Title

ATIM-12. PHASE 2 STUDY TO EVALUATE THE CLINICAL EFFICACY AND SAFETY OF MEDI4736 (DURVALUMAB [DUR]) IN PATIENTS WITH BEVACIZUMAB (BEV)-REFRACTORY RECURRENT GLIOBLASTOMA (GBM)

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with bevacizumab. Promising antitumor activity was noted in a subset of patients. Updated response, survival and toxicity data will be presented.

ATIM-10. PHASE 2 TRIAL OF SL-701, A NOVEL IMMUNOTHERAPY COMPRISED OF SYNTHETIC SHORT PEPTIDES AGAINST GBM TARGETS IL-13RA2, EphA2, AND SURVIVIN, IN ADULTS WITH SECOND-LINE RECURRENT GBM

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BACKGROUND: SL-701, a novel immunotherapy comprised of synthetic peptides elicits immune responses against overexpressed GBM targets: interleukin-13 receptor alpha-2 (IL-13Rα2), EphrinA2 (EphA2), and Survivin. Updated data reported from a multicenter, 2-stage Phase 2 clinical trial of SL-701 in HLA-A2+ adults with relapsed GBM. **METHODS:** Patients enrolled had KPS > 60 and failure of standard RT/TMZ. Stage 1: SL-701 was administered with adjuvants GM-CSF and imiquimod biweekly for 6 months, then q28 days. Stage 2: SL-701 and adjuvant poly-ICLC were administered biweekly with bevacizumab (10 mg/kg). Primary objectives include: safety and tolerability, investigator assessed objective response rate (ORR) using RANO criteria and 12 month-survival rate. **RESULTS:** As of 16May2017, 74 patients (46 in Stage 1 and 28 in Stage 2) received SL-701. Accrual for Stage 1 and 2 is complete. Patients were 100% bevacizumab naïve, 65% male with a median age of 56 years (range: 24–79). Patients received a median of 8.5 doses. The most frequent grade 3–4 treatment-related adverse event was fatigue (n = 2; 2.7%). Among 46 evaluable Stage 1 patients, 1 partial response (PR; duration: 78 weeks) and 15 stable disease (SD; median duration: 16 weeks; range: 1.3 – 99 weeks) were observed. Of 28 evaluable Stage 2 patients, 21% ORR consisting of 2 complete response (CR; duration: 30 and 46 weeks, respectively) and 4 PR (median duration: 31 weeks; range: 12 – 47 weeks) was observed with 19 SD (median duration: 14 weeks; range: 0.1 - 41 weeks) achieved. Median overall survival (mOS) of 11.2 and 11.7 months was observed for Stage 1 and 2 patients, respectively with a 25% survival probability at 14 weeks. SL-701 plus adjuvants with or without bevacizumab have a manageable safety profile with anti-tumor activity, several CRs, and a preliminarily promising survival curve, warranting further study. Updated study data will be presented.

ATIM-11. PILOT STUDY OF TUMOR LYSATE VACCINE AND IMIQUIMOD IN ADULTS WITH WHO GRADE II GLIOMAS

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BACKGROUND: We conducted a pilot study of intradermal vaccinations with tumor lysate and imiquimod in adults with newly diagnosed high-risk low-grade glioma (LGG). The vaccine uses the brain tumor initiating cell (BTIC) cell line GBM6-AD as antigen source. GBM6-AD expresses glioma-associated antigens (GAAs), including interleukin-13 receptor (IL- 13R)α2, EphA2, and Her-2 and key BTIC antigens, including CD133, nestin, and Sox-2. **METHODS:** Patients were enrolled into three cohorts: LGG without prior therapy (Cohort 1); LGG with stable disease following chemo and /or radiation therapy (Cohort 2); or recurrent LGG (Cohort 3). Vaccinations were administered on weeks 0, 3, 9, 15 and 21 and every 16 weeks for up to 2 years. Imiquimod was applied topically prior to vaccination and at 24 hours. Primary endpoints were safety and CD8+ T-cell responses against vaccine targeted GAAs in post-vaccine PBMC using IFN-γ- ELISPOT. Exploratory endpoints were response and progression free survival (PFS). **RESULTS:** Cohorts 1, 2, and 3 enrolled 6, 11, and 2 patients, respectively. No regimen-limiting toxicity has been encountered. One patient died due to an accidental opioid overdose. There were one grade 4 lipase, and grade 3 AST and ALT elevation. Gr 1/2 fatigue was the most common AE in 7 patients. Other at least possibly related AE's (all grade 1) include seizure (3), injection site reaction (3), headache (2), decreased ANC (2) and one event of nausea, abdominal pain, fever and flu-like symptoms each. Best response was stable disease (n=18). Median PFS was 23.5 months (Cohort 1; since diagnosis; range 8–54 months) and 14 months (Cohort 3; since the 1st vaccine; range 8–28 months) and 14 months in cohort 3 (range 10–18 months). Sixteen patients are alive to date. **CONCLUSIONS:** The vaccine was well tolerated. Immunological and updated survival data will be presented. A larger efficacy study is warranted.

