MacroGenics®

Developing
Breakthrough Biologics,
Life-changing Medicines™

Corporate Presentation

May 29, 2020

Legal Notices

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Investigational Agents

All Company product candidates described or mentioned herein are investigational and have not yet been approved for marketing by any regulatory authority.

Building a Leadership Position in Immuno-Oncology

Late-stage immuno-oncology company	• December 2020 PDUFA goal date for most advanced product candidate • Three additional ongoing or anticipated registration-directed studies
Proprietary platform technologies	• Bispecific DART® platform technology that exploits multiple mechanisms • Fc-engineering to enhance innate and adaptive immunity
Deep and differentiated pipeline	• Unique immune-based mechanisms • Retain major market rights for 6 of 7 clinical assets
Funded to execute on plan	• $171M cash, cash equivalents and marketable securities at 3/31/20 • Multiple 2020 inflection points • Cash runway into 2022 via anticipated and potential collaboration payments

Deep and Differentiated Immuno-Oncology Pipeline

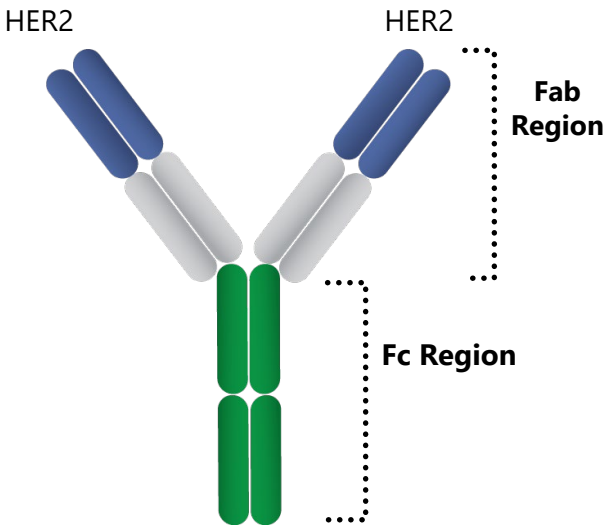
Program (Target)	Potential Indication(s)	First-in-Human (Phase 1)	Proof-of-Concept (Phase 2)	Pivotal	Major Market Rights
Margetuximab (HER2)	HER2+ Breast				MacroGenics; Greater China: zai Lab
	HER2+ Gastric/GEJ (+retifanlimab/MGD013)				
Flotetuzumab (CD123 × CD3)	AML				MacroGenics
Retifanlimab (PD-1)	Solid Tumors				Incyte (b)
Enoblituzumab (B7-H3)	SCCHN (+retifanlimab/MGD013)				MacroGenics; Greater China: I-MAB Biopharma
MGD013 (PD-1 × LAG-3)	Solid Tumors & Heme Malignancies				MacroGenics; Greater China: zai Lab
MGD019 (PD-1 × CTLA-4)	Solid Tumors				MacroGenics
MGC018 (B7-H3)[a]	Solid Tumors				MacroGenics

MGD = DART | MGA = Antibody | MGC = ADC

(a) MGC018 is an antibody-drug conjugate (ADC) based on a duocarmycin payload with cleavable peptide linker that was licensed from Byondis (formerly Synthon Biopharmaceuticals).
(b) MacroGenics retains rights to develop its pipeline assets in combination w/retifanlimab (MGA012) and to manufacture a portion of global clinical and commercial supply needs of retifanlimab.
All Company product candidates described or mentioned herein are investigational and have not yet been approved for marketing by any regulatory authority.

Margetuximab: Anti-HER2 mAb Engineered to Enhance Activity of Immune System

December 2020 PDUFA goal date for BLA for HER2+ metastatic breast cancer (mBC)

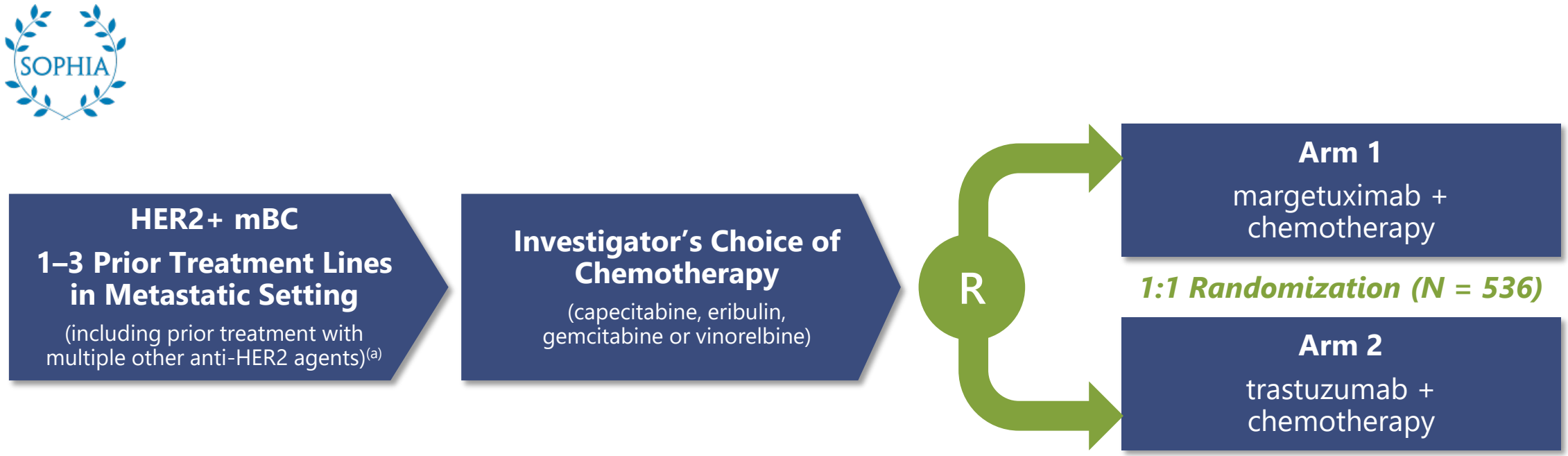


Function/ MoA	• Inhibits HER2 signaling (similar to trastuzumab) • Fc region engineered to engage innate and adaptive immunity as mediators of anti-tumor activity
Clinical Studies	• Ph. 3 SOPHIA study versus trastuzumab in HER2+ mBC • Ph. 2/3 MAHOGANY study w/checkpoint inhibitor in HER2+ gastric cancer • Ph. 1/2 expansion cohort w/checkpoint inhibitor in HER2+ solid tumors
2020 Anticipated Milestones	• BLA for HER2+ mBC: PDUFA goal date (12/18/2020) • Final SOPHIA OS analysis (N=385) (2H) • Obtain initial data from MAHOGANY Module A

Margetuximab is investigational and has not yet been approved for marketing by any regulatory authority

Phase 3 SOPHIA Study Comparing Margetuximab to Trastuzumab

Designed to support registration in 3rd/4th line HER2+ metastatic breast cancer



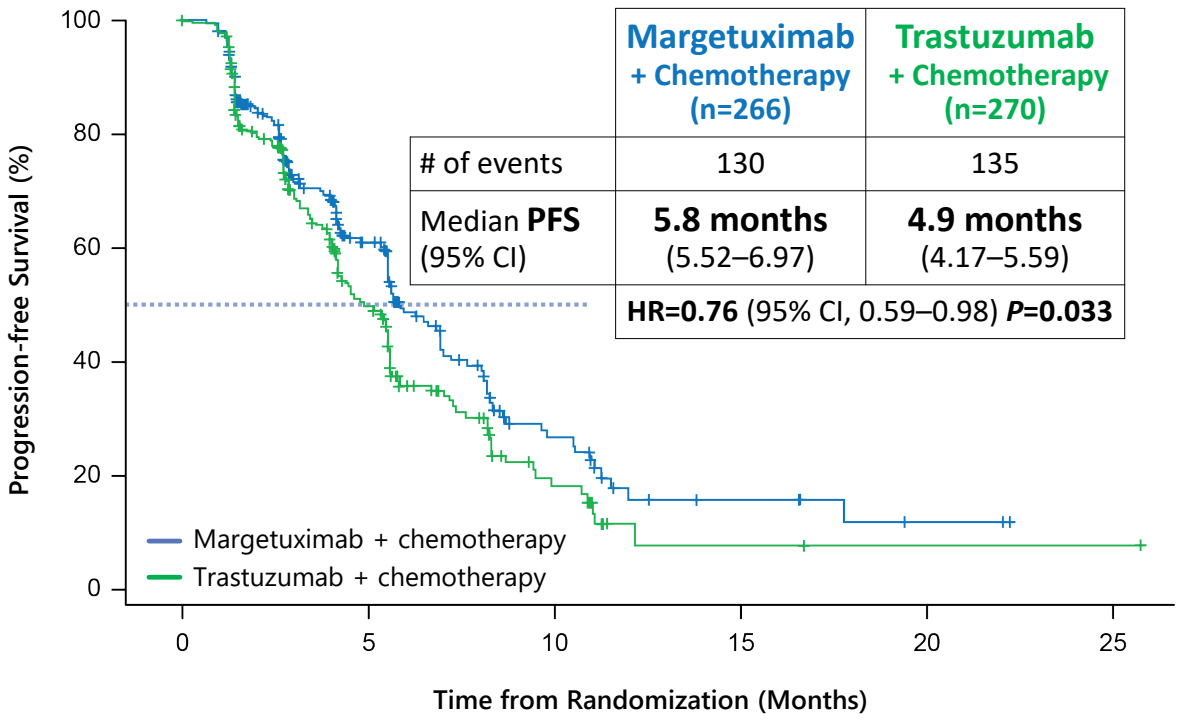
- **Sequential primary endpoints: PFS and OS**
- Patients carrying CD16A (FcγRIIIa) 158F allele were pre-specified exploratory subpopulation

PFS (N=257, HR=0.67, α=0.05, power=90%)
OS (N=385, HR=0.75, α=0.05, power=80%)

(a) All study patients had previously received trastuzumab and pertuzumab, and approximately 90% had previously received ado-trastuzumab emtansine.

Primary PFS Endpoint: Margetuximab Demonstrated Superiority to Trastuzumab

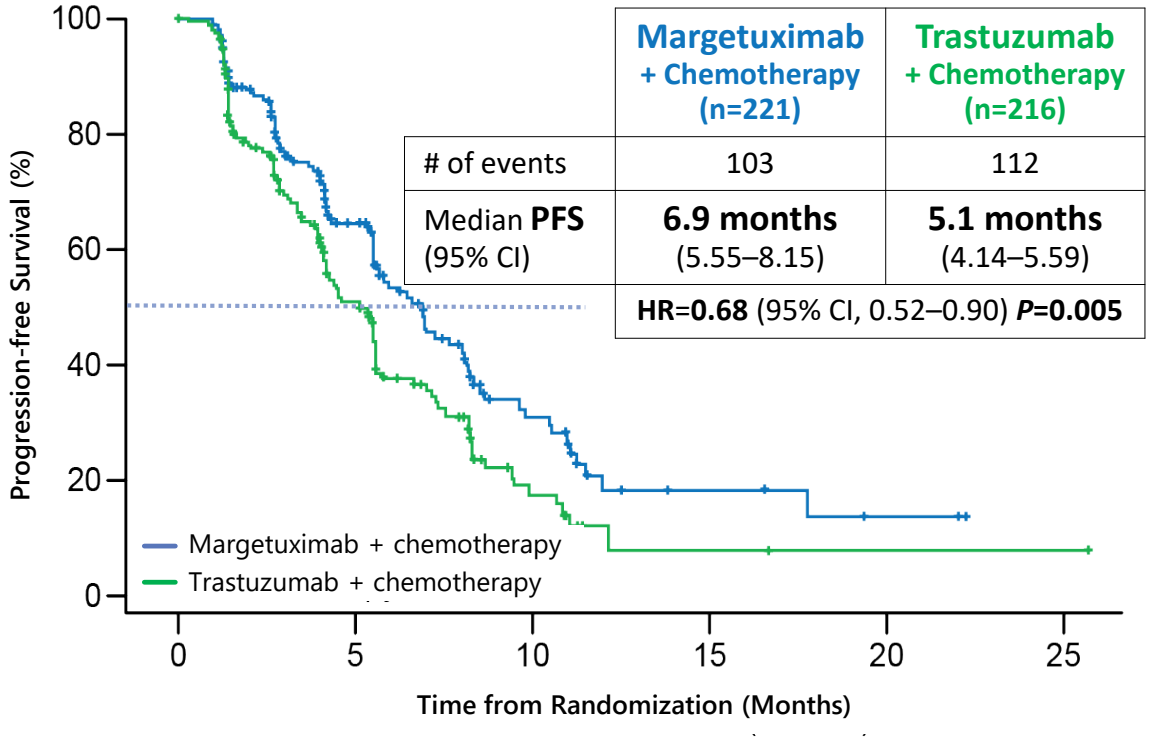
PFS Primary Endpoint (ITT Population):
24% Risk Reduction of Disease Progression



	Margetuximab + Chemotherapy (n=266)	Trastuzumab + Chemotherapy (n=270)
# of events	130	135
Median **PFS** (95% CI)	**5.8 months** (5.52–6.97)	**4.9 months** (4.17–5.59)
	HR=0.76 (95% CI, 0.59–0.98) ***P*=0.033**	

Margetuximab	266	174	94	45	21	8	6	4	2	0	
Trastuzumab	270	158	74	33	13	2	2	1	1	1	1

Pre-specified Exploratory Subpopulation (CD16A-158F Carriers):
32% Risk Reduction of Disease Progression



	Margetuximab + Chemotherapy (n=221)	Trastuzumab + Chemotherapy (n=216)
# of events	103	112
Median **PFS** (95% CI)	**6.9 months** (5.55–8.15)	**5.1 months** (4.14–5.59)
	HR=0.68 (95% CI, 0.52–0.90) ***P*=0.005**	

Margetuximab	221	157	84	42	21	8	6	4	2	0	
Trastuzumab	216	129	62	30	11	2	2	1	1	1	1

October 2018 data cut-off after 265 PFS events in ITT population.
CI=confidence interval. ITT=Intent to Treat population: N=536. CD16A 158F Carriers=FF or FV Genotype.
HR=Hazard Ratio (ITT by stratified Cox model; F Carriers by unstratified Cox model).

