

## Age and aging in blood disorders: EHA theme of the year 2013-2014

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The introduction of a European Hematology Association theme of the year in June 2012, focusing on Quality of Life (QoL) in hematology was successful in stimulating awareness, conference sessions, publications and reports.<sup>1-3</sup> At the 17<sup>th</sup> Congress of the European Hematology Association in Amsterdam, two sessions were dedicated to the topic: a scientific working group session and a patient advocacy session. Guidelines produced by the Scientific Working Group QoL on “Quality of Life and symptoms on patient reported outcomes in hematology” are now available.<sup>3</sup> The Open Window project, an art project for patients in isolation, showed a statistically positive outcome when patient Quality of Life was evaluated.<sup>2</sup> These examples highlight the impact Quality of Life is having on our daily practice as well as on our clinical trials and research. The quality of healthcare comes first, but, with evidence-based research on Quality of Life, it becomes undeniably clear how important this part of the process has become for patients. Although each theme of the year is introduced to highlight a certain topic in hematology, the themes should subsequently remain active. Quality of Life, the first theme of the year, will remain on the agenda indefinitely.

The next EHA theme of the year will run from June 2013 to June 2014, and is dedicated to “Age and aging in blood disorders”. The theme should encompass not only the aging of patients with blood disorders but also the concept of the aging of cells, whether hematopoietic or not. Both fields have developed over the past years, and a focus on age and aging in blood disorders appears appropriate for EHA. This next theme of the year may be seen at first as a continuation of the “Quality of Life” theme of the year. Living with a hematologic disorder is difficult at any age, but reports highlight the experience as particularly complex in elderly patients. Multiple facets of the theme will be reported and debated throughout the year. In particular, the definition of “who” is old? Patients may not have the same thresholds as clinicians. It is clear that the standard cut off of 65 years may no longer be appropriate for every blood disorder or treatment.

The action that will be developed during the year will facilitate sharing of information on the complexity of treating patients with other chronic diseases, treating patients in a specific social context (alone, in retirement homes, in difficult financial situations), and patients with different expectations regarding treatment efficacy and Quality of Life. Over the past three years, there has been a steady increase in the number of abstracts at the EHA Annual Congress referring to clinical trials or diseases affecting the elderly, a trend that confirms the interest and concern of hematologists for this group of patients. Interestingly, increased longevity is unfortunately associated with an increased risk of acquiring various blood disorders, whether malignant (myelodysplastic syndromes, myeloma, lymphomas)<sup>4,5</sup> or non-malignant (such as anemias due to iron or vitamin deficiencies or susceptibility to blood coagulation disorders). These blood disorders, which appear to increase with age, are related to changes at the DNA or

protein levels in various cells or tissues that contribute to the process of aging. Scientists interested in the aging cell have pointed out some common molecular themes, pathways and genes that have emerged as important modulators of aging,<sup>6</sup> including the immune system, length of telomeres and cell metabolism.<sup>7</sup> Finally, one must also take into account environmental issues with the increased risk of prolonged exposure (indoor or outdoor, including infectious stimuli), combined with toxicities of drugs taken earlier on in life, even for cancers already cured. These environmental issues now spur novel research ventures on epigenetics, transposon activity and overall genomic instability that may become relevant as we live longer. These studies are urgently needed as they will affect a very large number of Europeans. As reported by Eurostat, the statistical service of the European commission, “the impact of demographic ageing within the European Union is likely to become of major significance in the coming decades...with a progressive ageing of the older population. The share of those aged 80 years or above in the EU 27’s population is projected to almost triple between 2011 and 2060”.<sup>8</sup>

In the next year, EHA will draw attention to developments that involve aging in hematology and will foster further clinical, economic and basic research programs in order to provide better training for the management of older patients with a blood disorder.

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## References

1. Chomienne C, Guenova M, Hagenbeek A, Lacombe C, McCann S, Salek S, Geissler J, van der Beek I. Quality of Life in hematology: European Hematology Association theme of the year ... and years to come *Haematologica*. 2013;98(1):2-3.
2. McCann SR. Can an art intervention influence quality of life in a hospitalized patient? *Haematologica* 2013;98(1):4-6.
3. EHA website. Available from: [www.ehaweb.org](http://www.ehaweb.org)
4. Deschler B, Ihorst G, Platzbecker U, Germing U, März E, de Figuerido M, et al. Parameters detected by geriatric and quality of life assessment in 195 older patients with myelodysplastic syndromes and acute myeloid leukemia are highly predictive for outcome. *Haematologica* 2013;98(2):208-16.
5. Oerlemans S, Mols F, Issa D, Pruijt J, Peters W, Lybeert M, et al. A high level of fatigue among long-term survivors of non-Hodgkin's lymphoma: results from the longitudinal populations-based PROFILES registry in the south of the Netherlands. *Haematologica* 2013;98(3):479-86.
6. Serrano M, Blasco MA. Cancer and ageing: convergent and divergent mechanisms. *Nat Rev Mol Cell Biol*. 2007;8(9):715-22.
7. Newgard CB, Sharpless NE. Coming of age: molecular drivers of aging and therapeutic opportunities. *J Clin Invest*. 2013;123(3):946-5
8. [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Population\\_structure\\_and\\_ageing](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Population_structure_and_ageing).