**Reviewer's report**

**Title:** CD40L induces multidrug resistance to apoptosis in breast carcinoma and lymphoma cells through caspase independent and dependent pathways.

**Version:** 1  **Date:** 29 November 2005

**Reviewer:** Maria Caterina Turco

**Reviewer's report:**

General
The manuscript convincingly demonstrates that CD40L signaling inhibits cytotoxic drugs- and ceramides- induced apoptosis in BCC lines, through a (caspase- independent) pathway different from the (caspase- dependent and -independent) mechanism triggered in NHL lines. However, some concerns can be raised.

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

In the last part of the discussion, the Authors say that "the protective effect of CD40L does not involve a downregulation of intracellular ceramide production". This sentence does not appear to rely on experimental results, since intracellular ceramide production has not been analysed.

**Minor essential revisions**
- In the second paragraph of the Results section, the Authors conclude that "the anti-proliferative effect of C2 and C6 ceramides on the breast carcinoma and NHL cell lines tested was reversed by co-culture with CD40L L cells (Table 3)". It should be pointed out that the effect is partial.
- Possible mechanism(s) of CVD40- mediated effects should be discussed.

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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)**

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**Discretionary Revisions (which the author can choose to ignore)**

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

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