Conclusion Our data support lymphatic spread does not require the proliferation of new lymphatic endothelial cells in early-stage cervical cancer. These results emphasize the importance of pre-existing peritumoral lymphatic vessels in the metastatic process in early cervical cancer. None of the markers of lymphangiogenesis and proliferation assessed in this study were predictive of PLNM or recurrence.

Efficacy and Safety of VB10.16, a Therapeutic DNA Vaccine Specifically Targeting Antigen-Cell Presenting Cells, in Combination with Atezolizumab in Patients with Advanced HPV16-Positive Cervical Cancer: Results from a Pre-Planned Interim Analysis

Introduction/Background VB10.16 is a novel therapeutic antigen-presenting cell targeting DNA vaccine developed to treat HPV16-positive cancers. We aimed to investigate whether VB10.16 is safe and efficacious when administered to patients with advanced cervical cancer in combination with atezolizumab.

Methodology In this open-label, single-arm, phase 2a trial, patients with recurrent or metastatic HPV16-positive cervical cancer were recruited at 13 hospitals across Europe. Patients received up to 11 intramuscular 3 mg VB10.16 vaccinations in combination with 3-weekly 1200 mg atezolizumab for up to 48 weeks, or until disease progression or unacceptable toxicity. Anti-tumor activity was assessed by central independent review using RECIST v1.1 criteria.

Results At the cut-off date of 14 February 2022 for this interim analysis, 39 patients had at least one or more post-baseline scan available and were included in the efficacy analysis. 69% of patients had received 2 or more prior systemic treatment lines. Overall Response Rate (ORR) was 21%, with 2 Complete Responses (CR) and 6 Partial Responses (PR). Responses were observed in both PD-L1 positive and negative patients (ORR 27% and 17%, respectively). Disease Control Rate (DCR) was 64% (77% in PD-L1 positive and 58% in PD-L1 negative patients). HPV16-specific T cell responses were observed in the majority of patients and associated with a clinical response. 50 patients had received ≥1 doses of VB10.16 and atezolizumab and were included in the interim safety analysis. 5 patients (10%) experienced treatment-related adverse events (TRAEs) of grade 3, including 1 patient (2%) who experienced a grade 3 TRAE related to VB10.16. No grade 4–5 TRAEs were reported.

Conclusion VB10.16 combined with atezolizumab had a favorable safety profile in heavily pre-treated patients. The combination treatment showed clinically relevant HPV16-specific T cell responses and promising clinical activity with a very high DCR of 64% and 8 patients achieving CR or PR.

Impact of COVID-19 Infection on the Rates of Perioperative Complications Following Total Pelvic Exenterations for Gynecological Malignancies

Introduction/Background COVID-19 infection led to one of the greatest crises affecting the healthcare system worldwide. The aim of the current paper is to analyze the influence of previous COVID-19 infection on the perioperative outcomes of patients submitted to total pelvic exenterations for gynecological malignancies.

Methodology Between July 2021 and April 2022 there were 38 patients submitted to pelvic exenterations for different gynecological malignancies, 11 of these cases presenting a previous history of COVID 19 infection. However, all these 11 patients developed asymptomatic or mild symptomatic disease and did not necessitate hospital admission.

Results Patients with previous history of COVID-19 infection reported a significantly longer length of the surgical procedure (380 minutes versus 300 minutes, p=0.004), a higher intraperoperative blood loss (1100 ml versus 600 ml, p=0.002) and a longer intensive care unit stay (5 days versus 2 days, p=0.001). Meanwhile, two of the patients with previous history of COVID-19 infection developed postoperative pneumonia and other three cases developed thrombotic complications while in the control group a single patient developed postoperative thrombotic complications and another one necessitated intensive care readmission due to respiratory dysfunction due to a previous history of asthma.