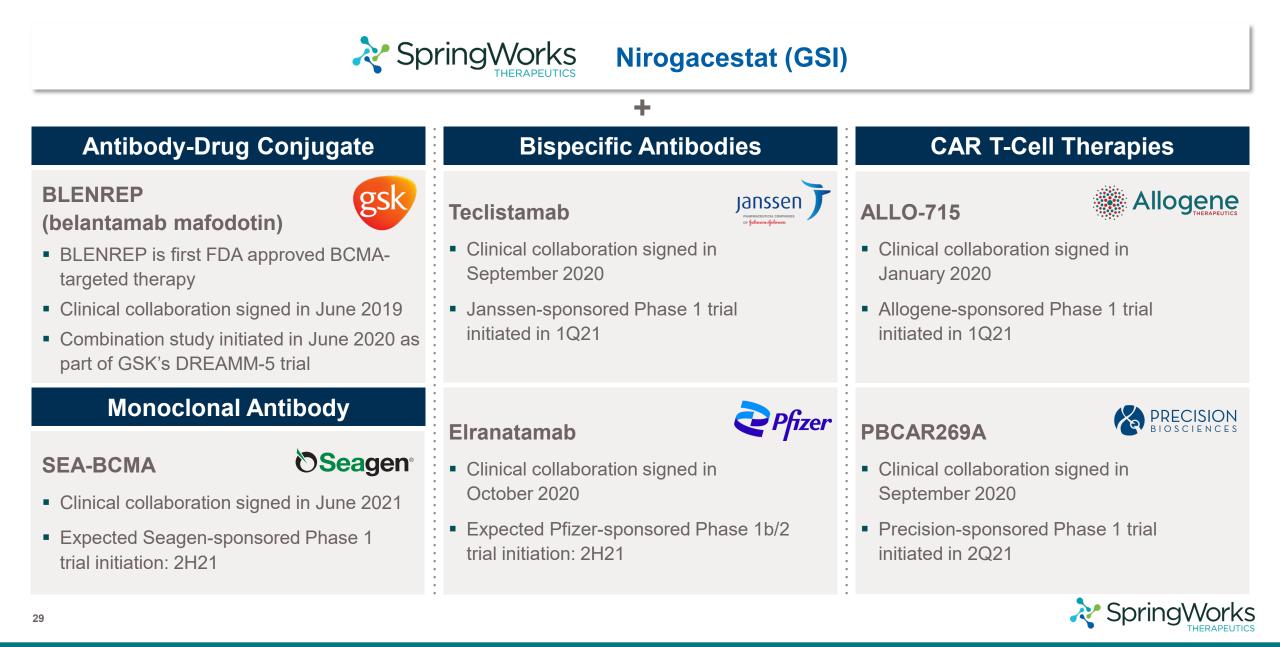
Nirogacestat enhanced multiple myeloma cell killing activity of BCMA ADC by up to ~3,000-fold

Note: ECD = extracellular domain; ADC = antibody-drug conjugate; MM = multiple myeloma. Source: Eastman et al., Abstract #4401 "Synergistic Activity of Belantamab Mafodotin (anti-BCMA

28 immuno-conjugate) with Nirogacestat (PF-03084014, gamma-secretase inhibitor) in BCMA-Expressing Cancer Cell Lines", ASH 2019.



## Six Clinical Collaborations Across All Key BCMA-Targeted Modalities



## **Biomarker-Defined Metastatic Solid Tumors**



## Mirdametinib in *RAS/RAF* Mutant Solid Tumors: Advancing Potentially Best-in-Class MEK/RAF Dimer Inhibitor Combination in Collaboration with BeiGene



#### Mirdametinib + Lifirafenib

MEKi + RAF dimer inhibitor

RAS/RAF Mutant and Other MAPK Pathway Aberrant Solid Tumors  Significant area of unmet need in cancer patients with RAS/RAF mutations and other MAPK pathway aberrations (approximately 25% of solid tumors)

