Reviewer's report

Title: Combined mutations of asxl1, cbl, flt3, idh1, idh2, jak2, kras, npm1, nras, runx1, tet2 and wt1 genes in myelodysplastic syndromes and acute myeloid leukemias

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Reviewer: Olivier KOSMIDER

Reviewer's report:

In this manuscript, Rocquain and colleagues have shown with an important work and in an elegant way that many new molecular abnormalities could be associated in MDS and AML. On samples already analyzed for many oncogenic mutations, they have detected some new alterations and made some new conclusions on associations between molecular events.

They clearly described all the mutations and some informations on gene functions are given at the end. This is an very interesting work for the comprehension on leukemogenesis as discussed at the end.

To be more precise, could the authors make some statistical analysis between the prevalence of the most frequent mutations or not?

As the authors have mentioned, the R140Q mutation of IDH2 have already been described in many publications so they can't write that they have found a "new mutation" in IDH2, even if they have found it before all the publications mentioned. Finally, If it's possible, I think that they could better explain their model of leukemogenesis which is very interesting, by using some supplementary sentences.

Some minor revisions are required

Minor Essential Revisions

In the Table 1, the TET2 mutation of the patient HD-0098 is a misense Glu960Ser or a FS? If it is a misense, constitutional DNA had been analyzed?

Moreover, I have not found any legend for the table 2, please add one.

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