**Rationale for the use of double ligation.**

The intercostal arteries in mice have a microscopic diameter of approximately 0.15mmS3 and are very delicate. Any relatively rough manipulation will lead to injury of the vessel and sometimes complete avulsion of the vessel. Given this, we tried to be very gentle during ligation, which, in turn, makes the “tie” loose and does not completely restrict blood flow. To overcome this problem, we double ligated (double tied), which resulted in a complete cessation of blood flow and produced the behavioral and histopathological findings discussed in the paper.

**References**

S3. Müller B, Langa S, Dominiettoc M, Rudinc M, Schulza G, Deyhleb, H, Germanna M, Pfeifferd F, Davidd C, Weitkamp T. High-resolution tomographic imaging of microvessels. Proc. of SPIE. 2008;7078:70780B1-10.