

**SUPPLEMENTARY INFORMATION****High-Resolution Morphological Approach to Analyse Elastic Laminae Injuries of the Ascending Aorta in a Murine Model of Marfan Syndrome**

Júlia López-Guimet<sup>1</sup>, Jordi Andilla<sup>2</sup>, Pablo Loza-Alvarez<sup>2</sup>, Gustavo Egea<sup>1,3,\*</sup>

<sup>1</sup>Departament de Biomedicina, Facultat de Medicina, Universitat de Barcelona, Barcelona (Spain)

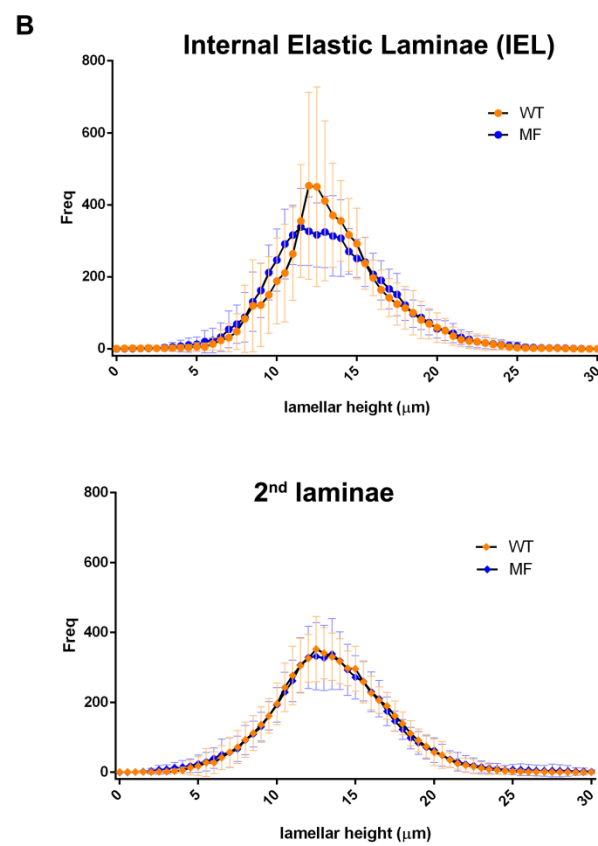
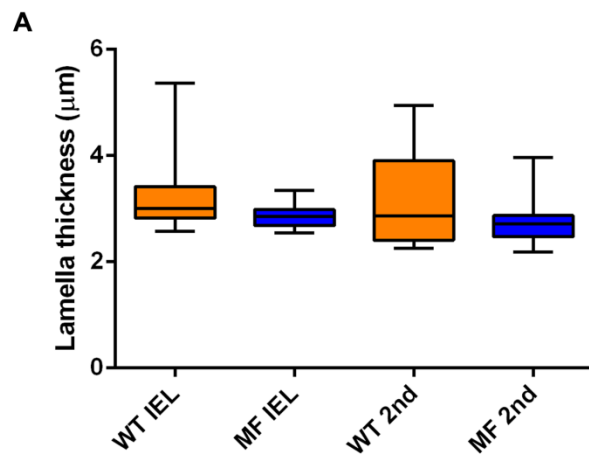
<sup>2</sup>ICFO-Institut de Ciències Fotòniques, The Barcelona Institute of Science and Technology, 08860 Castelldefels, Barcelona, Spain.

<sup>3</sup>Institut de Recerca Biomèdica August Pi i Sunyer (IDIBAPS), Barcelona (Spain)



Lopez-Guimet et al-supplementary video.avi

**Supplementary figure 1 (video). Consecutive image sequence of elastin signal at transverse view.** Resliced original elastin image stack from wild-type aortic tissue, where lighter grey signal displays elastic lamellae. Progression throughout the volume shows lamellae branching, crosslinking, and breaks. Stack tissue volume dimensions are 153.6x66.0x153.6  $\mu\text{m}$  (XZY).



**Supplementary figure 2. Quantitative analysis of lamella thickness and waviness. (A)**

Thickness in wild-type (orange) and Marfan (blue) IEL and 2<sup>nd</sup> laminae. (B) Waviness by lamella local height histogram.