

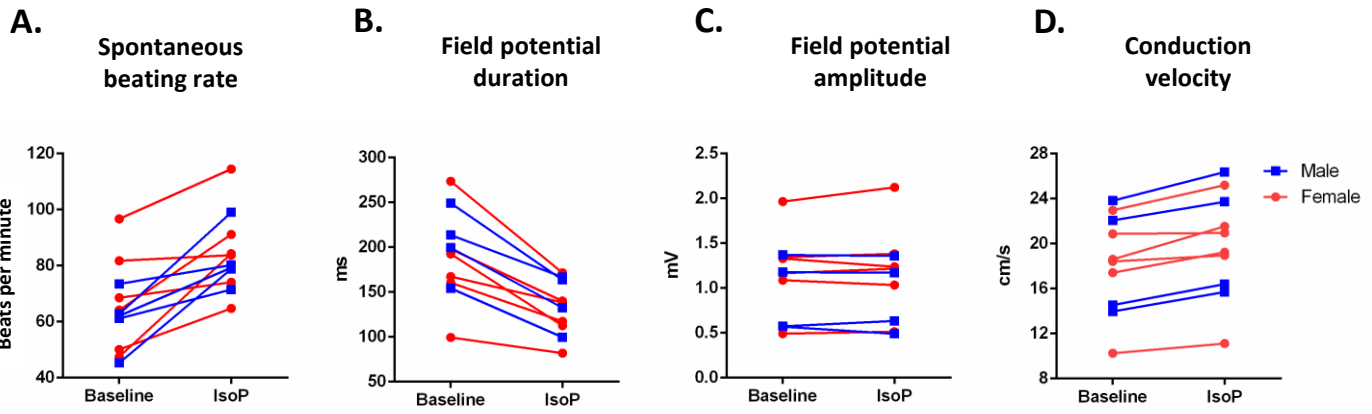
## **Appendix A – Supplemental Data**

### **Cardiomyocyte functional screening – interrogating comparative electrophysiology of high-throughput model cell systems**

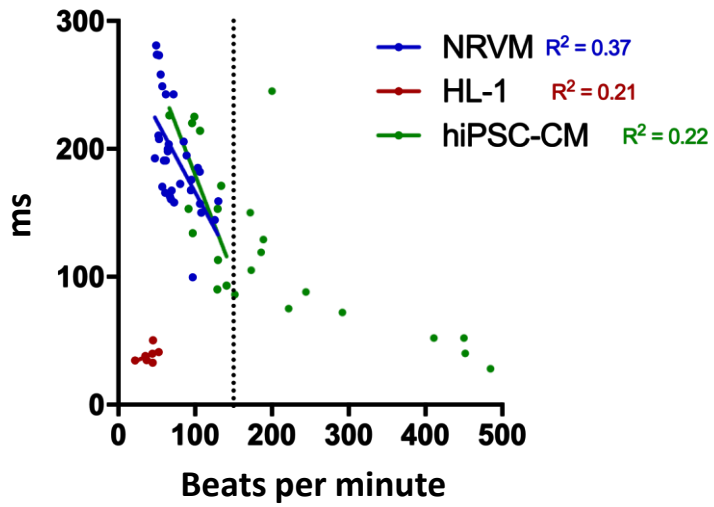
Simon P. Wells, Helen M. Waddell, Choon Boon Sim, Shiang Y. Lim, Gabriel B. Bernasochi, Davor Pavlovic, Paulus Kirchhof, Enzo R. Porrello, Lea M. D. Delbridge, James R. Bell

