Reviewer's report

Title: Bevacizumab And Combination CHemotherapy in rectal cancer Until Surgery (BACCHUS): A phase II, multi-centre, open-label, randomised study of neoadjuvant chemotherapy alone in Patients with high-risk cancer of the rectum

Version: 2 Date: 7 December 2014

Reviewer: Ji Zhu

Reviewer's report:

This is a phase II, multi-centre, open-label, randomized study of neoadjuvant chemotherapy alone in patients with high-risk cancer of rectum. The primary aim is to evaluate whether these two intensive NACT regimens can achieve an encouraging pCR rate to warrant further investigation.

The study’s design is reasonable and good evidence-based, however, several major compulsory revisions will be needed to clarified to make the protocol more sound.

1. In page 9, “patients who do not respond will come off all trial treatment”. What is the scheduled sequence treatment for these cases? Receiving CRT, surgery or some others?

2. In page 11, the section of sample size calculation, the authors anticipate a pCR rate of 20% for intensive NACT, compared to 5% pCR rate for RT alone. However, after the studies of EORTC22921 and FFCD9203, neoadjuvant CRT became the standard care for locally advanced rectal cancer. So, the pCR rate of neoadjuvant CRT should be the control, instead of neoadjuvant RT alone.

3. In the same paragraph, “A regimen will be considered successful if at least 4/27 pCRs are observed”. According to statistical calculation, if less than 3 pCRs are observed, we have more than 80% power to reject the null hypothesis that the actual pCR rate is more than 20%. But in opposite, we can’t draw a conclusion that the pCR rate more than 20% if at least 4/27 pCRs occur. Please clarify.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.