Special Issue

The Urokinase System in Cancer: From Stress Responses to Therapeutic Targeting

Message from the Guest Editors

Today, ischemic cerebral vascular events are one of the main causes of morbidity, with plasminogen activators being widely used as thrombolytic agents in clinics in different cases of blood vessels' blood clot occlusions. However, the plasminogen activation system also has numerous other physiological and pathological functions, such as tissue remodeling and wound healing, cell migration and invasion, tumor metastases, etc. Although plasminogen is ubiquitous, the production of plasmin is closely controlled by the plasminogen activation system, consisting of tissue (tPA) and urokinase plasminogen activators (uPAs), its inhibitors and uPAR, a membrane urokinase receptor. Plasminogen activation system molecules are regulated at the level of transcription. They are also finely tuned and responsive to different cues, such as hormones, growth factors, chemotherapeutic agents, and DNA damage. This Special Issue will cover topics encompassing the mechanisms of urokinase plasminogen activation system molecules' regulation in tumor cells and their use in diagnostics, prognostics and targeted therapy.

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in Biomolecules so far. We would be delighted to welcome you as one of our authors.

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