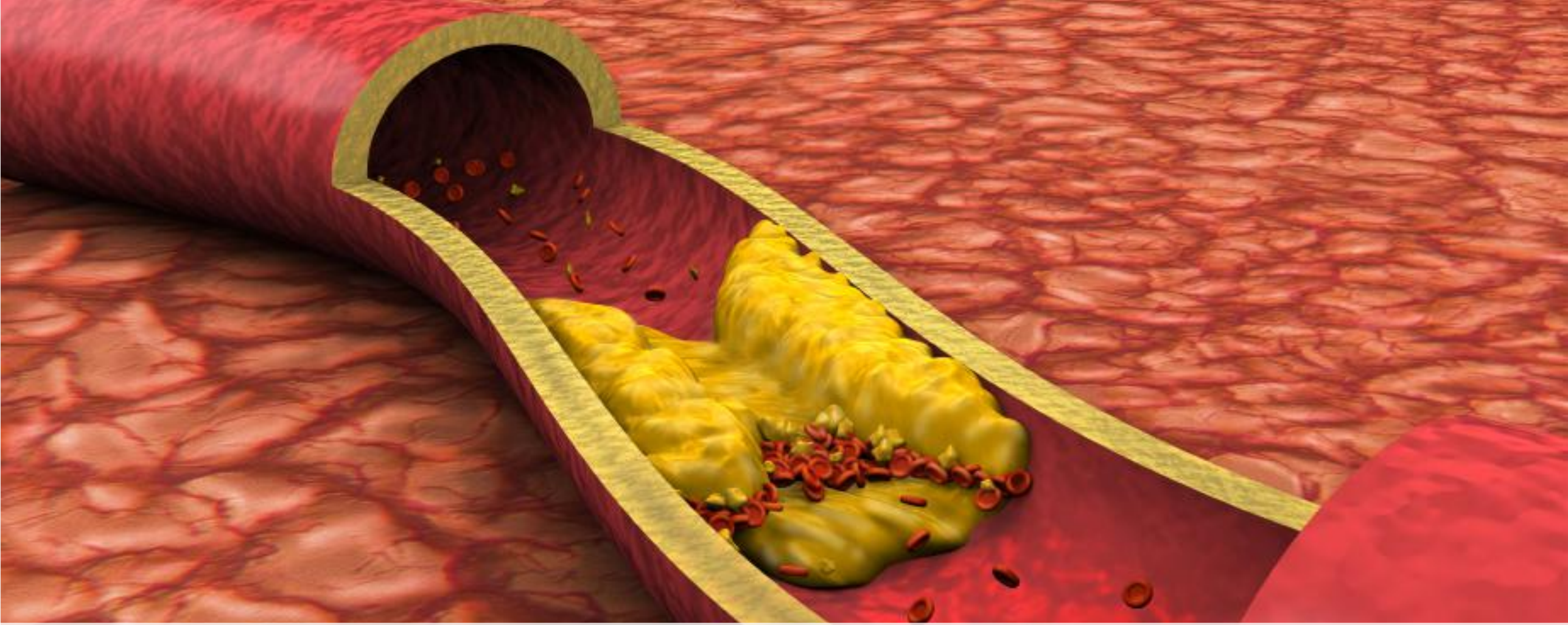
Silk
BIOMATERIALS

Regenerate new blood vessels from natural silk

Gabriele Grecchi, CEO & Founder - Milano, July 2016



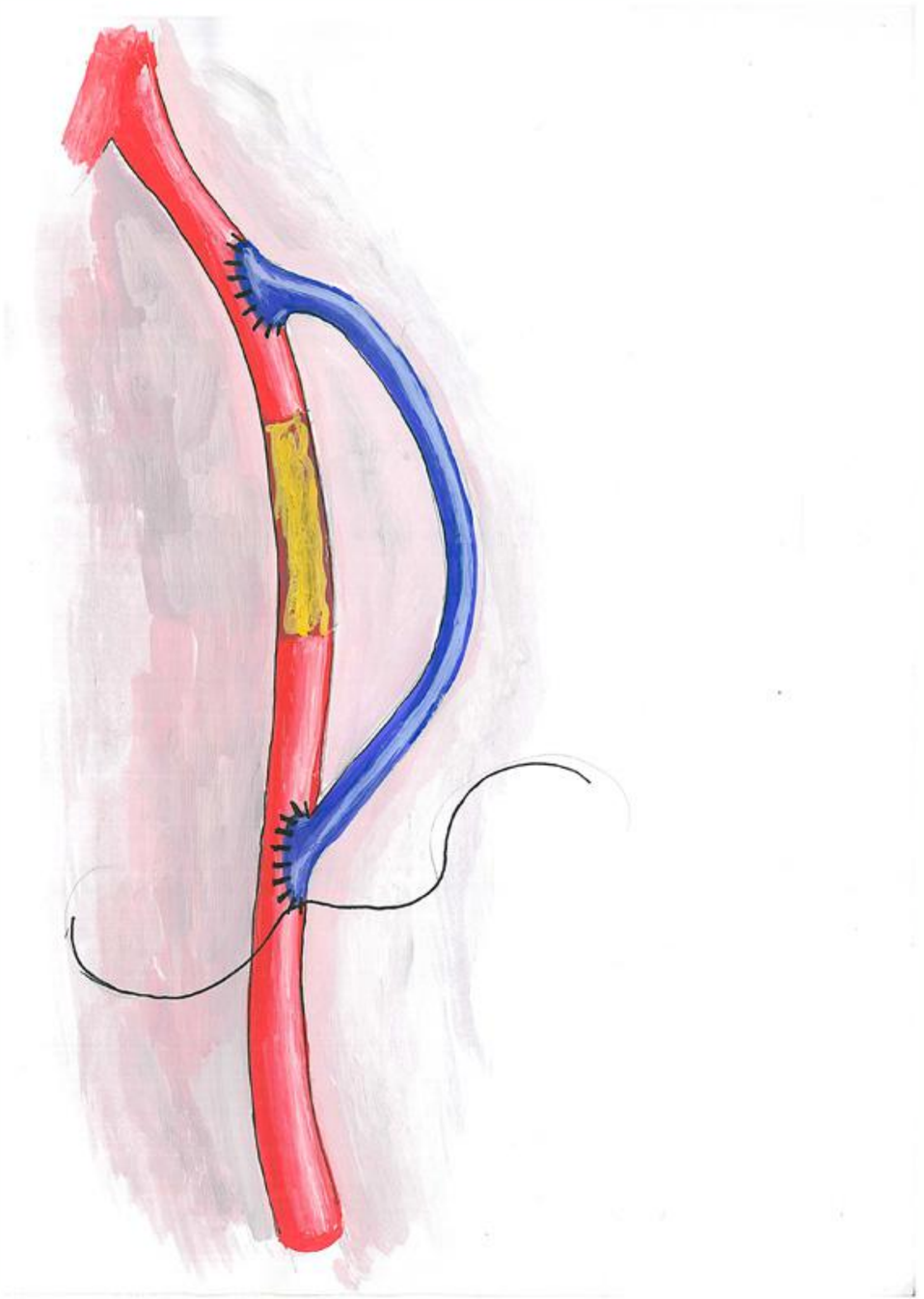
1.4m patients in the US need revascularizations

