Special Issue

Translational Research in Angiogenesis—a Key Tool for Developing Therapeutic Strategies Towards Tissue Regeneration

Message from the Guest Editor

Physiological tissue regeneration requires an optimal stromal microenvironment, dictating cellular function within the wound bed, specifically the induction of new vessel formation, which is a key pre-requisite for tissue repair. While our understanding of the various biological processes that support wound angiogenesis has significantly improved in recent decades, there are still significant gaps in our knowledge of the detailed mechanisms that mediate the effects of the stromal microenvironment on cell migration, proliferation. differentiation, the control of tissue oxygen tension/hypoxia regulation, and growth factor production. As a result, there is currently a scarcity of effective therapeutic approaches towards the healing of chronic wounds, as well as the treatment of tissue damage occurring as a result of microvascular pathology. The scope of this issue will include research on the pathophysiological mechanisms (biochemical, molecular, cellular, and physical processes) through which the stromal microenvironment influences. angiogenesis-driven tissue regeneration and wound repair.

Guest Editor

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