

# THE IMPORTANCE OF CLOSE MOLECULAR MONITORING IN A CASE OF CHRONIC MYELOID LEUKEMIA WITH NEGATIVE EVOLUTION IN THE ERA OF TYROSIN KINASIS INHIBITORS.

*Cătălina Hațegan, Hortensia Ioniță, Ioana Ioniță, Dacian Oroș, Ema-Cristina Budai, Mirela Nedelcu, Liliana Cornea*

Department of Hematology, Emergency Clinical Hospital, Timisoara, Romania

**Introduction:** Chronic Myeloid Leukemia (CML) is a proliferation of the polynuclear granulocytes associated with the apparition of the Philadelphia chromosome (Ph). From the clinical point of view CML is characterized by splenomegaly, paleness, headaches, sweating and recurrent infections. The treatment for CML are inhibitors of the tyrosin kinasis. The prognostic for CML is favorable because of the appearance of the tyrosin kinasis inhibitors

**Case presentation:** We present the case of a 60 years old patient, diagnosed in April 2008 with CML chronic phase Ph1+ which was given citoreductory treatment with Hydroxiurea until June 2008 when he starts treatment with Glivec. The patient presents complete cytogenetic remission at 6 months and major molecular remission at 1 year from beginning of treatment but in March 2010 he loses the Ph1+ cytogenetic response and presents the pathological clone +8 (14%). He starts treatment with Dasatinib with favorable evolution and complete cytogenetic and molecular remission at 6 months after the start of treatment. At the monitoring from June 2015 it is suspected a molecular relapse and is considered necessary cytogenetic monitoring in view of further treatment.

**Conclusions:** The treatment with tyrosin kinasis inhibitors is intended to obtain complete cytogenetic and molecular response. Our patient obtained this response only for short periods of time but did not maintain this response, therefore we recommend a close cytogenetic and molecular monitoring of patients with CML in view of optimal treatment.