Author's response to reviews

Title: Expression profiles of muscle disease-associated genes and their isoforms during differentiation of cultured human skeletal muscle cells

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Dear Editor,

Enclosed is the article: Expression profiles of muscle disease-associated genes and their isoforms during differentiation of cultured human skeletal muscle cells, which we hope will be considered suitable for publication in BMC Musculoskeletal Disorders.

We investigated the expression profile of a panel of sarcomeric components with a focus on proteins associated with a group of congenital disorders. The analyses were performed in cultured human skeletal muscle cells during myoblast proliferation and myotube development. A number of proteins involved in muscle diseases were readily detected in the initial stages of muscle cell differentiation, suggesting the possibility of an early role for these proteins as constituent of the developing contractile apparatus during myofibrillogenesis. Our results show that cell cultures of human skeletal muscle are an appropriate tool to study developmental stages of myofibrillogenesis. Our differentiated cultures were predominantly occupied by myotubes, showing a mature sarcomeric cross-striated pattern. This indicates the high quality of our human tissue culture and confirms its usability as a model system for studying the pathogenesis of muscle diseases caused by defects in sarcomeric or cytoskeletal constituents during skeletal muscle development.

Given the new implications for the field, we kindly ask you to consider this manuscript.

All coauthors have seen and agree with the contents of the manuscript. Coauthors have no relevant financial interest in this manuscript. The manuscript is not under review at any other publication.

Yours sincerely

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