Immunotherapy: changing the face of melanoma treatment

Immunotherapy can benefit substantial numbers of patients with malignant melanoma, two landmark trials led at The Royal Marsden and The Institute of Cancer Research, London have revealed.
A Phase III trial led by Dr James Larkin, a Consultant Medical Oncologist specialising in melanoma at The Royal Marsden and a Reader at The Institute of Cancer Research (ICR), showed that a combination of the immune-boosting drugs ipilimumab and nivolumab was significantly more effective at delaying cancer progression than ipilimumab alone.

In 58 per cent of patients, the two drugs combined shrank tumours and stopped the cancer advancing for nearly a year on average. The findings were presented at the 51st Annual Meeting of the American Society of Clinical Oncology (ASCO) and simultaneously published in the New England Journal of Medicine in June.

Dr Larkin said: ?By giving these drugs together, you are effectively taking two brakes off the immune system rather than one, and the immune system is able to recognise tumours it wasn?t previously recognising and destroy them. For immunotherapies, we?ve never seen tumour shrinkage rates over 50 per cent, so this is going to have a big future for the treatment of cancer.?

Halting the progress of melanoma

In another groundbreaking trial, a genetically engineered herpes simplex virus was shown to halt the progression of melanoma. T-VEC is a modified form of herpes that multiplies inside cancer cells and bursts them from within, and stimulates the immune system to destroy the tumour.

It is the first time that a Phase III trial of a viral immunotherapy has definitively shown benefit for cancer patients. Responses to treatment were most pronounced in patients with less advanced cancers and those who had yet to receive any treatment ? showing the potential benefits of T-VEC as a first-line treatment for metastatic melanoma that cannot be removed surgically.

The trial, which was published in the Journal of Clinical Oncology, was led in the UK by researchers at the ICR and The Royal Marsden, and involved 64 research centres around the world.

UK trial leader Professor Kevin Harrington [5], Professor of Biological Cancer Therapies at the ICR and a Consultant Clinical Oncologist at The Royal Marsden, said: ?There is increasing excitement over the use of viral treatments because of their two-pronged attack on tumours ? both killing cancer cells directly and marshalling the immune system against them.?