



**Project coordinator**  
 Josep A. Planell  
 japlanell@ibebarcelona.eu  
 Baldri Reixac 10, 08028  
 Barcelona (Spain)

## Angiogenic nanostructured materials for non-consolidating bone fractures

### Acronym

n-Angiofrac

### Project partners

- Biomedical Research Networking center in Bioengineering | Biomaterials and Nanomedicine (CIBER-BBN) | Spain
- Warsaw University of Technology (TUW) | Poland
- Inserm | France
- Euroimplant | S.A | Poland
- Hospital CHU Pellegrin (CHU) | France

### Abstract

One important strategy in tissue regeneration consists on developing smart tailored scaffolds able to signal and stimulate progenitor cells to colonize them and to activate their natural behaviour that results in the regeneration of new healthy living tissue. One of the main limitations of present scaffolds is their lack of vascularisation to support both the growth and viability of these regenerated tissues. Therefore, the development of new angiogenic materials capable to trigger new vessels formation and to induce vascularisation is a key issue. In this context, the development of novel biomaterials capable to release the right concentration of angiogenesis promoting ions is an innovative, cost-effective and promising strategy to achieve adequate tissue vascularization and regeneration.

