EHA2025

Congress Review

Review of the European Hematology Association (EHA) 2025 Congress

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The theme for this year's Congress was "Borderless Hematology", highlighting the importance of providing high-quality care to all haematology patients

THE 30th EUROPEAN Hematology Association (EHA) Congress was held in the beautiful city of Milan, Italy from the 12th–15th of June 2025. The theme for this year's Congress was "Borderless Hematology", highlighting the importance of providing high-quality care to all haematology patients. As members of the society emphasised, the word 'borderless' suggests limitless possibilities, encouraging us to envision a world where knowledge and access to treatment is shared regardless of physical or geographical constraints.

During his opening speech, António Almeida, the EHA President, paid tribute to the late Professor Jacques-Louis Binet, who sadly passed away in December 2024. He was internationally recognised for developing the prognostic classification of chronic lymphocytic leukaemia, which bears his name and continues to be used in clinical practice to this day. "Today we celebrate the extraordinary legacy of a visionary who transcended boundaries and steered us into the future."

Martin Dreyling, Scientific Program Committee Chair, then took to the stage to present the programme planned for the EHA2025 Congress. He introduced a newly launched format, with scientific sessions now spread across 3.5 days. This structure allows for a greater number of sessions, extended time for each, and reduced topic overlap. In total, more than 575 sessions were offered in this year's programme, a testament to EHA's role as a leader in haematology and the Congress's significance as a global forum for collaboration and networking. Additionally, over 4,000 abstracts were submitted from across the globe, covering basic, translational, and clinical areas of research.

The Grants Ceremony followed, presented by Dominique Bonnet (University College London, UK), which highlighted innovative research from more than 17 countries, with a noticeable increase in female awardees. Almeida subsequently presented the prestigious EHA Clinical Excellence award, recognising extraordinary achievement and commitment to the clinical and clinical-research field of haematology.

This year's recipient, Khaled Musallam, Thalassemia & Sickle Cell Center, Burjeel Medical City, Abu Dhabi, UAE, delivered an insightful talk on his work in non-transfusion-dependent thalassemia. Finally, Alberto Orfao (University of Salamanca, Spain), the recipient of the EHA Research Excellence Award, gave a presentation on the early detection and clinical relevance of small clones of haematopoietic cells.

Throughout the Congress, attendees experienced a rich array of keynote lectures, poster presentations, and satellite symposia, all designed to foster global collaboration and ignite new ideas. Of particular note were the four guideline sessions for peripheral T cell lymphoma, multiple myeloma, mild and moderate haemophilia A and B, and aggressive large B cell lymphoma. These guidelines are covered in greater detail in the guidelines section of our Congress review.

In conclusion, the 30th EHA Congress provided a valuable platform for sharing the latest developments in haematology and encouraging collaboration across the global community. The range of sessions, research contributions, and opportunities for discussion highlighted the ongoing commitment to improving patient care and advancing the field. The Congress in Milan, Italy, reflected the importance of continued international cooperation and knowledge exchange in shaping the future of haematology.

Guidelines Overview

At the EHA2025 Congress, new guidelines across multiple haematologic conditions introduced refined risk classifications, updated diagnostic tools, and evolving treatment strategies. Emphasising precision, personalisation, and evidence-based care, these updates reflect ongoing advances in research and clinical practice.

Updated European Hematology Association-European Myeloma Network Recommendations for Multiple Myeloma

THE EHA2025 Congress saw the European Myeloma Network (EMN) and EHA jointly present comprehensive new guidelines for the management of multiple myeloma.[1] Developed by a panel of 34 European myeloma experts, the guidelines incorporate data through May 31st 2025, reflecting both high-level evidence and expert consensus following extensive review rounds.

A major advancement is the redefinition of high-risk multiple myeloma. Translocations t(4;14), t(14;16), and t(14;20) are no longer considered high-risk if they occur alone, they only qualify as high-risk when co-occurring with 1q gain/amplification or monoallelic 1p deletion. Similarly, 1q gain alone is no longer sufficient for high-risk classification. High-risk now includes del(17p) in >20% of plasma cells, *TP53* mutations, biallelic 1p32 deletions, and high β2-microglobulin with normal renal function.

