

Proposed Ovarian Cancer Research Project

Background

The ICVI funded research team, under the direction of Professor Angus Dalgleish, has a positive history of developing immunotherapeutic products that are used clinically to good effect and radically altering survival in selected patients with extremely poor prognosis.

To date the team's focus has been on malignant melanoma which, like ovarian cancer, frequently has a poor prognosis for patients.

A study carried out recently by the ICVI team on melanoma patients has shown that those patients who don't respond well to treatment have high levels of inflammatory markers in their blood. Research previously carried out has shown that chronic inflammation suppresses immune responses in patients. As a result they are much less likely to respond well to vaccines or check point inhibitor drugs (CPI's).

Ovarian cancer trial

In the light of the above observations we would like to run a trial on ovarian cancer patients, in collaboration with Dr Fiona Lofts, Consultant Oncologist at St George's Hospital. Dr Lofts sees over 50 new patients each year with advanced ovarian cancer.

We want to see if the inflammatory markers which predict outcome in melanoma are also relevant to ovarian cancer patients.

This project would measure the inflammatory and immune markers in those of Dr Loft's ovarian cancer patients who are about to have standard chemotherapy and to monitor the effect of treatment. In non-responding patients we will offer the following:

- An immune modulator drug called IMM-101 which has been used very successfully in melanoma patients, some of whom have responded completely.
- An anti-inflammatory agent to see if the inflammatory markers drop, and then document the effect of repeat or second line chemotherapy.

Professor Dalgleish has already observed dramatic clinical responses in patients with ovarian cancer who have received IMM-101. Several patients have shown reduced progression, one with a complete response to her advanced ovarian cancer for over two years.

This trial will use cutting-edge proteomics technology and mass spectrometry used to identify inflammatory markers. In addition we are going to collaborate with our US colleagues who have confirmed our initial results in melanoma and who have the latest developments in this technology.

We hope that this further research will both define the ovarian cancer patients who are most likely to benefit from combined immunotherapy with chemotherapy and to assess more systematically the impact of such immunotherapy.

Costs:

This is a three year project, designed by Professor Angus Dalglish and managed by Dr Alberto Fusi.

Associated costs (for the three year project)

	Salary (inc employer costs)	Overhead cost	Consumables	Total
Clinical Registrar	150000	37,500		187500
Laboratory Technician	90,000	22,500		112500
Data manager	60,000	15,000		75,000
Research nurse	60,000	15,000		75,000
Proteomic costs			150,000	150,000
				600,000