Lifirafenib possesses potentially best-in-class profile among RAF dimer inhibitors

 Combination synergy demonstrated across preclinical models harboring a variety of KRAS and NRAS mutations

Phase 1b/2 trial is ongoing in Australia and the US

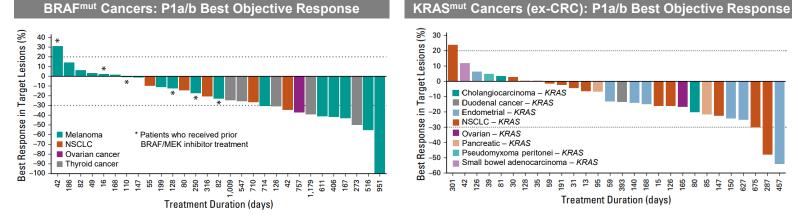
Focused investment until significant clinical validation achieved

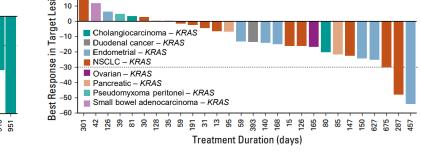
Expect to report initial clinical data in 2021



## Mirdametinib + Lifirafenib: Encouraging Monotherapy Clinical Activity and Strong **Preclinical Combination Data**

Lifirafenib monotherapy clinical activity in BRAF and **KRAS** mutant cancers

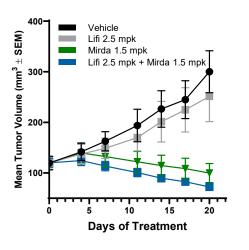


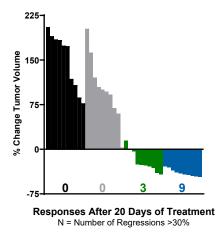


Preclinical synergy demonstrated with mirdametinib and lifirafenib in vitro across RAS mutations and in vivo at clinically relevant doses

NSCLC Cell Line	RAS Mutation	Max EC <sub>50</sub> shift with mirdametinib combo
Calu-6	K-RAS Q61K	59 fold $\downarrow$
SW1573	K-RAS G12C	97 fold $\downarrow$
NCI-H23	K-RAS G12C	22 fold $\downarrow$
NCI-H2122	K-RAS G12C	21 fold $\downarrow$
NCI-H358	K-RAS G12C	18 fold $\downarrow$
Calu-1	K-RAS G12C	No shift
Sk-Lu-1	K-RAS G12D	32 fold $\downarrow$
A549	K-RAS G12S	11 fold ↓
NCI-H1299	N-RAS Q61K	16 fold ↓

Mirdametinib + Lifirafenib In Vivo Activity (NCI-H358)







Source: Desai et al., J Clin Oncol, 2020; Tang et al., Mol Cancer Ther, 2015; Yuan et al., Molecular Oncology, 2020; Yuan et al., Abstract #6415, AACR 2020 Virtual Annual Meeting II.

1

2

## BGB-3245: Potentially Differentiated Program for Currently Unaddressed *BRAF* Driver Mutations and Fusions



**BGB-3245** 

Mutant BRAF monomer, dimer, and fusion inhibitor

**BRAF** Mutant Solid Tumors

- MapKure is a joint venture between SpringWorks and BeiGene that is advancing BGB-3245, a novel BRAF inhibitor
- BGB-3245 could address BRAF alterations that currently lack targeted therapeutic options (non-V600 BRAF mutations and fusions)

 BGB-3245 has shown preclinical activity against resistance mutations to first generation BRAF V600 inhibitors

Phase 1 trial initiated in 2020 and dose escalation ongoing in Australia and the US

 Industry-leading Scientific Advisory Board chaired by Dr. Neal Rosen of Memorial Sloan Kettering Cancer Center