Key diagnostic updates include the use of next-generation flow or sequencing for detecting clonal plasma cells and assessing minimal residual disease (MRD).

Urine testing is now limited to diagnosis and relapse settings, with 24-hour urine collection no longer required for routine follow-up. MRD testing is now integral for monitoring treatment response, and MRD negativity must be confirmed every 12 months for sustained status. Imaging has evolved to include either PET-CT or diffusion-weighted MRI, with the latter favoured for its bone marrow sensitivity.

For high-risk smouldering myeloma, daratumumab (Dara) monotherapy for 3 years may be considered, though regulatory approval is pending. In transplant-eligible patients, quadruplet induction regimens, such as Dara or isatuximab

“Key diagnostic updates include the use of next-generation flow or sequencing and assessing minimal residual disease”

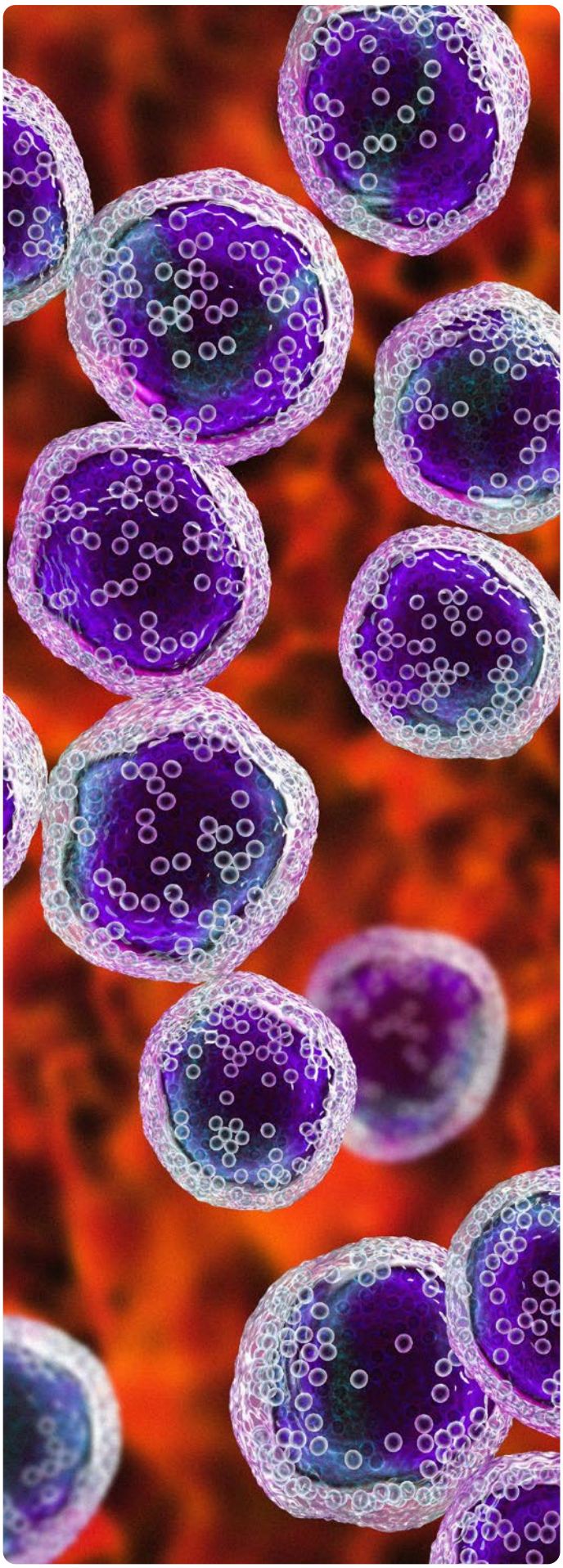
(Isa) with bortezomib, lenalidomide, and dexamethasone (VRd), are now recommended, followed by transplant, consolidation, and maintenance. Dara-lenalidomide maintenance can be stopped after 24 months if sustained MRD negativity is achieved. The PERSEUS trial showed that Dara-VRd nearly doubled MRD negativity, and extended median progression-free survival to a projected 17 years versus 7.3 years with VRd alone. Similar benefits were shown with Isa-VRd in a German study.