There is a huge unmet clinical need for vascular prostheses

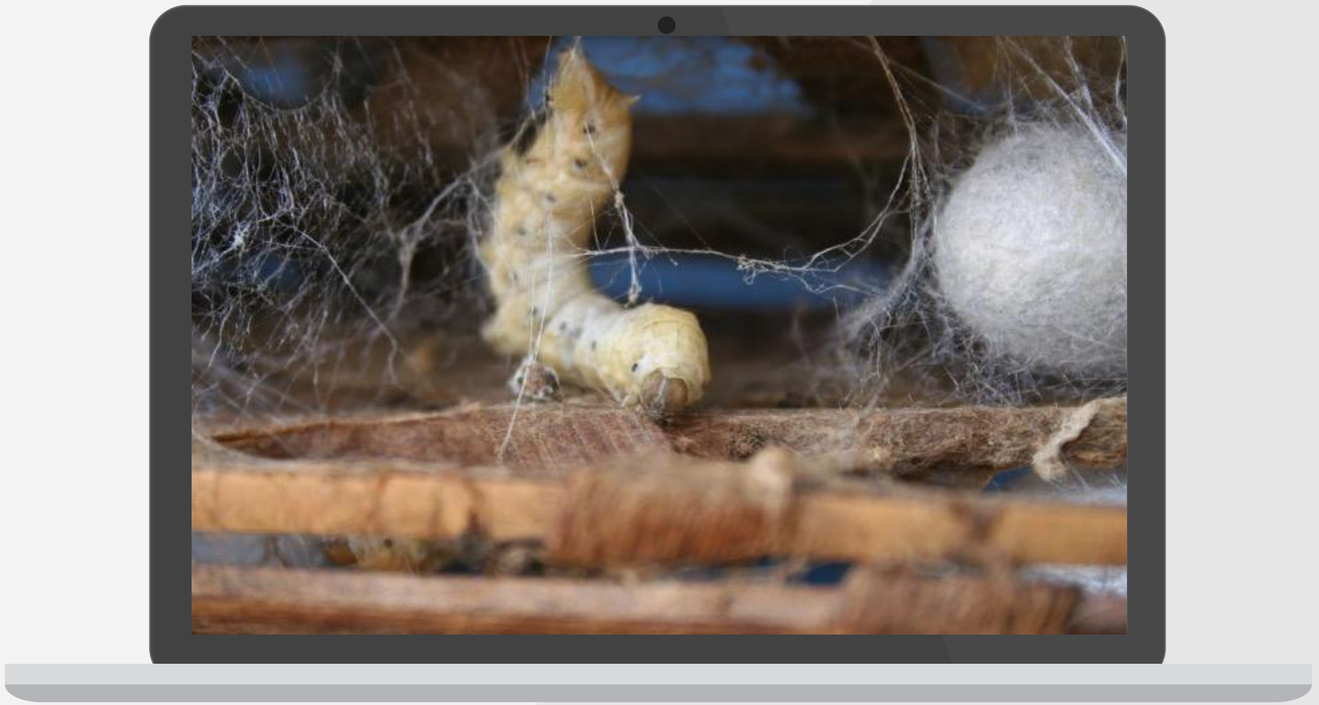
Bypass procedures

- You could **use your own veins**
- But most of the time they're **not available**

- Or use **synthetic vascular grafts**, which still have important limits: **they simply fail**!