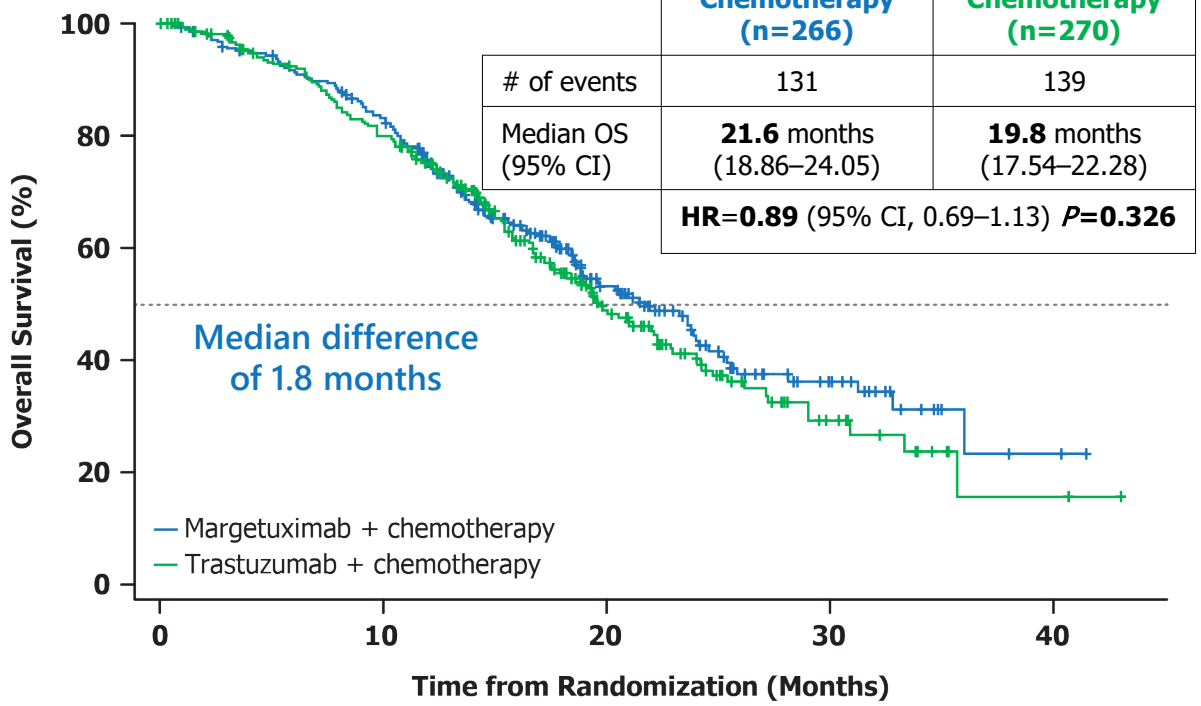
Rugo, et al., ASCO 2019

Second Interim Overall Survival Analysis: Trend Favored Margetuximab

Final analysis expected 2H20

ITT Population

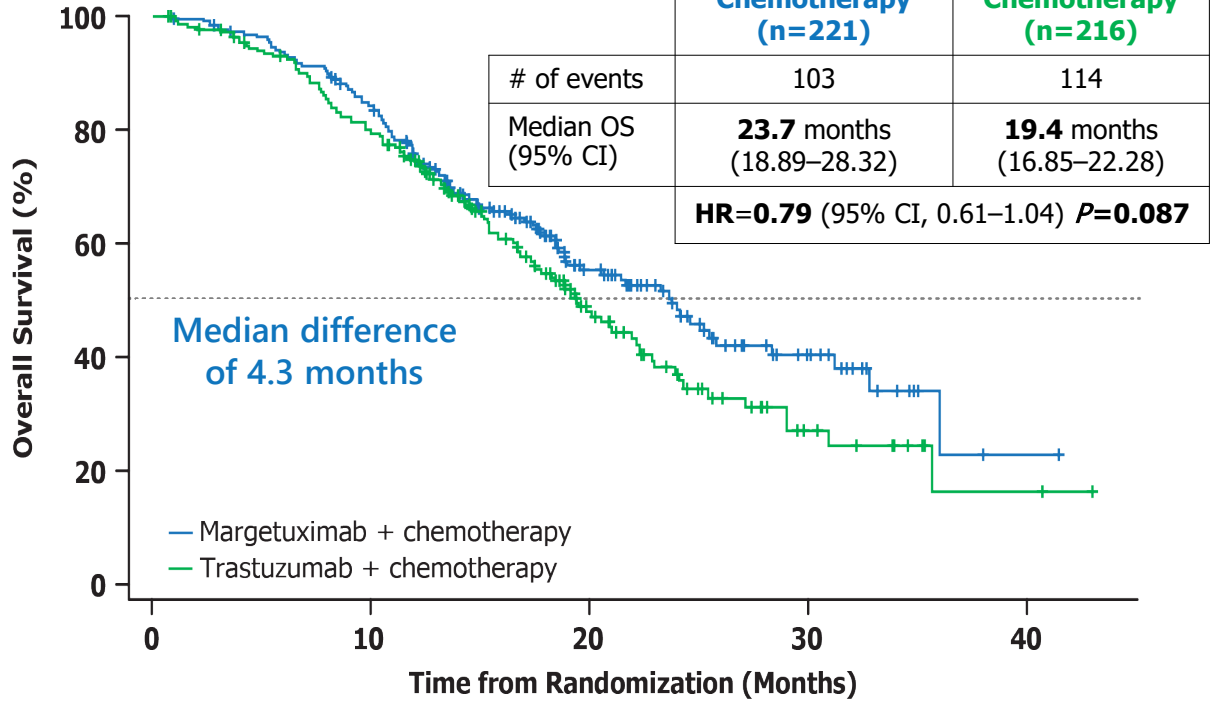
	Margetuximab + Chemotherapy (n=266)	Trastuzumab + Chemotherapy (n=270)
# of events	131	139
Median OS (95% CI)	**21.6** months (18.86–24.05)	**19.8** months (17.54–22.28)
	HR=0.89 (95% CI, 0.69–1.13) ***P*=0.326**	



Margetuximab	266	259	249	239	230	214	188	159	131	107	80	64	47	35	31	22	14	9	3	2	2	0
Trastuzumab	270	260	246	236	218	205	183	160	126	102	74	57	43	30	22	16	10	6	2	2	2	1	0

Pre-specified Exploratory Subpopulation (CD16A-158F Carriers):

	Margetuximab + Chemotherapy (n=221)	Trastuzumab + Chemotherapy (n=216)
# of events	103	114
Median OS (95% CI)	**23.7** months (18.89–28.32)	**19.4** months (16.85–22.28)
	HR=0.79 (95% CI, 0.61–1.04) ***P*=0.087**	



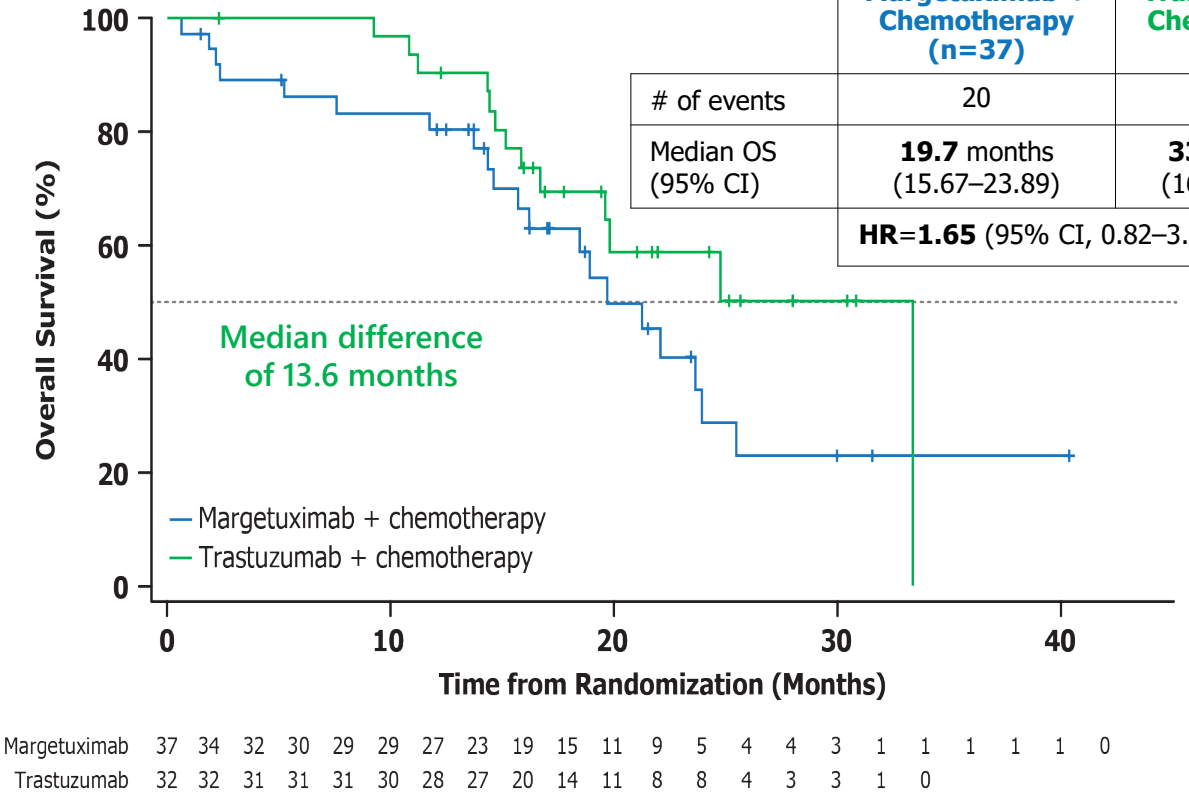
Margetuximab	221	219	212	204	196	181	157	135	111	91	68	55	42	31	27	19	13	8	2	1	1	0
Trastuzumab	216	210	201	192	176	165	145	123	98	81	57	43	30	21	16	11	9	6	2	2	2	1	0

September 2019 data cut-off after 270 events in ITT population. Median follow-up: 15.6 months.
ITT=Intent to Treat population: N=536. CD16A 158F Carriers=FF or FV Genotype.
CI=confidence interval. HR=Hazard Ratio (ITT by stratified Cox model; F Carriers by unstratified Cox model).

Rugo, et al., SABCS 2019

Pre-specified Exploratory OS in CD16A-158 VV Homozygotes

VV subpopulation represents 33 events (270 events in ITT population)



	Margetuximab + Chemotherapy (n=37)	Trastuzumab + Chemotherapy (n=32)
# of events	20	13
Median OS (95% CI)	**19.7** months (15.67–23.89)	**33.3** months (16.66–33.31)
	HR=1.65 (95% CI, 0.82–3.32) ***P*=0.157**	

Unbalanced patient characteristics

Baseline Characteristic	Margetuximab + Chemotherapy (n=37)	Trastuzumab + Chemotherapy (n=32)
Cancer disease history		
Brain, n (%)	8 (**22%**)	3 (**9%**)
Breast, n (%)	10 (**27%**)	5 (**16%**)
Liver, n (%)	16 (**43%**)	10 (**31%**)
Lung, n (%)	11 (**30%**)	13 (**41%**)
Lymph node, n (%)	21 (**57%**)	16 (**50%**)
HER2 IHC 3+, n (%)	19 (**51%**)	18 (**56%**)
Hormone receptor +, n (%)	23 (**62%**)	18 (**56%**)
ECOG PS 1, n (%)	14 (**38%**)	16 (**50%**)
>60 years of age, n (%)	16 (**43%**)	5 (**16%**)
>2 prior metastatic lines of therapy, n (%)	15 (**41%**)	9 (**28%**)

Less favorable

September 2019 data cut-off after 270 events in ITT population. Median follow-up: 15.6 months.
CI=confidence interval. HR=Hazard Ratio (by unstratified Cox model).

Rugo, et al., SABCS 2019

Overall Safety Profiles Similar

Adverse Events (AE)

	Margetuximab + Chemotherapy (n=264)		Trastuzumab + Chemotherapy (n=266)	
Any grade AE, n (%)	260 (98.5)		261 (98.1)	
Any margetuximab or trastuzumab-related AE, n (%)	160 (60.6)		132 (49.6)	
Grade ≥3 AE, n (%)	142 (53.8)		140 (52.6)	
Grade ≥3 margetuximab or trastuzumab-related AE, n (%)	34 (12.9)		22 (8.3)	
Any SAE, n (%)	43 (16.3)		49 (18.4)	
Any margetuximab or trastuzumab-related SAE, n (%)	5 (1.9)		4 (1.5)	
AE leading to treatment[a] discontinuation, n (%)	8 (3.0)		7 (2.6)	
AEs resulting in death,[b] n (%)	3 (1.1)[c]		2 (0.8)[d]	
AEs of special interest, n (%)	**All Grade**	**Grade ≥3**	**All Grade**	**Grade ≥3**
Infusion-related reaction (IRR)	35 (13.3)	4 (1.5)	9 (3.4)	0
Discontinuation due to IRRs, n (%)	2 (0.6)	0	0	0
LV dysfunction leading to dose delay or discontinuation, n (%)	4 (1.5)	0	6 (2.3)	0

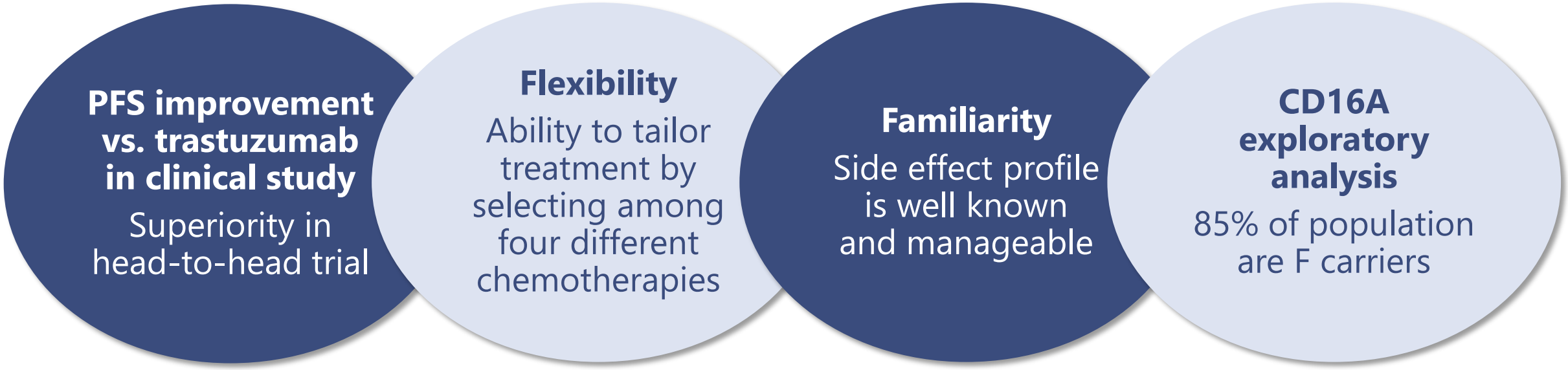
Safety Population (randomized patients who received any study treatment): N=530. April 2019 cut-off.
(a) Including both anti-HER2 study therapy and chemotherapy. (b) No AEs resulting in death were considered related to anti-HER2 study therapy.
(c) Pneumonia (n=2), pneumonia aspiration (n=1). (d) Pneumonia (n=1), acute kidney injury (n=1). LV=left ventricular; SAE=serious AE.

