Reviewer’s report

Title: Superior efficacy of rituximab-based chemoimmunotherapy as a initial therapy in newly diagnosed patients with B cell indolent lymphomas: long-term results from a single center in China

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Reviewer: Ryan Cassaday

Reviewer's report:

While the role of rituximab in the treatment of indolent B-NHL is not in question, this report does provide some important findings in a relatively under-reported population. However, some issues with how the data are reported make me concerned about the accuracy of the results.

Major Compulsory Revisions:

1. I am concerned about the accuracy of the time-to-event analyses based on some of the data reported in Table 3. Two patients progressed after only 2-3 cycles of R-chemotherapy, yet their PFS was reported as 10 and 44 months, respectively. I can only assume that progression on treatment was not considered an event, and these times actually reflect a response to subsequent treatment; the patient with PFS of 44 months indeed went on to allogeneic transplantation. These patients should be scored as having progressed much earlier, likely in the 2-3 month range considering the number of cycles of R-chemo they received. This approach will provide a more accurate assessment of who effective the front-line treatment was. Based on this finding, I am subsequently concerned about how progression was assessed in other patients. Please address this and provide some reassurance about the accuracy of the assessments of other patients.

2. Perhaps this is related to #1, but I am surprised that R-chemo did not improve PFS in the CLL subgroup, but OS was significantly improved. If this is accurate, it speaks more to the efficacy of second-line or salvage treatment than it does the addition of rituximab to front-line treatment. Please review this and (if correct) provide an explanation.

3. While it is clearly stated in the title, I think it would be worth emphasizing in the text (perhaps once toward the end of the Introduction and again in the beginning of the Results) that this analysis was specifically for patients receiving their initial treatment.

Minor Essential Revisions:

1. Results, lines 176-177: From my reading, these are comparisons of risk factors among patients who all received R-chemo, yet it is stated that the CR rate was higher with R-chemo “than other treatments.” Either this statement is incorrect (because all patients in this comparison received the same treatment),
or clarification is needed as to what these comparisons actually represent.

2. Results, lines 188-189: The median number of courses of R-chemo in the patients that achieved an MRD-negative remission is provided, yet similar data for other groups are not reported (e.g., number of courses of treatment to achieve MRD-negative remission without R). Either remove this information or provide it for both of these sub-groups.

3. In the 2nd and 3rd paragraphs of the Discussion (lines 270-284, specifically), there are multiple places were results are repeated. I think the specific results like CR rate and ORR can be deleted and simply described, as this information typically would not be repeated in the Discussion.

4. Similar to #3, frequencies of specific histologies and treatments received should be included in the Results section, not the Methods (lines 352-362). How the diagnoses and treatments are defined can certainly stay in this section.

Discretionary Revisions:

1. In the first paragraph of the Introduction (line 93), it is stated that remarkable progress in the treatment of B-cell lymphomas has been observed “over the past ten decades.” I think this statement is far too broad, and probably should instead be 2-3 decades.

2. When describing patient characteristics in the Results section (line 123), I would change “physical fitness” to “performance status,” since this is what the ECOG score actually reflects.

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, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests