Supplemental Material

In Vitro Grown Micro-Tissues for Cardiac Cell Replacement Therapy *in Vivo*

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To see the video, please use the following link: https://www.cellphysiolbiochem.com/Articles/000092/SM/2018MS3078Suppl_Video.mp4

Supplementary figure 1: Hamilton syringe with needle used for intramyocardial injection.





Supplementary figure 2: Flow cytometric characterization of bone marrow mesenchymal stem cells (batch 1 passage 11, batch 2 passage 29 and 30, batch 3 passage 40 and 41)

Supplementary figure 3: Fraction of detected transgenic cells (i.e. ES-CMs) as percentage of total number of detected male cells (i.e. ESCM+MSC)

The fraction of persisting ES-CMs within all detectable cells injected was approximately twice as high in +lowMSC as in +highMSC at both time points but it declined over time in both groups.



Supplementary figure 4: Purified FLuc-αPIG-AT25 iPS-CMs

Puromycin purified AT25fluc iPS-CMs were plated onto coverslips and stained with antibodies against sarcomeric alpha-actinin (green). Nuclei were stained by Hoechst dye.

