Tentative Outline
Special Issue for Current Medicinal Chemistry
Guest Editor: Giuseppe Mandraffino

Endothelial and Circulating Progenitor Cells: Between Diseases and Therapies

Aims & Scope:

Circulating progenitors cells (CPCs), including Endothelial progenitor cells (EPCs), are a heterogeneous population of cells in different states of maturation, originated from bone marrow (BM). Since their identification, a great effort has been directed to explore the regenerative/reparative potential of EPCs, including their abilities of self-renewal, of starting reparative mechanisms, and of neoangiogenesis. The role of CPCs in vivo is still debated, however the evidence of their involvement in disease pathophysiology and outcome are growing. There are many reports on associations between cell number, activity, oxidoreductive status, and disease, on the effects of different pharmacological treatments on CPCs, and also preliminary observations on the potential role of CPCs as therapy. The mechanisms underlying cell mobilization into peripheral blood, circulation, and activities, and their relationships with medical therapy are far to be completely clarified. The challenge of this special issue will be to bring together the leading experts in the field to add new insights into pathophysiological, drug-related and pharmacological aspects of CPCs, also to address the issue of why different subjects with similar risk profile could have different outcome.

Keywords: Circulating progenitors cells; Endothelial progenitor cells; Cardiovascular risk factors

Subtopics:

CPCs and EPCs: myth or facts?
Cardiovascular risk factors and outcomes
CPCs and EPCs in cardiovascular disease: natural history and medical therapy
CPCs and EPCs in systemic disease: natural history and medical therapy
CPCs and EPCs in hematologic disease: natural history and medical therapy
Therapy with progenitor cells in acute disease: overall and CV outcome
Therapy with progenitor cells in chronic disease
Therapy with progenitor cells in hematologic disease: overall and CV outcome

Schedule: December, 2016