

Introducing the HemaSphere Controversies Series

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Diagnostics, treatment, response evaluation, and follow-up of hematologic diseases have changed considerably in recent years. Novel diagnostic techniques and improved staging tools allow an accurate biological and pathological characterization and a precise risk group allocation in various diseases.^{1–3} The increasing knowledge of crucial pathways involved in onset, maintenance and progression of hematologic diseases has resulted in the development and introduction of targeted therapies such as monoclonal antibodies,⁴ antibody-drug conjugates,⁵ kinase inhibitors,⁶ CAR-T cells^{7,8} and others. These drugs are given either alone or in combination with conventional chemotherapy and have significantly improved the prognosis of many malignant hematologic diseases.^{9,10} In a number of malignancies, response assessment and follow-up are no longer restricted to physical examination, evaluation of standard laboratory parameters and radiological examinations, but also include the detection of circulating tumor DNA or minimal residual disease in case an appropriate marker is available.^{2,11} Hence, the rapid development in both, basic and clinical research has led to unquestionable improvements for a multitude of patients, but also generated novel questions and controversies with regard to diagnostics, therapy and follow-up.

In an attempt to address the current challenges in the field of hematology, HemaSphere has launched an article series termed “Controversies in Hematology”.¹² Each article will be written by a panel of experts from different cooperative groups focusing on a particular disease. In the introduction part of these articles, the current knowledge obtained from recent prospective studies is described briefly. Thereafter, the most relevant unsolved questions are presented and discussed. Those may include the

choice of the optimal diagnostic and staging procedures, for example, genetic examinations in leukemia and imaging in lymphoma.^{1,2} Factors influencing the choice of first-line treatment and salvage approaches, such as stage at diagnosis, age, risk-benefit ratio and others, as well as the pros and cons of different treatment options in the respective clinical situation (first-line treatment, salvage treatment, consolidation treatment) are being discussed more extensively. Of note, the role of novel agents is highlighted as it is often not defined sufficiently. Last, open questions regarding follow-up examinations are addressed, including the time interval between follow-up visits, the extent of each follow-up visit and possible novel ways to optimize the detection of disease recurrence and therapy-related late effects. Taken together, articles of the HemaSphere controversies series will provide a comprehensive overview of the most relevant issues discussed in the field of hematology.

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