Poster 32: Evaluation of pseudoprogression on immune checkpoint inhibitor therapy in gynecologic cancers

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Topic: Other (immune checkpoint inhibitor therapy)

Objectives

The objective of this study is to evaluate patterns of treatment response in gynecologic cancer patients who received immune checkpoint inhibitor therapy and assess for incidence of pseudoprogression events.

Methods

This IRB-approved retrospective cohort study included data from patients treated with ICI therapy between 08/01/2014 and 09/10/2021 at a single institution. Demographic information, cancer type, treatment information, and imaging findings were collected from the electronic medical record. Tumor distribution on baseline imaging studies prior to starting ICI therapy were compared to subsequent studies. Mixed response was characterized by interval growth and shrinkage of lesions on the same imaging study. Pseudoprogression was defined as tumor growth on a scan followed by regression of disease on a subsequent scan.

Results

Of the 86 patients included in the study, 39% had ovarian cancer, 38% had endometrial cancer, 16% had cervical cancer, 2% had vulvar or vaginal cancer, and 3% had uterine sarcoma. ICI therapy was administered as second line therapy in 34% and third line or greater in 65% of patients. Best response included complete or partial response in 27%, stable disease in 8%, mixed response in 15%, and progression in 47%. Patients discontinued therapy for progression of disease in 70%, side effects in 12%, completion of therapy in 7%, and 3% are still on therapy. There were no pseudoprogression events in this cohort.

Conclusions

All patients who demonstrated tumor growth of disease while on ICI therapy continued to have progression on subsequent assessments. No patients in this study demonstrated pseudoprogression. Based on these findings, providers should consider early change in therapy when progression on ICI therapy is demonstrated.