

SGO 2014 winter meeting abstracts

Oral Presentations

Session I: Ovarian Cancer

Moderator: Susan Modesitt, MD, *University of Virginia*

Autologous ovarian tumor cells vaccine, modified with the hapten, dinitrophenyl (DNP), in platinum resistant ovarian cancer

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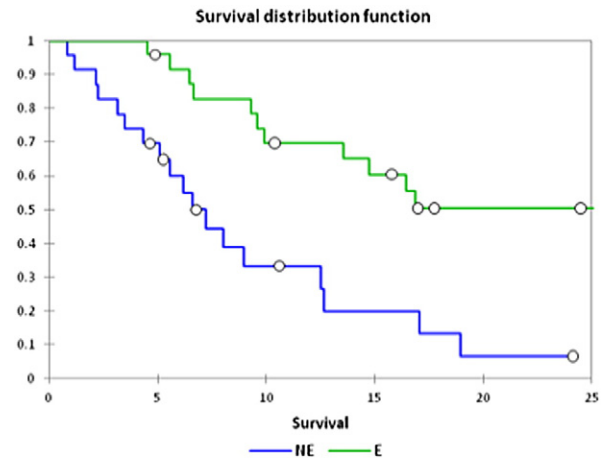
Objectives: Recurrent ovarian cancer is ultimately chemotherapy resistant. We investigated an immunologic treatment using a human cancer vaccine consisting of autologous tumor cells, modified with the hapten, dinitrophenyl (DNP), in platinum resistant ovarian cancer.

Methods: From 12/2008–7/2013, 91 subjects with recurrent platinum resistant ovarian cancer consented to collection of intraperitoneal tumor cells for vaccine preparation during clinically indicated secondary tumor debulking surgery. Each was randomly assigned using a double blind method to receive one of 3 dose levels of DNP modified cells on a 6 month schedule comprised of 8 vaccine injections, low dose cyclophosphamide (300 mg) and BCG adjunct. Adverse events, delayed type hypersensitivity (DTH) to autologous DNP-modified tumor cells, CA125 levels, and survival were recorded. Dose levels remain blinded at the time of this analysis.

Results: Median age was 56(range 41–73); median number of prior salvage regimens was 2(range 0–4). 86 underwent surgery, 70 had tumor sent for vaccine preparation with 51(73%) yielding usable autologous vaccine cells. 26 were enrolled, of whom 25 received at least 7 doses of the autologous vaccine. Vaccine was prepared but not administered to 25 subjects for reasons including: undergoing splenectomy during debulking, subject anxiety and request for additional chemotherapy before vaccine availability, progression before vaccine availability, post-op complications precluding study, physician choice, and others. All toxicities were grade 1–2 except for 6 grade 3 injection site reactions. DTH indicated a T cell mediated immune response to hapten-modified autologous tumor cells in 11/18(61%) of available subjects. In 6 vaccinated subjects, CA125 levels became normal following surgery + vaccine and remained normal throughout the 9-month duration of the protocol. Median overall survival by Kaplan–Meier method after surgery in the vaccinated group (n = 24, 2 lost to FU) was 25.4 months compared to 6.5 months in the vaccine prepared but not administered group (n = 23, 2 lost FU). Among vaccine subjects with 0 or 1 prior salvage chemotherapy regimens 7/13 survived at least 24 months (median 16.2); with 2–4 salvage chemotherapies, only 1/11 did so (median 9.6 months).

Conclusions: This autologous DNP-modified ovarian tumor vaccine, is tolerable, immunogenic, and associated with a longer survival in platinum resistant recurrent ovarian cancer compared to a non-randomized control group.

Abstract 25 – Exhibit A



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Session III: Integrative Oncology

Moderator: Allison Axtell, MD, *Kaiser Permanente Medical Group*

The Charlson Comorbidity Index predicts survival in women with epithelial ovarian cancer independent of surgical debulking status

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Objectives: Our objective is to determine if patient comorbidities impact progression free survival (PFS) and overall survival (OS) in patients with epithelial ovarian cancer (EOC).

Methods: Eligible subjects for this retrospective cohort study included women diagnosed with EOC between 2004 and 2009 who received primary treatment and follow-up at our institution. After IRB approval, records were reviewed for demographics, tumor characteristics, recurrence, survival, and comorbidity as quantified using the Charlson Co-morbidity Index (CCI). The CCI is a validated predictor of hospital mortality and includes 19 separately weighted medical conditions. For our analysis, patients were separated into 3