Reviewer's report

Title: Prolyl-4-hydroxylase alpha subunit 2 promotes breast cancer progression and metastasis by enhancing collagen deposition

Version: 4
Date: 25 November 2013

Reviewer: Anke Zieseniss

Reviewer's report:

Thank you for making changes to the manuscript, the revised manuscript has improved from the original submission. However, there are some concerns that have not been addressed by the authors.

MAJOR COMPULSORY REVISIONS

1. The P4HA2 knock out efficiency is, in the revised manuscript, shown in T4-2 cells (Fig. 2) and in MDA-MB 231 cells (supplemental Fig. 2). However, there are no Western blots shown for ZR-75 and MDA-MB157 cells. Please provide additional data.

2. Overall the P4HA2 protein levels seem to be very low in MDA-MB 231 sh control cells (supplemental Fig.2). Thus, the knock out efficiency is hard to judge and seems to be not very sufficient. P4HA2 is induced in hypoxia. Therefore, adding a Western blot showing P4HA2 protein expression in sh control cells compared to knock out cells in hypoxia might display the knock down more convincingly. Can the authors provide an explanation why the basal levels of P4HA2 seem to be so different in MDA-MB 231 cells compared to T4-2 cells?

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 declare that I have no competing interests