#### Expect to report initial clinical data in 2021

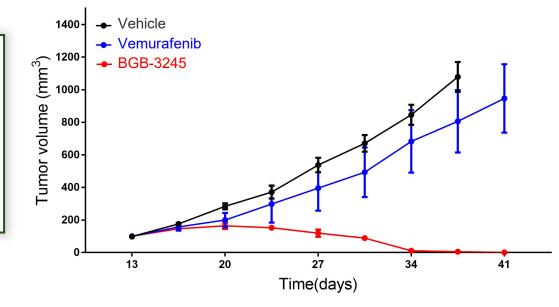


## BGB-3245 Has Demonstrated Encouraging Preclinical Activity

**BRAF** Fusion PDX: In Vivo Tumor Growth Inhibition

BGB-3245 is active in patient-derived xenografts driven by *BRAF* fusions and non-V600 mutations, where approved BRAF inhibitors do not work

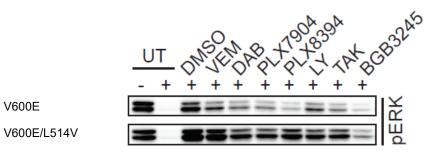
1



- Driver mutations and fusions potentially uniquely targetable by BGB-3245 could account for up to  $\sim 5\%$  of all solid tumors
- BGB-3245 also active preclinically against mutant BRAF monomers (e.g., V600)

BGB-3245 is active against resistance mutations that 2 arise in *BRAF* V600 patients treated with approved BRAF inhibitors

pERK Activity in BRAF V600E/L514V Cell Line



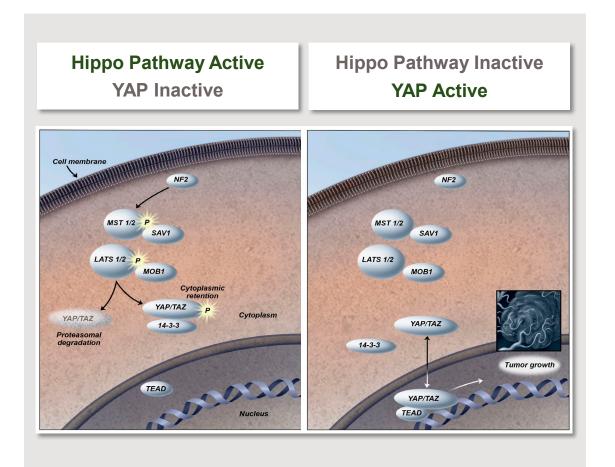
- BRAF V600E/L514V is a dabrafenib resistance mutation
- BGB-3245 showed strongest in vitro activity versus other first- and second-generation BRAF inhibitors tested



Source: Rosen presentation, Sixth International RASopathies Symposium: Precision Medicine - From Promise to Practice, 2019; Dankner et al., Oncogene, 2018; Ross et al., IJC, 2016; Dimitriadis et al., J Neurooncol, 2013; Garnett et al., Molecular Cell, 2005; Siegel et al., CA A Cancer J Clin, 2019; Wang et al., Cancer Discovery, 2018.

V600E

## TEAD Inhibitor: Biomarker-Guided Approach for Tumors Driven by Aberrant Hippo Pathway Signaling



- Hippo pathway is genetically altered in approximately 10% of cancers and is generally associated with poor patient outcomes
- TEAD inhibition represents rational target given its central position in integrating Hippo pathway signaling
- TEAD palmitoylation is required for transcriptional activity and can be inhibited with potent and selective small molecules
- Multiple monotherapy and combination therapy opportunities guided by biomarker-driven development approach
- Program is currently in lead optimization with competitive in vitro and in vivo activity demonstrated

#### Expect to nominate DC and commence IND-enabling studies in 2022



## Program is in Lead Optimization with Selectivity, Potency and In Vivo Tumor **Growth Inhibition Demonstrated**

Growth

Mesothelioma

Gl<sub>50</sub> = 8 nM

(NF2 Deletion)

