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Artificial Intelligence Augmentation in Blood Transfusion, Bio-Chemistry, and Hematology of Digital Pathology: A Comparative Performance Evaluation on Pathology Labs and Corporate Hospitals located in Bengaluru

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## **Abstract**

Artificial intelligence augmentation is increasingly incorporated in the medical and healthcare sphere, especially in the pathology arena of Blood transfusion, Biochemistry, and Hematology, towards detecting and analyzing diseases and disorders. Hence, it is important to understand the implications of artificial intelligence on humanity with the pathology's innovation practices. The pathology laboratories and hospitals need to incorporate artificial intelligence into specific functions and sub-functions of result-oriented specialties to create effortless healthcare activities. This study was undertaken with selected pathology laboratories and healthcare organizations in Bengaluru that have access to digital initiatives and artificial intelligence into their business process for the last three years and examine the performance on three result-oriented functions in which artificial intelligence is incorporated. This article studies on the potential competencies of artificial intelligence augmentation and builds awareness in the healthcare sector on the capabilities of augmenting the right intelligent systems enables in streamlining the activities carried out in the pathology lab and exhibits that on what organization need and how technological advancement and innovation helps in improving the organizational performance and notifies that if the performance improvement measures are followed with continuous update and maintenance, only then innovations in healthcare result in success.

## **Keywords:**

Artificial Intelligence, Augmentation, Blood Transfusion, Biochemistry, Hematology, Pathology

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