Reviewer's report

Title: Health Profiles of 996 Melanoma Survivors: the M. D. Anderson Experience

Version: Date: 2 February 2006

Reviewer: Lehana Thabane

Reviewer's report:

General

Overall, the paper is well written, but it is not clear what the primary objective of the study was. There are several important details missing in the description of the purpose of the study and in the methods. The reporting also requires major revision. Below are the specific comments to be considered in the revision. (Unless otherwise indicated with an *, all comments are considered major compulsory revisions.)

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

1. Page 2, Abstract, under Results: Replace “44.8 ? 12.7” with “44.8(12.7)” and “63.9 ? 12.8” with “63.9(12.8)” to represent mean(standard deviation). The sign “?” should not be used for describing a sample, but for expressing the precision of an estimate using a confidence interval.

2. Page 4, Background, lines 11-13 (from top):
   • What was the primary objective of the study?
   • What were the specific secondary objectives of the study?

3. *Page 6, Methods, line 5 (from top): Replace “and/or” with “or”.

4. Page 6, Methods, lines 4-5 (from bottom): “The calculation of statistical significance of data analysis was conducted by…” should be replaced by “The data analysis was conducted in part by…”

5. Pages 6-7, Methods: There are a few details missing in the description of the methods.
   • It is not clear what the hypotheses were, and what the corresponding justification for each hypothesis was.
   • How were missing or incomplete data handled in the analysis?
   • What was the criterion for statistical significance?
   • How was the overall level of significance adjusted for multiple analyses?

6. Page 8, Results, Population, para 1:
   • This reviewer recommends using a flow diagram to summarize the process of patient selection for inclusion or exclusion (reasons for exclusion) for analysis.
   • Although this should be under methods, it is not clear whether any power analysis was performed as part of the study design to assess whether the available data would be sufficient to address the primary objective of the study. Such a description should cover the following items:
     1. clear statements of the (primary) objectives of the study;
     2. the desired level of significance;
     3. the desired power;
     4. the type of summary or test statistic that will be used for analysis;
     5. whether the test will one- or two-tailed;
     6. the smallest difference and a clear statement of whether it is
        • the smallest clinically important difference;
• the difference that investigators think is worth detecting;
• the difference that investigators think is likely to be detected;
7. justification provided on how the various prior estimates of the variance and the effect used in the
calculations were obtained and their usefulness in the context of the study;
8. clear statements about the assumptions made about the distribution or variability of the outcomes;
9. a clear statement about the scheduled duration of the study;
10. clear statements about how the sample size calculation was adjusted for
• the expected response rate;
• loss to follow up;
• lack of compliance;
• any other unforeseen reasons for loss of subjects;
11. the software that was used for the sample size calculation or reference the formula used for the
calculation;
12. any other information that formed the basis for the sample size calculation.
7. Pages 8-9: Delete “?” as suggested in comment #1 above.
8. Pages 8-13: Report both absolute numbers and percentages. Chi-squared tests or Fisher’s Exact
tests should also report the value of the test statistic and degrees of freedom for the distribution in
addition to corresponding values. Overall, the reporting of the results requires major improvement.
The following reference may help: Lang TA, Secic M. How to report Statistics in Medicine. American
9. Pages 21-22, Figures 1 and 2: The third dimension in these figures is not needed. The figures
display information on two variables and should be in two dimensions instead of three.
10. Pages 23-24, Tables 1 and 2:
• Delete “?” as suggested in comment #1 above, and define the entry as mean(SD) where SD =
standard deviation.
• It is misleading to define the columns as “Survivors(%)” because some of the entries in the table
refer to mean(SD).
• Indicate what tests were used for each variable which led to the p-values in the last column.
• How was the overall level of significance adjusted for multiple analyses summarized in each table?
11. Page 25, Table 3:
• Refer to the third and fourth bullets in comment #10 above.
• State the corresponding denominator for calculating percentages for each variable.
12. Pages 26-29, Tables 4-7:
• One assumes that either a chi-squared test or Fisher’s exact test was used for the results in these
tables. However, this needs to be clearly indicated.
• Again, how was the overall level of significance adjusted for multiple analyses in each table and
across tables?
• Replace “N= ” with “n =”

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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 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.