



Supplementary Materials: Supplementary Materials can be found at www.mdpi.com/xxx/s1.



Figure 1. Deprivation of sexual activity shortens survival in mice with DCM. (**A**) Kaplan Meier survival curve of DCM+S (n = 32) vs. DCM-S (n = 19), on C57BL/6J genetic background. (**B**) Example of the porous social divider (Unimice Cage Divider Kit w/Social Holes, Animal Care Systems, Centennial, CO, USA). (**C**,**D**) Representative camera setup for breeding activity recording. (**E**) Example of a still image from video recording using multi-camera digital video recorders (DVR).



Figure 2. Sexual deprivation affects cardiac function in DCM male mice. (**A**,**B**) Representative cardiac MRI videos of (**A**) DCM-S (132 days) presence of the ventricular and atrial dilation, left atrial thrombosis and pleural effusion compared to (**B**) DCM+S (148 days). Click on the included image to play the video of MRI scans.



Figure 3. Sexual activity deprivation modulates expression of contractile protein genes Myocd and Myh7 levels in mice with DCM. Fold-change in transcript levels of the differentially expressed genes analyzed by microarray in left ventricular (LV) tissue of DCM+S vs. DCM-S, on breeding diet (n = 4 per group).



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