

Supplemental Material

Data S1.

Supplemental Methods

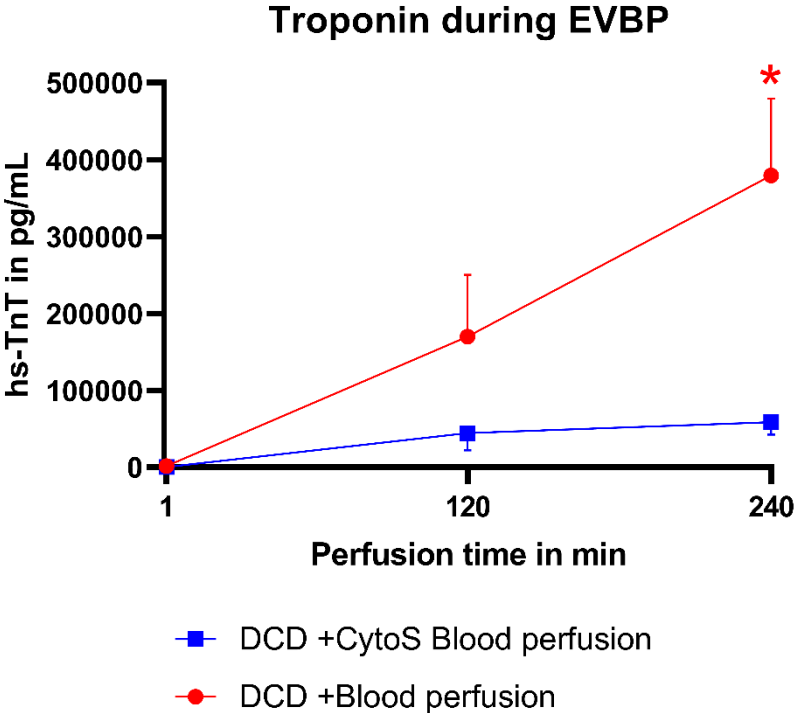
Statistics – Network analysis

We explored the global multivariate patterns by comparing differences across the architectures of the GE networks. The network's nodes are variables confirmed in both statistical and machine-learning steps. The edges between nodes are the absolute values of the Pearson correlation coefficients if the FDR-adjusted p -values were significant. The graph was computed using the stress-majorization layout¹⁴. To facilitate the visualization of important nodes, two filters were used: a) the node-degree > 2 , and normalized centrality-betweenness $> 20\%$.

Table S1. Primer for RT-qPCR.

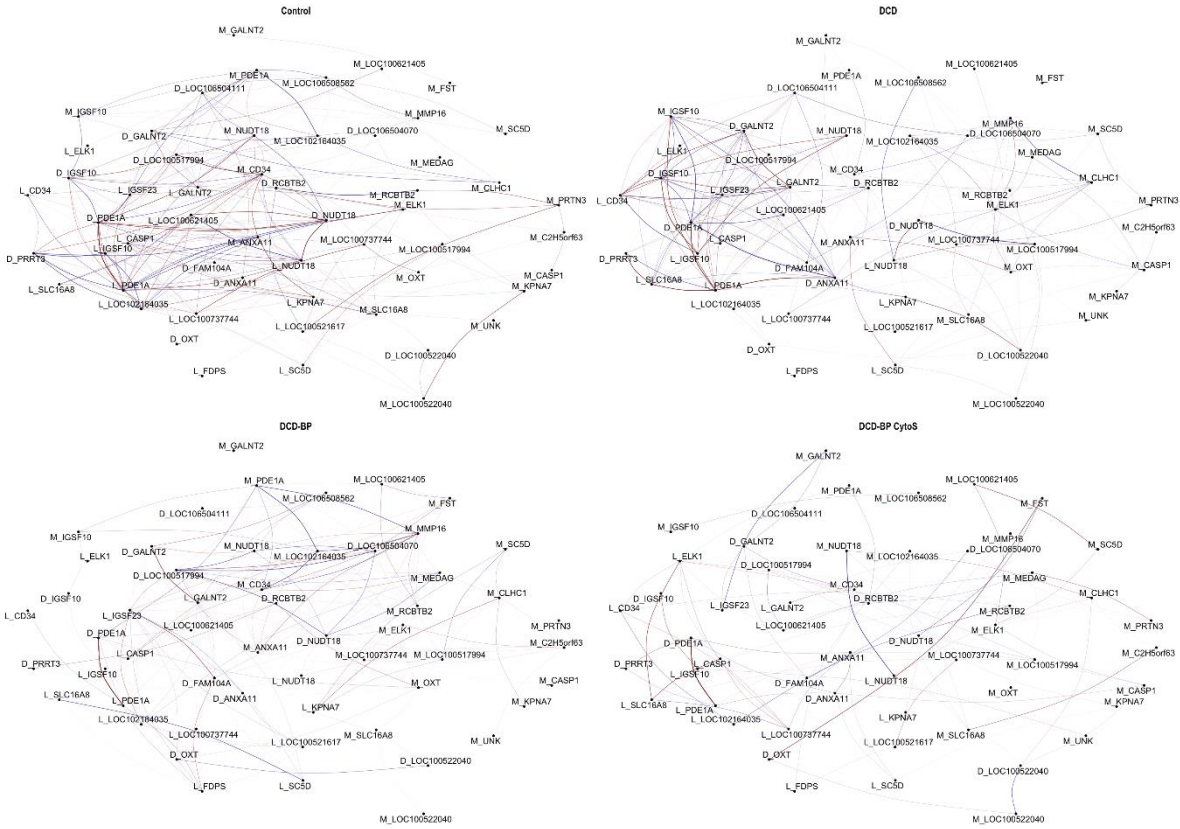
| | |
|----------------|------------------------|
| HPRT1 | |
| Foward | GGACTTGAATCATGTTTGTG |
| Reverse | CAGATGTTTCCAAACTCAAC |
| GAPDH | |
| Foward | ACCAGGGCTGCTTTTAACTCTG |
| Reverse | TTCTCCATGGTCGTGAAGACAC |
| CASP1 | |
| Foward | GCAGAAGCAAGCGTGACAGC |
| Reverse | TGGCATCAAAAGCTGCACATAC |
| RAD51B | |
| Foward | ACTCTGTCGCTTCTGTGGTAA |
| Reverse | ACATCAAGATCAGCTCCCAC |
| FAM104A | |
| Foward | CAAGGCCCGTACTTCCACAT |
| Reverse | CACAGAAGGCAAGAAACCGC |

Figure S1. Troponin kinetics during maintenance perfusion.