Our tissue engineering solution



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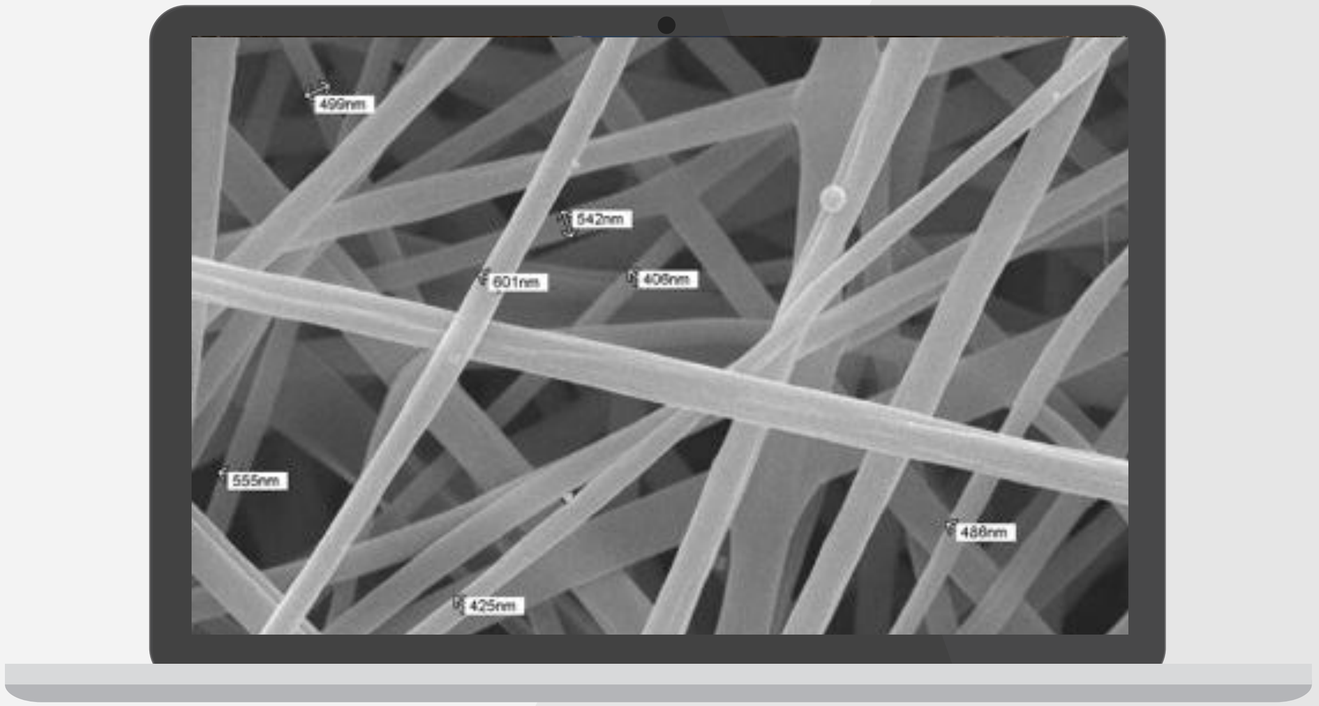

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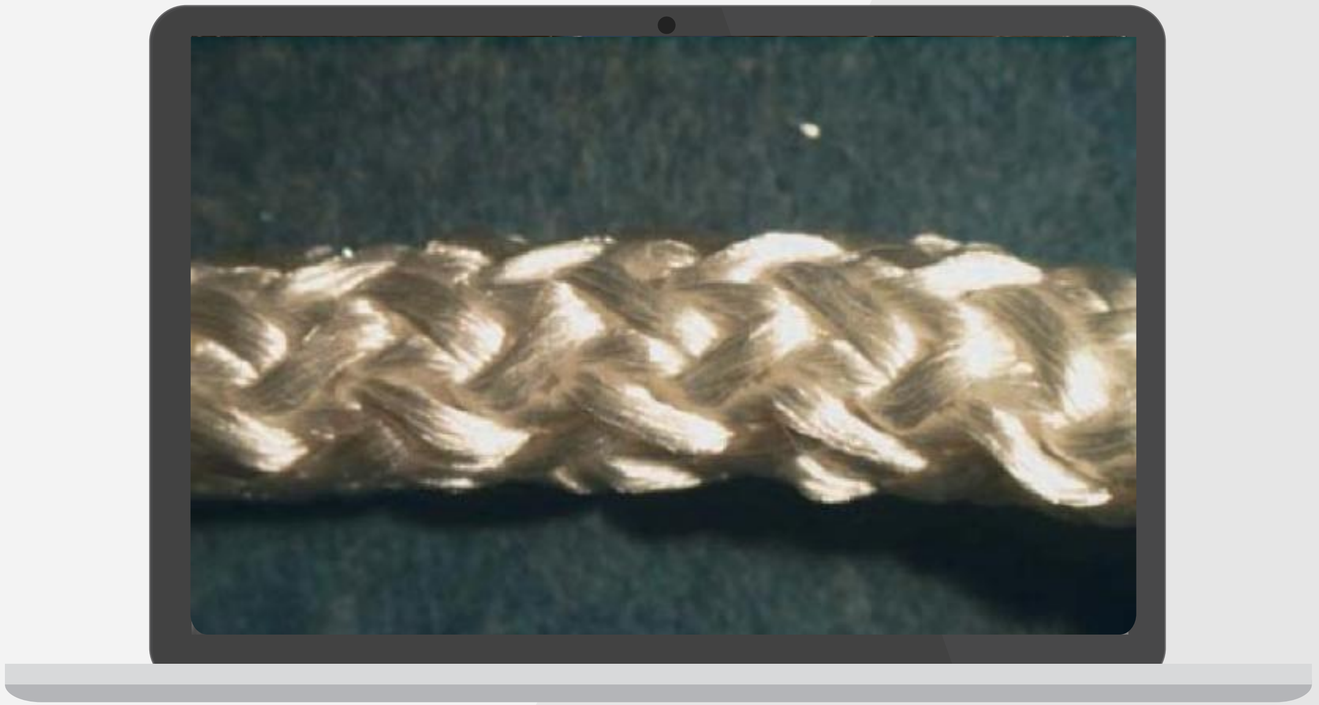

