

Wednesday, 28<sup>th</sup> July, 9.30am, Online

*Host: Dr. Jesús Ruiz-Cabello*

## **Novel Approaches for the treatment of Heart Failure**

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Cardiovascular disease is the leading cause of death worldwide, which has encouraged the search for new therapies that enable the treatment of patients in palliative and curative ways. In the past decade, the potential benefit of transplantation of cells able to regenerate the injured heart has been studied with several stem cell populations like the cardiovascular progenitors, mesenchymal or induced pluripotent stem cells among others. Interestingly, their combination with many different bioengineering approaches has significantly improved their engraftment, survival and differentiation capacity, and therefore, their therapeutic potential. Furthermore, the controlled and sustained delivery of growth factors and small molecules able to promote an adequate tissue remodeling, revascularization and/or cell survival is also being explored by applying different nanotechnological strategies. All these approaches constitute a promising strategy for clinical application in cardiovascular disease.