EHA Scientific Working Group  
Leukemia diagnosis: morphology and flow cytometry.  
Chair MC Béné – Co-Chair G Zini

Report 2015

This SWG works in close relationship with Workpackage 10 (WP10) of the European LeukemiaNet and has the same aims related to the initial steps of diagnosis in hematological malignancies. These groups initiate and promote consensus recommendations for both morphology and flow cytometry. Two atlases have been published which are freely available on the ELN website at www.leukemia-net.org respectively of bone marrow cells and normal bone marrow flow cytometry. Recommendations are provided in terms of preanalytical precautions and antibody panels. The group is also interested in minimal residual disease and works together with the ELN party devoted to myelodysplastic syndromes.

Membership is open, as both laboratory and clinical personnel of all levels are invited to take part to the annual meetings at EHA and at ELN.

In 2015, the third meeting of the SWG took place in Vienna. This session was very well attended (over 200 people) in spite of its schedule on the Sunday morning. It seems thus that the modification in the agenda was very beneficial. The session dealt with “Unusual diagnoses in oncohematology, integration of morphology and flow cytometry”. Is used voting boxes for challenging cells/cases. Barbara Bain presented morphologic characteristics of leukemias with suspected cytogenetic anomalies, Wolfgang Kern showed unusual immunophenotypic features of myeloblastic leukemias. Peter Bettelheim triggered the audience on the immunophenotype of unusual erythroid hemopathies and Gina Zini focused the participants on the morphologic characteristics of unusual lymphoblastic leukemias.

The major event of the year was the 2,5 days Scientific meeting on October 10-12, 2015 in Barcelona on “Integrated approach to demanding hematological diagnoses, from MDS to leukemias”. With an audience of over 100 people, this was considered a stimulating meeting. It mixed, as per EHA recommendations, classical presentations, voting boxes challenges, presentations by the industry and clinicians, as well as e presentation on the life of a drug before and through EMEA, and a very interesting encounter between patients’ associations and laboratory people who are at the root of their diagnosis and follow-up.
During the year, Pr. Gina Zini has continued her work with the morphology faculty, via internet through the Medial Microscope. The project is being extended to a larger faculty of volunteer participants.

Besides the SWG Scientific Meeting in Barcelona, on the flow side, Pr. Béné has given presentations at meetings in Milan (EBMWG, April), Chicago (ISLH, May), Prague (Flow Course, May), Naxos (ESCCA, October), Athens (ESCCA-IFCC course, October) Members of the WP10 and SWG participate to the work of the subgroup interested in myelodysplastic syndromes which produced recommendations and met in Athens in October. We are involved in several chapters of the new WHO classification. Finally, the Harmonemia project about harmonization of flow cytometry on 23 different platforms had several meetings and finalized a first manuscript which was published in early 2016.

Pr. Gina Zini, as scientific secretary of the ICSH (International Council for Standardization in Haematology) has been involved in several sessions aimed at the harmonization of diagnostic procedures in the hematology laboratory; as member of the International Working Group on Morphology of MDS (IWGM-MDS) works to the definition of more specific cell features and details for a consensus morphologic diagnosis: a paper on Morphology of Megakaryocytes is at this moment in an advanced phase of the editorial process.

Board
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Publications of the board members related to the SWG interests in 2015.


Conflict of interest.
Gina Zina and Marie C Béné declare no conflict of interest.

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