Reviewer’s report

Title: Impending Relapse of Myelodysplastic Syndrome after Allogeneic Transplant is Difficult to Diagnose and Requires a Multi-Modal Approach

Version: 0 Date: 25 Oct 2017

Reviewer: Dan Jones

Reviewer's report:

The Authors present a small but well-characterized series of pre- and post-transplant course of MDS patients. The Authors primarily focus on the morphological and hematologic features and conclude that detecting relapse is difficult. Statistically significant features that are seen in early versus late relapsing cases are present including increased marrow hypercellularity and persistent dysmegakaryopoiesis in post-transplant biopsies. As is mentioned in the discussion, molecular mutation panels are probably the most useful current methodology for characterization of early relapse.

The paper

Prior to finalization of the manuscript, the Authors should address the following points:

- Include a reference to the Authors' previous similar published work (Trottier et al, Bone Marrow Transplant, 2016) and explain in discussion how this study extends those findings. Worth mentioning how many pts are in common if that is known.

- Provide more details on the flow cytometry panels used over the study period (e.g. how colors and were myeloid maturation assessed). This is important given the centrality of flow cytometry currently to assess the presence of myeloid maturation.

- Consider adding one or more additional correlated morphological features to the Abstract Result section

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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