

Publication**Antibody-based immunotherapy for ovarian cancer: where are we at?****JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)****ID** 2832284**Author(s)** Tse, B. W. C.; Collins, A.; Oehler, M. K.; Zippelius, A.; Heinzelmann-Schwarz, V. A.**Author(s) at UniBasel** [Zippelius, Alfred](#) ; [Heinzelmann, Viola](#) ;**Year** 2014**Title** Antibody-based immunotherapy for ovarian cancer: where are we at?**Journal** Annals of oncology**Volume** 25**Number** 2**Pages / Article-Number** 322-331

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Cytoreductive surgery and chemotherapy continue to be the mainstay of ovarian cancer treatment. However, as mortality from advanced ovarian cancer remains very high, novel therapies are required to be integrated into existing treatment regimens. Immunotherapy represents an alternative and rational therapeutic approach for ovarian cancer based on a body of evidence supporting a protective role of the immune system against these cancers, and on the clinical success of immunotherapy in other malignancies. Whether or not immunotherapy will have a role in the future management of ovarian cancer is too early to tell, but research in this field is active. This review will discuss recent clinical developments of selected immunotherapies for ovarian cancer which fulfil the following criteria: (i) they are antibody-based, (ii) target a distinct immunological pathway, and (iii) have reached the clinical trial stage. Specifically, the focus is on Catumaxomab (anti-EpCAM x anti-CD3), Abagovomab, Oregovomab (anti-CA125), Daclizumab (anti-CD25), Ipilimumab (anti-CTLA-4), and MXD-1105 (anti-PD-L1). Catumaxomab has reached phase III clinical trials and exhibits promise with reports, showing that it can cause a significant and sustained reduction in ascites. Phase I-III clinical trials continue to be conducted on the other antibodies, some of which have had encouraging reports. We will also provide our perspective on the future of immunotherapy for ovarian cancer, and how it may be best employed in treatment regimens.

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