Dr. Xiaoyan Cao

Review Associate

JoVE

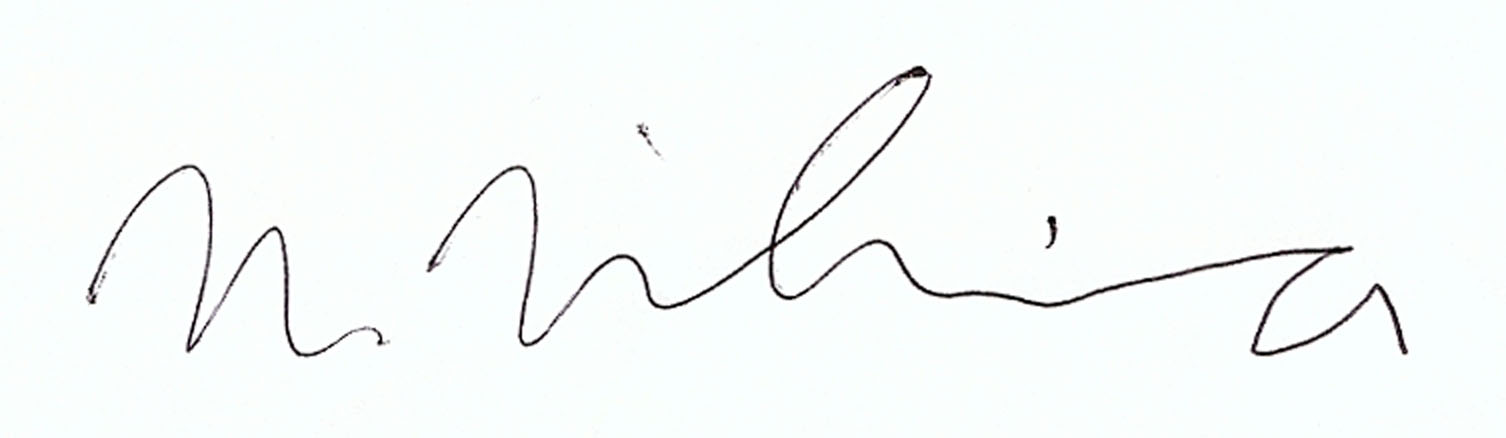
August 30, 2018

Re: Isolation and Characterization of Human Umbilical Cord-Derived Mesenchymal Stem Cells from Preterm and Term Infants (JoVE58806\_R3)

Dear Dr. Xiaoyan Cao,

Thank you very much for your letter of August 28, 2018 concerning our manuscript (JoVE58806\_R3) entitled “Isolation and Characterization of Human Umbilical Cord-Derived Mesenchymal Stem Cells from Preterm and Term Infants” by S. Iwatani et al. According to your suggestions, we have revised our manuscript. Our responses to you follow below. We believe that the revised manuscript is now satisfactory for publication in the ***JoVE***. Your prompt consideration will be greatly appreciated.

Sincerely yours,



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**Our responses to Editorial comments and changes in the revised manuscript (RE: JoVE58806\_R3)**

**1. Please reference Figure 1 in the protocol (Line 96).**

According to the Editorial comment, we have referenced Figure1 in the revised manuscript.

**2. How many successes (and yields) versus failures (Line 103) ?**

According to the Editorial comment, we have described the yields of UC-MSCs subjected to this protocol in the revised manuscript Lines 103-106).

**3. Please consider whether to** **include 1.4 and its substeps for filming. Currently there is still space for filmable content and including this part completes the procedure for isolation and culture of UC-MSCs (Line 192).**

According to the Editorial comment, we have included 1.4 and its substeps for filming and highlighted it with yellow color in the revised manuscript.

**4. Previous steps do not mention subculture. Please** **describe how and when to subculture (Line 216).**

According to the Editorial comment, we have described how and when to subculture in the revised manuscript (Lines 230-242).

**5. Please** **specify incubation conditions (Line 229).**

According to the Editorial comment, we have specified incubation conditions in the revised manuscript (Lines 257-258).

**6. How much (Line 245)?**

According to the Editorial comment, we have described the volume of viability dye in the revised manuscript (Line 275).

**7. More details (Line 250)?**

According to the Editorial comment, we have revised this substep in the revised manuscript (Lines 281-282).

**8. Temperature? Volume of** **Oil Red O solution used (Line 272)?**

According to the Editorial comment, we have described the temperature and volume of Oil Red O solution in the revised manuscript (Lines 304-305).

**9. Temperature? Volume of** **Alizarin Red S solution used (Line 295)?**

According to the Editorial comment, we have described the temperature and volume of Alizarin Red S solution in the revised manuscript (Lines 329-330).

**10. Temperature? Volume of** **toluidine blue solution used (Line 317)?**

According to the Editorial comment, we have described the temperature and volume of Toluidine Blue solution in the revised manuscript (Lines 352-353).

**11. Please** **describe different panels (A-C) in the figure legend (Lines 362-364).**

According to the Editorial comment, we have described different panels (A-C) in the figure legend of the revised manuscript (Lines 402-404).

**12.** **What are P1, P3 and P5 and what does washing mean (for instance what washing solvent is used) (Line 369)?**

According to the Editorial comment, we have described the P1, P3 and P5 in the revised manuscript (Lines 409-412).