For non-transplant-eligible patients, quadruplets (e.g., Isa-VRd) are preferred over triplets. In patients who are frail, Dara with lenalidomide and dexamethasone remains standard, but Dara with lenalidomide without dexamethasone shows promise in reducing toxicity while maintaining efficacy.

> **MRD negativity must be confirmed every 12 months for sustained status**

Treatment after first relapse depends on prior anti-CD38 exposure. For patients who are lenalidomide-refractory but anti-CD38-naïve, options include Dara plus carfilzomib and dexamethasone, Isa plus carfilzomib and dexamethasone, ciltacabtagene autoleucel (cilta-cel) CAR-T cell therapy, or belantamab combinations. Recent approvals of cilta-cel and belantamab with bortezomib and dexamethasone show significantly improved progression-free survival and MRD rates.

In later lines, CAR-T therapies (cilta-cel, idecabtagene vicleucel) and bispecifics (teclistamab, elranatamab, linvoseltamab, talquetamab) show high efficacy, especially when sequenced appropriately. Importantly, CAR-T efficacy diminishes if administered after bispecifics or antibody drug conjugates, thus, sequencing remains a key challenge. Data support giving CAR-T before B cell maturation antigen-targeted bispecifics.



New European Society for Medical Oncology-European Hematology Association Clinical Guidelines for Peripheral T Cell Lymphomas

THE EHA2025 Congress saw the European Society for Medical Oncology (ESMO) and EHA jointly present comprehensive new guidelines for the management of peripheral T cell lymphomas (PTCL).

Francesco d'Amore, Aarhus University Hospital, Denmark, emphasised the significant evolution seen over the past decade, not only in therapeutic approaches, but also in diagnostic tools and our understanding of disease biology.

> **These updates reflect a rapidly evolving landscape, and underscore the importance of precision, research, and international collaboration in improving outcomes for patients with PTCL**

The revised guidelines are structured using a matrix that categorises first-line and relapsed/refractory treatments across nodal, extranodal, and leukaemic PTCL entities. Crucially, the guidelines stress the importance of enrolling patients, especially those with less common subtypes, into clinical trials.

Stem cell transplantation continues to play a central role. Autologous transplantation is generally recommended in the first-line treatment for nodal PTCL, while allogeneic transplantation is considered for relapsed disease or more aggressive extranodal forms. A landmark German-French trial, published in both 2019 and 2024,[2,3] compared autologous and allogeneic stem cell transplantation in PTCL. While the study found no statistically significant difference in overall survival or event-free survival between the two approaches, it did reveal notable contrasts in relapse risk and treatment-related mortality. Autologous transplant had a treatment-related mortality of 0% in 2019 and 3% in 2024, compared to 31% for allogeneic transplant in both years. Conversely, the relapse risk was higher with autologous transplantation (36% in 2019 and 55% in 2024), while it remained much lower with allogeneic transplantation, at 0% and 8%, respectively. These findings underscore the trade-off between reduced relapse risk and higher treatment toxicity with allogeneic transplantation. From these findings, the authors concluded that allogeneic stem cell transplantation is the recommended treatment choice for younger, treatment-eligible patients with relapsed/refractory PTCL, whilst allogeneic stem cell transplantation is generally not recommended as part of first-line consolidation.

Referring to the ESMO-EHA clinical practice guidelines for PTCL, D'Amore recommended that, at diagnosis, a PET-CT is the preferred imaging modality for all nodal and extranodal (non-leukaemic) PTCLs. Moreover, in all cases, a bone marrow biopsy is recommended for accurate staging, and a rebiopsy is recommended at relapse or progression. Finally, for nodal PTCL, the International Prognostic Factor Index is still the preferred prognostic tool.

New therapies also feature prominently in the updated guidance. Oral azacitidine has shown encouraging results in the ORACLE trial,[4] and checkpoint inhibitors, particularly when combined with chemotherapy, are demonstrating high complete response rates in extranodal natural killer/T cell lymphomas.[5] The guidelines also include novel treatment strategies for specific subtypes, such as enteropathy-associated T cell lymphoma[6] and breast implant-associated anaplastic large cell lymphoma.

