Reviewer’s report

**Title:** B-Raf specific antibody responses in melanoma patients

**Version:** 1  **Date:** 15 July 2004

**Reviewer:** Giorgio Parmiani

**Reviewer’s report:**

The study by Fensterle and colleagues reports the presence of BRAF specific antibodies in melanoma patients. The data is new and of importance in the context, due to the high frequency of mutated BRAF in melanoma, and adds to the few data available pointing at BRAF as a cancer antigen against which immunotherapeutics can be developed. The study is well done, results are clearly presented though some points can be better defined, and some can be added to improve the manuscript.

**Major points**
1. The authors state that both total Ig and IgG were tested in patients’ and controls’ sera. However, the data on to IgG are not given and should be included. Which are the BRAF specific Ig subtypes of the positive sera?
2. To increase the confidence in the specificity of the ELISA, positive sera should be tested against recombinant BRAF by Western blot analysis, in comparison with specific polyclonal antisera.

**Minor points**
1. I wonder whether controls from the dermatology department are adequate for this study, since they should include patients presenting with melanocytic lesions possibly bearing mutated or amplified BRAF.
2. In the Method section, ELISA paragraph, the data relative to sera types and numbers should be better specified. Possibly some parentheses are missing.
3. In the first page of the Results and Discussion section the authors state that antibody preparations were not standardized: the meaning of this sentence is unclear.
4. The reactivity against CRAF is lower for positive sera. Are shared protein domains recognized?
5. In the legend of fig 2, line 8, “... or with the addition of 0.1 mg antigen (D) as 1”, what does “as 1” mean?
6. Legend of figure 3 should better explain if control - and melanoma – background values represent background positivity in the absence of antigen or against an unrelated antigen.
7. Figure 2 should be better specified by including labels indicating SERA# and MELANOMA or CONTROL group, and including in the legend COATING/COMPETITION and for the x axis RATIO BETWEEN COATING AND COMPETITION.

**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:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**
None