Haematologic Malignancies

Why we focus on Haematologic Malignancies
Leukaemia and lymphoma represent the most common cancers that occur in younger patients, with lymphoma their most common cause of cancer death, and, therefore, these malignancies have a major impact in society. Even in adults, collectively they are the fourth most common form of cancer.

Although there has been significant progress, such that some are now curable, the outcome can be dismal for those patients who fail to respond to standard therapy. Work remains to be done to understand the molecular basis for lymphoma, leukaemia and myeloma, to identify targets for novel targeted therapies and to identify biomarkers of prognosis and response to treatment.

What we do
• We have groups of investigators working on acute and chronic leukaemias, non-Hodgkin’s lymphoma, Hodgkin’s lymphoma, and multiple myeloma.
• We are investigating the genetic mutations involved in development of leukaemias and lymphomas and their progression and transformation to more aggressive types.
• We are focusing on the identification of the cancer-initiating or stem cell that gives rise to these cancers.
• We are investigating the mechanism of action of novel agents to identify and optimise new treatment approaches, including immunotherapy and novel targeted treatment approaches in clinical trials.
• We are investigating the role of the cancer cell in the development of unique microenvironments that support tumour growth.
• We are investigating the role of stem cell transplantation to improve outcome in patients with high risk disease.
• We have access to a large biobank of patients’ leukaemia and lymphoma cells and biopsies that is linked to the clinical outcome of these patients.
Key Publications

- Wrench et al. SNP rs6457327 in the HLA region on chromosome 6p is predictive of the transformation of follicular lymphoma. Blood. 2011; 117: 3147-3150

Who does the research

Prof. John Gribben  Tumour microenvironment, immunotherapy
Dr. Jeff Davies  Immunotherapy, allogeneic stem cell transplantation
Dr. Gabriella Ficz  Epigenetics and stem cells
Dr. Jude Fitzgibbon  Molecular pathogenesis of lymphoma, epigenetics
Dr. Li Jia  Apoptosis and autophagy in leukaemia & lymphoma
Dr. Rifca LeDieu  Immunotherapy of leukaemia

Major Funders

- Cancer Research UK
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- Leukaemia & Lymphoma Research Fund
- Medical Research Council
- US NIH

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