Rugo, et al., SABCS 2019

Margetuximab's Potential Role in Treatment of HER2+ mBC

Need remains for additional therapies in later lines

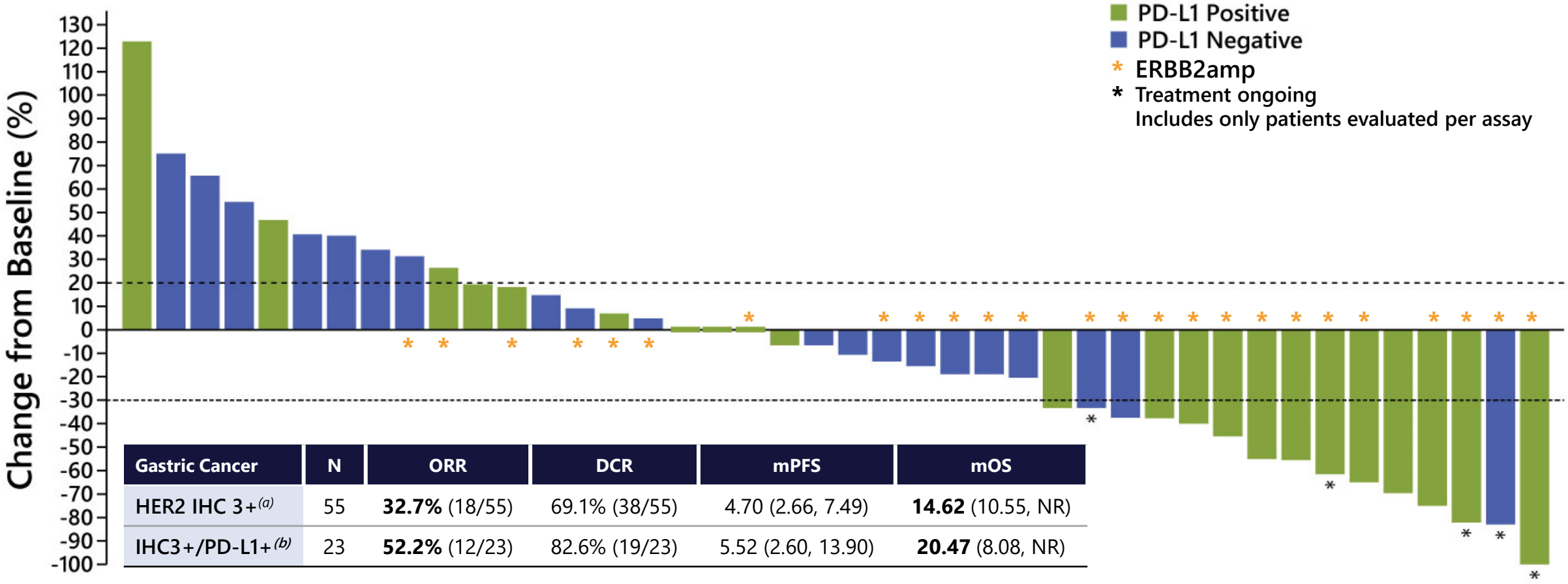
Patients will progress on other HER2-directed therapies



Margetuximab is investigational and has not yet been approved for marketing by any regulatory authority

Promising Activity in Advanced Gastric Cancer Patients in Phase 2 Study

33% ORR in HER2 3+ gastric cancer previously treated with chemotherapy and trastuzumab



Gastric Cancer	N	ORR	DCR	mPFS	mOS
HER2 IHC 3+[(a)]	55	**32.7%** (18/55)	69.1% (38/55)	4.70 (2.66, 7.49)	**14.62** (10.55, NR)
IHC3+/PD-L1+[(b)]	23	**52.2%** (12/23)	82.6% (19/23)	5.52 (2.60, 13.90)	**20.47** (8.08, NR)

Data cut-off July 10, 2019. Includes patients who received ≥1 margetuximab and pembrolizumab dose in expansion phase, and had baseline measurable disease and ≥1 post-baseline disease assessment.

(a) Immunohistochemistry (IHC) test gives score of 0 to 3+ that measures amount of HER2 receptor protein on surface of cells in cancer tissue sample. Score of 0 to 1+ is called "HER2 negative", score of 2+ is called "borderline", score of 3+ is called "HER2 positive."

(b) "PD-L1 Positive" reflects Combined Positive Score (per standard FDA approved assay) ≥1% (PD-L1 tested on archival tissue by IHC; clone 22C3 pharmDx).

Catenacci, et al., ESMO 2019

Gastric Cancer as Follow-on Indication

Data from 2L margetuximab + anti-PD-1 mAb presents opportunity to advance to 1L

HER2+ gastric cancer benchmarks

	1st Line	2nd Line			3rd Line
	SOC	SOC	Ongoing Phase 2 Study	Failed	Ongoing Study
Agent (Study)	Trastuzumab + Chemo[a] (TOGA)	Ramucirumab + Paclitaxel[b] (RAINBOW)	**Margetuximab + Pembrolizumab[c]** IHC 3+	**Margetuximab + Pembrolizumab[c]** IHC 3+/PD-L1+	Pembrolizumab[d] (KEYNOTE-61) PD-L1+	DS-8201[e]
ORR	47%	28%	**33%**	**52%**	15.8%	43%
Median PFS	6.7 mos.	4.4 mos.	**4.7 mos.**	**5.5 mos.**	1.5 mos.	5.6 mos.
Median OS	**13.1 mos.**	9.6 mos.	**14.6 mos.**	**20.5 mos.**	9.1 mos.	12.8 mos.
≥ Grade 3 TRAEs	**68%**	Overall: N/A 41% Neutropenia 15% Hypertension 12% Fatigue	**20%**		14%	48%
Gastric/GEJ Patient Mix	80/20%	80/20%	**100%/0%**		70%/30%	80%/20%

SOC = Standard of Care

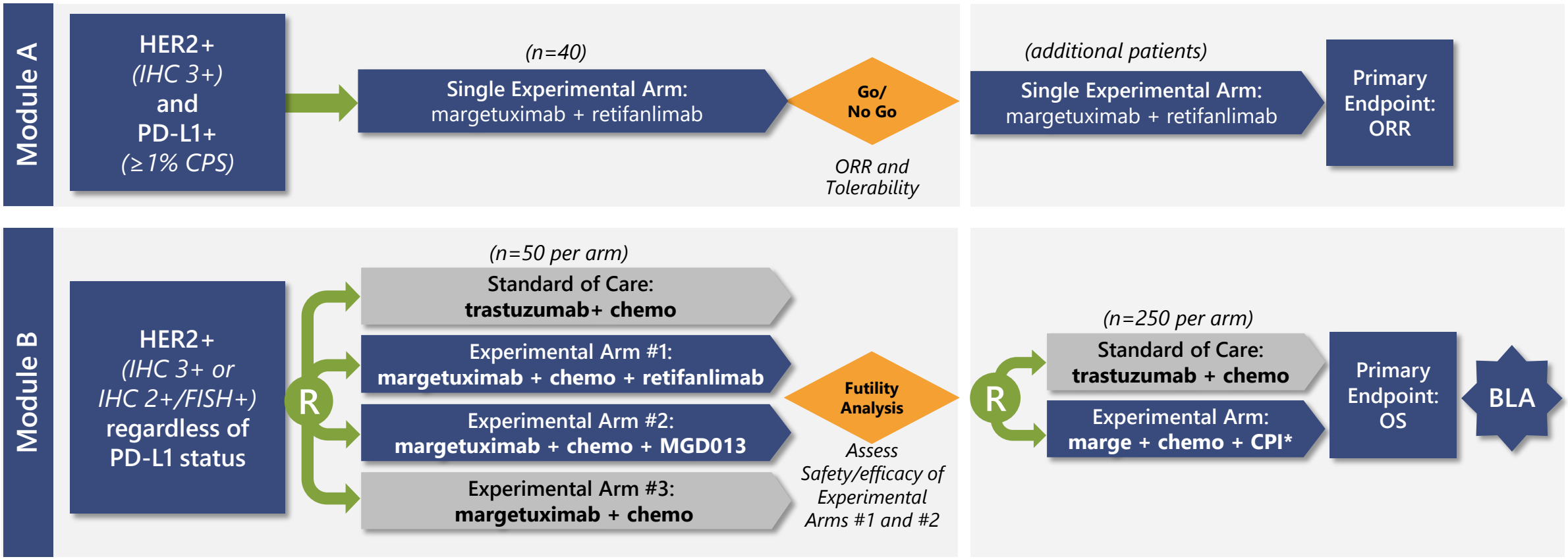
(a) Data from Herceptin package insert; Bang, et al., Lancet, 2010;
(b) Data from Cyramza package insert; Wilkes, et al., Lancet Oncology, 2014;
(c) Data presented at ESMO 2019; Grade 3 TRAE includes all GC and GEJ patients.

(c) Data presented at ESMO 2019; Grade 3 TRAE includes all GC and GEJ patients.
(d) Shitara, et al., 2018, Lancet;
(e) Shitara, et al., 2019, Lancet Oncol.

MAHOGANY Phase 2/3 Study: Registration Path in 1L Gastric & GEJ Cancer

Module A has potential for U.S Accelerated Approval of chemotherapy-free regimen

MAHOGANY



MAHOGANY *(**Ma**rgetuximab in **H**ER2-p**o**sitive **Ga**stric Cancer*

** Pending chronic tox study (if regimen with MGD013 is selected).*

Flotetuzumab: CD123 × CD3 DART Molecule

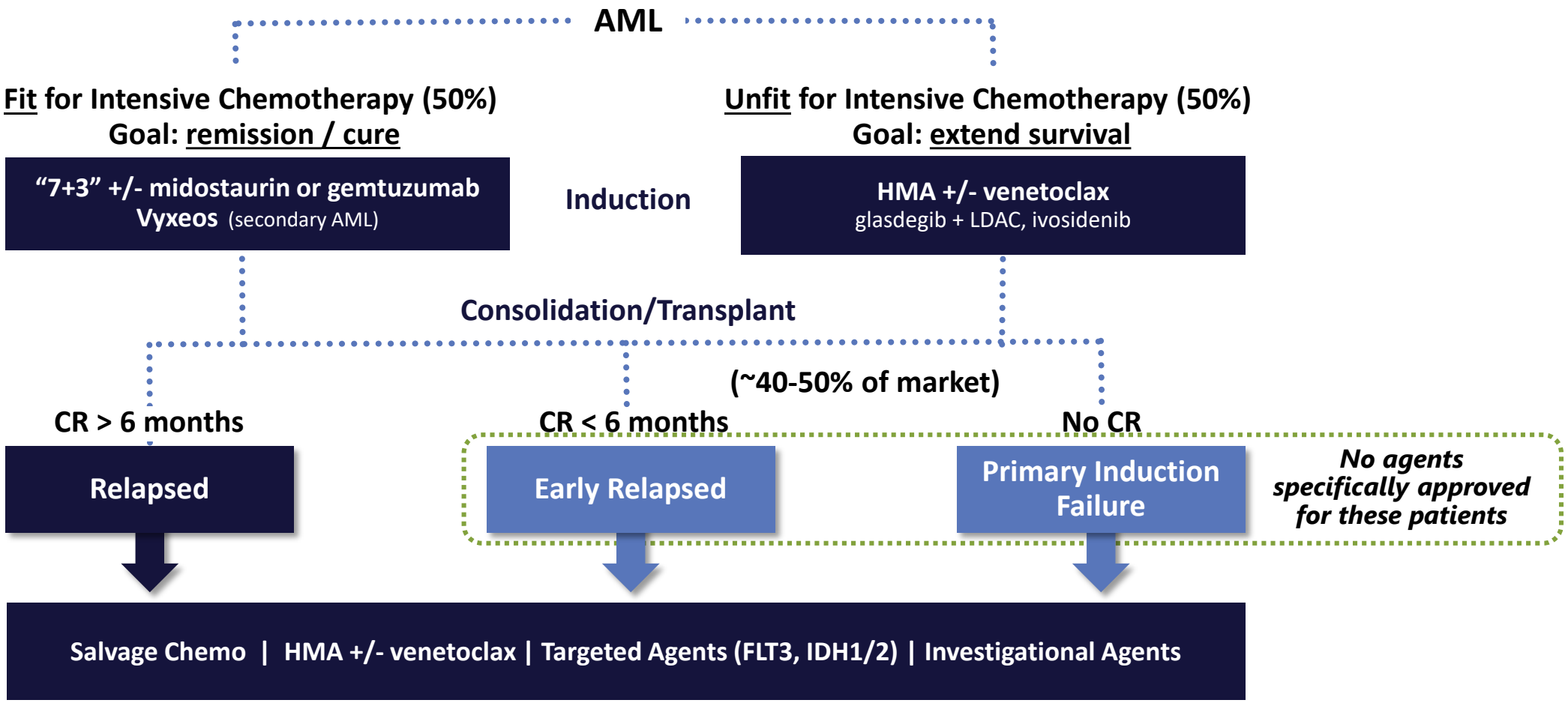
Establishing leadership position among CD123-targeting bispecifics

Function/ MoA	• Redirected T-cell killing against leukemia cells – Eliminates leukemic stem cells; spares normal hematopoietic stem cells – Engages any T-cell without HLA-restriction
Clinical Studies	• Single arm study to support registration in primary induction failure (PIF) and early relapse (ER) AML (continuation of ongoing Phase 1/2) • Phase 1 combination with retifanlimab planned in R/R AML
2020 Anticipated Milestones	• Updated data from Phase 1/2 study in 2H 2020

Flotetuzumab is investigational and has not yet been approved for marketing by any regulatory authority

Primary Induction Failure & Early Relapsed AML: Significant Unmet Need

50% of patients have no known targetable mutation; flotetuzumab is mutation-agnostic

