Author's response to reviews

Title: Overexpression of connexin 43 using a retroviral vector improves electrical coupling of skeletal myoblasts with cardiac myocytes in vitro

Authors:

Oleg Tolmachov (o.tolmachov@imperial.ac.uk)
Yu-Ling Ma (y.ma@imperial.ac.uk)
Pravina Patel (pravina.patel@imperial.ac.uk)
Michael Themis (m.themis@imperial.ac.uk)
Hilmar Spohr (h.spohr@imperial.ac.uk)
Yvonne Kienast (yvonne.kienast@gmx.de)
Charles Coutelle (c.coutelle@imperial.ac.uk)
Nicholas S Peters (n.peters@imperial.ac.uk)

Version: 4 Date: 22 May 2006

Author's response to reviews: see over
To: BMC Cardiovascular Disorders

21st May, 2006

Dear Editor,

We are grateful for the extension granted to us for the revision of our manuscript “Overexpression of connexin 43 using a retroviral vector improves electrical coupling of skeletal myoblasts with cardiac myocytes in vitro”. We now submit our revision of the article.

Please find below our response to the reviewers comments (their text is in blue). In addition, Dr Kenneth T MacLeod joins us as a co-author of the manuscript with a corresponding change in the “Authors’ contributions” section. Finally e-mail address of the corresponding author has changed to epsilon@tinyworld.co.uk.

Referee: Daniele Bani.

Accept without revision.

Referee: Hans Reinecke

General
The authors replied to the reviewers comments appropriately. I am surprised, however, by the authors comment that fusion was limited to 5% of the cultures and that confluent primary myoblast cultures could be maintained for many weeks. I would argue that these cultures are mainly consistent of fibroblasts.

-----------------------------------------------------------------------------------
In response to the reviewer comments we provide the requested data as ‘Additional file 2’ and its Legend. The primary rat myoblasts were used for immunostaining with mouse anti-desmin antibody immediately after isolation/purification with the anti-alpha-7 integrin antibody and also after retroviral transduction with subsequent EGFP sorting by FACS (which involved 4 additional weeks of culturing). NIH3T3 mouse fibroblasts were used as a desmin-negative control and L6 rat myoblasts were used as a desmin-positive positive control. We used the monoclonal anti-desmin antibody (clone DE-U-10, product number D033 from Sigma-Aldrich), which is cross-reactive in a broad array of vertebrate species including rat and mouse. The obtained images show that desmin-positive cells of myogenic origin constitute the bulk of the cells both immediately after the alpha-7 integrin sorting and also in our ‘late’ myoblast culture. The ‘Additional file 2’ is referenced from the ‘Retroviral transduction of primary skeletal myoblasts and FACS analysis’ subsection of ‘Methods’.

Truly yours,

Dr. Oleg Tolmachov