ATIM-12. PHASE 2 STUDY TO EVALUATE THE CLINICAL EFFICACY AND SAFETY OF MEDI4736 (DURVALUMAB [DUR]) IN PATIENTS WITH BEVACIZUMAB (BEV)-REFRACTORY RECURRENT GLIOBLASTOMA (GBM)

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BACKGROUND: GBM patients who progress on BEV, an approved angiogenesis inhibitor for recurrent GBM, have a dismal outcome with a median survival of < 6 months. DUR is a human IgG1 monoclonal Ab against PD-L1. **METHODS:** This ongoing Phase 2 open-label study (NCT02336165) evaluates safety and efficacy of DUR (10 mg/kg every 2 weeks [Q2W]) in 5 GBM cohorts. Results are presented for Cohort C (DUR + continuing BEV 10 mg/kg Q2W in BEV-refractory recurrent GBM). The primary efficacy endpoint for Cohort C is overall survival at 6 months (OS-6), based on modified RANO criteria by investigator assessment; secondary endpoints include safety/tolerability and progression-free survival (PFS). The Intent-to-treat population includes patients receiving any dose of DUR and having at least baseline and 1 post-baseline tumor assessment. **RESULTS:** First patient treated: 24 Mar 2015; data cutoff: 15 Mar 2017. Cohort C completed enrollment of 22 patients (male: 63.6%; mean age: 54.8 [37–77] years; baseline ECOG PS0: 27.3%, PS1: 68.2%; baseline measurable lesions: 81.8%). Treatment-emergent adverse events (TEAEs) occurred in 19 (86.4%) patients and most commonly included neurologic events associated with GBM. Treatment-related AEs (TRAEs) occurred in 10 (45.5%) patients, and incidences by maximum CTCAE grade (Gr) were Gr1: 5 (22.7%); Gr2: 4 (18.2%); Gr3: 1 (4.5%; fatigue); and Gr4/5: 0 patients. Most common TRAEs (≥2 [9.1%] patients) were fatigue, increased ALT, constipation, and headache. All patients (n=22) were evaluable for efficacy: OS range, 0.9 - 51.6 weeks; 8 patients (36%) had OS ≥ 22 weeks; PFS range, 0.9 -24.4 weeks; 11 patients (50%) had PFS ≥ 8 weeks; 3 patients were still alive at cutoff date; OS-6 to follow. **CONCLUSIONS:** DUR + continuing BEV therapy appears to be well tolerated and shows preliminary activity in BEV-refractory recurrent GBM. Further studies are warranted.

ATIM-13. ALLOGENEIC TUMOR LYSATE/AUTOLOGOUS DENDRITIC CELL VACCINES IN NEWLY DIAGNOSED GLIOBLASTOMA: RESULTS OF CLINICAL TRIAL MC1272

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INTRODUCTION: Dendritic cell (DC) vaccines for glioblastoma multiforme (GBM) have been promising in pre-clinical studies but widespread clinical translation has been hampered by issues related to immune editing for vaccines targeting specific antigens and feasibility / scalability for tumor lysate-based vaccines. We report findings from a clinical trial combining a DC vaccine strategy that addresses these issues with standard therapy in newly diagnosed GBM. **METHODS:** Twenty adult patients with