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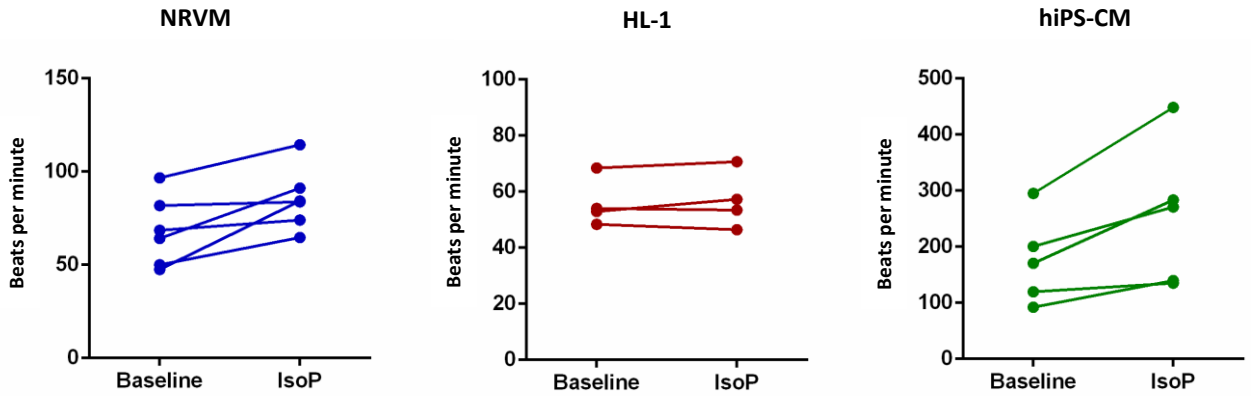


**Fig S1** | Individual responses of male (blue) and female (red) NRVMs to  $1\mu\text{M}$  isoproterenol. **(A)** Spontaneous beating rate **(B)** field potential duration, **(C)** field potential amplitude and **(D)** conduction velocity.  $N=5-6$  cultures,  $n=6-7$  MEAs.

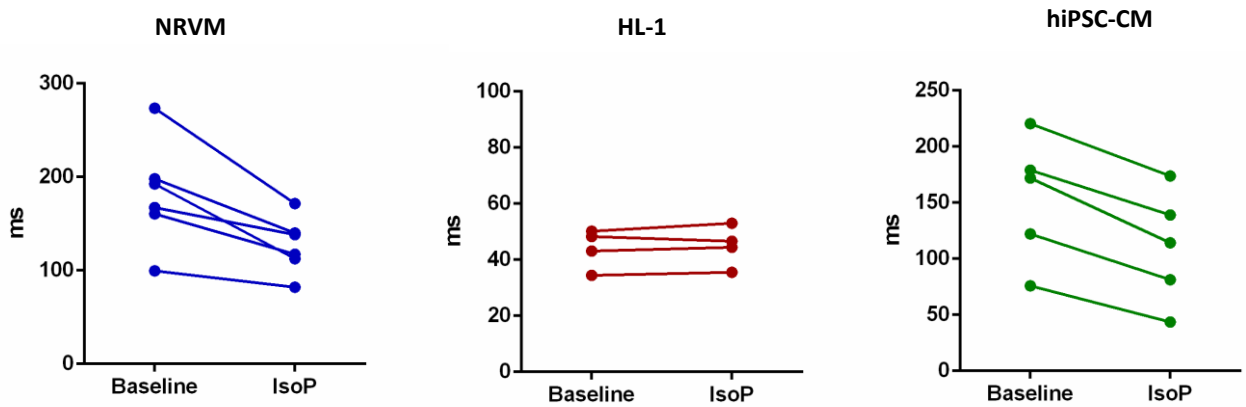


**Fig S2** | Spontaneous beating rate:Field potential duration relationship among NRVMs, HL-1 and hiPSC-CMs, with a linear regression fitted only to cells with rates  $\leq 150$ BPM.

## A. Spontaneous beating rate



## B. Field potential duration



**Fig S3** | Individual responses of NRVMs, HL-1 and hiPSC-CMs to  $1\mu\text{M}$  isoproterenol. (A) Spontaneous beating rate (B) field potential duration. NRVMs:  $N=6$  cultures,  $n=7$  MEAs; HL-1:  $N=4$  passages,  $n=7$  MEAs; hiPSC-CMs:  $N=5$ ,  $n=22$  MEAs.