

# **MONITORING PATIENTS WITH CHRONIC MYELOID LEUKEMIA: BETWEEN PRACTICE AND THEORY.**

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Chronic myeloid leukemia (CML) is a malignancy in which huge progress has been made - the introduction of therapy with tyrosine kinase inhibitors (TKIs) have dramatically improved survival rates at 10 years. Unfortunately, CML patients who have evolution towards accelerated phase (AP) and blast phase (FB) have a poor prognosis - modern therapy for these patients brought no progress, except for those eligible for bone marrow allogeneic transplantation. For this reason, the only possible strategy, at this time, is the decrease the risk of progression to FA/FB.

The clinician who treats patients with CML has some questions to answer:

- What is the first line therapy? At this moment there are available three commercially preparations of TKIs: imatinib, nilotinib, dasatinib. There are studies that indicate a marginal benefit for second-generation TKIs on the overall survival and progression free survival. But the cost difference is important: the second generation of TKIs are more expensive by 30% to 100% compared to imatinib. The introduction of generic imatinib makes this difference be very high.

- What is the optimum time to change the therapeutic line? What is the best tool for monitoring of treatment response? How deep must be the response to treatment? Can we talk about stopping TKI therapy, outside of clinical trials? Can we talk about treatment free remission ? NCCN and ELN guidelines recommend evaluating at 3 and 6 months of starting therapy with TKI. These guidelines recommend early switch of TKI if the transcript bcr / abl not fall below 10%. There are enough data for this strategy? What about patients who achieved cytogenetic complete remission but have not achieved major molecular response?

This presentation aims to answer these questions.

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