

Publication of a paper describing a phase 2 study of cancer vaccination therapy in patients with refractory/persistent cervical cancer and ovarian cancer

An article that described a phase 2 study of cancer vaccination therapy in patients with refractory/persistent cervical cancer (CC) and ovarian cancer (OC) has been published in *OncoImmunology*, by a research group of Dr. Takeuchi at Iwate Medical University School of Medicine. Peptide vaccines used in this study are proprietary peptides of OncoTherapy Science.

Previously, Dr. Takeuchi's group reported that the multiple epitope-peptides cocktail vaccination was well-tolerated in patients with refractory or persistent CC and OC in Phase 1 study ¹⁾. In this paper, they reported the additional safety data, as well as the efficacy after vaccination.

The most common adverse event was dermatological reaction at injection site (15.6%) and no other severe adverse event was detected after vaccination. One patient showed complete response and 7 patients showed partial response among 35 evaluable cases in OC. The response rate²⁾ and disease control rate³⁾ were 22.9% and 82.9%, respectively. In CC patients, 3 patients showed partial response. The response rate and disease control rate were 20.0% and 80.0%, respectively.

These results suggest that immunotherapy using cancer-derived multiple peptides cocktail vaccination has the possibility of being applied as an alternative therapy for the treatment of chemo-refractory/persistent cervical cancer and ovarian cancer.

The paper has been published online in *OncoImmunology*.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7671072/>

References

- 1) Takeuchi et al, Anti-cancer Immunotherapy Epitope-peptides Vaccination in Patients with Refractory/Persistent Disease of Cervical Cancer and Ovarian Cancer (Phase 1 Studies). *Cancer Research Journal*. Vol. 7, No. 3, 2019, pp. 106-116.
- 2) *Response rate*: defined as the sum of complete response (CR) and partial response (PR) among all treated patients. Tumor response was assessed by spiral computed tomography sequences with enhancement according to Response Evaluation Criteria in Solid Tumors (RECIST).
- 3) *Disease control rate*: defined as the sum of CR, PR, and stable disease (SD) among all treated patients.