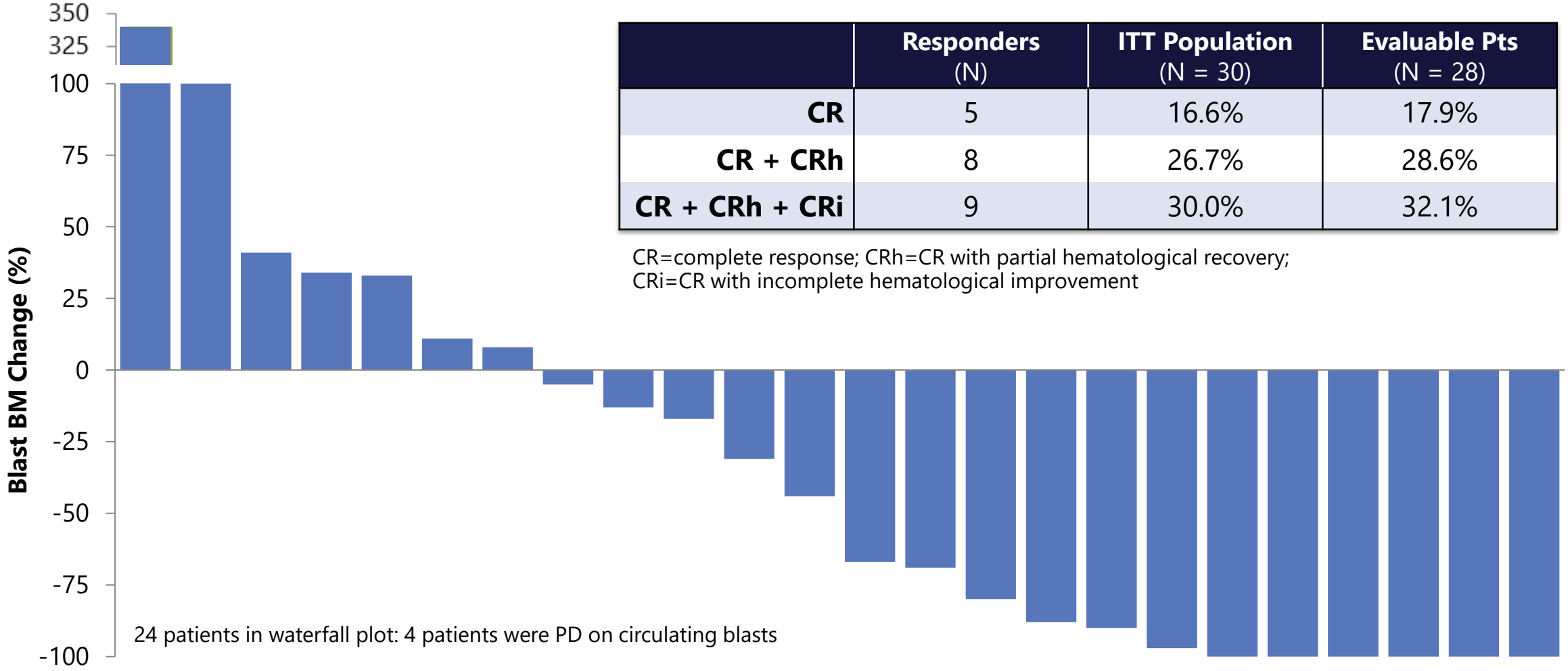


Flotetuzumab is Active in Primary Induction Failure & Early Relapsed AML Patients

Benchmark analysis suggests historical CR+CRh rates in this setting of ~12.5%[(a)]

	Responders (N)	ITT Population (N = 30)	Evaluable Pts (N = 28)
CR	5	16.6%	17.9%
CR + CRh	8	26.7%	28.6%
CR + CRh + CRi	9	30.0%	32.1%

CR=complete response; CRh=CR with partial hematological recovery;
CRi=CR with incomplete hematological improvement



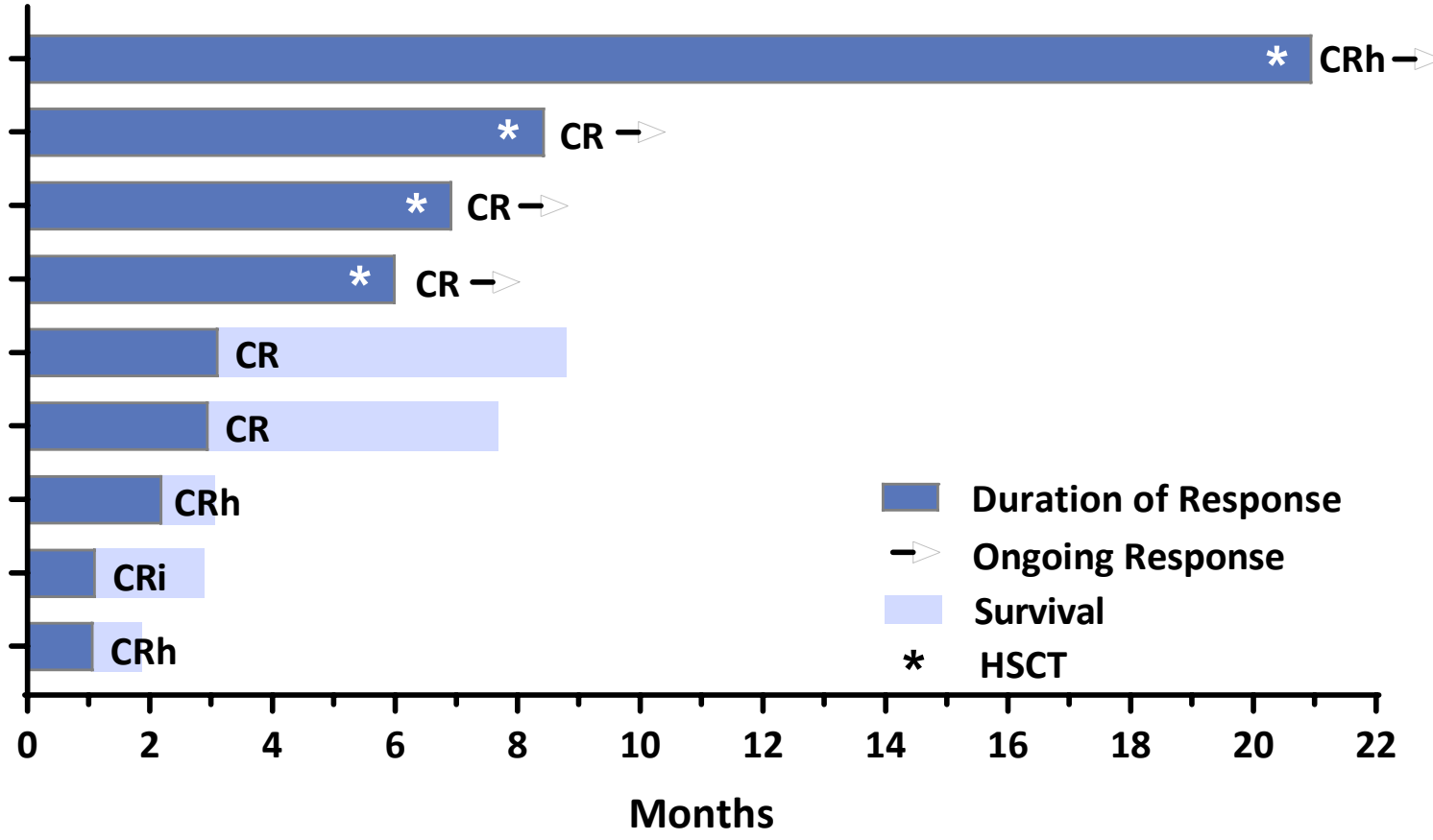
24 patients in waterfall plot: 4 patients were PD on circulating blasts

(a) Unpublished analysis of the CLASSIC I, VALOR, ADMIRAL trials and additional trials that included venetoclax, gemtuzumab-ozogamicin, and IDH1/2 inhibitors; (n=1328): CR/CRh = 12.5% [95% CI = 7.7%, 19.6%]

Uy, et al., ASH 2019

Flotetuzumab: Duration of Response in PIF & Early Relapsed AML Patients

Prior Rx Lines	Prior Rx Included:	Response to Flotetuzumab
2	7+3/HiDAC	* CRh →
2	HiDAC/Venetoclax	* CR →
3	HiDAC (x2)	* CR →
2	AZA/Midostaurin	* CR →
4	HiDAC (x2)/MEC	CR
2	7+3 (x2)	CR
2	HiDAC/Venetoclax	CRh
4	7+3/FLAG-Ida/FLAG	CRi
4	AZA/CD33xCD3 (Amv564)	CRh



** Four responders (3 CR, 1 CRh) received allo-HSCT consolidation*

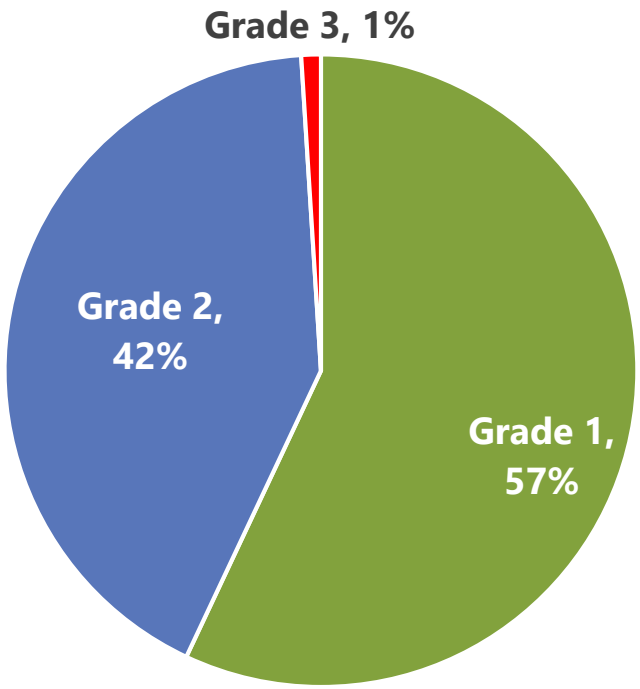
Uy, et al., ASH 2019

Mitigating Cytokine Release Syndrome Associated With T Cell Engagers

Decreased CRS severity and increased total flotetuzumab dose intensity

- Infusion-related reaction /cytokine release syndrome (IRR/CRS) occurred in all (30/30) patients:
  - Mild to moderate (grade 1 or 2) in severity; only one grade 3 event reported in one patient
  - Most events observed were of short duration (Median: Grade 1=1 day; Grade 2=2 days; Grade 3=3 days)
- CRS mitigation strategies:
  - Lead-in dosing schedule for flotetuzumab
  - Early use of tocilizumab as supportive care
  - Short half-life molecule can be "switched-off" (Continuous infusion advantageous for managing exposure)

Distribution of CRS Events by Grade

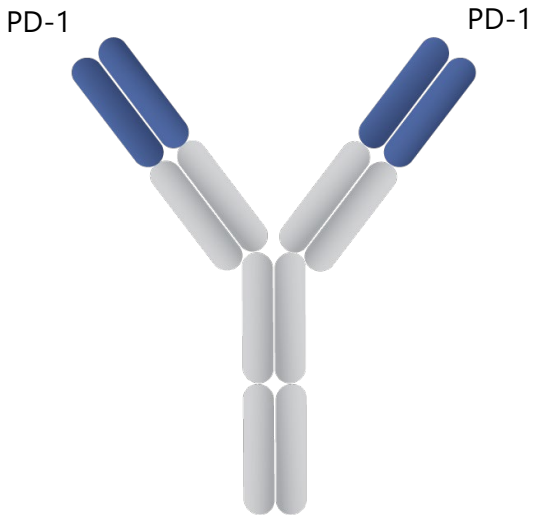


There were no grade 4 events

Uy, et al., ASH 2019

Retifanlimab (MGA012): Anti-PD-1 antibody

Global collaboration with Incyte



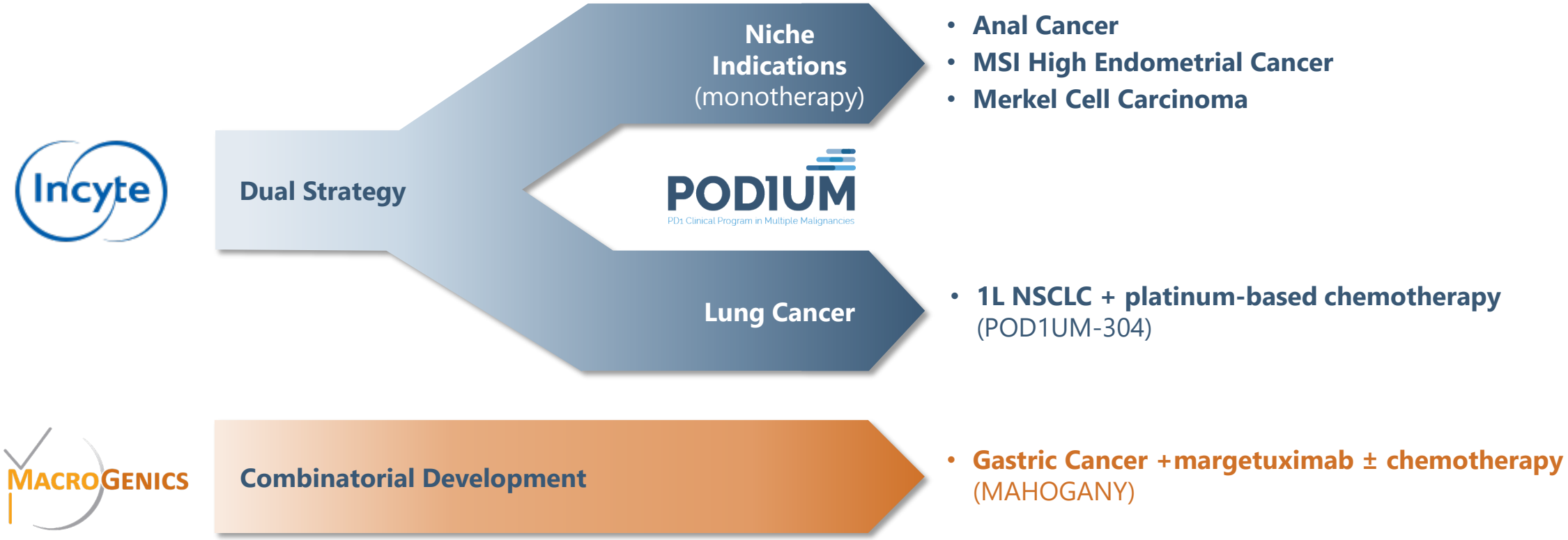
Function/ MoA	• Humanized, hinge-stabilized IgG4 mAb • Inhibits PD-1
Clinical Studies	• Five registration-directed studies ongoing or planned in 2020 across a broad range of tumor types[(a)]
Global Incyte Transaction	• Up to $750M in milestones ($15M received to date) • Tiered royalties of 15-24% on future retifanlimab sales • Rights to develop pipeline assets with retifanlimab
2020 Anticipated Milestones	• Monotherapy data in anal cancer • Initiation of Ph. 3 randomized study in NSCLC by Incyte

(a) ClinicalTrials.gov referenced May 28, 2020

Retifanlimab is investigational and has not yet been approved for marketing by any regulatory authority

Comprehensive Development Plans for Retifanlimab

Multiple potentially registration-enabling clinical studies



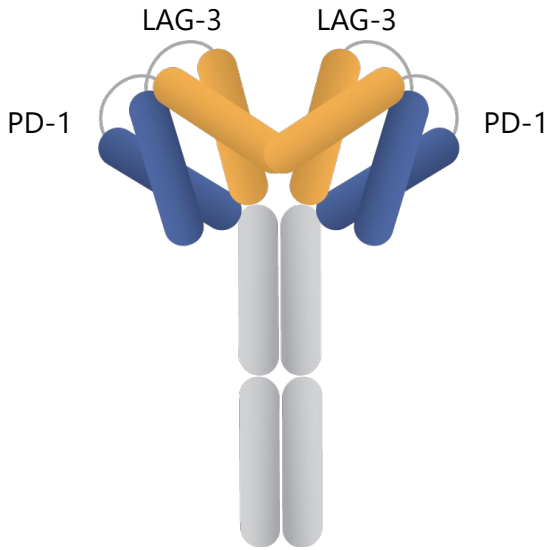
- **Anal Cancer**
- **MSI High Endometrial Cancer**
- **Merkel Cell Carcinoma**

- **1L NSCLC + platinum-based chemotherapy** (POD1UM-304)

- **Gastric Cancer +margetuximab ± chemotherapy** (MAHOGANY)

ClinicalTrials.gov referenced May 28, 2020

MGD013 (PD-1 × LAG-3): First Bispecific Checkpoint Molecule in Clinical Trials

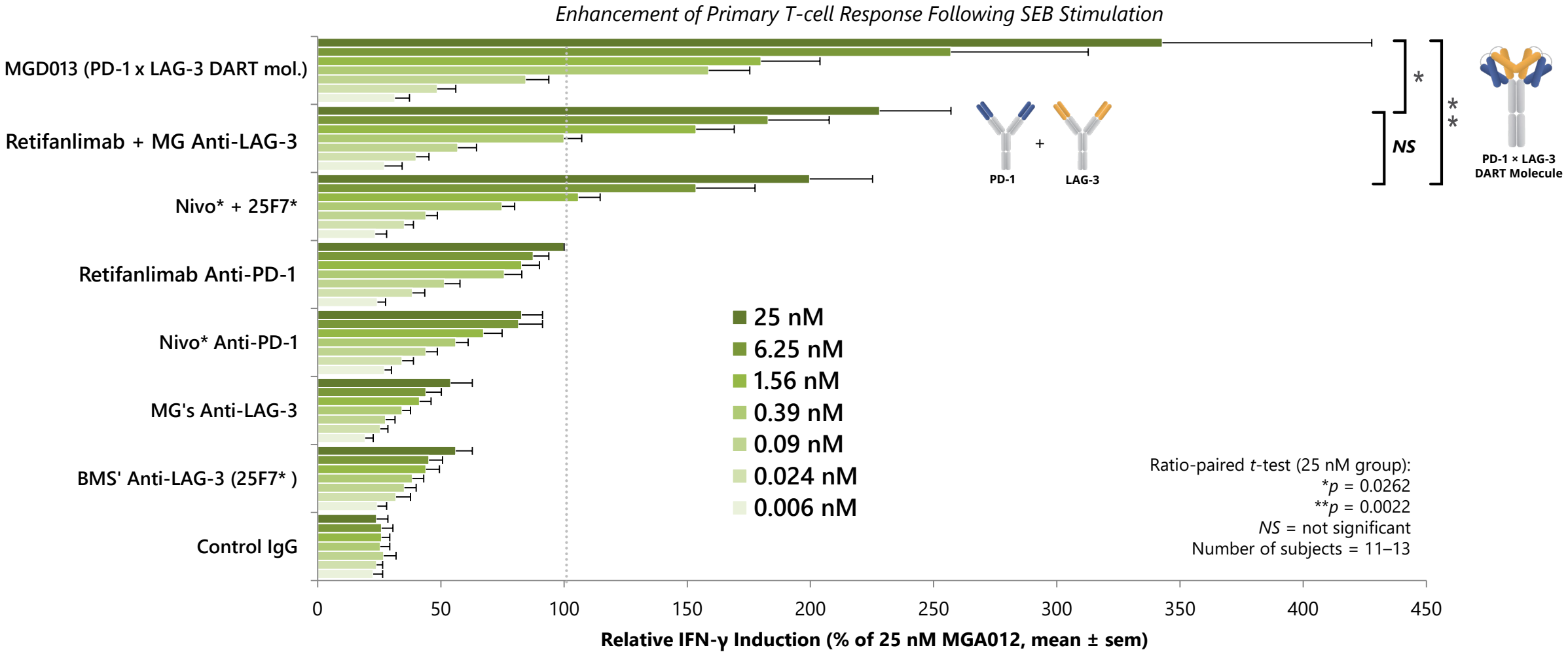


Function/ MoA	• Simultaneous and/or independent blockade of two checkpoint molecules • Reactivation of exhausted T cells
Clinical Studies	• Ph. 1 dose expansion in: – Nine tumor types (solid and liquid); checkpoint-naïve and checkpoint-experienced – Multiple combination studies ongoing (including expansion cohort with margetuximab in HER2+ tumors)
2020 Anticipated Milestones	• Select indications for further monotherapy and combination development

MGD013 is investigational and has not yet been approved for marketing by any regulatory authority

MGD013: Synergistic T-cell Activation

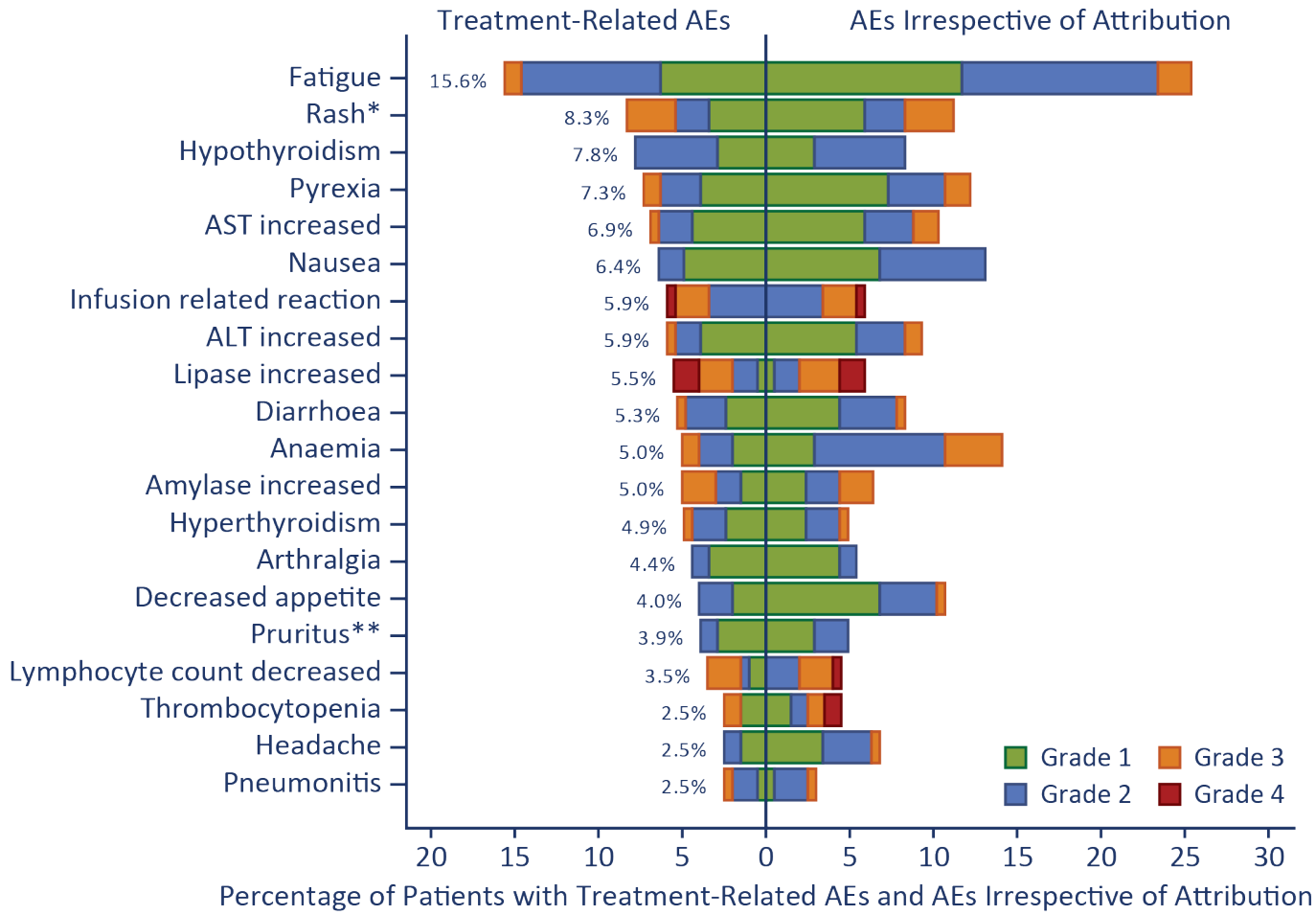
DART molecule construct enhances T-cell activation vs. anti-PD-1 + anti-LAG-3 mAbs in vitro



**IFNγ release by 25 nM MGA012 = 3276±744 pg/ml.*

MGD013 Safety Profile Consistent with PD-1 Antibody Monotherapy

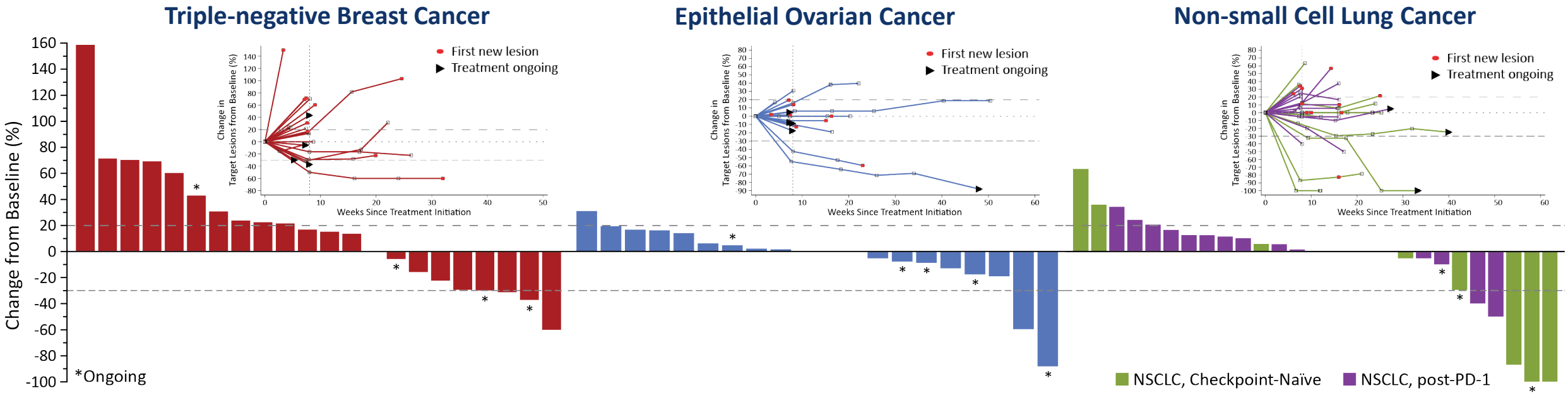
Overall AE Totals	No. (%) of Patients	
	All Grades (N=205)	≥ Grade 3 (N=205)
AE (irrespective of causality)	178 (86.8)	86 (42.0)
Treatment-related AE	118 (57.6)	37 (18.0)[a]
SAE (irrespective of causality)	63 (30.7)	47 (22.9)
Treatment-related SAE	18 (8.8)	11 (5.4)
AE leading to discontinuation	18 (8.8)	16 (7.8)
AESIs in ≥ 2 Patients		
Rash	17 (8.3)	6 (2.9)
Hypothyroidism	16 (7.8)	0 (0.0)
IRR or CRS	13 (6.3)	5 (2.4)
Diarrhoea	11 (5.4)	1 (0.5)
Lipase increased	11 (5.4)	7 (3.4)
Hyperthyroidism	10 (4.9)	1 (0.5)
Arthralgia	9 (4.4)	0 (0.0)
Pneumonitis	4 (2.0)	1 (0.5)
Myalgia	4 (2.0)	0 (0.0)
Peripheral neuropathy	3 (1.5)	1 (0.5)
Hepatitis	3 (1.5)	2 (1.0)
Adrenal insufficiency	2 (1.0)	0 (0.0)



* Includes MedDRA Preferred Terms of Rash and Maculopapular Rash. ** Includes MedDRA Preferred Terms of Pruritus and Generalized Pruritus.
Grade 4 drug-related AEs include: lipase increased (n=3), neutrophil count decreased, and IRR (n=1, each). No Grade 5 TRAEs have been reported.
AESI = adverse events of special interest. Data cutoff: April, 25, 2020.

