TPS5622 **Poster Session**

A phase II, single-arm, open-label clinical trial to evaluate the combination of cadonilimab injection and gut microbiota modulation in the treatment of persistent, recurrent, or metastatic cervical cancer following second-line therapy.

Qin Xu, Fei Zhu, Jing Liu, Lele Zang, Li Li; Department of Gynecologic Oncology, Clinical Oncology School of Fujian Medical University, Fujian Cancer Hospital, Fuzhou, China; Department of Gynecologic Oncology, Clinical Oncology School of Fujian Medical University, Fujian Cancer Hospital, Fuzhou, Fujian, China; Department of Gynecologic Oncology, Fujian Cancer Hospital, Fuzhou, China; Department of Gynecology, Clinical Oncology School of Fujian Medical University, Fujian Cancer Hospital, Fuzhou, China

Background: Current treatment options for cervical cancer include surgery, radiotherapy, and chemotherapy. For persistent, recurrent, or metastatic disease, systemic therapies such as targeted agents and immune checkpoint inhibitors (ICIs) play a crucial role. The NCCN 2023.V1 guidelines recommend PD-1/CTLA-4 bispecific antibody Cadonilimab as a second-line option for recurrent or metastatic cervical cancer. In April 2024, China's NMPA accepted an application for Cadonilimab plus platinum-based chemotherapy (± bevacizumab) as second-line treatment, based on the global phase III AK104-303 trial. Cadonilimab monotherapy demonstrated a 33.0% objective response rate (ORR) and a 12% complete response rate (CR) in platinum-resistant cervical cancer, with an ORR of 43.8% in PD-L1+ patients. Recent research highlights the gut microbiome as a key modulator of immunity and ICI responses across multiple cancers. Gut microbiota modulation may enhance antitumor immunity, improve ICI efficacy, and reduce immune-related adverse events. Fecal microbiota transplantation (FMT) has been shown to restore immune homeostasis by increasing short-chain fatty acid (SCFA) production, particularly butyrate, which strengthens the intestinal barrier and suppresses inflammation. Despite promising findings in other malignancies, no clinical studies have assessed the impact of gut microbiota modulation in advanced cervical cancer immunotherapy. Further investigations are needed to evaluate its therapeutic potential and underlying mechanisms, warranting clinical trials in this field. **Methods:** This study is a Phase II, single-center clinical trial conducted at Fujian Cancer Hospital. Patients will receive gut microbiota transplantation combined with intravenous (IV) administration of Cadonilimab. The recommended dosage of Cadonilimab is 10 mg/kg, with a treatment cycle of 21 days. On Day 1, patients will receive gut microbiota transplantation, followed by Cadonilimab administration on Day 3.Imaging assessments will be conducted every six weeks. The primary objective of the study is to evaluate the Objective Response Rate (ORR). Secondary objectives include Progression-Free Survival (PFS), Disease Control Rate (DCR), Duration of Response (DOR), Overall Survival (OS), PFS rate (≥6 months), and safety (assessed by CTCAE v5.0).Inclusion criteria: Patients with recurrent, metastatic, or persistent cervical cancer; histological types including squamous cell carcinoma, adenosquamous carcinoma, or adenocarcinoma, who are not candidates for curative surgery or radiotherapy. Trial status: The study is in the initiation phase, with plans to enroll 20 patients. As of this submission, patient enrollment has not yet begun. Research Sponsor: Joint Funds for the innovation of science and Technology, Fujian province; 2023Y9449.