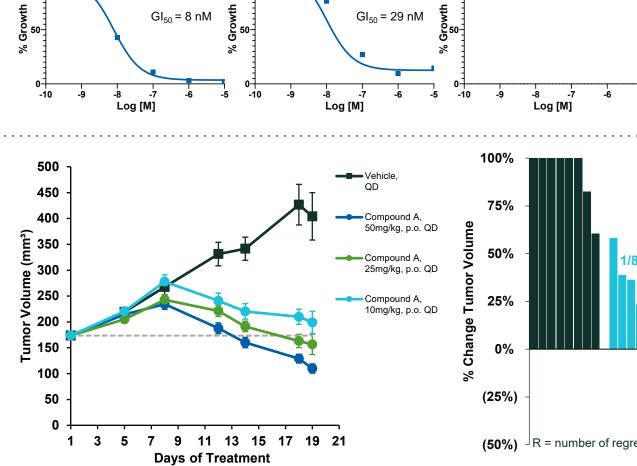
100-

TEAD inhibitors potently and selectively inhibit growth of cancer cell lines driven by Hippo pathway mutations

1

2

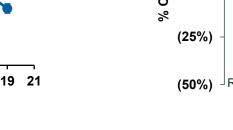
Compounds have shown good tolerability and oral bioavailability in vivo, with dose dependent tumor growth inhibition in NF2deficient xenografts



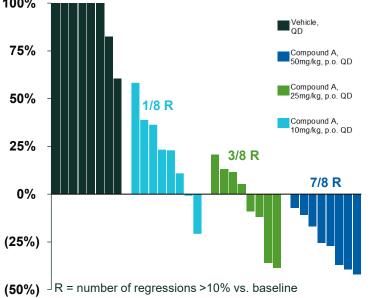
NSCLC

(NF2 Deletion)

GI<sub>50</sub> = 29 nM



Growth



% Growth

-10

-5

NSCLC

(NF2 WT)



NSCLC

(NF2 WT)

-8

Log [M]

Note: GI<sub>50</sub> = drug concentration producing 50% maximal growth inhibition; P.O. = by mouth; QD = once a day.

# The SpringWorks Opportunity





## Multiple Milestones Anticipated Across Our Pipeline in 2021

	Indication	Program		Expected Milestone	Timing
Late-Stage Rare Oncology	Desmoid Tumors	Nirogacestat		Report Phase 3 DeFi topline data in adult desmoid tumor patients	2H 2021
	NF1-Associated Plexiform Neurofibromas	Mirdametinib		Phase 2b ReNeu full enrollment	2H 2021
	Pediatric Low-Grade Gliomas	Mirdametinib		Phase 1/2 trial FPFD	2H 2021
BCMA Combinations	Relapsed / Refractory Multiple Myeloma	Nirogacestat	+ BLENREP	Report initial Phase 1b data with GSK	2021
			+ ALLO-715	Initiated Phase 1 trial with Allogene	1Q 2021
			+ Teclistamab	Initiated Phase 1 trial with Janssen	1Q 2021
			+ PBCAR269A	Initiated Phase 1 trial with Precision	2Q 2021
			+ Elranatamab	Phase 1b/2 trial initiation with Pfizer	2H 2021
			+ SEA-BCMA	Phase 1 trial initiation with Seagen	2H 2021
Biomarker- Defined Metastatic Solid Tumors	RAS/RAF Mutant and Other MAPK Pathway Aberrant Solid Tumors	Mirdametinib	+ Lifirafenib	Report initial Phase 1b/2 data with BeiGene	2021
	RAF Mutant Solid Tumors	BGB-3245		Report initial Phase 1 data	2021
	Hippo Mutant Tumors	TEAD inhibitor		DC nomination	2022



Well Capitalized to Execute on Important Value-Driving Milestones

## **\$541.0M** Cash, Cash Equivalents & Marketable Securities<sup>(1)</sup>

**No Debt** 

# **NASDAQ: SWTX**

## **49.1M**

Common Shares Outstanding<sup>(2)</sup>



39 (1) As of March 31, 2021.(2) Basic common shares outstanding as of April 30, 2021.

## Strategic Priorities and Building Blocks for Substantial Value Recognition in 2021





