

Company Presentation February 2022



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MISSION

Our mission is to become the world leader in developing better and safer antibody-based oncology products addressing clear unmet pediatric and adult medical needs



Y-mAbs Platforms to Drive Sustainable Long-term Value

Innovative Platforms

Antibodies and Vaccines

Y-BiClone (BiSpecifics)

Radio-immunotherapy

SADA Platform Liquid Radiation[™]

2022-2024 Milestones

Initiaton of Naxitamab label expansion into adult indications

Potential resubmission and approval of omburtamab in 2022

Partnership potential for SADA Technology, Y-BiClone and antibody portfolio

Commercial Leverage

DANYELZA

(naxitamab-gqgk)

Anti-GD2 Antibody marketed for R/R High-Risk Neuroblastoma

omburtamab

BLA-ready Anti-B7-H3 Antibody for CNS/LM from Neuroblastoma

MAA submitted Anti-B7-H3 Antibody for

CNS/LM from Neuroblastoma

Capital Efficiency

\$215.7 million in cash and equivalents as of September 30, 2021

Four candidates eligible for **Priority Review Vouchers** on approval (each currently sell for ~\$100m)



Strong Pipeline

Programs	Preclinical	Phase 1	Phase 2/Pivotal Study	Approved	Next Anticipated Milestones
Lead Candidates	DANYELZA (naxitamab-go	ągk)			FDA approved
	¹³¹ I-omburtamab		RPDD ¹		BLA resubmission Q1 2022, MAA submitted Q2 2021
Vaccine	GD2-GD3 Vaccine	R	PDD 📀		Multicenter Phase 2 study being planned
Y-BiClone Bispecific Platform	Nivatrotamab	R	PDD 🥪		Small Cell Lung Cancer - recruiting
	CD33xCD3				AML Pediatric Cancer IND filed
Farly-Stage RIT	¹⁷⁷ Lu-omburtamab-DTPA	RPDD 🥪			Phase 1/2 Medulloblastoma
	¹⁷⁷ Lu-omburtamab-DTPA				Phase 1/2 CNS/LM metastasis in adults
SADA Technology	GD2-SADA				GD2 Positive solid tumors – IND filed December 2021. Additional INDs being prepared for 2022 and 2023

¹ Indicates eligibility for a Priority Review Voucher (PRV) on approval





Commercial Readiness

DANYELZA® (naxitamab-gqgk): Anti-GD2 Antibody for R/R High-Risk Neuroblastoma

> Omburtamab: Anti-B7-H3 Antibody for CNS/LM from Neuroblastoma

Commercial Opportunities – DANYELZA and omburtamab

Compound	Indication	Total Incidence per Year (US)	Addressable Patient Population per Year (US)
GD2 DANYELZA (naxitamab)	Neuroblastoma – 2 nd Line	300	300
	Neuroblastoma – Front Line	800	450
	Osteosarcoma – 2 nd Line	450	200
	Nouroblastama Matastatia ta the Captral Norvous System		
	ineuropiasiona melasialic to the Central Nervous System	80	80

	(CNS/LM from NB)	80	80
B7-H3 omburtamab	Diffuse Intrinsic Pontine Glioma (DIPG)	300	300
	Desmoplastic Small Round Cell Tumors (DSRCT)	100	100



DANYELZA: Only FDA-Approved Medicine for R/R NB Patients



FDA approval for patients with R/R Neuroblastoma (NB)

- Rapid infusion, less pain, fewer hospitalization days, high degree of treatment compliance
- Outpatient treatment



Neuroblastoma

- NB forms in certain types of nerve tissue. It most frequently starts from one of the adrenal glands but can also develop in the neck, chest, abdomen or spine.
- NB is the most common cancer in babies and the third-most common cancer in children

U.S. commercial launch performance

- Q3 net sales of \$9.0 million
- 24 active sites across the U.S.
- 40%+ of U.S. revenues generated outside MSK



Pre-launch efforts drove market development and

uptake

- market access
- Significant engagement with key stakeholders





DANYLEZA: Primary and Secondary Refractory Patients

Study 12-230 (SIOP October 2019 - Investigator evaluated responses)

23 evaluable patients with primary refractory high-risk NB: 78% ORR

50% two-year progression free survival (PFS) was observed

Study population of 35 secondary refractory patients with relapsed NB resistant to salvage therapy: 37% ORR

36% two-year PFS was observed

Study 201 (SIOP October 2020 - Independent review assessment)

25 patients enrolled, of which 22 patients were evaluable: 68% ORR and 59% CR

Bone marrow (BM) clearance in subjects with positive BM at trial start: CR in BM was observed in 7 of 9 subjects.



