Reviewer's report

Title: Cytotoxic drug sensitivity of Epstein-Barr virus transformed lymphoblastoid B cells

Version: Date: 11 September 2006

Reviewer: Masanobu Sugimoto

Reviewer's report:

General:
The authors studied the sensitivity of various anti-cancer drugs to Epstein-Barr virus (EBV) transformed lymphoblastoid cell lines (LCLs), in order to have an idea for chemotherapy protocols against post-transplant lymphoproliferative disorder caused by EBV. They established the pattern of in vitro efficacy of the most commonly used cytotoxic anti-cancer drugs against EBV-transformed LCL cells. As a conclusion, they recommended to include epirubicin and paclitaxel into chemotherapy protocols against this disorder.

This paper is acceptable to BMC Cancer after revision.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached):

Comment 1: The description at the top of the Discussion section, “The presented data suggest that EBV transformed B-cell lines share common cytototoxic drug sensitivity profile independent of their origin.” may be correct as far as pre-immortal cell lines are concerned. However, the recent paper (Sawada, K. et al. Differential cytotoxicity of anticancer agents in pre- and post-immortal lymphoblastoid cell lines. Biol Pharm Bull, 28: 1202-1207, 2005.) reported that pre-immortal LCLs with negative or a low telomerase activity and normal karyotypes are significantly more sensitive against certain drugs, including camptothecin (topoisomerase inhibitor) and bleomycin, than post-immortal LCLs with a high telomerase activity and abnormal karyotypes. Interestingly, the anti-microtuble drugs, including colchicines, vincristine and paclitaxel showed similar levels of cytotoxicity to both pre- and post-immortal LCLs. So the authors should refer to these facts in Discussion.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct):

Comment 2: The authors use “comma” to indicate decimal point in Tables 1 and 2, and Figs. 4 and 5. This is very confusing, and all decimal points should be changed to “dot”: for instance, 0,001, 0,01, 0,1 (RMAPC) of Fig. 4 should be 0.001, 0.01, 0.1.

Comment 3: In Table 2, the description at the top: 64x dilution, 16x dilution, 4x dilution, highest conc. is puzzling, and should be changed to a simpler description, for instance, 64x dilution, 16x dilution, 4x dilution, 1x no dilution.

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Discretionary Revisions (which the author can choose to ignore): no items

What next?: Accept after minor essential revisions

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

Quality of written English: Needs some language corrections before being published
Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.