In the news

IMMUNOTHERAPY SQUARED

Phase I clinical trial data presented at the 2013 American Association for Cancer Research (AACR) meeting support the use of a new combination immunotherapy strategy in patients with advanced ovarian cancer. Lana E. Kandalaft, from the University of Pennsylvania, USA, who presented the study, said "It's not a slam dunk … but the more we do, the more we learn" (*The Philadelphia Inquirer*, 7 Apr 2013).

Patients initially received a personalized antitumour dendritic cell (DC) vaccine, in which tumour antigens present in tumour tissue collected during each patient's surgery were used to activate the patient's own DCs. They also received bevacizumab, which targets vascular endothelial growth factor (VEGF). A clinical benefit was seen in 19 of 31 patients, and eight of these had no measurable disease at the end of the study. One of the eight has remained disease-free for 42 months following vaccination, although it is difficult to say conclusively whether the vaccination was responsible for her response.

The 11 patients who responded to the vaccine but who still had residual disease then underwent adoptive T cell therapy, which seemed to amplify the immune response, as the DC vaccine had already educated the T cells to respond to the tumour antigens. This allowed seven patients to achieve stable disease, and one had a complete response.

Although the trial is still ongoing, Louis Weiner of Georgetown University, USA, who was not involved with the study, noted that it "shows that it's now possible to devise very efficient and complex but feasible combination strategies (starting with) a vaccination that will basically point the immune system in the direction of the tumour" and that this may help "overcome some of the innate resistance mechanisms that cancers use" (*MedPage Today*, 7 Apr 2013).

Sarah Seton-Rogers