



## Angiogenesis and Anti-angiogenesis in Health and Diseases

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### Message from the Guest Editor

Angiogenic switch is an important event during tumor progression where the balance between pro and antiangiogenic factors slope towards a proangiogenic outcome, leading to the transition from avascularized neoplasia to a vascularized tumor. Tumor vessels often appeared abnormal in shape and function, and they are more loosely connected with surrounding cells, influencing drug delivery. Therefore, preclinical and clinical studies have focused on the role of mural cells, stabilizing the tumor vasculature through various signaling pathways, which influence many hallmarks of cancer. However, both defective vasculature and excessive ECM generation and pericyte coverage represent a physical barrier for effective drug delivery, leading to the resistance to the anti-tumor therapies. Angiogenesis is also occurring under other pathological conditions, such as diabetic retinopathy, ischemic stroke and atherogenesis. Current efforts aim to advance research toward the discovery of new molecular targets, gene profiling, resistance mechanisms, and diagnostic and prognostic markers to overcome disease progression by improving the therapeutic options.





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## Message from the Editor-in-Chief

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