



## Hyaluronic Acid in Human Medicine

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### Message from the Guest Editor

Dear Colleagues,

Hyaluronic acid (HA) is an acidic, non-sulfated glycosaminoglycan that is intensively studied as biodegradable and biocompatible material for scaffolding, regenerative medicine, and clinical applications. The main functions of HA are hydration, space-filling capacity, lubrication, and forming of the framework through which cells migrate. It also contributes to fetal healing of wounds, i.e., rapid healing without a scar, and tissue elasticity. During the degradation of HA, which is accelerated under pathological conditions, its long molecules are cleaved into smaller fragments of low molecular weight. Bioactive functions in the inflammatory reaction, angiogenesis, or its role in cancer progression and reactive oxygen species scavenging vary for different fractions of HA.

In tissue engineering, HA is considered a promising material thanks to its biocompatible, biodegradable, and bioresorbable properties, as well as its chemical traits and high level of technical processing.





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