Electronic Supplementary Material

M.L. Handoko et al. A refined radio-telemetry technique to monitor right ventricle or pulmonary artery pressures in rats. Pflugers Arcg – Eur J Physiol 2007.

Fig. E-1, E-2, E-3.

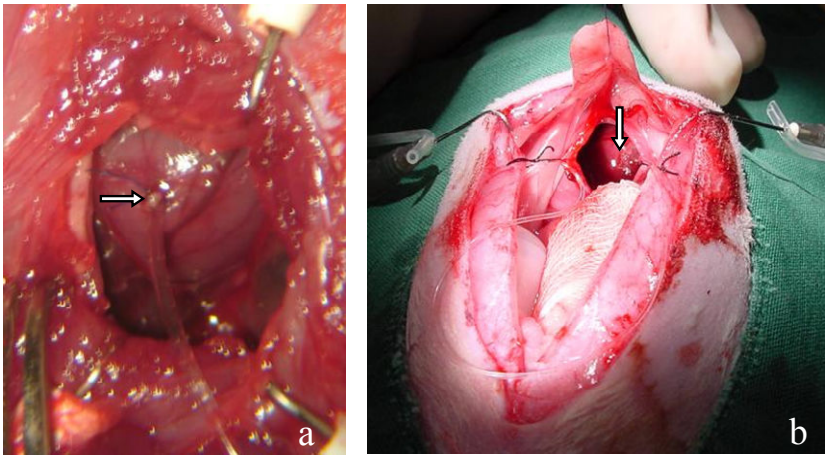

Figure E-1: a) The transthoracic approach: a left thoracotomy was performed, and the pressure catheter was subcutaneously tunnelled and then inserted into the right ventricle (*arrow*). Shown is a detailed view of an opened thorax on the catheterised heart. b) The transdiaphragm approach: via a laparotomy the diaphragm was opened, and the pressure-catheter was inserted into the right ventricle (*arrow*). The catheterised heart can be seen behind the opened diaphragm.

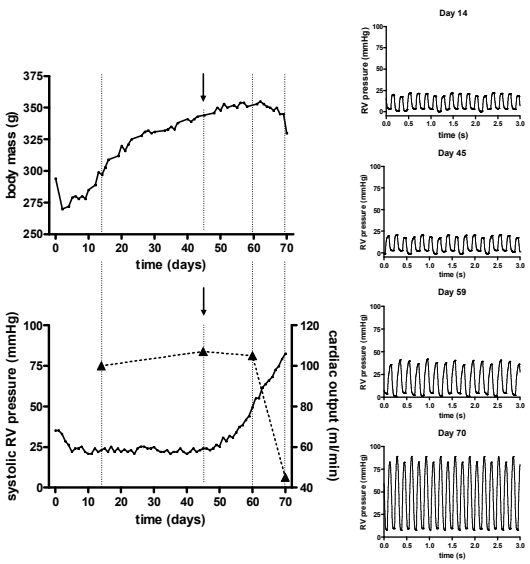

Figure E-2: *(left panel)* A typical example of the development of body mass, systolic RV pressures and cardiac output (*triangles*) is shown for the monocrotaline treated rat (*arrow*: day 45; MCT 80 mg/kg s.c.) for a total registration time of 70 days. After 12 days the pre-surgical level of the body mass was reached, and increased until heart failure developed. There is a gradual rise in systolic RV pressures after injection of MCT. Cardiac output remained stable until RV heart failure developed. The *vertical dotted lines* mark interesting time points: two weeks after recovery of the procedure (day 14), when MCT was injected (day 45), two weeks after injection (day 59), and when RV heart failure developed (day 70) after which the rat was euthanized. *(right panel)* RV pressure recording remained stable during the whole study period. Pressure waveforms traces of the MCT treated rat are shown for day 14, day 45, day 59, and day 70.

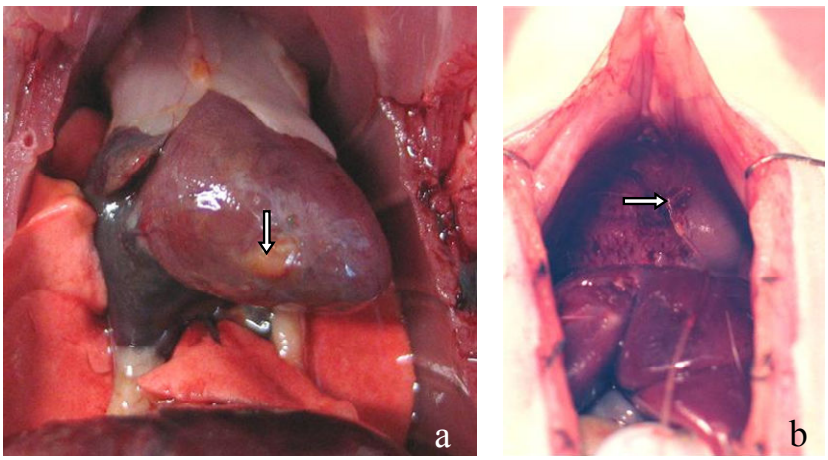

Figure E-3: a) Autopsy revealed fibrosis only in the near proximity of the insertion point of the pressure catheter (*arrow*), and b) in the transdiaphragm operated animals, no signs of herniation or dehiscence was seen, and often the liver was partially accreted to the healed diaphragm. Via a laparotomy the diaphragm was exposed: on the right side, the liver was partially accreted. One can also observe the pressure catheter perforating the diaphragm (*arrow*).