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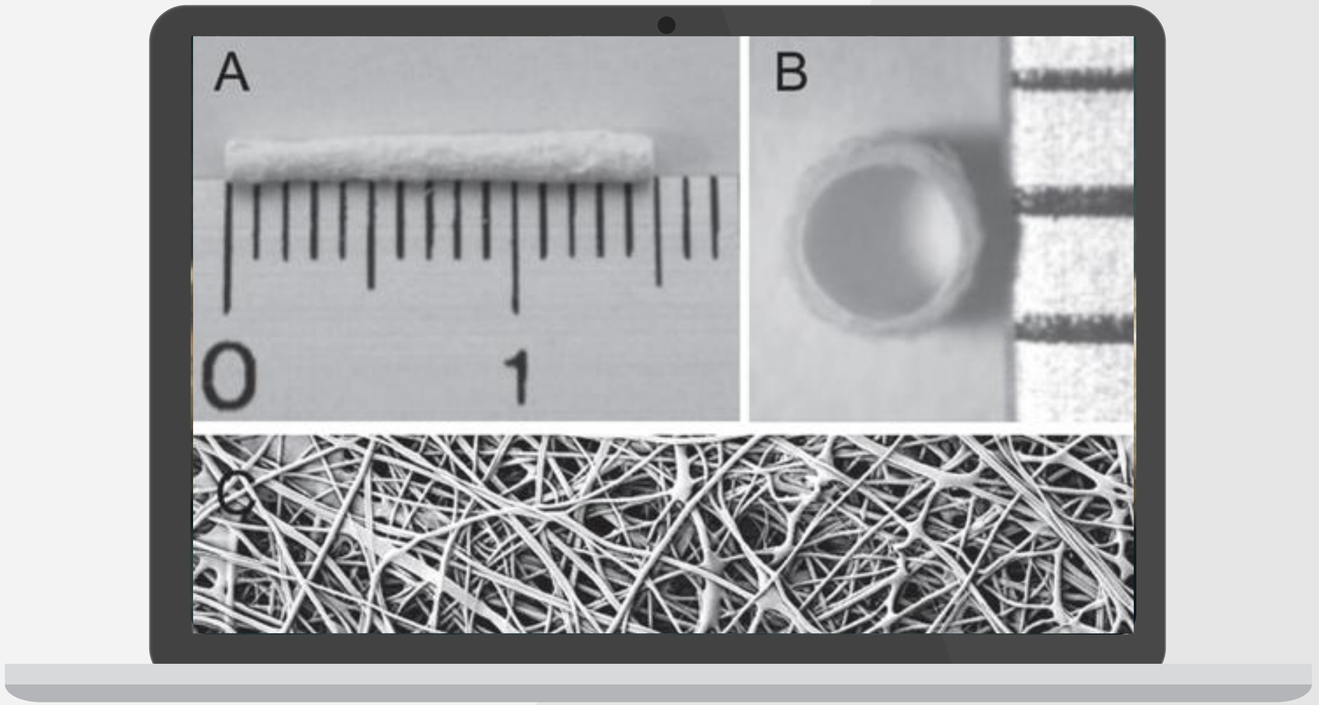

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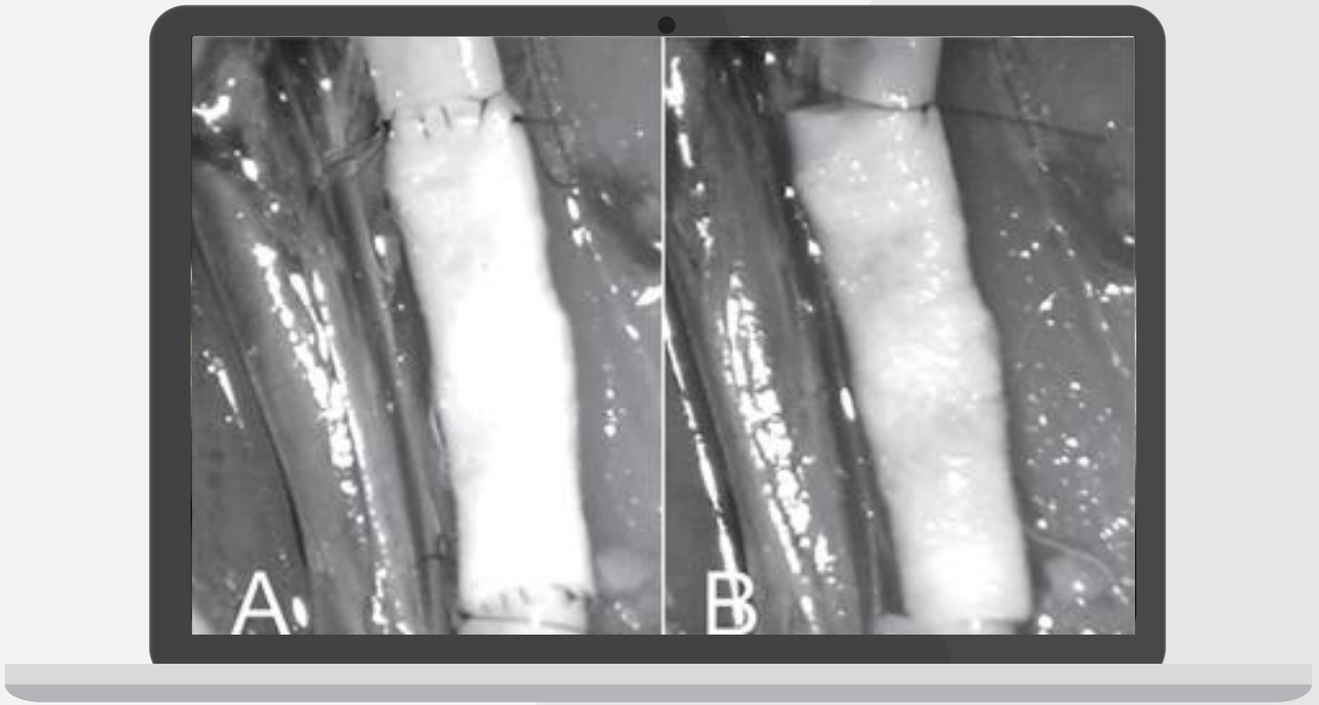

