Phase 1 trial of the adenosine A2A receptor antagonist inupadenant (EOS-850):

Update on tolerability, and antitumor activity potentially associated with the expression of the A2A receptor within the tumor.

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Background and Methods



Updated safety & efficacy from inupadenant monotherapy – durable responses observed



Most Frequent (≥15%) TEAEs

	Number of Patients (%)					
Preferred Term	20 mg QD (N=3)	40 mg QD (N=3)	40 mg BID (N=3)	80 mg BID (N=28)	160 mg BID (N=6)	Total (N=43)
Fatigue	1 (33.3)	2 (66.7)	1 (33.3)	9 (32.1)	4 (66.7)	17 (39.5)
Anemia	0 (0.0)	2 (66.7)	0 (0.0)	11 (39.3)	1 (16.7)	14 (32.6)
Decreased appetite	2 (66.7)	1 (33.3)	1 (33.3)	5 (17.9)	3 (50.0)	12 (27.9)
Constipation	2 (66.7)	1 (33.3)	0 (0.0)	7 (25.0)	1 (16.7)	11 (25.6)
Aspartate aminotransferase increased	1 (33.3)	1 (33.3)	0 (0.0)	4 (14.3)	2 (33.3)	8 (18.6)
Alanine aminotransferase increased	2 (66.7)	0 (0.0)	0 (0.0)	3 (10.7)	2 (33.3)	7 (16.3)
Diarrhoea	0 (0.0)	1 (33.3)	1 (33.3)	4 (14.3)	1 (16.7)	7 (16.3)
Dyspepsia	0 (0.0)	1 (33.3)	0 (0.0)	4 (14.3)	2 (33.3)	7 (16.3)
Dyspnoea	0 (0.0)	0 (0.0)	1 (33.3)	3 (10.7)	3 (50.0)	7 (16.3)
Nausea	1 (33.3)	1 (33.3)	1 (33.3)	3 (10.7)	1 (16.7)	7 (16.3)

Drug-related SAEs in 3 patients: Acute myocardial infarction (160 mg BID), atrial fibrillation and pericardial effusion (80 mg BID)

2 durable PRs - Castrate-resistant prostate cancer (ongoing), melanoma

1 SD > 1 yr - Sinus carcinoma

2 SDs > 6 mo - Parotid gland carcinoma and lung cancer (ongoing)

Gene Expression Within Tumors

Inupadenant up-regulates immune-related gene signatures in non-progressors

Biomarker Methods



Gene Signature Analysis by Nanostring



A_{2A} Receptor ($A_{2A}R$) within the tumor

Inupadenant anti-tumor activity is possibly associated with A2AR expression within the tumor area



Inupadenant is tolerated well and shows signs of activity potentially associated with the expression of the A2A receptor within the tumor

- Inupademant safety in this larger data set is consistent with previously presented data.
- 2 PRs and 3 SDs were **durable**.
- Analysis of pre-treatment tumor biopsies has identified that A_{2A}R may be associated with clinical outcome. This provides new mechanistic insights, which we are continuing to investigate.
- **Expansion arms** in the ongoing study will evaluate activity in monotherapy, and in combination with either pembrolizumab, chemotherapy or both.
- Future studies will evaluate A_{2A}R as a potential selection biomarker.

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Ph 1: HCl salt monotherapy (food effect) – Advanced solid tumors

Ph 1/2: + EOS-448 – Melanoma (post-PD1)

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- Inupadenant project team
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