Luke, et al., ASCO 2020

MGD013 Monotherapy: Anti-tumor Activity Observed in Multiple Tumor Types



	TNBC	EOC	NSCLC, CPI-Naïve	NSCLC, post-PD-1
Evaluable Patients	23	23	14	15
ORR (Confirmed)	4.3% (1/23)	8.7% (2/23)	14.3% (2/14)	0% (0/15)
ORR (Confirmed + Unconfirmed)	17.4% (4/23)	8.7% (2/23)	21.4% (3/14)	13.3% (2/15)
SD	34.8% (8/23)	43.5% (10/23)	50.0% (7/14)	53.3% (8/15)
DCR	39.1% (9/23)	52.2% (12/23)	64.3% (9/14)	53.3% (8/15)

Data cutoff: April, 25, 2020

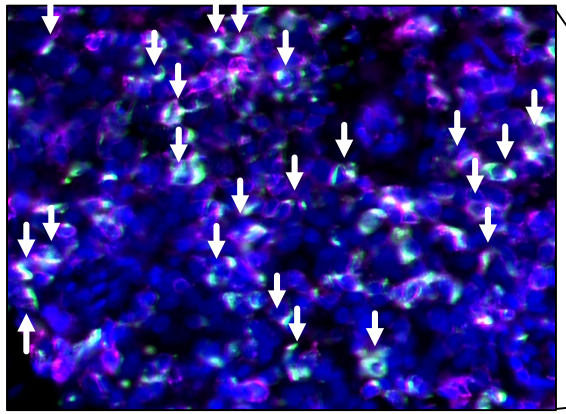
Luke, et al., ASCO 2020

Complete Response after Single MGD013 Administration

27-year-old male with DLBCL progressive disease after CAR-T cell therapy

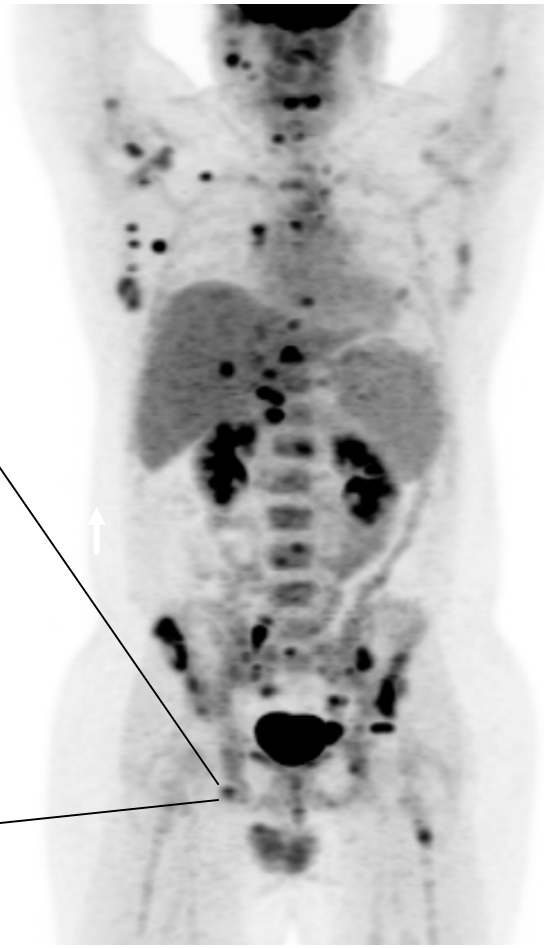
- Relapsed subsequent to DA-R-EPOCH and JCAR017
- Pre-treatment biopsy: High levels of LAG-3 & PD-L1
- Received MGD013, 600 mg x 1
- Admitted on Day 11 for management of Grade 2 CRS
- CR on Day 24 (per Lugano classification)
- No evidence of CAR-T in circulation
- Allogeneic SCT performed
- Currently in remission:
  - 11 months post-MGD013
  - 9 months post-transplant

PD-1/LAG-3 Co-expression

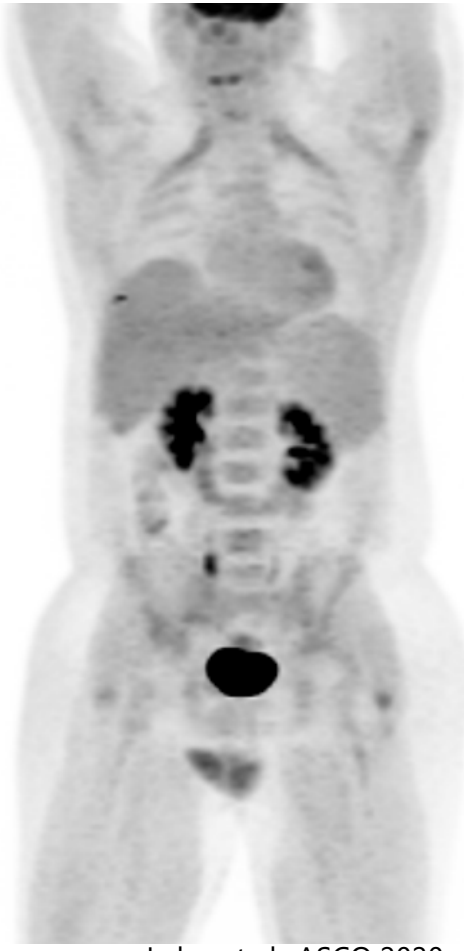


PD-1 (magenta) and LAG-3 (green) co-localized staining

Screening



MGD013
Complete Response - Day 24

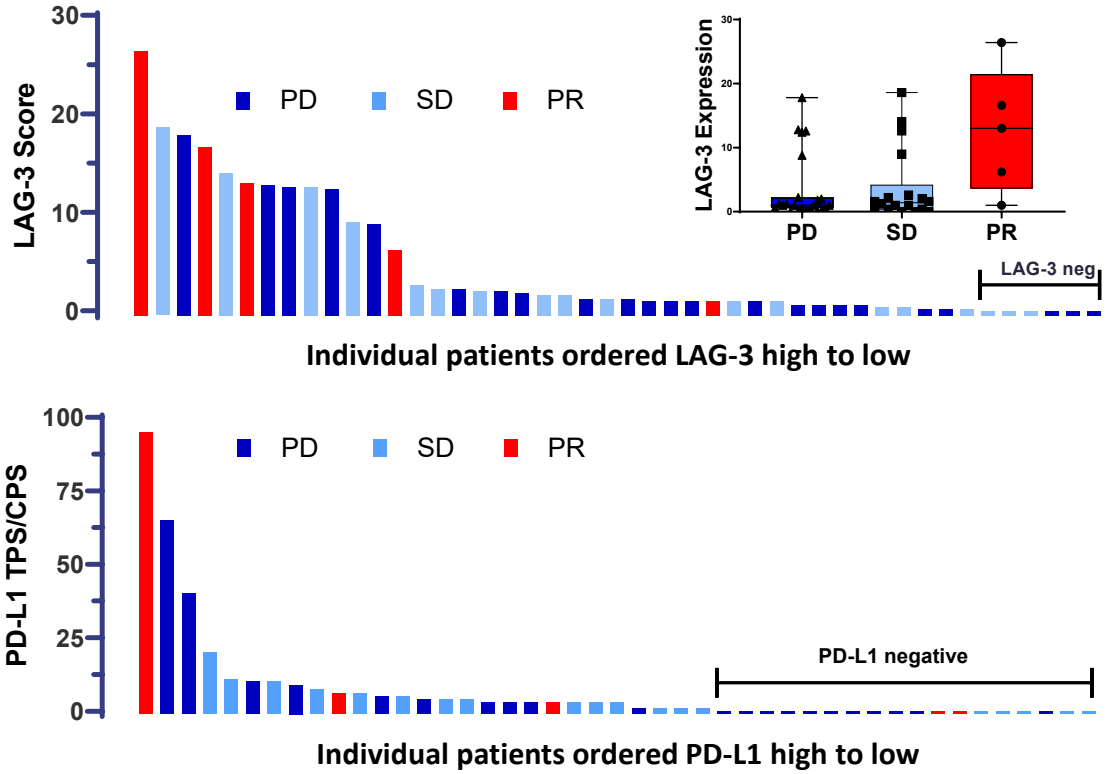


Luke, et al., ASCO 2020

Monotherapy Objective Responses Associated with LAG-3 Expression

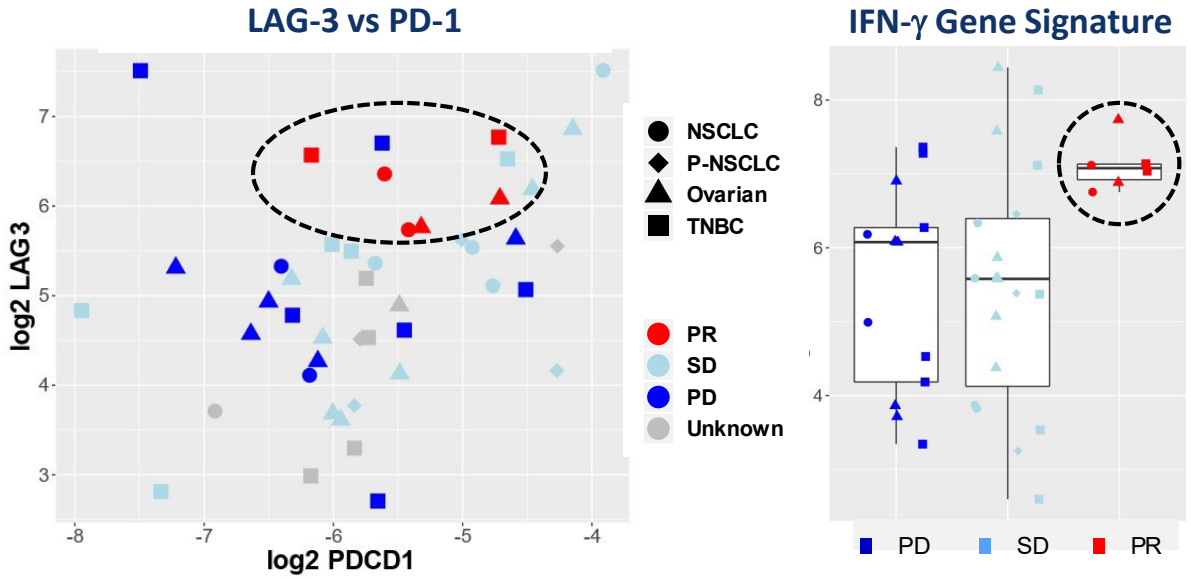
Inflammatory interferon-γ signature elevated in patients with clinical response

Retrospective IHC Analyses



Archival biopsies from TNBC, EOC, and NSCLC expansion cohorts analyzed for LAG-3 (N=46) or PD-L1 (N=45) by IHC. LAG-3 score was determined as per Chen et al., e15086 ASCO 2020. PD-L1 expression was determined per Agilent PD-L1 (22C3) pharmDx kit

Transcript Profiling (Baseline Tumor Biopsy)



Objective responses associated with high baseline LAG-3/PD-1 expression and IFN-g gene signature (CXCL9, CXCL10, CXC11, STAT1)

The NanoString PanCancer IO 360™ assay was used to interrogate gene expression, including the abundance of 14 immune cell types and 32 immuno-oncology signatures from archival biopsies from EOC (N=14) NSCLC (N=25) and TNBC (N=13) expansion cohorts.

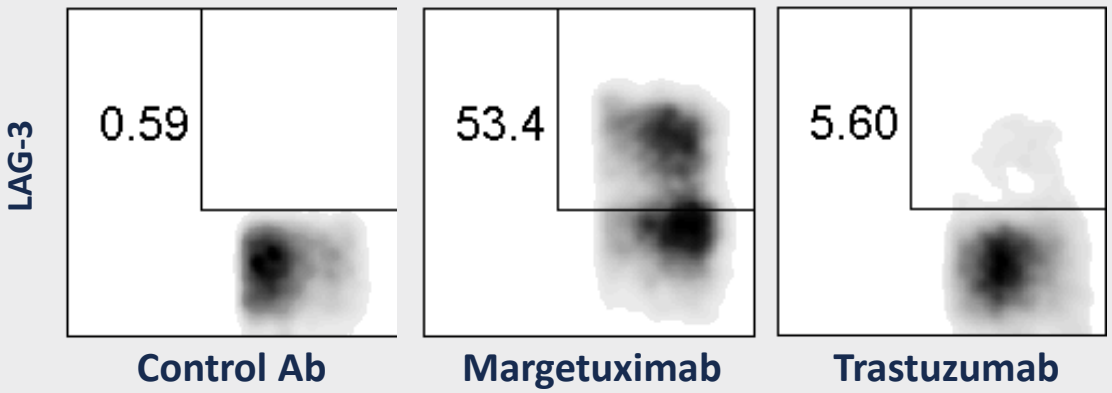
Luke, et al., ASCO 2020

Can Tumors Be Made More Responsive to PD-1 × LAG-3 Intervention?

Enhancing effector-cell activation via Fc-engineered mAb

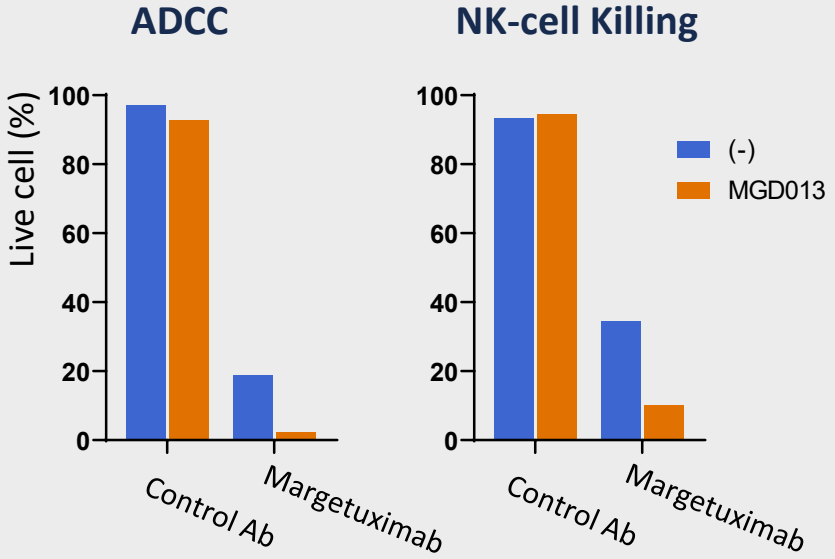
Fc-engineered margetuximab up-regulates LAG-3 and PD-L1 on NK, monocytes and T cells

Margetuximab Enhances LAG-3 Expression by NK Cells



Human PBMC + N87 (HER2+) gastric cancer cells; E:T=10:1; (IL-2, 20 U/mL) Control Ab 50ng/mL, margetuximab/trastuzumab, 5ng/mL; FACS analyses (72h) on $CD3^{-}CD56^{+}$-gated NK cells.

