Author's response to reviews

Title: Analyses of the differentiation potential of satellite cells from MyoD-/-, mdx, and PMP22 C22 mice

Authors:

Marion M Schuierer (marion.schuierer@klinik.uni-r.de)
Christopher J Mann (chris.mann@kcl.ac.uk)
Heidi Bildsoe (heidi.bildsoe@kcl.ac.uk)
Clare Huxley (c.huxley@ic.ac.uk)
Simon M Hughes (simon.hughes@kcl.ac.uk)

Version: 2 Date: 21 February 2005

Author's response to reviews: see over
Dear ladies and gentlemen,

please find enclosed our revised manuscript now entitled: “Analyses of the differentiation potential of satellite cells from MyoD⁻/⁻, mdx, and PMP22 C22 mice” by Schuierer and coworkers (MS: 1268143276511033). We thank both reviewers for their fruitful comments that we would like to answer as follows.

Reviewer 1:
We thank the reviewer for the comment on the use of matrigel in our assay system. To address this issue we now point out that utilization of other matrices might uncover subtle variations that we have not been able to detect under the conditions we have chosen. The text within the discussion section on page 13 has been amended by the following paragraph:
“Additionally, we cannot exclude the possibility that very subtle differences in differentiation behaviour were not detected in our assay system as we have utilized matrigel, a matrix in which growth factors are abundant. Thus, small variations might have been masked that only would be detectable at the application of collagen or gelatine matrices.”

Reviewer 2:
We have now taken up “MyoD⁻/⁻” in the title of our manuscript as suggested by the reviewer, the new title now is: “Analyses of the differentiation potential of satellite cells from MyoD⁻/⁻, mdx, and PMP22 C22 mice”.

Although the publication cited by the reviewer (Schafer et al) only came out after submission of our manuscript, we thank the reviewer for mentioning that work. The data of Schafer et al. point out inter-individual variations and heterogeneity within the satellite cell pool and may therefore support our findings. We have added the following paragraph within the conclusions sections, citing that publication:
“A very recent publication by Schaefer et al. also revealed heterogeneity in the number of satellite cells between individual mdx and C57 animals. The authors observed that this heterogeneity did not correlate with age, gender, or degree of degeneration, but possibly reflected additional genetic factors that influence the maintenance of the satellite cell pool.”

Thank you for considering the revision of our manuscript.

Yours sincerely,

Marion M. Schuierer