

A comprehensive review on biomarkers for detection of gastric cancer

Anurag Shukla¹, Noopur Srivastava², Smriti Tripathi^{3*}, Papiya Mitra Mazumder⁴

^{1,2} Department of Pharmacology, Advance Institute of Biotech and Paramedical Sciences, Kanpur, Uttar Pradesh, India

^{3*,4} Department of Pharmaceutical Sciences & Technology, Birla Institute of Technology, Mesra, Ranchi, Jharkhand, India

Abstract

Cancer is the second leading cause of mortality. It has been reported that cancer has caused 9.6 million mortalities, in which 1.03 million mortalities due to gastric cancer occurred worldwide in the year 2018. Gastric Cancer is a heterogeneous ailment, where every patient shows a different genetic and molecular profile. The biomarkers that are used for diagnosis of gastric cancer include carcinoembryonic antigen (CEA), specific carbohydrate antigens such as CA 19-9, CA 125, CA 72-4, CA 50, CA 24-2, HER-2, pepsinogen, fibroblast growth receptor factor 2 (FGRF-2), and E-cadherin. The traditional diagnosis methods of gastric cancer are of less utilization because of their low sensitivity. The traditional methods of diagnosis are unable to analyze the reappearance of cancer. Several studies have shown that cancerous cell secretes various molecules that can be an effective and sensitive method for detecting gastric cancer. These molecules can indicate gastric cancer in the acute stage and help to analyze the recurrence of cancer. This review gives detailed insight into the novel strategies and molecules for the diagnosis of gastric cancer.

*Mail id for correspondence: smrititripathi2009@gmail.com

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