

# Chromoprobe Multiprobe®-ALL System

## Prognosis and Disease Management

The Chromoprobe Multiprobe ALL Panel has been designed to detect up to eight different FISH probes on a single slide in a single hybridisation experiment. It can be used to determine genotype in leukaemia patients and aid in prognosis and treatment.

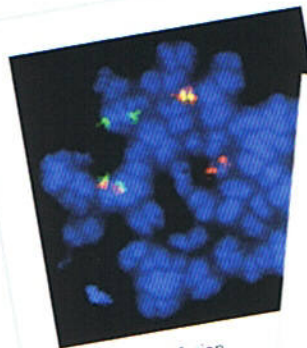
Knowledge of the precise rearrangement involved in the disorder has been shown to have important implications for the prognosis for the patient and can thus provide vital diagnostic and patient management information. For ALL, the importance of karyotype as a predictor of clinical outcome has been known since 1978 which has led to cytogenetics, and more recently FISH, to be important aspects of ALL treatment trials. This important correlation has led to the ALL panel being designed to help fill the gap between diagnosis and prognosis. In so doing, it may help to direct and manage the treatment of this important and relatively common disease.

Acute Lymphoblastic Leukaemia is most common in the young, especially in childhood. It represents 23% of cancer diagnoses among children younger than 15 years of age and occurs at an annual rate of approximately 31 per million. In young adults, the median age is around 30 whilst in children the incidence is higher between the ages of 2 and 5. The disease is classified using the French-American-British (FAB) classification system based in the morphological characteristics of the immature, lymphoid cells that accumulate in the bone marrow and peripheral blood. The system classifies cells as either L1, L2 or L3 and each one has a series of characteristic chromosome rearrangements associated with them.

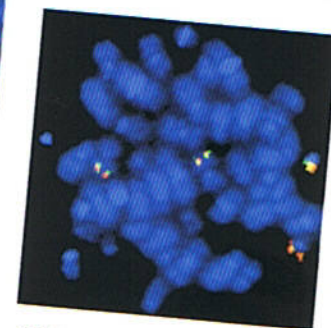
Cytocell's Chromoprobe Multiprobe ALL Panel has been designed to detect rearrangements that occur primarily in B-cell lineage ALL, though some T-lineage markers have been included. In addition, in common with the CLL Panel, the strategy has been developed to give the maximum amount of information from cells at interphase and in some cases is capable of detecting chromosome rearrangements that are undetectable using standard cytogenetics.

## Innovative design, leading technology

- Picks up translocations involving MLL gene which occur in 85% of paediatric ALL
- Detects TEL(ETV6)/AML1 found in 21% of paediatric cases
- Detects Aneuploidy which occurs in 30% of ALL cases. The number and identity of additional chromosomes is of huge prognostic value
- E2A probes for t(1,19) detect 20% of patients undetectable by conventional tests
- IGH and MYC identifies patients with Burkitt Lymphoma like ALL
- Rapid method on a single slide
- Low cost per probe



BCR/ABL Dual fusion probe on a Philadelphia positive patient



E2A/MLL Break apart probes on a normal cell