

The Society for Immunotherapy of Cancer 37th Annual Meeting and Pre-Conference Programs

THE LEADING CANCER IMMUNOTHERAPY AND TUMOR IMMUNOLOGY CONFERENCE

#SITC22





Botensilimab, a novel innate/adaptive immune activator with balstilimab (anti-PD-1) in "cold" and I-O refractory metastatic solid tumors

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Consultant/Advisory Role: Adaptimmune, Adcendo, Daiichi Sankyo, Deciphera, Epizyme, Polaris, Springworks

Institutional Coordinating PI: Agenus





100%

ADVANCED CANCER POPULATION

0%



Agenus projections based on Haslam & Prasad, JAMA 2019 and Evaluate Pharma 2022 global revenue estimates, I-O treatment benefit defined per Haslam et al as objective response rate.

Background





Agenus projections based on Haslam & Prasad, JAMA 2019 and Evaluate Pharma 2022 global revenue estimates, I-O treatment benefit defined per Haslam et al as objective response rate.

Novel Immunotherapy Agents

botensilimab

Fc-enhanced CTLA-4 Inhibitor



Active in cold and I-O refractory tumors¹

- ↑ T cell priming, expansion, memory^{2,3}
- ↑ Frequency of activated DCs
- ↑ Treg depletion



1. El-Khoueiry AB, et al. SITC 2021 Annual Meeting. Poster #479. 2. Waight et al. *Cancer Cell*. 2018;33(6): 1033-1047. 3. Data on File. Agenus, Inc. November 2022. 4. O'Malley, et al. *Gynecol Oncol*. 2021; 163: 274-280. 5. O'Malley et al, *J Clin Oncol*. 2022; 40(7): 762-771.



balstilimab

PD-1 Inhibitor



Safety and efficacy analogous to approved anti-PD-1 mAbs^{4,5}

- >750 patients treated; 10 ongoing trials / 2 completed
- Complete blocker of PD-1-PD-L1/2 interactions
- Enhanced T cell activation and effector function

C-800-01 Study



NCT03860272: First-in-human trial of **botensilimab (bot)** ± **balstilimab (bal)** in patients with advanced cancer^{1,2}





C-800-01 Analysis Population



NCT03860272: First-in-human trial of **botensilimab (bot)** ± **balstilimab (bal)** in patients with advanced cancer^{1,2}

POPULATION DESIGN

Evaluable Combination Patients

125 treated with 1 or 2 mg/kg bot + bal* as of 19 May 2022 with \geq 1 Q6W imaging assessment⁺

- 115 de novo combination patients
- **10** *rescue* patients who received combination therapy after bot monotherapy





 https://clinicaltrials.gov/ct2/show/NCT03860272.
 El-Khoueiry AB, et al. SITC 2021 Annual Meeting. Poster #479. *Fixed-dosing also permitted (bot 150 mg Q6W + bal 450 mg Q3W).
 tAn additional 34 patients who started treatment as of 19 May 2022 were not evaluable due to early or clinical PD (n=22), withdrawal of consent (n=6), patient decision (n=3), need for a prohibited medication (n=1), a dose-limiting toxicity (n=1), or an unrelated AE (n=1).

Patient Characteristics (N=125)



	ALL PATIENTS		ALL PATIENTS
Age, median (range)	59 (25-83)	Select expansion cohorts, n (%)	
Sex, n (%)		MSS CRC	59 (47)
Male	48 (38)	Recurrent Platinum Resistant/Refractory Ovarian	19 (15)
Female	77 (62)		
ECOG PS at baseline, n (%)		Sarcoma	12 (10)
0	56 (45)	Anti-PD-(L)1 R/R NSCLC	4 (3)
1	69 (55)	15 other tumor types, n (%)	31 (25)
Prior lines of therapy, n (%)			
1L	13 (10)	Bot dose. n (%)	
2L	20 (16)		
3L+	61 (49)	1 mg/kg bot Q6W + bal 3 mg/kg Q2W	19 (15)
Not available	31 (25)	2 mg/kg bot Q6W + bal 3 mg/kg Q2W	101 (81)
Prior I-O, n (%)	36 (29)	Fixed-dose (150 mg bot Q6W + bal 450 mg Q3W)	5 (4)



Efficacy in Combination Patients (N=125)