High-Risk Neuroblastoma Frontline Treatment Regimes





Naxitamab: Frontline NB Data *without* Standard ASCT



Naxitamab – Potential Label Expansion - Anticipated Study Initiation

Cancer indications	Treatable patient population (US)	GD2 expression	2020 2021 2022 2023 2024
Neuroblastoma FDA approval for R/R HR-NB in Nov 2020	800	~ 99-100%	R/R - High Risk Neuroblastoma Front-line HR Neuroblastoma Chemo combo in R/R HR NB
Relapsed/Recurrent Osteosarcoma	200	~88%	Relapsed Osteosarcoma Study 15-096 Pivotal RCT
Soft-Tissue Sarcomas	2,900 (1 st -line population)	>90%	Phase 1/2
Triple Negative Breast Cancer	8,900 (2^{nd} line & 3^{rd} line <i>plus</i>)	>50%	Phase 1/2
Melanoma - Newly unresectable & met.	11,400 (2 nd line & 3 rd line <i>plus</i>)	>50%	Phase 1/2



Naxitamab: Key Takeaways

Addresses Significant Unmet Needs in R/R High-Risk NB • Potential to Expand to Broader Populations



Studies 12-230 and 201 formed primary basis of approval in November 2020



Granted ODD and BTD. Frontline studies ongoing



US commercialization in highrisk NB initiated. Chinese partnership with SciClone



Multiple potential advantages over other GD2 targeting antibody-based therapies: Modest toxicity, shorter infusion time, ability to be administered in outpatient setting



Omburtamab: Regulatory Path to BLA Approval



U.S.

Studies 03-133 and 101 forms basis of BLA submission:

- PK and dosimetry comparison required
- Data from Study 101 multicenter supports BLA submission
- ODD, BTD, and RPDD
- Planned resubmission of BLA in Q1 2022

Europe:

Marketing Authorization Application submitted April 2021



Omburtamab: Delivered in an Outpatient Setting – 2 Doses per Patient

CNS/LM from NB patients

Administration of radiolabeled omburtamab via Ommaya reservoir





PET scan of distribution of radiolabeled omburtamab two hours after administration



After induction treatment including all or some of the three treatments (chemotherapy, surgery, and radiation) patients will receive radiolabeled omburtamab



Omburtamab: Clinical Overview

Studies 03-133 and 101: ¹³¹I-omburtamab Improves Survival in CNS/LM from NB Patients



Number of patients in the full analysis set	24			
Objective Radiographic Response (CR and PR), N (%)	4 (40.0)			
[95% CI*]	[12.2 ; 73.8]			
Best Overall Radiographic Response				
Complete response	2 (20.0)			
Partial response	2 (20.0)			
Stable disease	5 (50.0)			
Progressive disease	1 (10.0)			
Total	10 (100.0)			
No evidence of disease / Not evaluable (N)	14			
N: Number of subjects, %: Percentage of subjects Best overall radiographic response is assessed at Week 26 by independent Review of images.				
Results confirm the direct anti-tumor effect of ¹³¹ I-omburtamab				
Disease Control at Week 26 in 9 out 10 pts (90%)				

 1 MSK HC = neuroblastoma patients with CNS/LM treated at MSK prior to 2003

 2 ¹³¹I-omburtamab = Patients with CNS/LM treated under Study 03-133

Omburtamab: Label Expansion Through Broad Clinical Platform

Omburtamab (B7-H3)	Phase 1	Phase 2/Pivotal Study	Highlights	
Accelerated Dathway	Phase 2: CNS/LM from NB (Pedia	tric) – Study 101	Multi-center PK study; resubmission of BLA in Q1 2021 – MAA submitted in April 2021	
Accelerated Pathway	Phase 1: CNS/LM – Study 03-133		MSK single-center efficacy data	
	Phase 1: DIPG – Study 11-011		Study update presented at ASCO 2021	
Label Expansion	Phase 2: DIPG multi-center		Multi-center study to initiate in 2022, IND filed Q4 2021	
	Phase 2: DSRCT – Study 19-182		Study update from Phase 1 presented at CTOS Nov 2019	



