



Laboratory for Molecular Haemato-Oncology (LMH) at King's

Molecular techniques are powerful tools for the identification and quantification of molecular abnormalities/markers for diagnostic, prognostic and monitoring purposes in haematological malignancies. They play a vital role in achieving the optimal management of patients with these cancers.

Despite significant improvements in survival rates, relapse remains the main cause of treatment failure in myeloid leukaemias, even in patients with good prognostic indicators. Minimal residual disease (MRD) monitoring plays an important role in the management of leukaemic patients, including assessment of the effectiveness of treatment and prediction of relapse at an early stage, which may enable modification of treatment to prevent the onset of haematological relapse.

For patients who receive allogeneic stem-cell transplants, chimerism analysis is of great value in assessing engraftment and disease prognosis post transplantation. Measuring Chimerism is also useful for directing therapies such as (donor lymphocyte infusion) DLI

The LMH at Kings College Hospital has developed a large number of sensitive molecular protocols to detect and quantify molecular markers such as PML-RARA, AML1-MTG8(ETO), CBFB-MYH11, MLL and BCR-ABL translocations and NPM, FLT3 ITD, ABL kinase, JAK2 exon 14 (V617F) and 12 exon 12 and c-MPL w515 mutations.

We also offer Immunoglobulin VH clonality and mutation quantification for CLL prognosis to complement the tools available in CLL diagnosis, prognosis and MRD monitoring.

CONTACT

Dr Nicholas Lea tel: 020 7848 5821 / lab 5809 / fax 5820 email:nicholas.lea@kch.nhs.uk