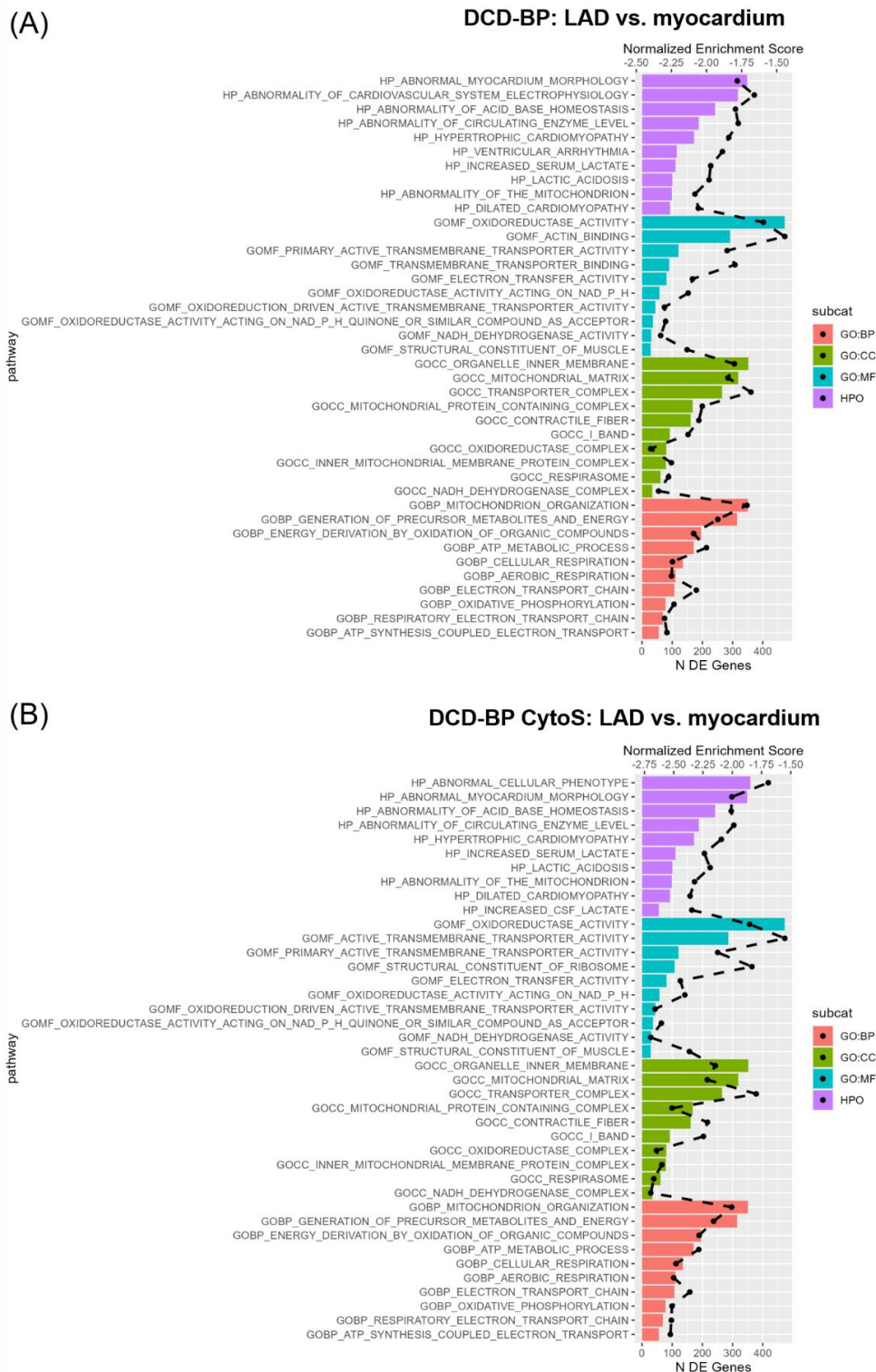
Timepoint 1 and 120 min: Samples of 3-4 pigs per group. Timepoint 240 min: Samples from 8 pigs per group.

Figure S2. Network analysis.



The edges between nodes are the absolute values of the Pearson correlation coefficients if the FDR-adjusted p -values were significant. To facilitate the visualization of important nodes, two filters⁴² were used: a) the node-degree > 2 , and normalized centrality-betweenness $> 20\%$. BP: Blood perfusion. CytoS: CytoSorb. DCD: Donation after circulatory death. LAD: Left anterior descending. M, L, and D combined with gene symbols reflect the myocardial expression, LAD expression, or expression difference between both tissues. A positive correlation is shown in blue. A negative correlation is shown in red.

Figure S3. Pathway analysis for tissue comparison.



BP: biological process. DE: differentially expressed. CC: cellular component. GO: Gene ontology. HPO: human phenotype ontology. MF: molecular function. The dashed black line represents the normalized enrichment score. All plotted pathways are $p < 0.05$.