Reviewer's report

Title: Circulating lymphocyte is an important determinant of the effectiveness of preoperative radiotherapy in advanced rectal cancer

Version: 1 Date: 2 November 2010

Reviewer: Bhaumik Patel

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Review: circulating lymphocyte is an important determination of the effectiveness of preoperative radiotherapy in advanced rectal cancer.

Brief summary: This is a retrospective analysis of pre treatment blood count and its impact on complete response to radiation in patient with locally advanced rectal cancers. Authors demonstrate that relative lymphocyte count (% of total WBC count) is positively associated with complete response to radiation.

Innovation and significance: moderate

Critiques:
1) The manuscript is marred with several typographical and grammatical errors.
   e.g.
   a. Page 2 line 4..adding should be changed to addition of
   b. Page 6 line 14….conversely spelled wrong.
   c. Page 8 line 1…as is unnecessary
2) Ratio and % counts are incorrectly used interchangeably adding to the confusion.
3) Figures 2 and 3 do not add any value to the manuscript and can be removed.
4) The text linked to figs 2,3 do not indicate if any formal statistics was applied to pre and during treatment blood count values or are just purely descriptive.
5) True pathological and clinical CR were taken together as complete responders. The clinical CR represents 20% of all CR cases and they do not necessarily mean pathological completer response which might be a desirable surrogate since it positively correlates with overall survival.
6) The conclusion in the abstract (page 2) and discussion (page 8 line 9)sections are far reaching and not consistent with data presented in the manuscript.
7) Figure legend 1: Indicate it is pre-RT blood counts.
8) Table 1: size, CEA and circumferential extent should have greater than or lesser than signs before the numbers..it is unclear what is meant as it is stands. The numbers in table should be also be represented as % in parenthesis.