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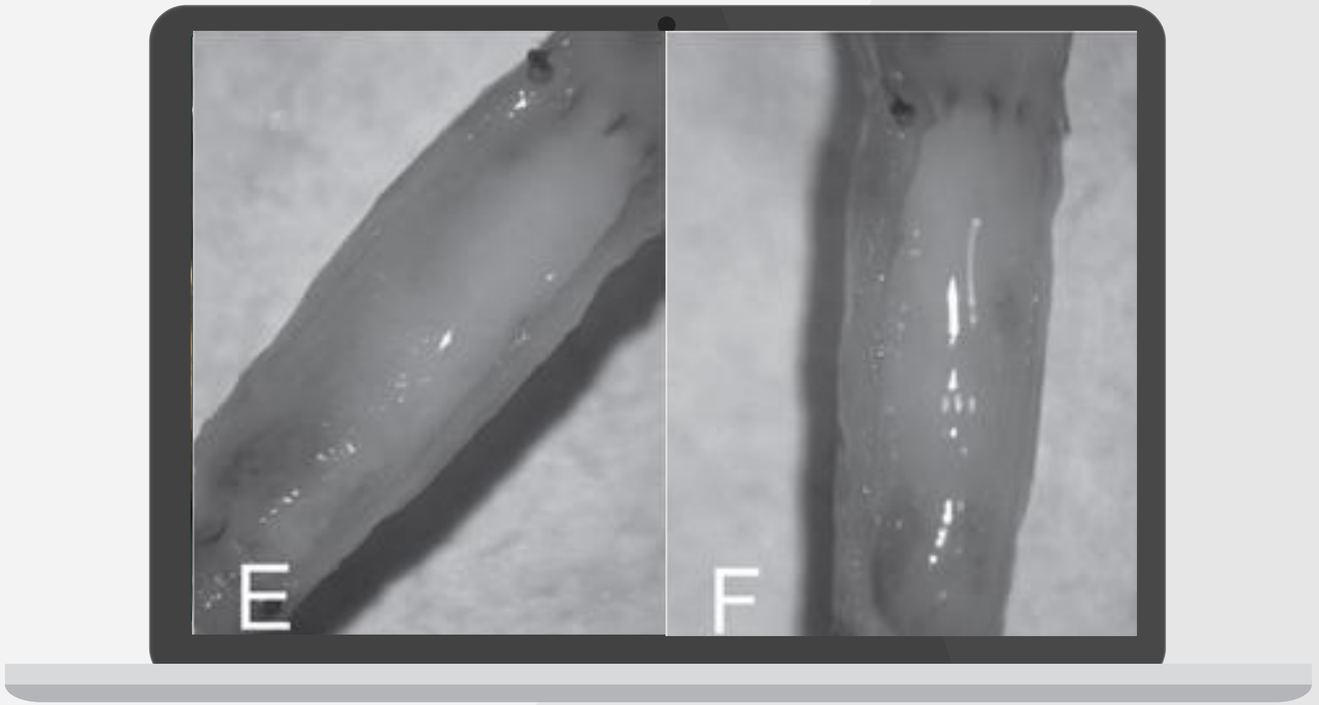
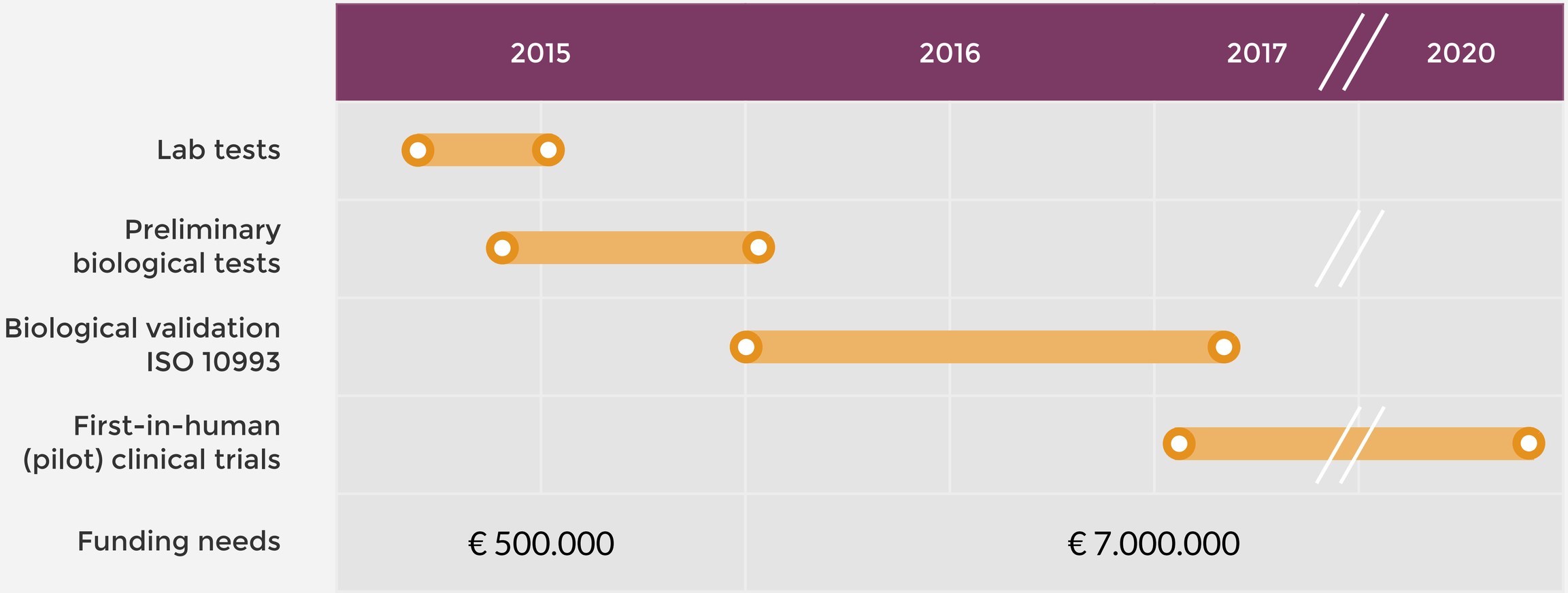


