

ing and staging was significantly milder in the group of B-NHL patients. During the follow up 22% of the patients had increased ALT in the group without NHL, according to the calculated Kaplan-Meier curve, while all NHL patients showed persistently normal ALT values. *Conclusions.* HCV positive patients affected by B-NHL do not have a more severe liver disease as compared to patients without B-NHL. This means that it is unlikely that NHL in HCV+ patients is a consequence or perturbed immune system by the hepatic disease. Rather, it seems that HCV may cause either hepatitis or NHL, occasionally both.

## myeloproliferative disorders

P0387

### IMMUNOPHENOTYPIC, FUNCTIONAL AND CYTOGENETIC CHARACTERIZATION OF MONOCYTE-DERIVED DENDRITIC CELLS FROM PATIENTS WITH MYELOPROLIFERATIVE-MYELODYSPLASTIC DISORDERS AND CHRONIC MYELOID LEUKEMIA

M. Della Porta, G.M. Rigolin, R. Bigoni, A. Tieghi, G. Castoldi  
Section of Hematology, Department of Biomedical Sciences,  
University of Ferrara

Dendritic cells (DC) are professional antigen presenting cells that play a central role in the initiation and modulation of the immune response. It has been reported that chronic myeloid leukemia (CML) cells can be induced to differentiate into functional DC which retain the capability to induce autologous anti-tumor specific immune responses. Recently the WHO has recognised the myelodysplastic/myeloproliferative disorders (MPD/MDS) as a separate entity in the new classification of hematologic myeloid disorders. The aim of this study was therefore to compare the phenotypic and functional characteristics of DC generated *in vitro* from the peripheral blood mononuclear fraction of 10 MPD/MDS patients (7 CMML and 3 atypical CML) with DCs generated in a similar way from 17 CML patients in chronic phase. After 14 days of culture in the presence of GM-CSF, IL-4 and TNF- $\alpha$ , comparable numbers and percentages of DCs were obtained in the two groups of patients. MPD/MDS pre-culture monocytes exhibited a significantly higher intensity of expression of CD14 ( $p=0.051$ ) and chemokine receptors CCR5 ( $p=0.066$ ) and CXCR1 ( $p=0.050$ ). By contrast, MPD/MDS DC presented significantly lower intensity of expression of CD116 ( $p=0.040$ ), CD11c ( $p=0.001$ ), CD1a ( $p=0.053$ ) and CD83 ( $p=0.023$ ) molecules while no difference was observed concerning co-stimulatory antigens (CD40, CD80, CD86) and MHC class II molecules. MPD/MDS DC also showed a reduced receptor-mediated endocytosis as demonstrated by FITC-dextran uptake ( $p=0.018$ ). By contrast, the ability to stimulate T cells in the allogeneic mixed leukocyte reaction (evaluated by 24 hour BRDU incorporation) was not different in the two groups of patients. Simultaneous FISH and immunophenotypic analysis demonstrated that in both groups of patients DCs were derived from the pathological clone. Taken together these findings indicate that, not only in CML but also in MPD/MDS disorders monocyte-derived DC are part of the malignant clone. Moreover, in MPD/MDS, pre-culture monocytes are in a functional state of activation which could influence DC differentiation. Though exhibiting a deficient expression of DC markers and a deficient FITC dextran uptake as observed in MDS disorders, MPD/MDS DC are still capable of inducing an apparently normal proliferation of allogeneic T cells. Further studies are warranted to clarify the reasons for these abnormal phenotypic and functional findings in both monocytes and monocyte-derived DC and to verify whether a deficient uptake function could present some problems in the pulsing of DC with specific peptides for the design of immunotherapeutic strategies.