Reviewer's report

Title: In B-CLL, the codon 72 polymorphic variants of p53 are not related to drug resistance and disease prognosis

Version: 1 Date: 18 June 2005

Reviewer: massimiliano bonafe

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Major Compulsory Revisions:
1- Authors should clarify the cause of death of B-CLL patients. The relevance of this issue is due to the mean age of the patients enrolled in the study. Indeed, aged people are impinged upon by high mortality rate for causes unrelated to B-CLL, such as cardiovascular disease. In this regard, it is worth noting that p53 Codon 72 could exert an impact even on myocardial ischemia, as reported in Bonafe et al, Cell Death Differentiation Cell Death Differ. 2004 Sep;11(9):962-73.
2- Authors should specify the type cells which were employed in the cell death assay. It is indeed very important to know whether or not they studied B-CLL lymphocytes or whole PBMC.
3- Authors should report data regarding chemotherapy to which the patients underwent. These pieces of information (and the stratification of patients on their bases) potentially affect both in vitro and in vivo data.
4- Authors should be cautious in estimating p53 codon 72 genotype frequency distribution in B-CLL. Indeed, (at least in some patients) whole blood leucocytes of these patients are predominantly neoplastic lymphocytes. Therefore, some Arg/Arg homozygotes could be, in fact, Arg hemizygotes arisen from Arg/Pro cells carrying an mutated Arg allele. This fact could explain why they find a p=0.06 difference when they compare p53 codon 72 genotype distribution between carriers and non carriers of p53 mutations.
5- Authors should avoid the concluding sentence, in which they state that discrepancy among studies could be due to sample size. At variance they should underline that p53 codon 72 does not play any role in B-CLL neoplasms.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests' below