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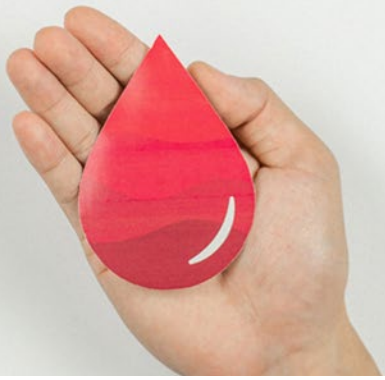

Overview of the Forthcoming Guidelines on Mild and Moderate Haemophilia A and B

THE EHA2025 Congress session on the forthcoming European Association for Haemophilia and Allied Disorders (EAHAD)-EHA recommendations for mild and moderate haemophilia A and B delved into the guideline development process, key clinical questions, and the main topics that will be covered in upcoming guidelines.[7]

Over 20% of patients with mild or moderate haemophilia A or B met the criteria for severe bleeding disorders based on clinical phenotype, not just factor levels.

The session began with a description of the methodology used to develop the guidelines, with a systematic approach based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses framework. The panel identified four major domains for clinical questions that the guidelines will be based on: women's issues (including prevention of postpartum haemorrhage, anaesthesia management, and heavy menstrual bleeding); surgery and procedures (covering the management of minor/major surgery, tooth extraction, and the duration of haemostatic therapy); treatment (such as the role of DDAVP trials, the management of non-severe bleeding, and frequent bleeding episodes); and general management (with a focus on genetic investigations for asymptomatic carriers).

For each domain, the panel formulated specific clinical questions using the Population, Intervention, Comparator, Outcome method. For example, in patients with mild or moderate haemophilia A undergoing minor surgery, the team compared DDAVP plus antifibrinolytics versus replacement therapy, analysing outcomes such as bleeding severity, adverse events, and inhibitor development.

A comprehensive literature search with 2,202 papers revealed that over 20% of patients with mild or moderate haemophilia A or B met the criteria for severe bleeding disorders based on clinical phenotype, not just factor levels. This finding supports the need for a new classification system that incorporates both clinical phenotype and factor levels, recognising the dynamic nature of disease severity.

The session also highlighted ongoing work to address gynaecological and obstetric bleeding in women and girls, including recommendations for managing heavy menstrual bleeding with hormonal therapy, DDAVP, or replacement therapy based on individual response and severity.

Based on the research done by the panel, the forthcoming recommendations aim to refine diagnosis, personalise management, and improve outcomes by integrating clinical presentation with laboratory measures in mild and moderate haemophilia A and B.

European Hematology Association Guidelines for Large B Cell Lymphomas

At the EHA2025 Congress, Catherine Thieblemont, Hôpital Saint-Louis, Paris, France, presented the new EHA guidelines for large B cell lymphomas (LBCL) on behalf of a multidisciplinary panel of 23 European haematology experts.[8]

The group conducted a rigorous systematic review of the literature using the Grading of Recommendations Assessment, Development and Evaluation framework to establish evidence-based recommendations. The guidelines will be updated biennially, with treatment algorithms reviewed annually on the EHA website.

The new guidelines stress the importance of expert haematopathology, with full immunohistochemistry and molecular profiling for accurate diagnosis, particularly in detecting high-risk subtypes such as double-hit lymphomas. While cell-of-origin classification (Germinal Centre B cell versus Activated B cell) remains useful, it holds no current therapeutic consequence. Genetic profiling, although not yet routine, is deemed increasingly crucial.

PET-CT is now firmly established as the gold standard for staging, surpassing bone marrow biopsy in detecting extranodal involvement. The International Prognostic Index (IPI) remains essential, with central nervous system (CNS)-IPI strongly recommended for risk-adapted therapy. Novel metrics such as metabolic tumour volume, distance maximum, and circulating tumour DNA offer superior prognostic insights.

Supportive care is highlighted, with cardiac and osteoporosis assessments and frailty evaluations encouraged, especially in

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elderly patients. Clinicians are urged to ensure that patients receive clear, jargon-free information and have their preferences considered.