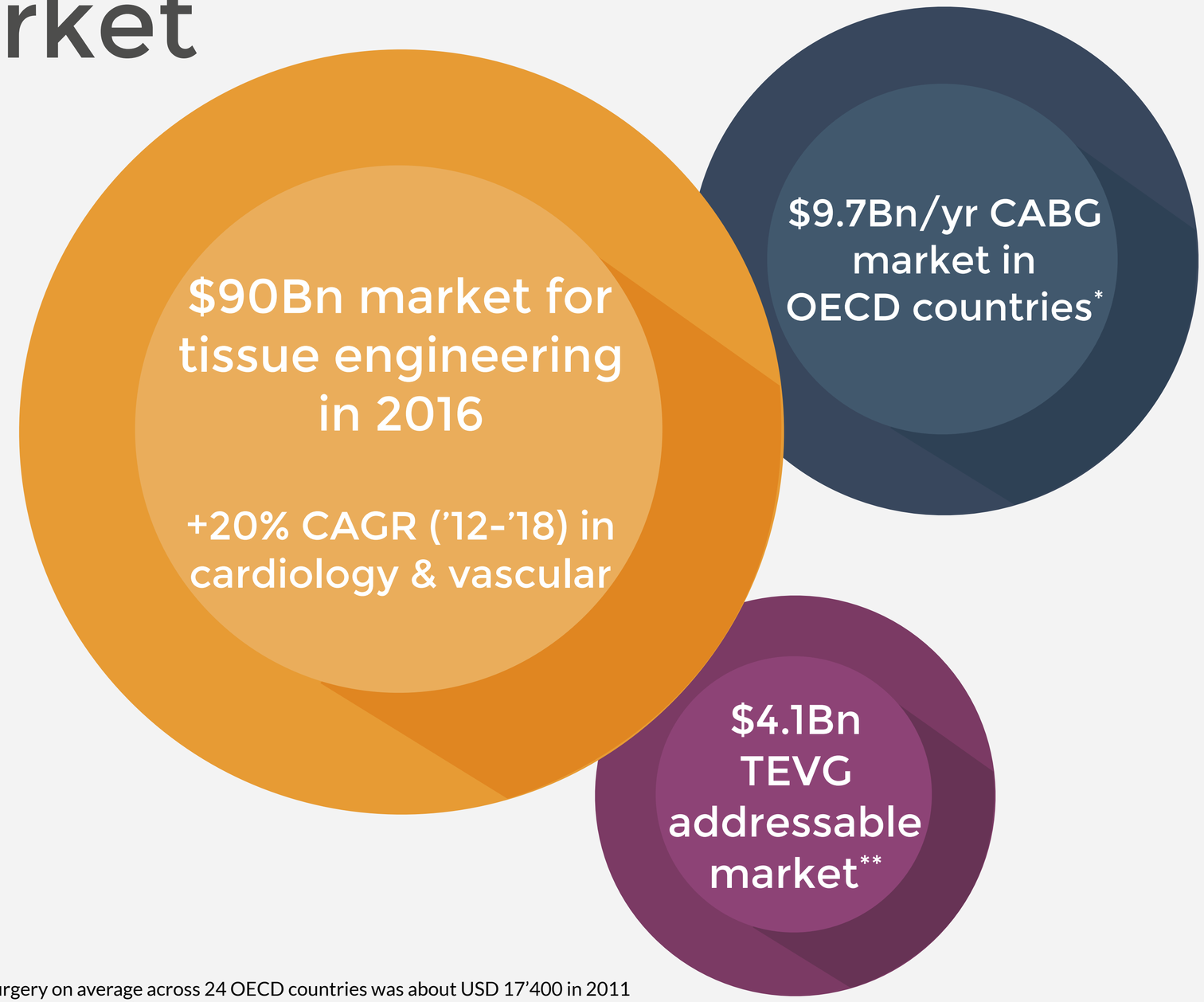
Silk: a “gifted” material

Regulatory path



Already creating partnerships with consultants and CROs to prepare the **clinical evaluation plan**, following in parallel the CE Mark (Notified Body, etc.) and FDA (pre-IDE, etc.) paths

The market



* the estimated price of a coronary bypass surgery on average across 24 OECD countries was about USD 17’400 in 2011
** based on an average 3.3 grafts per procedure and an ASP $1’580/graft, as estimated via interviews and market research

