

# Diagnostic Approaches of Skin Cancer and Artificial Intelligence Applications

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## ABSTRACT

Skin cancer is one of the most common cancers around the world and its rate is increasing. Exposure to sunlight for long periods of time is classified as one of the main causes. Therefore, understanding the disease and using innovative, effective, diagnostic methods may help in the eradication of the disease and improving the patients' quality of life. In this review, the main etiological factors, the most common diagnostic approaches and the application of artificial intelligence in the detection of skin cancer are discussed. Currently, there are several diagnostic techniques to detect skin cancer, however each technique has advantages and disadvantages that can affect the efficiency of diagnosis. Artificial intelligence (AI) is a promising tool in the detection and treatment of skin cancers. AI is expected to play a key role in several aspects in the field of battling skin cancer in integration with other technologies. This role may be represented by several applications, including aiding in diagnosis and treatment, analysing images, enhancing diagnostic accuracy, and having applications for initial self-diagnosis. As these tools are expected to play an even bigger role in the future, there is a need for more studies on these applications, both in terms of pros and cons.

**Keywords:** Skin cancer , Artificial intelligence (AI) , Diagnostic techniques

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