

## **Supplementary material and methods**

### **Transverse aortic constriction**

For the surgical procedure, mice were anaesthetized with isofluran and intubated. The mice were subsequently ventilated with 0.2 ml at a respiratory rate of 110 per minute. After opening the chest cavity, the aortic constriction was performed with a 7-0 nylon suture which was ligated against a 27-gauge needle according to reference [26]. After removal of the needle the chest cavity was closed and the intubation canula was removed. Successful TAC operation was controlled by echocardiography before and after surgery with a Vevo 2100 (Visualsonics).

### **Quantification of fibrosis**

Fibrosis was quantified in left-ventricular slices that were stained with Sirius Red / Fast Green. Whole slice images were taken and analysed using the MetaMorph software (Molecular Devices) on a Zeiss Axio Observer Z1 microscopy system.