Reviewer's report

Title: Challenging dedifferentiated liposarcoma identified by MDM2-amplification, two case reports

Version: 2
Date: 24 April 2014
Reviewer: Jerad Gardner

Reviewer's report:

The authors present two cases of dedifferentiated liposarcoma where MDM2 FISH was useful in arriving at the final diagnosis. The information is not novel, as MDM2 amplification is very well described in well differentiated and dedifferentiated liposarcoma, but as this short report demonstrates practical application of MDM2 FISH in approaching tumors in this family, I feel such information may be of interest to your readers. I would recommend the following changes (my changes in ALL CAPS) before publication of this manuscript:

Minor Essential Revisions:

1. page 2 "background" line 5: "[MDM2]. . is characteristic for most liposarcoma with low differentiation AS WELL AS DEDIFFERENTIATION." both WDL and DDL are usually MDM2 amplified

2. page 2 "case presentation" line 8: "since LOW GRADE osteosarcoma may also harbour MDM2 amplification...

3. page 2 "conclusions" line 4: "...with low differentiation AND DEDIFFERENTIATION"

4. page 3 "background" line 5: . "WDLS are most frequently located in the RETROPERITONEUM, followed by the limbs, particularly the thighs..." WDLS is most frequent in the retroperitoneum followed by limbs, whereas DDLS is most frequent in retroperitoneum but uncommon in limbs. most freqent

5. page 3 "background line 9: MFH is an old name. Should be called "undifferentiated pleomorphic sarcoma (WHO term). Can still add MFH in parenthesis though.

6. page 3 background line 12: "which" should be "and"

7. page 3 "histologic" line 5: "higher differentiation" should be "more well differentiated"

8. page 3 "histologic" line 6: "myoepithelial" should be "myofibroblastic"

9. page 4 conclusions line 2: authors state both tumors showed osteoblastic areas, but in text only one of the cases showed that finding
10. page 4: "dichotomicly" should be "dichotomously"

11. page 4 second to last line: "", only a fraction of pleomorphic liposarcoma has MDM2 amplification" Please provide a reference.

12. page 5: LOW GRADE osteosarcomas harbor MDM2 amplification. Please be sure to clarify that in the text (twice on page 5).

**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