PD-1 × LAG-3 (MGD013) enhances lytic activity of immune cells primed by Fc-engineered mAb (margetuximab)

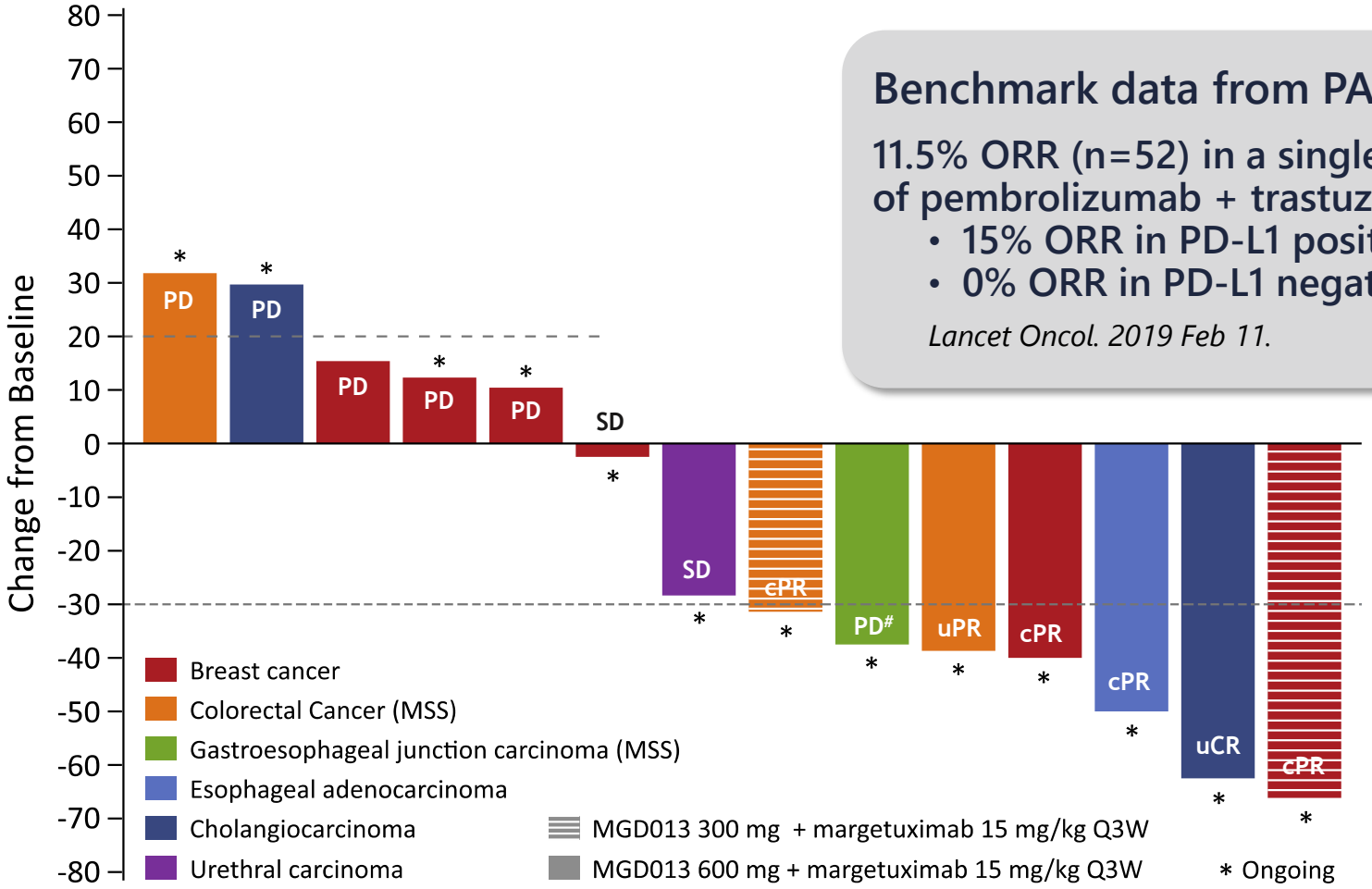


ADCC (target: margetuximab opsonized N87, E:T=10) and NK-cell killing (target: K562, E:T=10) mediated by immune cells activated for 6 days by margetuximab +/- MGD013 in the presence of N87 tumor cells.

Luke, et al., ASCO 2020

Margetuximab plus MGD013 in Patients with Relapsed/Refractory HER2+ Solid Tumors

Preliminary ORR = 42.9% based on 6/14 evaluable pts (includes unconfirmed objective responses)



Benchmark data from PANACEA study:

11.5% ORR (n=52) in a single arm, multicenter Ph. 1b/2 trial of pembrolizumab + trastuzumab in HER2+ mBC

- 15% ORR in PD-L1 positive (n=6/40)
- 0% ORR in PD-L1 negative (n=0/12)

Lancet Oncol. 2019 Feb 11.

Baseline PD-L1 & LAG-3 in # of Responding Patients (N = 6)

PD-L1 CPS:	< 1	1	TBD
N	4	1	1

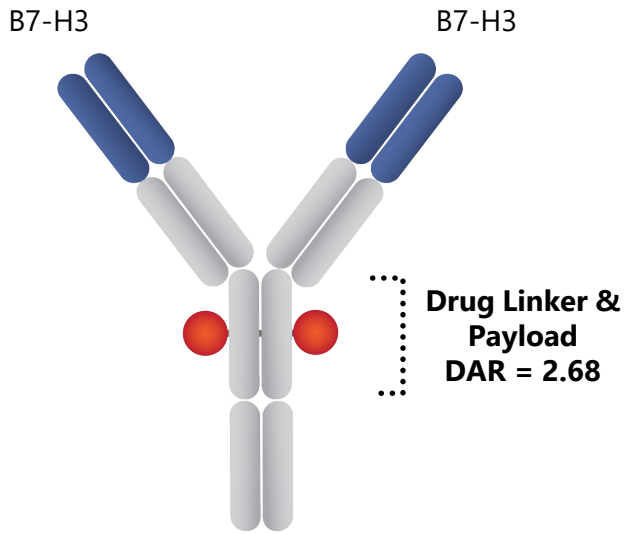
LAG-3 Score:	< 5	5-15	TBD/NE
N	3	1	2

GEJ pt with apparent pseudo-progression (PD per RECIST), now with 37.5% reduction in target lesions (iPR per iRECIST).

Luke, et al., ASCO 2020

MGC018: Antibody-Drug Conjugate with Duocarmycin-based Linker Payload

Leveraging high B7-H3 expression in solid tumors



Function/ MoA	• ADC that delivers a potent duocarmycin payload to dividing and non-dividing B7-H3-expressing cells • Cleavable peptide linker facilitates bystander effect • Not subject to multi-drug resistance (MDR)
Clinical Study	• Phase 1 dose escalation in advanced solid tumors (ongoing)
2020 Anticipated Milestones	• Initiate Phase 1 dose expansion in metastatic castration-resistant prostate cancer (mCRPC)

Duocarmycin payload and cleavable peptide linker technology was licensed from Byondis (formerly Synthon Biopharmaceuticals).
MGC018 is investigational and has not yet been approved for marketing by any regulatory authority

Confirmed High Penetrance in Broad Set of Solid Tumors

Majority of B7-H3 positive tumors express high levels of B7-H3 (≥ 2+)

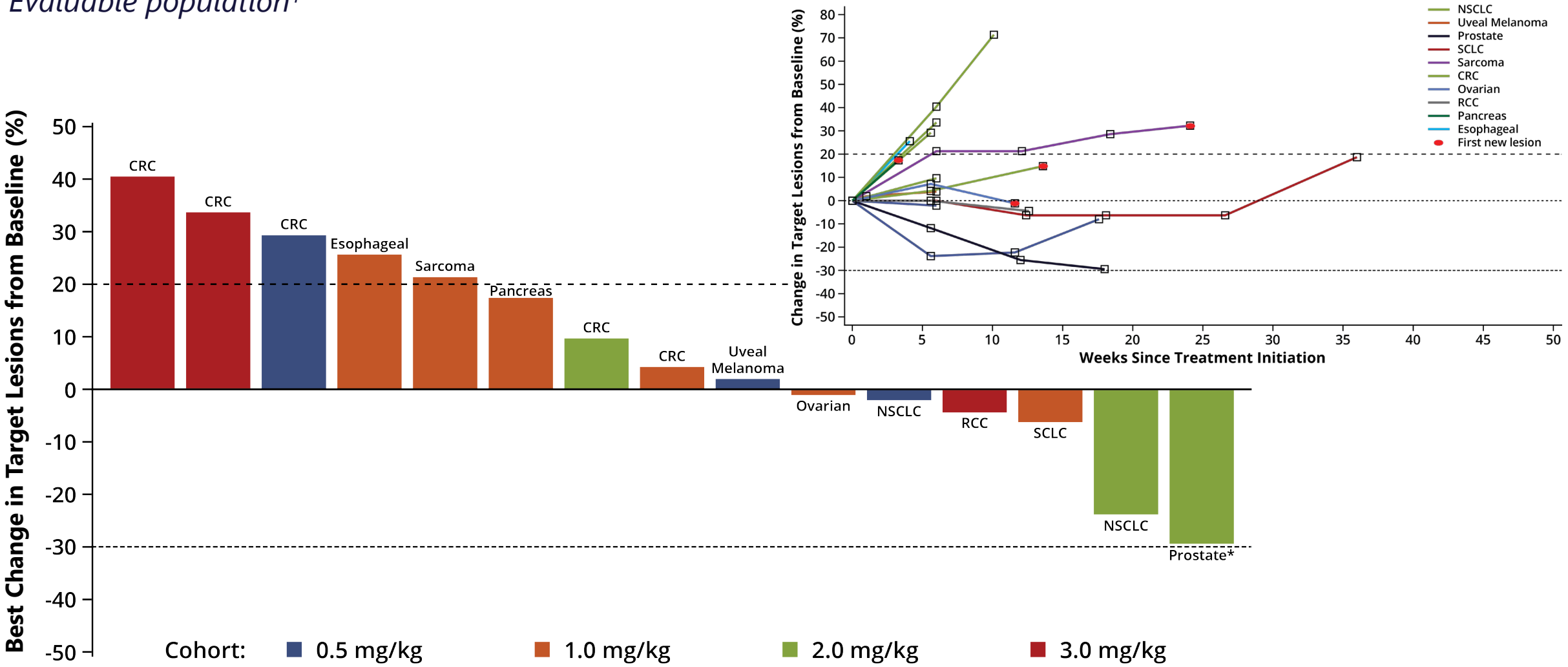
Potential Indications	IHC Summary of >1,400 Tumor Tissue Samples Screened			
	B7-H3 Positive[(a)]		2+ or Above	
Head and Neck	19/19	**100%**	19/19	**100%**
Kidney Cancer	77/78	**99%**	75/78	**96%**
Glioblastoma	65/66	**98%**	63/66	**95%**
Thyroid Cancer	34/35	**97%**	33/35	**94%**
Mesothelioma	41/44	**93%**	39/44	**89%**
Melanoma	132/146	**90%**	94/146	**64%**
Prostate Cancer	**88/99**	**89%**	**51/99**	**52%**
Pancreas Cancer	69/78	**88%**	45/78	**58%**
Bladder	134/156	**86%**	123/156	**79%**
Lung Cancer	324/379	**85%**	300/379	**79%**
Breast Cancer	189/249	**76%**	156/249	**63%**
Ovarian Cancer	59/79	**75%**	36/79	**46%**

Limited expression in normal tissue → favorable profile for targeting B7-H3

(a) B7-H3 positivity reflects any grade staining via fixed tumor microarray; B7-H3 is expressed on tumor as well as tumor vasculature.

Preliminary Evidence of Activity in Multiple Tumor Types

Evaluable population[1]



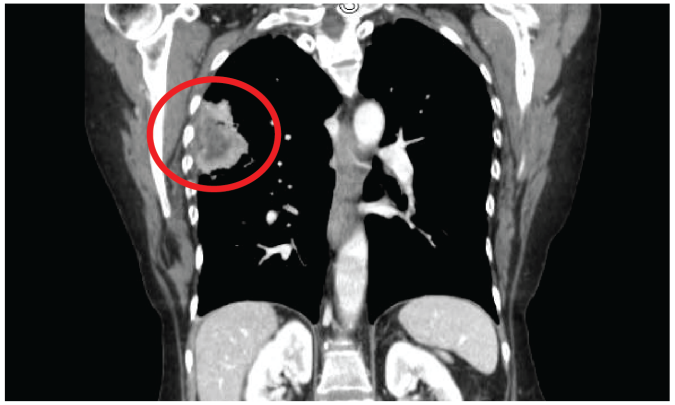
[1]Patients who received at least one dose and had at least one post-baseline tumor evaluation. *mCRPC Pt #1. Data were extracted on 06MAY2020.

Powderly, et al., ASCO 2020

Reduction of Pleural-Based Tumor in NSCLC Patient

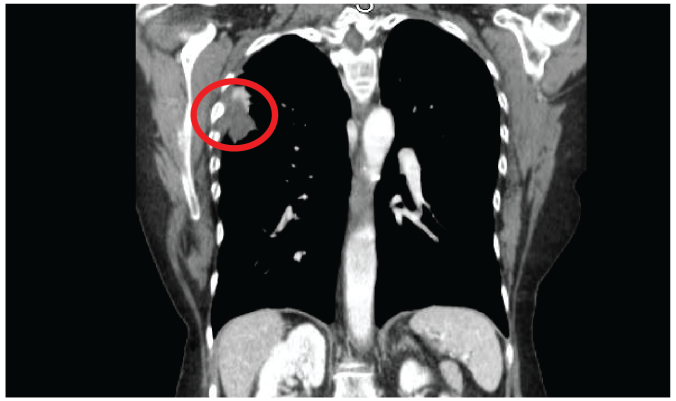
MGC018 following progression after five lines of prior therapy

Baseline (May 23, 2019)



2 Doses of MGC018 (2.0 mg/kg)
Decrease in pleural lesion read by Investigator

Week 6 (July 26, 2019)



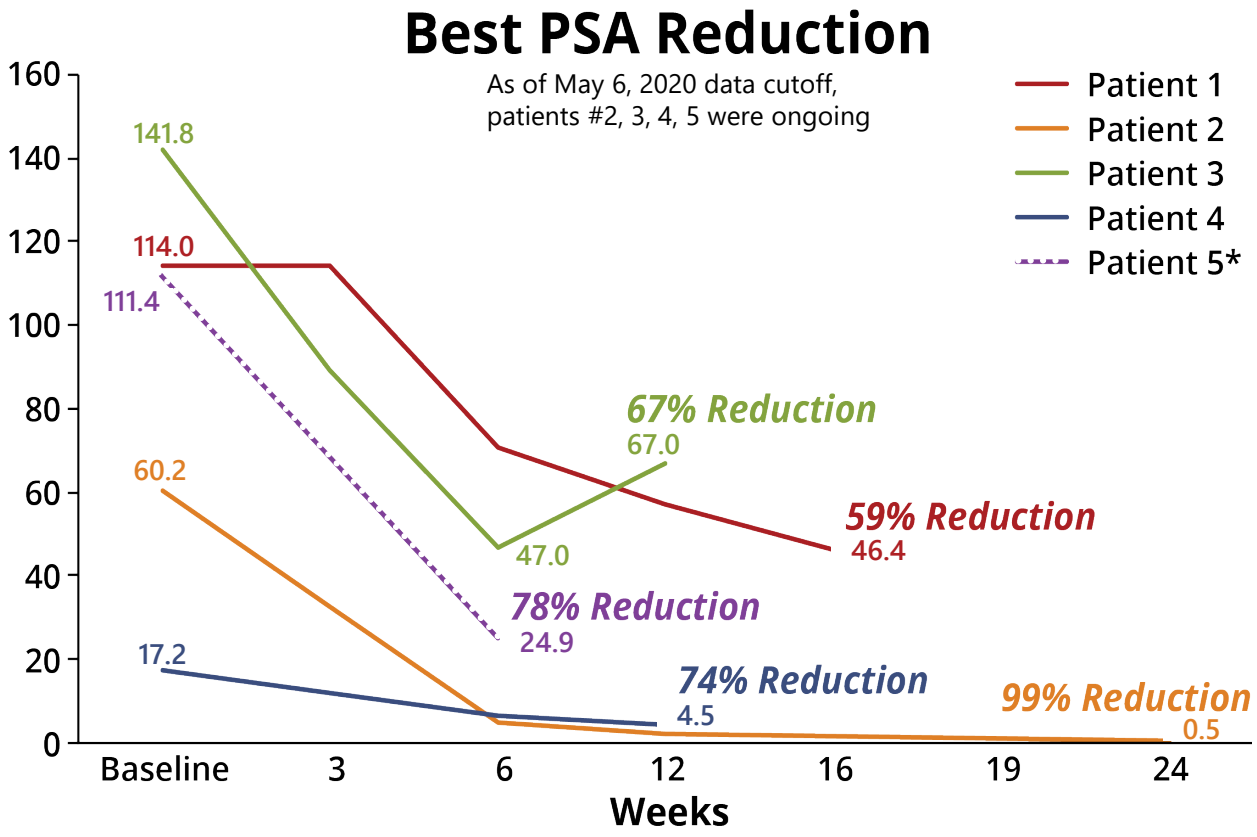
Note image not exact Anterior-Posterior slice as May 23, 2019

