TKI-related cardiovascular toxicities in Europe

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Chronic myeloid leukemia (CML) is a model for cancer disease due to the fact that a unique translocation determines the disease. With the introduction of tyrosine kinase inhibitors (TKI) to treatment, the disease has changed from a fatal one to a chronic disease in the majority of patients. The life expectancy of patients with CML receiving TKI treatment is nearly comparable now to that of the general population. A significant proportion of patients with CML in chronic phase achieve a deep molecular response determined via BCR-ABL1 transcript levels measured with real-time quantitative polymerase chain reaction (RQ-PCR) to evaluate residual disease.Treatment strategies not only comprise overall survival anymore but achievement of deep molecular remission (DMR) with even the possibility of successful attempt to stop therapy (treatment-free remission, TFR). However, most reports on treatment in CML focus on efficacy. In contrast, adverse events (AEs) are often reported as infrequent, and manageable, but they are increasingly important as therapy is lifelong and multiple TKIs are available. For this reason, it is important to understand, manage and prevent adverse events also not to jeopardize the achievemnt of treatment goals. In this context, attention must be given to comorbidities and drug interactions. Especially cardiovascular toxicities which came up with the introduction of 2nd generation TKI, are of great importance as they can hamper outcome in CML patients. The lecture will discuss actual data and results of CML studies with the focus on cardiovascular toxicities.