Reviewer's report

**Title:** Imbalances in serum angiopoietin concentrations are early predictors of septic shock and survival in patients with post chemotherapy febrile neutropenia

**Version:** 1  **Date:** 8 March 2010

**Reviewer:** barraud damien

**Reviewer's report:**

* No major compulsory revisions

* Minor essential revisions

1 Results : page 9 : error in the title of the second paragraph "Ang-2 / Ang-1 (and not 2) ratio..."

2 Results : table 1 : could you indicate the number of patients in each group in the first line of the table. Could you standardize the letter "NS" (sometimes in uppercase, sometimes in lowercase).

* Discretionary revisions

3 Laboratory measurement : it would have been interesting to indicate the coefficient of variation in the duplicate measurements using this assay.

4 Laboratory measurement : Have assays been realized during chemotherapy, between enrollment and the first episode of neutropenic fever ?

5 Results : what was the time of onset of shock ? Within 48 h ? After 48 h ?

6 Results : table 1 : What were the origin of infections ?

7 Results : figure 1 : levels of Ang1 et Ang2 are not significantly different between the two groups at the onset of fever, so the use of the ratio Ang 2/Ang seems quite "artificial", and the significant difference a "statistical miracle"...The difference in the levels of Ang2 48h after the onset of fever, though striking, is of little interest if the patients are already in shock at this time...

8 Results : Age (significant), Disease status (though surprisingly not significant), and most of all MASCC score could differentiate the two populations at baseline. This makes the interest for that measurement poor as a diagnostic tool...

9 Results : figure 2 : correlation using Spearman test should be expressed by Rs and not r2

10 Results : It seems hard to draw conclusions on a multivariate analysis with 10 death.

11 Results : could you provide a table with the characteristics of survivors vs non survivors

12 Results : could you indicate sensibility, specificity, PPV and NPV for the cut-off of 1,17 (ratio Ang-2 / Ang-1) provided by the roc curve
13 Discussion: What about limits of the study?

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I received fees from MSD (Merck Sharp & Dohm), as a speaker during tutorial sessions
Nothing else to declare