ALL PATIENTS		
ORR, %*	20% (95% Cl, 13-28%)	
BOR, n (%)		
CR	3 (2)	
PR	22 (18)	
SD	58 (46)	
PD	42 (34)	
DCR (CR + PR + SD), %	66% (95% Cl, 57-74%)	
Median DOR, months	NR (95% CI, 4.5-NR)	
Median PFS, months	2.8 (95% CI, 2.7-4.2)	
Median OS, months	NR (95% CI, 12.9-NR)	
12-month OS, months	66% (95% Cl, 54-76%)	
Median F/U, months	6.2 (Range, 1.1-29.3)	

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*Includes unconfirmed responses

Safety (N=125)

All TRAEs of Any Grade in \geq 10% of All Patients



n (%)	ALL GRADE	GRADE 3	GRADE 4
ANY TRAE	111 (89)	40 (32)	3 (2)
GASTROINTESTINAL	, ,		、 <i>'</i>
Immune-mediated diarrhea/colitis*	48 (38)	23 (18)	1 (1)
Other diarrhea	16 (13)	0	0
Nausea	32 (26)	1 (1)	0
Vomiting	17 (14)	0	0
CONSTITUTIONAL			
Fatigue	37 (30)	5 (4)	0
Decreased appetite	28 (22)	0	0
Chills	24 (19)	0	0
Pyrexia	20 (16)	4 (3)	0
SKIN			
Rash	27 (22)	2 (2)	0
Pruritus	17 (14)	0	0
HEPATIC			
↑ ALT	13 (10)	3 (2)	0
↑ AST	13 (10)	3 (2)	0
ENDOCRINE			
Hypo/hyperthyroidism	17 (14)	0	0
MUSCULOSKELETAL			
Myalgia	12 (10)	1 (1)	0
Arthralgia	12 (10)	0	0

• No grade 5 TRAEs

• Discontinuation due to a TRAE:

- 9% bot only
- 15% bot and bal

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MSS CRC Efficacy (n=59)





EFFICACY		
ORR, %*	22% (95% CI, 12-35%)	
BOR, n (%)		
CR	1 (2)	
PR	12 (20)	
SD	30 (51)	
PD	16 (27)	
DCR (CR + PR + SD), %	73% (95% Cl, 60-84%)	
Median DOR, months	NR (95% CI, 2.8-NR)	
Median PFS, months	4.1 (95% Cl, 2.7-4.4)	
Median OS, months	NR (95% Cl, 9.4-NR)	
12-month OS, months	60% (95% CI, 42-75%)	
Median F/U, months	6.2 (Range, 1.6-29.3)	
Responder Characteristics (n=13) • 11/13 (85%) with 3L+ prior LOT • 2/13 (15%) with prior I-O • 13/13 (100%) MSS • 0/10 (0%) TMB >10 mut/Mb	 1/7 (14%) PD-L1 positive (≥1%) 9/13 (69%) RAS mutant 0/13 (0%) BRAF mutant 9/13 (69%) with ongoing responses 	

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*Includes unconfirmed responses. §SD by RECIST; metabolic CR by PET. ©Resected target lesion showed complete pathologic response. +Ongoing response.

Recurrent Platinum Refractory/Resistant Ovarian Efficacy (n=19)







EFFICACY		
ORR, %*	26% (95% Cl, 9-51%)	
BOR, n (%)		
CR	1 (5)	
PR	4 (21)	
SD	7 (37)	
PD	7 (37)	
DCR (CR + PR + SD), %	63% (95% Cl, 38-84%)	
Median DOR, months	NR (95% CI, 4.2-NR)	
Median F/U, months	6.5 (Range, 2.0-24.0)	
Responder Characteristics (n=5)		

- 4 high grade serous (80%), 1 endometrioid/clear cell (20%)
- 3/5 (60%) with 3L+ prior LOT
- 1/5 (20%) with prior I-O (pembrolizumab/PI3Ki PD, nivolumab PD)
- 5/5 (100%) MSS
- 0/3 (0%) TMB >10 mut/Mb
- 3/3 (100%) PD-L1 positive (≥1%)
- 2/5 (40%) responses ongoing



*Includes unconfirmed responses SD for 72 weeks on monotherapy prior to switching to combination.

