

Special Issue on **Macrophages and Fibroblasts as Prospective Targets in Fibrosis**

CALL FOR PAPERS

Macrophages and fibroblasts are the major cellular components present in the fibrotic diseases. Fibroblasts known as “master producers” and macrophages as “master regulators” are the key cell types that strongly contribute to the initiation and progression of fibrosis. Activated fibroblasts (or myofibroblasts) are the main effector pathogenic cells in organ fibrosis, producing excessive extracellular matrix (ECM) such as fibrillar collagens leading to the increased tissue stiffness and progressive organ dysfunction. Macrophages, found in close proximity to fibroblasts, play crucial role by releasing vast array of mediators with cytotoxic, pro- and anti-inflammatory, angiogenic, fibrogenic, and mitogenic activities. Dysregulated release of mediators of inflammation, produced by macrophages, in response to danger signals or microenvironment, promotes development and aggravation of many inflammatory diseases including fibrosis. Understanding the precise functions of different macrophages populations, fibroblasts, and crosstalk between macrophages and fibroblasts is potentially important for the designing of effective therapeutic treatments for attenuating/reversing tissue damage and chronic disease and for the promotion of wound repair.

Fibroblasts and macrophages have therefore been identified as interesting and promising targets for both diagnosis and treatment of aforementioned pathologies. Recent advances in nanomedicine led to the development of multifunctional nanoparticles that allow for the simultaneous diagnosis and therapy (as theranostics) with high specificity and efficacy. Therefore, nanoparticles provide a highly promising and potential prospect for the management of chronic diseases like fibrosis.

We invite authors to contribute original research articles as well as review articles that will provide the information on the following topics.

Potential topics include but are not limited to the following:

- ▶ Understanding the role and function of macrophages and fibroblasts in inflammatory diseases mainly liver, kidney, and lung fibrosis
- ▶ Macrophages and fibroblasts as potential therapeutic target in fibrosis
- ▶ Mediators of inflammation and growth factors playing role in the progression of fibrosis
- ▶ Novel animal and cellular models to study macrophages and fibroblasts in fibrosis
- ▶ Macrophages: a friend or a foe in fibrotic diseases
- ▶ Macrophages-directed novel strategies for treatment of fibrosis
- ▶ Fibroblasts-directed novel approaches for therapeutic treatment of fibrosis
- ▶ Crosstalk between fibroblasts and macrophages during fibrosis

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/mi/mfpt/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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