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**ELN WP10 "DIAGNOSTICS" MEETING
MÜNCHEN OCTOBER 21-22, 2011**

Organizers : Prs Marie C Béné & Gina Zini.

Hosted by MLL, Pr Torsten Haferlach

Venue : MLL München Leukämielabor, Max Lebsche Platz, 31, München

This two-days meeting was devoted to morphology on Friday, and this session was chaired and animated by Gina Zini. She had organized to receive from the ELN WP10 morphology faculty an additional 160 atypical cells to complement the current atlas of over 600 cells already discussed and posted on the ELN Website. Pr Zini began by giving an overview of the work done so far and the methods used to reach consensus on naming cells. Faculty members attending the meeting and providing strong and appreciated input to the day's discussions were John M. Bennett, Barbara Bain, Peter Bettelheim, Jose Cortez, Giuseppe D'Onofrio, Winfried Gassmann, Petra Kacirkova, Krzysztof Lewandowski, Bodil Petersen, Anna Porwit, André Tichelli, Torsten Haferlach and Mars Van't Veer.

The attendance was a mixture of senior and junior hematologists, and the latter thoroughly appreciated the discussions about difficult morphological cases. It was pointed out that global information should also be taken into account, both as the global aspect of smears and complementary information from the clinical background of the patient and results from other methods, mainly flow cytometry at the diagnosis step.

This was in part illustrated in the lectures or demonstrations provided in the afternoon, namely:

- T Haferlach & W Gassmann: How to count blasts in dysplastic bone marrow? (videomicroscopy).

This interestingly included a new case just arrived at MLL which was discussed collectively, with agreement on the complementary immunophenotype to be looked into, which was provided the next day, confirming the rare diagnosis of MPN with eosinophilia and mastocytosis.

- B Bain: Eosinophilic dysplasia

- J Bennett : Dysgranulopoiesis (slides)

- A. Porwit : Hypoplastic bone marrow: diagnostic criteria (slides, smears)

The day's discussions were summarized by G. d'Onofrio and the new cells defined during this session will be uploaded with their definitions on the ELN website.

The Saturday session was devoted to flow cytometry, and chaired by Marie Christine Béné. She first gave an overview of current consensus regarding the immunophenotyping of leukemias based on the recent publications of WP10's recommendations. Two sets of three presentations were then devoted to the detection of minimal residual disease, first in acute lymphoblastic leukemia (ALL), then in acute myeloblastic leukemia (AML).

In the first session, Chantal Fossat (Marseilles), Anna Prowit (Stockholm/Toronto) and Giuseppe Basso (Padua) presented results from their respective working groups. It was interesting to see how procedures and strategies are now congruing with the definition of MRD relying on leukemia associated immunophenotypic patterns (LAIP) mostly involving CD45, CD34, CD19, CD10 and CD38 as an almost global backbone, with some additional markers, for B-lineage ALL. The combined use of cytoplasmic and surface CD3, together with TdT seems also very useful for T-lineage ALL. The general discussion dwelt on these consensus, panels and analysis strategies, as these were the main points asked to be discussed and very well explained in this session.

The same approach was then applied in three presentations on MRD in AML by Gerrit Schuurhuis (Amsterdam), Wolfgang Kern (Munich) and, on behalf of Francis Lacombe (Bordeaux), MC Béné. G Schuurhuis showed innovative data on the minute population of leukemic stem cells sharing immunophenotypic features with diagnosis blasts and MRD. W Kern and MC Béné presented results from their respective groups. Although panels seem to currently be less well-defined than in ALL, there is clearly progress in this field too, and WP10 aims at pursuing the exploration of the best methods for MRD detection in flow cytometry.

Again, as an accent had been put on the pragmatic aspects of panels/fluorochromes and analysis strategies, the audience appreciated the useful „take-home messages“ of these presentations.