Reviewer's report

Title: Gynecomastia during imatinib mesylate treatment for gastrointestinal tumor: a rare adverse event

Version: 1 Date: 22 June 2011

Reviewer: Giovanni Caocci

Reviewer's report:

This is an interesting report of patients experiencing gynecomastia during imatinib treatment for gastrointestinal tumor. Only two reports have previously decrypted such cases.

In order to judge the case for its impact on future therapy, the Authors will need to add some data which, unfortunately, are missing.

Major compulsory revisions:

1. Full spectrum of steroid hormones and stimulating hormones (as published by Gambacorti et al.) before and after tamoxifene treatment should be provided: in particular, if possible, 17-OHP levels

2. The potential impact of first and second generation TKI on gynecomastia should be discussed (not only imatinib)

Furthermore, I have the following minor essential revisions:

1. Abstract: In the results section it is not clear to which patients the authors are referring when they speak about serum free testosterone levels (those with or without gynecomastia?)

2. Introduction: please also consider the reported relationship between Dasatinib and gynecomastia

3. Please provide schedule and duration of tamoxifene treatment.

4. Also provide any additional medication with the potential to influence hormonal levels by interacting with imatinib (e.g., spironolactone)

5. Alternative treatments of gynecomastia should be discussed, e.g. radiation, considering the interaction of tamoxifen with imatinib.

6. The English language needs to be “polished”. Throughout the paper some verbs need to be corrected. The paper needs to be corrected by an English mother tongue assistant.

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