

Randomized phase II study to evaluate treatment with induction therapy with nivolumab plus ipilimumab, followed by nivolumab with chemoradiotherapy versus standard of care with chemoradiotherapy for women with locally advanced cervical cancer.

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Background: Cervical cancer (CC) is one of the leading cause of death in developing countries, largely due to insufficient HPV vaccination coverage. The majority of patients are diagnosed with locally advanced disease. Current standard of care (SOC) for those patients is cisplatin-based chemoradiotherapy (P-XRT). Recent advances have shown improved overall survival (OS) with addition of pembrolizumab administered concurrently with P-XRT and as adjuvant therapy (Lorusso, Domenica et al., KN A18 - LANCET, 2024) as well as neoadjuvant chemotherapy with carboplatin and paclitaxel (McCormick et al, LANCET, 2024). In the metastatic setting, the phase I/II CheckMate 358 trial demonstrated high responses rates with the combination of nivolumab (N) and ipilimumab (I) (Oaknin Ana et al, LANCET, 2024). Currently, no trials have evaluated the use of immune checkpoint inhibitors as a neoadjuvant and concurrent strategy with P-XRT in locally advanced CC. Therefore, we hypothesized that induction N/I followed by nivolumab and P-XRT in locally advanced CC can improve clinical outcomes with a manageable toxicity profile. **Methods:** This is a phase II, randomized, clinical trial, including 116 patients with locally advanced cervical cancer (FIGO stages IIB-IVA). Treatment arms: Patients who are eligible for the study was randomized to one of the following treatment arms: - Experimental: Induction Nivolumab (N) 1mg/kg IV plus Ipilimumab (I) 3mg/kg IV every 3 weeks x 4 cycles followed by N 240mg every 2 weeks concurrently with P-XRT. - Control: P-XRT. Endpoints: Primary endpoint: 3-year Progression-Free Survival (PFS). Secondary endpoints: 3-year overall survival (OS), complete response rate (CRR), objective response rate (ORR), duration of response (DoR), health related quality of life (HRQoL) and toxicity profile. Statistics considerations: A total of 116 participants were randomized 1:1 (experimental arm Vs SOC), considering a dropout rate of 10%. A two-sided log-rank test at a 0.05 significance level provides 80% power to detect a difference between a 3-year PFS rate of 75% in the experimental arm versus 50% in the control arm. This calculation assumes a recruitment period of 24 months, and a total study duration of 60 months (up to 24 months of recruitment and 36-month follow-up after the end of treatment). Current Status: The study is ongoing, and the recruitment phase has been completed. The first patient was enrolled in September 2022, and the last patient in April 2024. All participants have finished the treatment phase and are currently in the follow-up phase. Final study results are expected by mid-2028 Clinical trial information: NCT05492123. Research Sponsor: BRAVA institute (BRAZIL).