

Technology Group

3rd November, 2020

“Harnessing our immune system against cancer”

About 20 members attended via zoom this 15th anniversary meeting of the Cheadle Hulme U3A Technology group. Tina Menges and Ian Reid highlighted some of the wide range of topics discussed over the years and remarked that membership had grown as people became more interested in technological matters.

Today’s lecture was given by Associate Professor Fiona Thistlethwaite a consultant and team leader at the Christie Cancer Hospital in Manchester. Her topic was “Harnessing our immune system against cancer”. After briefly discussing the various types of drug therapy (chemo, hormonal, and targeted approaches) Fiona concentrated on the trials in immunotherapy. The objective is to stimulate the body’s natural immune response to further attack the cancer cells. Because some tumours are good at avoiding complete detection, trials have been carried out using anti-presenting cells which modify the T-cell surface to make them more interactive with tumour cells. Using more than one drug usually improves detection, but unfortunately toxicity effects start to increase so it is a trade-off between efficiency and toxicity. Expenses also come into the equation. The latest trials involve adoptive cell therapy in which T-cells are removed from tumour cells, modified (genetically) and expanded outside the body before being returned to the patient. There have been some spectacular successes to date, but they have been with specific tumours: the aim now is to develop an affordable standard treatment for all types of tumour.

Roger Perry. Nov 2020