Treatment recommendations vary by risk profile. For fit patients under 80 with no risk factors, R-CHOP21 for 4–6 cycles remains standard, depending on tumour size. For higher-risk cases, Pola-R-CHP is preferred. PET-based response assessment using the Deauville scale is central to therapy guidance.

Special populations, including those with CNS relapse risk, primary mediastinal or testicular lymphomas, intravascular LBCL, and elderly or frail patients, require tailored approaches. Notably, CNS prophylaxis strategies have shifted away from intrathecal therapy towards high-dose methotrexate when warranted.

Post-treatment care focuses on survivorship, end-of-treatment consultations, limited imaging in patients who are asymptomatic, cardiac monitoring, and addressing long-term effects such as fatigue and neuropathy. Psychological support and lifestyle interventions, such as smoking cessation, are also emphasised.

These comprehensive, regularly updated guidelines aim to enhance diagnostic accuracy, personalisation of therapy, and long-term patient wellbeing in LBCL.

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8. Catherine Theiblemon. Overview of guidelines. EHA guideline on the management of aggressive large B-cell lymphomas: first line and beyond. Presentation p-571-2. EHA Congress, 12-15 June, 2025.

Awards Summary

The 2025 EHA Congress Awards honoured outstanding contributions across clinical care, research, education, and advocacy in haematology. Recognitions included achievements in scientific publishing, mentorship, innovation, and the work of early-career professionals.

Opening Ceremony Awards

EHA Clinical Excellence Award:
Khaled Musallam
Burjeel Holdings, Burjeel Medical City, Abu Dhabi, United Arab Emirates

EHA Diversity, Equity, and Inclusion Award
Anna Schuh
University of Oxford, UK

EHA Education & Mentoring Award
Jan Cools
KU Leuven, Belgium

Young EHA Award:
Mandy Lauw
Erasmus Medical Center Rotterdam, the Netherlands

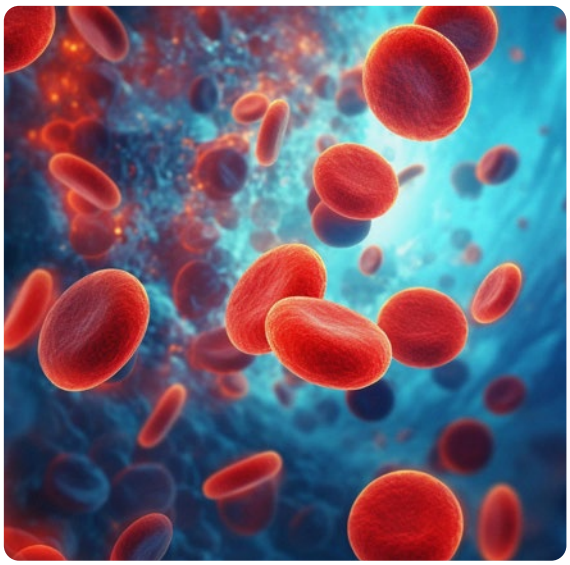
EHA Research Excellence Award
Alberto Orfao
Universidad de Salamanca, Spain

Hemasphere Awards 2025

> Top Cited Article (Clinical): Kai Rejeski et al.
Title: An International Survery on Grading, Diagnosis, and Management of Immune Effector Cell-Associated Hematotoxicity (ICAHT) Following CAR-T cell Therapy on Behalf of the EBMT and EHA

> Top Cited Article (Biology): Milad Rasouli et al
Title: The MLL-Menin Interaction is a Therapeutic Vulnerability in NUP98-rearranged AML

> EHA Lifetime Achievement Award
Jesús San-Miguel, Cancer Centre, Clinica Universidad de Navarra, Spain



Young EHA Best Abstract Awards

> Luca Bertamini
Erasmus Medical Center
Rotterdam, the Netherlands

> Lisa Leypoldt
University Medical Center
Hamburg-Eppendorf, Germany

> Hangjie Fu
Zhejiang Chinese Medical University
Hangzhou, China

> Noelia Collado-Gisbert
Cancer Center Clinica Universidad de Navarra Centro de Investigacion Medica Aplicada, Instituto de Investigacion Sanitaria de Navarra, CIBER-ONC CB16/12/00369 and CB16/12/00489
Pamplona, Spain