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# AI Based Disease Prediction

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**Abstract:** *Healthcare has benefited greatly from artificial intelligence (AI), which has revolutionized disease prediction and enhanced patient outcomes. The significance, methodology, and difficulties of AI-based disease prediction are highlighted in this paper's thorough discussion. The significance of disease prediction in healthcare is examined in the first section. Improved patient care, lower healthcare costs, and more effective public health actions all depend on early diagnosis and precise illness prognostication. With the help of massive amounts of data, AI approaches like machine learning and deep learning have demonstrated tremendous potential for identifying intricate patterns and predicting diseases. The significance of disease prediction in healthcare is examined in the first section. The approaches utilized for AI-based disease prediction are covered in detail in the second part. The difficulties in using AI to predict diseases are highlighted in the third section. The possible advantages of AI-based disease prediction are covered in the fourth part. Healthcare systems may boost preventive measures, create individualized treatment plans, distribute resources more effectively, and enhance patient outcomes by utilizing AI. Additionally, AI-based disease prediction can support public health policy, identify high-risk populations, and enable early interventions. In conclusion, AI-based disease prediction has become a viable strategy to revolutionize healthcare. Making informed judgements with the use of cutting-edge AI approaches can assist healthcare professionals and policymakers, ultimately improving patient care, illness management, and population health.*

**Keywords:** Healthcare

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