



The Impact of Hypoxia on Neutrophil Signaling and Function

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Message from the Guest Editors

Molecular oxygen is essential for the development and growth of multicellular organisms. Tissue oxygen tensions reflect a balance between oxygen delivery mechanisms and oxygen consumption, with each tissue compartment having a set point which may be perturbed by a range of pathological processes.

Neutrophils are highly mobile and accumulate rapidly in response to such pathological insults, hence, they must operate within a wide and rapidly changing range of oxygen tensions. Hypoxia-inducible factors (HIFs) are transcription factors which function as key molecular regulators of hypoxic responses, but it is increasingly recognized that HIF regulation of neutrophil function integrates other microenvironmental cues alongside hypoxia and that HIF-independent pathways may also influence neutrophils' response to hypoxia.

This Special Issue focuses on the recent advances in our understanding of the biology of hypoxia signaling and its impact on neutrophil function and interactions with the inflammatory microenvironment, in particular in the setting of infection and malignancy.

For further reading, please visit the Special Issue Website.





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Message from the Editor-in-Chief

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