Reviewer's report

Title: HFE H63D mutation frequency shows an increase in Turkish women with breast cancer.

Version: 1 Date: 27 November 2005

Reviewer: Gregor Weirich

Reviewer's report:

General
This manuscript aims at clarifying the role gene variants of the hemochromatosis gene HFE in female breast cancer. The manuscript is well written and the methodology sound. The finding of an association of breast cancer and the H63D genotype is interesting but needs supplementation.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
First, the number of patients is small (88).
Second, samples were highly preselected stemming all from a single oncology unit.
Third, there is no information about cancer type, stage and grade. This information is pivotal for the discrimination between general risk factors and prognostic factors in various cancer subgroups. In a similar study by Kallianpur et al. (ref. 23) that detected a significant increase of the HFE C282Y mutation in breast cancer patients, this association was probably due to a preselection of high stage, high grade tumors. Abraham et al. investigated an ethnically similar but larger and non-selected patient sample, and found no increased HFE mutation status in the case group.

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

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes

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