The core team

Antonio Alessandrino

Chief Engineer
Ph. D. in Materials Engineering
Several patents published

Gabriele Grecchi

Chief Executive Officer
MBA at INSEAD
Life science venture investor

Giuliano Freddi

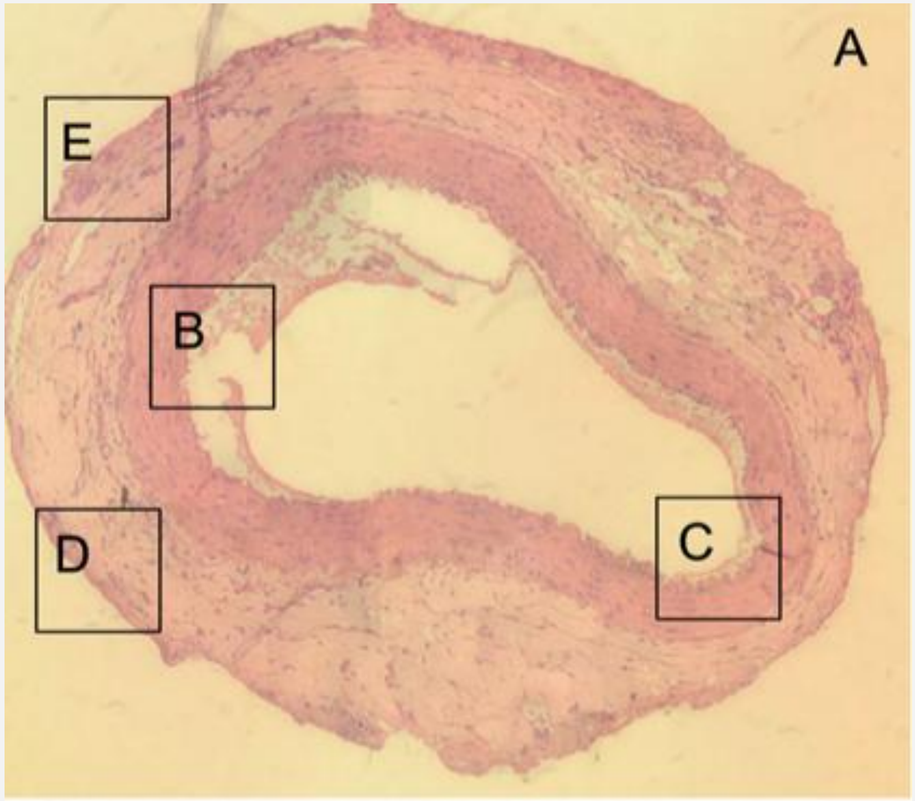
Chief Biologist
Ph. D. in Biology
140+ peer-reviewed papers published

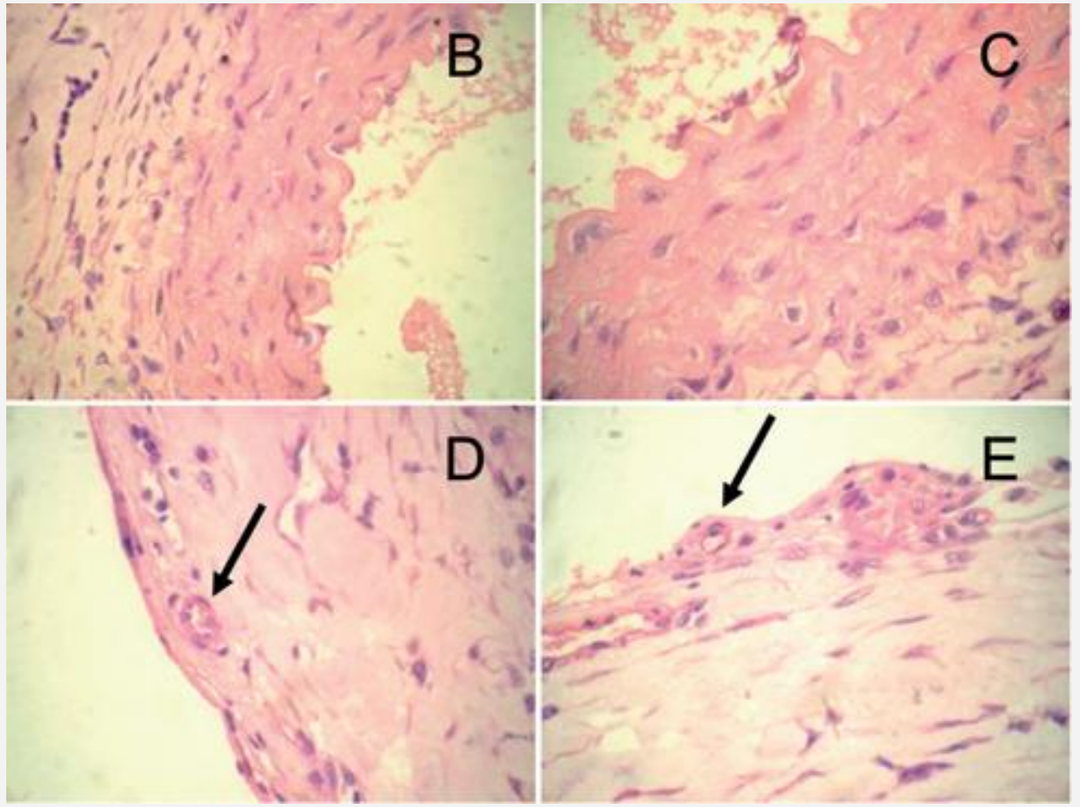
Lorenzo Sala

Process & operations
Master Degree in Management Engineering at Politecnico di Milano

