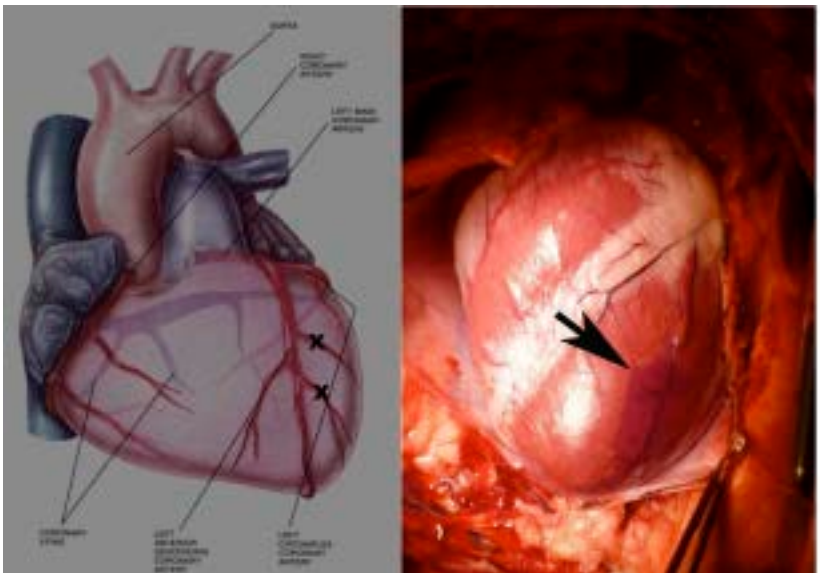
Project logo, diagrams, photographs, videos, etc.

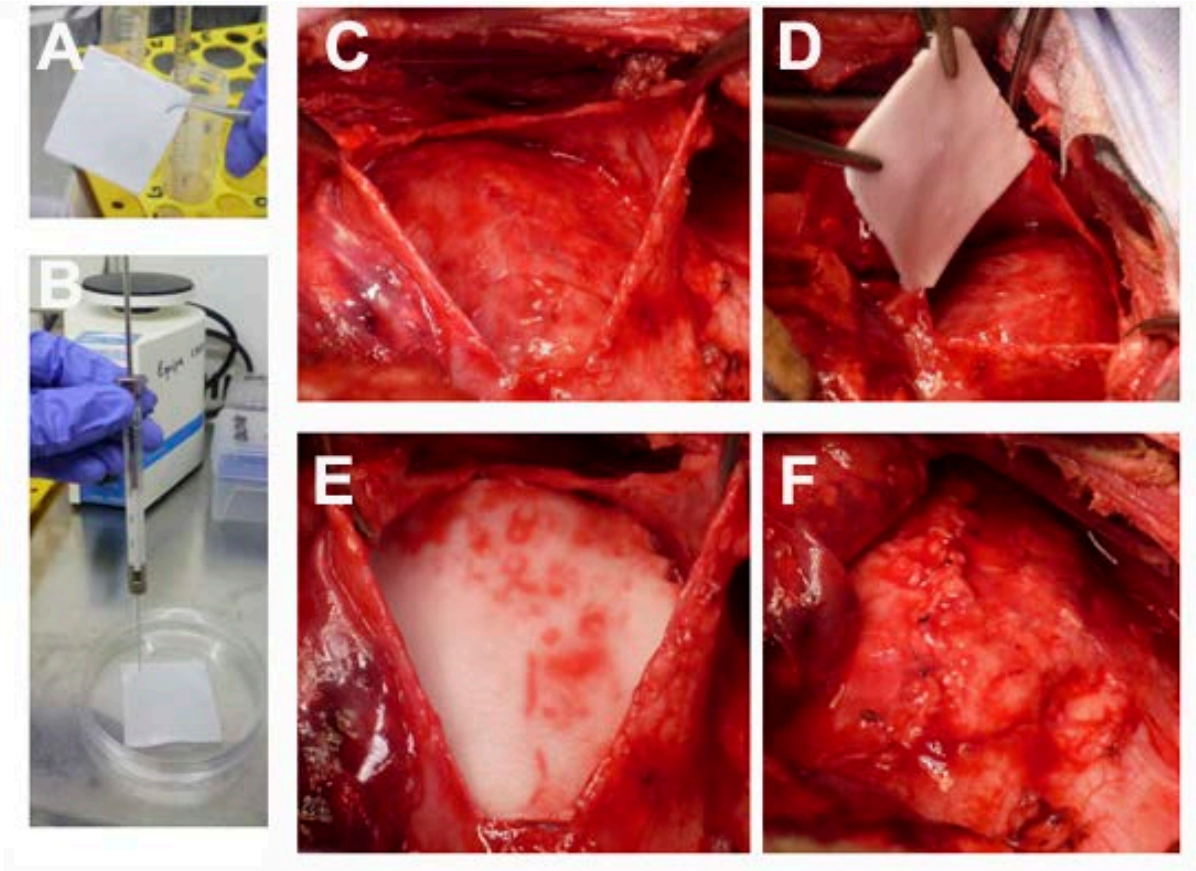
-Project logo:

-RECATABI Bioactive implant application on infarcted hearts:

The project provided the simple methodology to obtain a bioactive implant made out of an elastomeric membrane filled with a hydrogel (self-assembling peptide scaffold) and adult stem cells derived from the same patient. In the case illustrated the methodology obtained for application of the bioactive implant on an infarct produced in sheep. The picture below (left) indicates the procedure to obtain and infarct by closing two descendent coronary arteries. nhe resulted infarct cam be observed as a dark zone indicated by the black arrow (right).



Two months after the infarction, the bioactive implant is applied as indicated in the figure below. First, the elastomeric membrane (A) is impregnated with the self-assembling peptide hydrogel and adipose derived stem cells are injected (B). The bioactive implant now is ready to be applied. The infarcted sheep are re-operated and the bioactive implant is applied as indicated in the figure below (C-F). This procedure was developed during the project by the coordinated work of all the groups associated and gave extremely good results when applied in large animal model, sheep (mainly obtained by Cardio-Monde Association).



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