Line of Tx	Treatment	Cycles	Duration of Therapy (Months)	Best Response
1	Carboplatin+Paclitaxel+Bevacizumab	4	2	SD
2	Nivolumab	40	16	SD
3	MK-7162 (IDO1 inhibitor)	3	2	SD
4	APG-1252 (Bcl-2 inhibitor)	2	1	PD
5	Pembrolizumab (MK-3475)	2	1	PD
6	**MGC018**	**2**	**2**	**SD (≈24%)**

Powderly, et al., ASCO 2020

Greater than 50% PSA Decline Following MGC018 in Heavily Pre-treated mCRPC

Patient (Dose)	Line of Therapy	Treatment	Duration of Therapy (months)	MGC018 Response
Patient #1 2 mg/kg One target lesion (lymph node), abdominal adenopathy & bone lesions	1 2 3 4 5 **6**	Docetaxel Enzalutamide Prostvac Abiraterone Nivolumab **MGC018**	4 24 5 6 6 **4**	**SD (-29%); 59% PSA Decline**
Patient #2 3 mg/kg Bone only disease	1 2 3 4 **5**	Docetaxel Abiraterone Enzalutamide Radium 223 **MGC018**	6 4 12 6 **3+**	**SD (Ongoing); 99% PSA Decline**
Patient #3 3mg/kg Bone only disease	1 2 3 4 **5**	Docetaxel Provenge Enzalutamide Abiraterone **MGC018**	8 2 6 9 **1.5+**	**SD (Ongoing); 67% PSA Decline**
Patient #4 3 mg/kg Bone only disease	1 2 **3**	Abiraterone Nivo + Rucaparib **MGC018**	Unknown Unknown **1.5+**	**SD (Ongoing); 74% PSA Decline**
Patient #5 3mg/kg Bone only disease	1 2 3 4 5 **6**	Docetaxel Provenge Enzalutamide Abiraterone Docetaxel **MGC018**	4 12 7 7 4 **1.5+**	**SD (Ongoing); 78% PSA Decline**

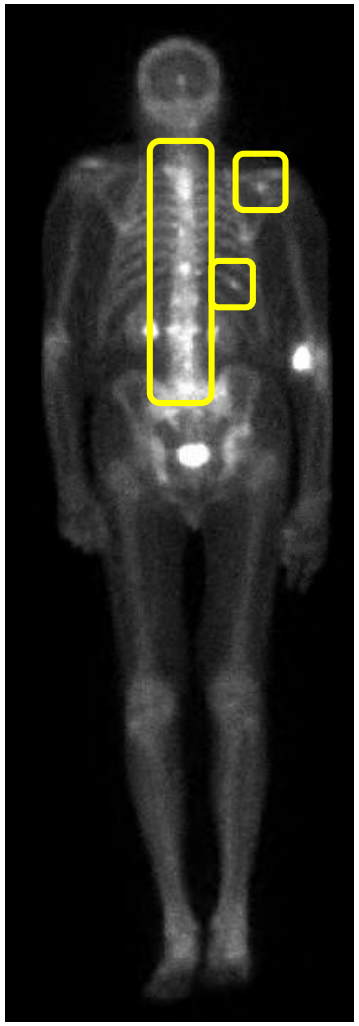


*Patient #5 data scaled for charting purposes:
Note: Baseline PSA 1,114 ng/mL dropped to 249 ng/mL at Week 6, with a further decline to 95 ng/mL at Week 12 (May 18, 2020; after the May 6, 2020 data cut-off).

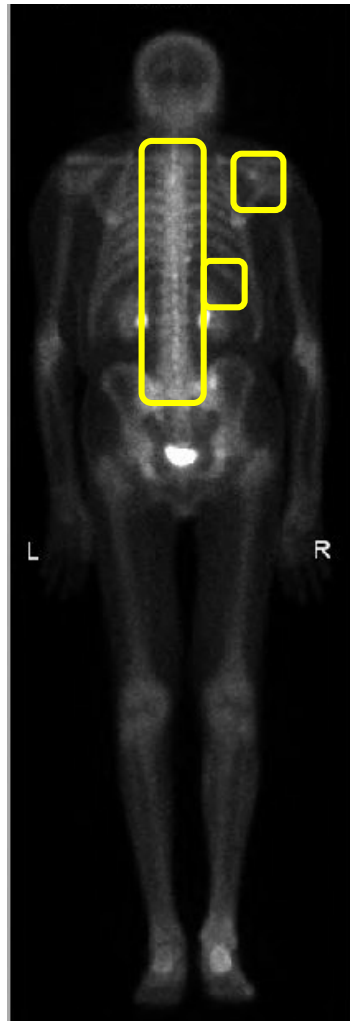
Powderly, et al., ASCO 2020

99% PSA Reduction with Substantial Improvement in Metastatic Bone Lesions

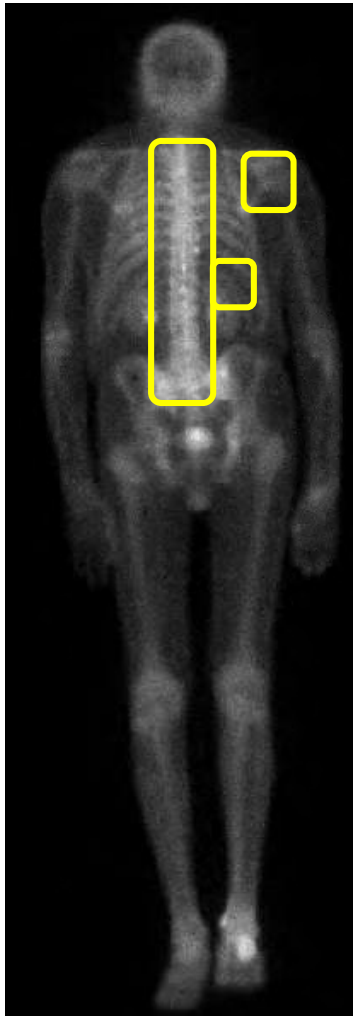
mCRPC Patient #2: Bone lesions of thoracic/lumbar spine, ribs, sternum, and pelvis



November 13, 2019



February 7, 2020



May 1, 2020

Powderly, et al., ASCO 2020

Manageable Safety Profile Across Dose Cohorts

Cytopenias and skin disorders were most common

Grade ≥3 Related Adverse Events

System Organ Class Preferred Term	0.5 mg/kg (N=3)	1.0 mg/kg (N=6)	2.0 mg/kg (N=7)	3.0 mg/kg (N=7)	All (N=23)
AT LEAST ONE EVENT	2 (66.7)	2 (33.3)	7 (100)	3 (42.9)	14 (60.9)
Blood and lymphatic system disorders	0	0	2 (28.6)	2 (28.6)	4 (17.4)
Neutropenia	0	0	2 (28.6)	2 (28.6)	4 (17.4)
Lymphopenia	0	0	1 (14.3)	1 (14.3)	2 (8.7)
Gastrointestinal disorders	0	1 (16.7)	0	0	1 (4.3)
Gastrointestinal inflammation	0	1 (16.7)	0	0	1 (4.3)
Investigations	1 (33.3)	2 (33.3)	4 (57.1)	2 (28.6)	9 (39.1)
Lymphocyte count decreased	0	1 (16.7)	2 (28.6)	1 (14.3)	4 (17.4)
Blood alkaline phosphatase increased	0	0	1 (14.3)	1 (14.3)	2 (8.7)
Neutrophil count decreased	0	1 (16.7)	1 (14.3)	0	2 (8.7)
Platelet count decreased	0	0	1 (14.3)	1 (14.3)	2 (8.7)
Lipase increased	1 (33.3)	0	0	0	1 (4.3)
White blood cell count decreased	0	1 (16.7)	0	0	1 (4.3)
Respiratory, thoracic and mediastinal disorders	1 (33.3)	0	0	0	1 (4.3)
Pneumonitis	1 (33.3)	0	0	0	1 (4.3)
Skin and subcutaneous tissue disorders	0	0	3 (42.9)	1 (14.3)	4 (17.4)
Palmar-plantar erythrodysaesthesia syndrome	0	0	1 (14.3)	1 (14.3)	2 (8.7)
Rash maculo-papular	0	0	2 (28.6)	0	2 (8.7)
Stasis dermatitis	0	0	1 (14.3)	0	1 (4.3)

Powderly, et al., ASCO 2020

No Discontinuations Due to Adverse Events at 3.0mg/kg

Patients Reporting at Least One Adverse Event	0.5 mg/kg (N=3)	1.0 mg/kg (N=6)	2.0 mg/kg (N=7)	3.0 mg/kg* (N=7)	All (N=23)
Adverse Event	3 (100)	6 (100)	7 (100)	7 (100)	23 (100)
Treatment-Related Adverse Event [1]	3 (100)	4 (66.7)	7 (100)	7 (100)	21 (91.3)
Adverse Event ≥ Grade 3 [2]	3 (100)	4 (66.7)	7 (100)	4 (57.1)	18 (78.3)
Treatment-Related Adverse Event ≥ Grade 3 [2]	2 (66.7)	2 (33.3)	7 (100)	3 (42.9)	14 (60.9)
Serious Adverse Event	1 (33.3)	1 (16.7)	3 (42.9)	0	5 (21.7)
Event that Resulted in Study Discontinuation	1 (33.3)	1 (16.7)	3 (42.9)	0	5 (21.7)
Event that Resulted in Drug MGC018 Withdrawal	1 (33.3)	1 (16.7)	3 (42.9)	1 (14.3)	6 (26.1)
Event that Resulted in Drug MGC018 Dose Reduction	0	0	1 (14.3)	2 (28.6)	3 (13.0)
Event that Resulted in Drug MGC018 Interrupted	1 (33.3)	0	2 (28.6)	5 (71.4)	8 (34.8)
Fatal Adverse Event (pneumonitis)	1 (33.3)	0	0	0	1 (4.3)
Adverse Event of Special Interest (AESI) – Infusion Reaction	0	0	2 (28.6)	5 (71.4)	7 (30.4)

*Amendment applied to allow dose modification.

- Three treatment-related serious adverse events occurred in three patients:
  - pneumonitis in a patient with concurrent bacterial pneumonia; non-infectious gastroenteritis; and stasis dermatitis in a patient with chronic venous insufficiency
- One dose-limiting toxicity (Grade 4 neutropenia resolved to baseline); no febrile neutropenia observed

[1]Includes events with causality assessments of 'Possible', 'Probable' or 'Definite'. [2]Based on CTCAE criteria version 4.0.3.

Powderly, et al., ASCO 2020

Key Milestones Anticipated in 2020

Margetuximab
(Anti-HER2 mAb)

Breast Cancer
- ✓ BLA filing acceptance (1Q)
- ❑ Final OS (2H)
- ❑ PDUFA date (12/18/2020)

Gastric/GEJ Cancer
- ❑ Initial data MAHOGANY Module A (2H)

Flotetuzumab
(CD123 × CD3 DART molecule)

- ✓ Define registration path for PIF/ER AML (1H)
- ❑ Provide clinical update on registration study (4Q)

Retifanlimab
(Anti-PD-1 mAb)

Per Incyte's disclosure

Incyte

MGD013
(PD-1 × LAG-3 DART molecule)

- ✓ Present data from ongoing Phase 1 (ASCO)
- ❑ Select indications for further monotherapy and combination development

MGC018
(Anti-B7-H3 ADC)

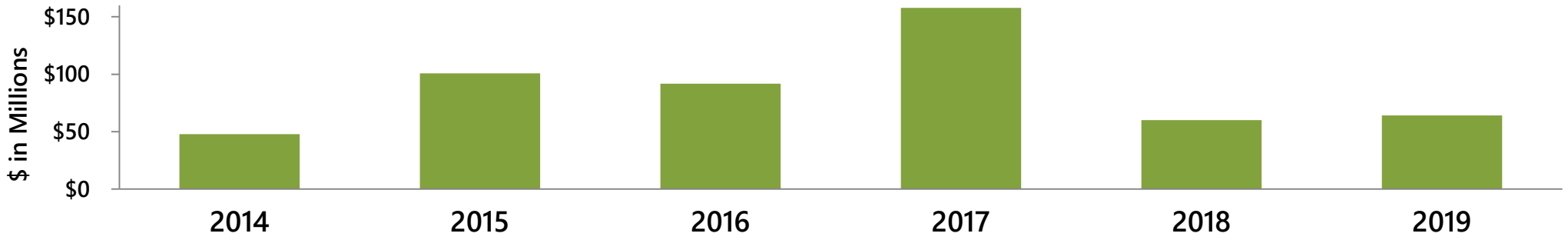
- ✓ Present data from ongoing Phase 1 (ASCO)
- ❑ Initiate dose expansion in mCRPC

Financial Overview

- $171M Cash, cash equivalents and marketable securities as of March 31, 2020
  - Cash runway into 2022 via anticipated and potential collaboration payments
- Historical financial details:

$ in Millions	2014	2015	2016	2017	2018	2019	1Q Ended March 31, 2020	1Q Ended March 31, 2019
Total Revenues	$48	$101	$92	$158	$60	$64	$14	$10
R&D Expense	70	98	122	147	191	195	49	47
Total Operating Expenses	86	121	152	180	231	241	59	57
Cash & Investments	158	339	285	305	233	216	171	320

- Revenues from collaborative and government agreements (>$525M since 2013 IPO):



Thank You!

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