The global top experts on silk as a biomedical tool

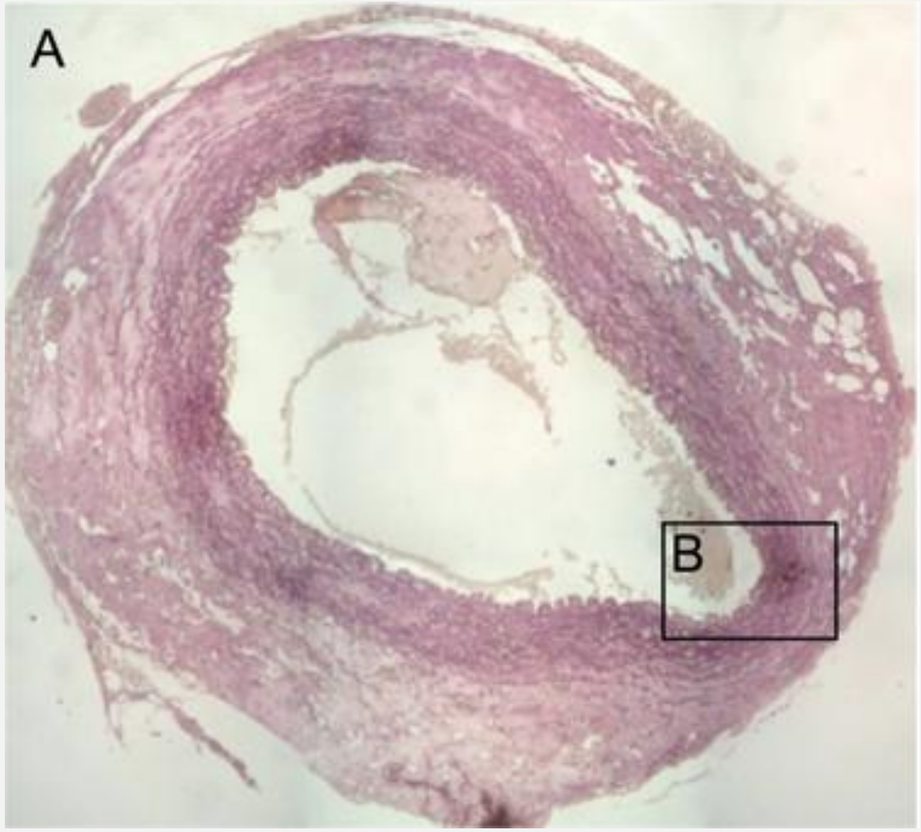
Amazing results

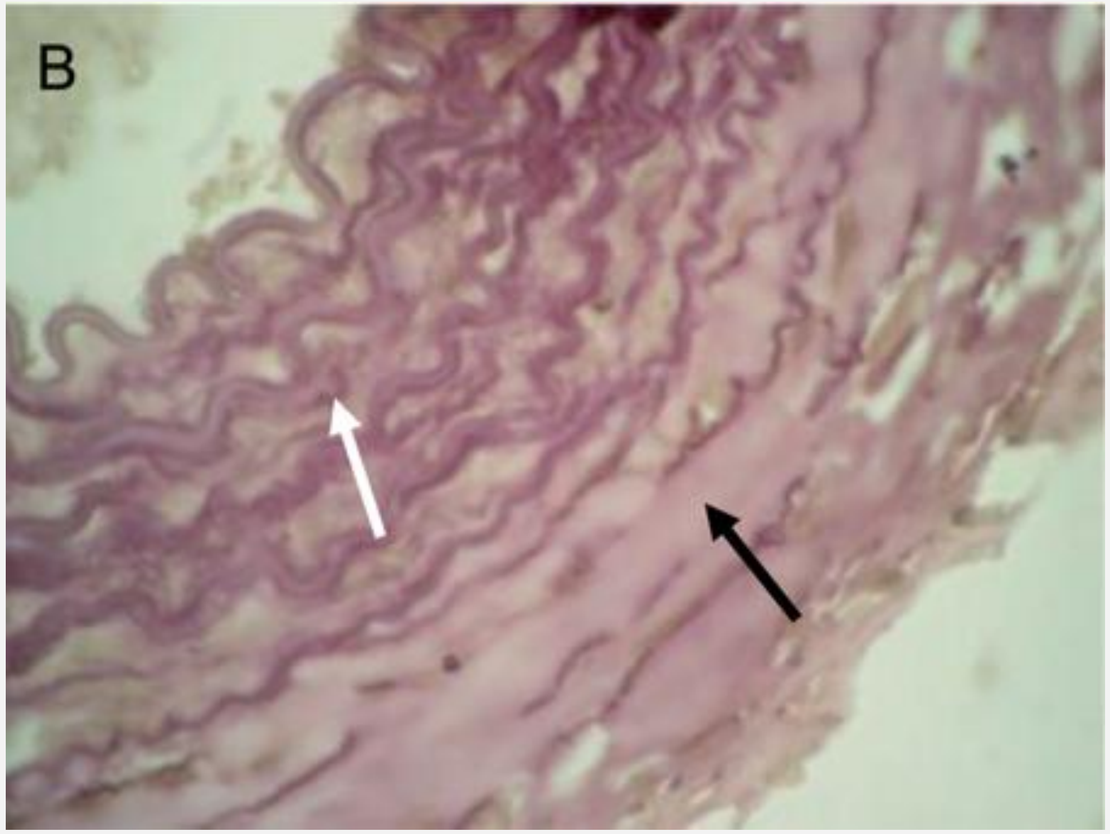




1. Cellular intimal layer similar to the natural tunica intima
2. *Vasa vasorum* (D,E: black arrows)
3. Cells in all the thickness

Amazing results





Organized elastic lamina