+Ongoing response. Received radiation, no evidence of disease

Sarcoma Efficacy (n=12)









EFFICACY		
ORR, %*	42% (95% CI, 15-72%)	
BOR, n (%)		
CR	1 (8)	
PR	4 (33)	
SD	3 (25)	
PD	4 (33)	
DCR (CR + PR + SD), %	67% (95% CI, 35-90%)	
Median DOR, months	NR (95% CI, 1.9-NR)	
Median F/U, months	4.4 (Range, 1.1-19.6)	
Responder Characteristics (n=5)		

- 1 cutaneous angiosarcoma (20%), 3 visceral angiosarcoma (60%), 1 liposarcoma (20%)
- 3/5 (60%) with 3L+ prior LOT
- 4/4 (100%) MSS
- 1/4 (25%) TMB >10 mut/Mb (TMB=15, visceral angiosarcoma)
- 3/4 (75%) PD-L1 positive (≥1%)
- 3/5 (60%) responses ongoing



*Includes unconfirmed responses +Ongoing response.

Anti-PD-(L)1 R/R NSCLC Efficacy (n=4)





EFFICACY		
ORR, %	50% (95% Cl, 7-93%)	
BOR, n (%)		
CR	0 (0)	
PR	2 (50)	
SD	1 (25)	
PD	1 (25)	
DCR (CR + PR + SD), %	75% (95% Cl, 19-99%)	
Median DOR, months	NR (95 % CI, 4.5-NR)	
Median F/U, months	5.3 (Range, 3.3-16.2)	
Responder Characteristics (n=2) Patient 1: PD-L1 negative (0%) Prior I-O: Carboplatin/paclitaxel/ pembrolizumab, pembrolizumab (PD) Response ongoing 	 Patient 2: PD-L1 negative (0%) Prior I-O: Carboplatin/pemetrexed/ pembrolizumab, pemetrexed/ pembrolizumab (PD) 	

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+Ongoing response.

Summary & Future Directions



- Botensilimab plus balstilimab demonstrates durable responses across a broad range of heavily
 pretreated unselected patients with cold and/or I-O relapsed/refractory tumors
- Results presented today in MSS CRC, ovarian, sarcoma (including angiosarcoma and liposarcoma), and anti-PD-(L)1 R/R NSCLC tumors are representative of broad activity in additional diseases including:
 - MSS endometrial, anti-PD-1 R/R HCC, anti-PD-1 R/R cervical, and anti-PD-1/CTLA-4 R/R melanoma
- Botensilimab plus balstilimab is well tolerated and appears differentiated from first-gen CTLA-4-based regimens, with less high-grade visceral toxicity outside of the GI tract, consistent with its molecular design^{1,2}
- Three botensilimab Phase 2 ACTIVATE trials are underway



AGAINST COLORECTAL CANCER



AGAINST MELANOMA





1. Levey D, et al. SITC Annual Meeting 2022. Poster #470. 2. Krishnan S, et al. SITC Annual Meeting 2022. Poster #941



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Abbreviations

DECEMBER 8-12 BOSTON MASSACHUSETTS

AE. adverse event **ALT**. alanine aminotransferase APC, antigen presenting cell AST, aspartate aminotransferase bal. balstilimab **BOR**, best overall response bot. botensilimab BRAF, v-raf murine sarcoma viral oncogene homolog B1 **CR**, complete response **CPK**, creatine phosphokinase CRC. colorectal cancer CTLA-4, cytotoxic T-lymphocyte antigen-4 **DC**. dendritic cell **DCR**. disease control rate DOR, duration of response ECOG, Eastern Cooperative Oncology Group Fc, fragment crystallizable FcyRIIIA, Fc gamma receptor IIIA **F/U**, follow-up HCC, hepatocellular carcinoma **ICI**, immune checkpoint inhibitor **IgG**, immunoglobulin G I-O, immunotherapy L. line **LOT**, lines of therapy



mAb, monoclonal antibody Mets. metastases MSI, microsatellite instability MSS. microsatellite stable NK. natural killer NSCLC, non-small cell lung cancer **ORR**, objective response rate **OS**, overall survival **PD**, progressive disease PD-1, programmed death receptor-1 PD-L1/2, programmed death-ligand ¹/₂ PFS, progression-free survival PR, partial response **PS**, performance status **QXW**, every X weeks **RAS**, rat sarcoma virus R/R, relapsed/refractory **SD**, stable disease SOC. standard of care TMB, tumor mutation burden TNBC, triple negative breast cancer TRAE, treatment-related adverse event Treg, regulatory T cell