Svetlana Cherepanoff

Technical Assistance Grant 2009

Award/Grant Received: Technical Assistance Grant
Year Received: 2009
Amount: $1000
Project Title: Tumour-associated macrophages and uveal melanoma cell expression of melanoma inhibitory activity (MIA) in human eyes
Relevance/utility: This grant enabled me to undertake independent research as a trainee by providing the funding for the antibodies and the detection method reagents. Uveal melanoma is the commonest primary intraocular cancer in adults. Mortality is high - up to 60% for larger tumours-and there is no current cure. Death is caused by tumour metastasis. Mechanisms by which this happens are unclear and the subject of intense research. MIA is a protein involved in cell-matrix interactions. High MIA levels in the serum of uveal melanoma patients is associated with metastatic disease. The project examined whether increased numbers of tumour infiltrating macrophages might be associated with increased tumour MIA expression, a proof of principle observation that would drive future research.
Impact: The project allowed me to have direct experience leading a small research project, troubleshooting technical difficulties, digitising microscopic slides and quantifying results. An undergraduate research student assisted in the analysis, giving me important research supervision experience. The results comprised the preliminary data upon which a larger study was conducted, currently being prepared as a manuscript. Below are some images of the findings.

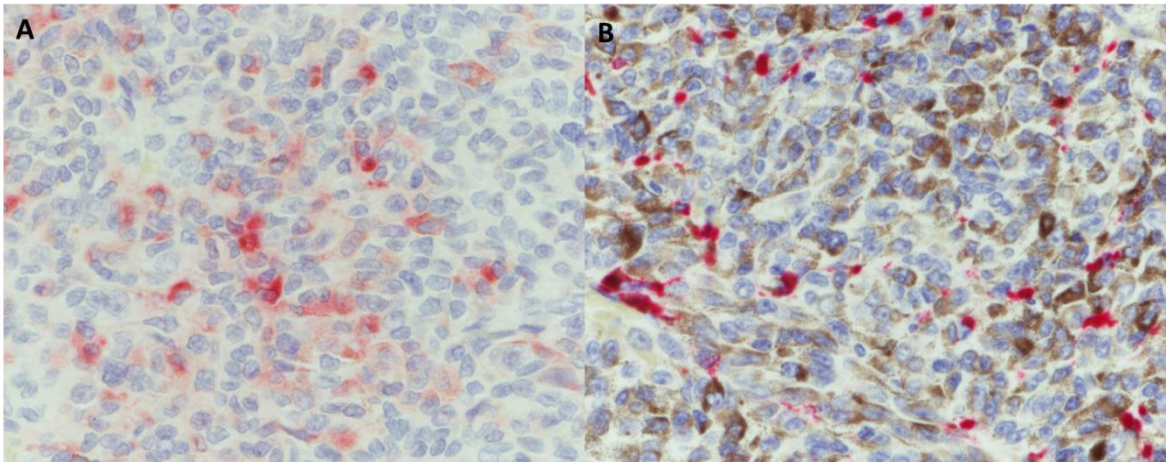

Figure A. Uveal melanoma tumour cells which are expressing MIA. Figure B. Tumour infiltrating macrophages identified by CD68 expression. (Red chromogen, haematoxylin nuclear stain. Magnification x200)