Reviewer's report

Title: Survival of Gastrointestinal Stromal Tumor Patients in the Imatinib era: Life Raft Group Observational Registry

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Reviewer: Philippe Cassier

Reviewer's report:

Call et al. report on the survival of patients with GIST in the Life Raft Registry. One of the main drawbacks of this study is patient-reported nature of most of the data but this stems directly from the nature of the study itself. Data on the variation of the male/female ratio with age is interesting.

Major compulsory revision:

- Mutational analysis: one of the key points in analysing the frequency of KIT, PDGFRA, SDH and BRAF mutations is to know how many patients were tested. Indeed SDH and PRAF are not universally tested and some institutions test only for KIT exon 11 and 9. Therefore it is essential that the authors provide the number of patients tested for SDH and BRAF mutations. Were all pediatric patients tested for SDH mutations? Also in this paragraph and the legend of table 4, the authors refer to "the wild-type mutation" which doesn't make sense (rephrase).

- Please provide the median follow-up which will help interpret the curves when median survival is not reached.

- Given the nature of the data I think the authors should refrain from performing a multivariate analysis as many confounding factors may not be controled in their analysis owing to the nature of the data (patient self-reported). (univariate analysis is fine)

- Patients with advanced disease at diagnosis have an overall survival of 6.3 years, which is longer than any published series for this patients' subgroup. An analysis of the SEER registry published in abstract form at ASCO several years ago showed an OS of "only" 33 months. Could authors comment on this a little bit more in the discussion (or in the resuslt section if they have explainatory data)

- I don't think it makes sense to compare the survival of patients diagnosed with metastatic disease to those who later developped metastasis.

Minor essential revisions

- Table 1: typographical error "retroperitoneal" instead of "retroperineal"

- Introduction needs to be shortened

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests