UNITID INTRODUCES THE SCREENING OF MYELOGENOUS LEUKAEMIA BY USE OF XPERT BCR – ABL MONITOR

UNITID recently started screening for the Philadelphia chromosome by use of XPERT BCR-ABL on 22nd September 2014.
The Xpert BCR-ABL Monitor Assay is a real-time RT-PCR (reverse transcription-polymerase chain (Reaction) assay intended as an aid in the monitoring of the BCR-ABL mRNA transcript in peripheral blood of patients with chronic myelogenous leukemia (CML).

The Xpert BCR-ABL Monitor Assay is an automated test for quantifying the amount of BCR-ABL transcript as a ratio of BCR-ABL/ABL. The assay is performed on Cepheid GeneXpert Instrument Systems. The systems consist of an instrument, computer, and preloaded software for running tests and viewing the results. The systems require the use of single-use, disposable GeneXpert cartridges that hold the RT-PCR and PCR reagents and host the RT-PCR and PCR processes

CML is one of the most common hematologic malignancies and accounts for 15-20% of all cases of leukemia. The incidence of CML is approximately 1.6/100,000, meaning 1 out of every 635 men and women will be diagnosed with CML during their lifetime. More than 95% of patients with CML have the distinctive Philadelphia chromosome (Ph1) that results from a reciprocal translocation between the long arms of chromosomes 9 and 22.2 The translocation involves the transfer of the Abelson or ABL1 (ABL) gene on chromosome 9 to the breakpoint cluster region (BCR) of chromosome 22, resulting in a fused BCR-ABL1 (BCR-ABL) gene. The fusion gene produces BCR-ABL, a tyrosine kinase with deregulated activity that plays a key role in the development of CML.3

The clinical utility of monitoring BCR-ABL mRNA levels by RT-PCR has been established in the International Randomized Study of Interferon and STI571 (IRIS),in which patient results were normalized under a standardized baseline common to the three laboratories participating in the trial. Subsequently, it was proposed that BCR-ABL monitoring assays conform to an international scale (IS) and should be anchored to two values defined in the IRIS trial, thereby allowing results to be expressed on a common scale. The first of these is the standardized baseline which represents 100% IS, and the second is a prognostically favorable 3-log reduction from the standardized baseline which represents 0.10% IS. In this fashion, IS-standardized molecular testing can provide an essential aid for clinicians to manage their CML patients' disease.
Speaking during the launch ,Prof Mwanda ,the Director of UNITID and also the prof of Haematology and Blood Transfusion noted that this is a breakthrough in the management of Leukaemia since this is one of its kind in East and central Africa.The test is expected to cost Ksh !6000.This gives a package of the Bone marrow aspirate ,Full blood count and BCR-ABL.The results are ready within 3 hours of sample reception.
Collect blood specimens in EDTA tubes, sodium citrate tubes, or PAX gene R Blood RNA tubes. Do not use heparin as the anticoagulant because it can inhibit the PCR reaction. Store blood specimens at 2-8 oC and the test should be completed within 48 hours after collection. For more info contact UNITID at 0716656629, or Fred Mose 07380410473