an opportunity to be followed for at least 16 weeks) is shown in the table 1. At data cutoff, 91.8% of responders remained ongoing and still on treatment. Treatment-related adverse events (TRAEs) occurred in 93.6% of pts (G3 in 13.8% [13/94], no G4 or G5, treatment discontinuation in 2.1% [2/94]). Treatment-related SAEs occurred in 3.2%. Most frequent TRAEs (≥15%) were fever (24.5%), hypothyroidism (21.3%), upper respiratory tract infection (18.1%), and ALT elevations (17.0%). Grade ≥3 TRAEs reported in ≥2 pts were platelet count decreased (2.1%). Immune-related AEs were reported in 42.6% of pts (G3 in 2.1%; psoriasis [n=1], IgA nephropathy [n=1]).

Conclusions Penpulimab was shown to be highly active resulting in a high CR rate in pts with R/R cHL. With longer follow-up, CR rate for penpulimab in R/R cHL could be further increased. Penpulimab demonstrated notably lower rates of SAE, TRAE leading to discontinuation, and Grade Grade ≥3 immune-related AEs in pts with R/R cHL.

Trial Registration NCT03722147

http://dx.doi.org/10.1136/jitc-2020-SITC2020.0791

Background Specific immune cell responses against oncogenic antigens are major determinants to achieve long-term disease control for HPV-related malignancies. We developed TG4001, a viral based vaccine against the HPV E6 and E7 antigens. Following the demonstration of its safety in phase Ib, we aimed to evaluate the antitumor activity and immune priming effects of TG4001 in combination with the PD-L1 inhibitor avelumab in HPV-related malignancies in phase II (NCT03260023).

Methods Patients (pts) with previously treated R/M HPV-16+ cancers received TG4001 at 5x10⁷ pfu SC weekly for 6 weeks, every 2 weeks up to M6, and every 12 weeks thereafter in combination with avelumab IV at 10mg/kg every 2 weeks. PBMC and tissue samples were collected longitudinally prior to and during the treatment period. Specific T cell response was assessed using ex-vivo IFNg-ELISPOT, and changes in the tumor microenvironment by phenotyping of immune infiltrate and transcriptomic analyses of immune related genes.

Results 34 pts with anal (15), oropharyngeal (8), cervical (6) or vulvar/vaginal (5) cancer, were enrolled. Median age was 61 years; the majority (88%) had received at least 1 prior line of chemotherapy (CT) with 32% having received ≥ 2 lines. 8 pts achieved confirmed response according to RECIST 1.1 (1 CR, 7 PR, ORR 23.5%). Responses were observed in all primary tumor types and across all lines of prior therapy. Liver metastases had a profound impact on outcome: ORR was 34.8% and PFS 5.6 months in pts without liver metastases (n=23) versus 0% and PFS of 1.4 months in pts with liver metastases (n=11). Consistent with phase Ib data, the combination had a favorable safety profile.

11 pts were evaluable for T-cell response at day (D) 43. 7/11 patients had vaccine-induced reactive T cells against E6, E7 or both. In particular, in the patient with CR, lesions disappearance was accompanied by the development of a strong T-cell response against E6 and E7. This response developed as early as D43 and sustained at 6 months after initiation of therapy, consistent with the durable disease control. Increased infiltrates, expression of immune related genes and higher PD-L1 protein expression were observed across all patients suggesting a remodeling of the tumor microenvironment consistent with a switch toward a ‘hot tumor’ phenotype.

Conclusions Our study suggests that immunotherapeutic combination of TG4001 and avelumab shows valuable tumor activity in pts with previously treated advanced HPV-16+ cancers. These results warrant validation in a larger cohort of patients.

Trial Registration NCT03260023

http://dx.doi.org/10.1136/jitc-2020-SITC2020.0793

Background The oligonucleotide MK-4621 selectively binds RIG-I to activate the RIG-I pathway, inducing a type 1 interferon response. In a first-in-human study (MK-4621-001, NCT03065023), intratumoral MK-4621 resulted in no dose-limiting toxicities (DLTs) and increased circulating chemokine levels and tumor expression of interferon signaling genes in patients with advanced/recurrent solid tumors. We report outcomes from an open-label, dose-escalation phase 1/ib study of intratumoral MK-4621 and intravenous pembrolizumab in patients with advanced solid tumors (MK-4621-002, NCT03739138).

Methods Participants were aged ≥18 years with histologically/cytologically confirmed advanced/metastatic solid tumors, ECOG PS 0/1, cutaneous, subcutaneous, and/or nodal lesions amenable to intratumoral injection and had received, or were intolerant to, all treatments known to
Conclusions The combination of intratumoral MK-4621 plus intravenous pembrolizumab had a manageable safety profile. At the highest dose level, modest antitumor activity was observed in patients treated with combination therapy.

Trial Registration ClinicalTrials.gov identifier, NCT03739138

Ethics Approval An independent institutional review board or ethics committee approved the protocol at each study site, and the trial is being conducted in compliance with Good Clinical Practice guidelines and the Declaration of Helsinki.

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