¹⁷⁷Lu-omburtamab-DTPA - Pediatric and Adult Strategy

¹⁷⁷ Lu-omburtamab-DTPA	Phase 1	Phase 2/Pivotal Study	Highlights
Pediatric	Phase 1/2: Medulloblastoma		Study 301 open, recruiting
Adult	Phase 1/2: B7-H3 Positive CNS/LM tumors		Study 302 open, recruiting

Adult	 First indication: Basket study of B7-H3 positive CNS/LM tumors. Study open, recruiting Prior experience from compartmental treatment of adult patients with ¹³¹I-omburtamab 	Lung Inciden Primary Turnor
Pediatric	 First indication: Medulloblastoma. Study open, recruiting Prior experience from compartmental treatment with ¹³¹I-omburtamab 	Metastatic
Clinical Testing (Adult)	 Experience using ¹³¹I-omburtamab in adult patients with tumors such as sarcoma, melanoma and medulloblastoma cGMP production established 	24,0







Omburtamab: Key Takeaways

Addresses Significant Unmet Needs and has the Potential to Expand its Application to Broader Populations



No approved products for patients with R/R NB who have CNS/LM from NB

Goal of treatment is generally palliative



Granted ODD, BTD, and RPDD; May qualify for a sBLA for DIPG and DSRCT assuming positive pivotal data



Demonstrated median OS of approximately 51 months

Historical median OS of ~6-9 months and no expected five-year survival



Studies 03-133 and 101 form primary basis for BLA resubmission for CNS/LM from NB by end of 2021. MAA submitted in April 2021. Large potential market opportunity for the treatment of LM from tumors expressing B7-H3





Bispecific Antibodies First Two Antibodies Targeting GD2 and CD33 Positive Cancers

Nivatrotamab





- Phase 2 trial for SCLC and Phase 1/2 trial for refractory GD2 positive solid tumors
- Expanding into adult indications addressing high unmet medical need
- Multicenter study
- ODD and RPDD





CD33XCD3

Non-clinical package

Clinical

- Full non-clinical package submitted to support Y-mAbs IND.
- No FDA hold issues identified.

- Clinical Protocol Submitted for Phase 1.
- No FDA hold issues identified.

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 Collaboration with COG who has identified approx. 15 sites

Expect IND to open Q1 2022

Y-mAbs Biclone CD33xCD3 binds to IgC region allowing binding to both full length and splice variant (rs12459419; reduced / no expression of IgV domain)

Approved CD33 mAb binds to region V only

Cytotoxic

granules





IND



SADA Technology Platform

Liquid Radiation[™]

SADA Technology - High affinity for tumor targets and rapid clearance from blood stream

SADA domains uniquely selected to allow proteins to change size based on concentration





SADA has high tumor uptake with minimal exposure to all other tissues

Conventional antibody's persistence in blood stream leads to substantial unwanted exposure



2-step IgG PET



Pretargeted SADA Technology (2-step, TI > 50:1)



2-step SADA



Adapted from Santich et al. Clin Canc Res 2021



SADA Technology can treat patient-derived neuroblastoma tumors

Tumor cures without toxicity to the liver, kidneys or bone marrow



No liver toxicity No kidney toxicity No bone marrow toxicity



Adapted from Santich et al. Clin Canc Res 2021







Strong Financial Position



Nasdaq

Follow on: November 2019

\$144 Million

Follow on: February 2021

\$115 Million

Non-dilutive cash: January 2021

\$62 Million from PRV sale

\$215.7 Million

of cash and cash equivalents as of September 30, 2021



\$489 Million Raised to Date

1 PRV

PRV sold for \$105 Million Y-mAbs retained 60% of net proceeds \$62 million

4 RPDDs

Received for leading compounds



	Pediatric	Adult
DANYELZA (naxitamab-gqgk) and GD2-GD3 Vaccine	High-Risk Neuroblastoma (NB)Osteosarcoma	Osteosarcoma
Omburtamab	 CNS/LM from NB (¹³¹I) DIPG and DSRCT (¹³¹I) Medulloblastoma (¹⁷⁷Lu) 	• B7-H3 positive tumors (¹⁷⁷ Lu)
Y-BiClone Platform	 High-Risk Neuroblastoma (GD2) Refractory positive solid tumors (GD2) AML (CD33) 	• SCLC (GD2)
SADA Platform		 GD2 positive tumors Colon Cancer, Prostate Cancer, Breast Cancer



THANK YOU