

**From research to the clinic: lessons from *BCR ABL* dosage in the tyrosine kinase inhibitors era**

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Standardisation and external quality controls are part of the routine in clinical biochemistry since years. International standards and external quality control rounds are absolutely warranted for any new biological marker for its worldwide use into the clinics. It is done for 40 years in biochemistry but such approach is still in its infancy for molecular biology tests. Taking the measurement of *BCR ABL* transcripts (M-BCR) as a model, we first developed a standardisation effort and external quality controls through the European Against Cancer (EAC) network then we developed freeze dried cells that can be sent worldwide at room temperature. *BCR ABL* is present mainly in patients having a chronic myeloid leukemia (CML). This naturally deadly disease has seen its prognostic revolutionized with the use of tyrosine kinase inhibitors targeting the *BCR ABL* protein. Now there is an international consensus to adapt the treatment based on the dosage of *BCR ABL* gene expression by real time PCR. We participated to the development of an international standard based on freeze dried cells which has been validated by the World Health Organization last year. During the meeting will be reported our efforts in this field at the regional, national and international levels and how biotech companies can participate to the effort of follow up improvement for health care patients.

**Biography**

Dr. Jean Gabert, Professor of Biochemistry and Molecular Biology, Faculty of Medicine, Méditerranée University, Marseille (France).