ScienceDirect

Nanotechnology for Hematology, Blood Transfusion, and Artificial Blood

Micro and Nano Technologies

2022, Pages 285-311

Chapter 13 - Nanotechnology for blood test to predict the blood diseases/blood disorders

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https://doi.org/10.1016/B978-0-12-823971-1.00005-2 ↗

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Abstract

This chapter briefly describes different types of blood disorders such as anemia, bleeding disorders and blood cancer (including its types and pathogenesis). Some of the current diagnostic and treatment modalities practiced and the various challenges are discussed. Nanodiagnostics employs umpteen varieties of nanostructures and nanodevices that have the potential to detect diseases. The potential applications of nanoparticles and nanosensors in diagnosing anemia, blood cancer, and bleeding disorders are highlighted with the focus on their efficacy. The presented overview deals with alternative solutions to manage blood diseases providing innovative noninvasive approaches for diagnosis and treatment.

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