CTC、ctDNA在结直肠癌诊断中的研究进展

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Title: **Research progress of circulating tumor cells and circulating tumor DNA in the diagnosis of colorectal cancer**

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摘要: 结直肠癌（colorectal cancer,CRC）是世界上第三大最常见的癌症类型，也是导致癌症死亡的第四大原因。CRC的常规治疗策略包括手术、新辅助治疗和辅助治疗。不幸的是，大约50%的CRC患者仅在晚期被诊断，因此显著降低了不同治疗方案的可用性。学者们不断寻找更准确的诊断结直肠癌的方法，除了通过蛋白质组学技术研究新的血清肿瘤生物标记物外，还引入循环肿瘤细胞（CTC）和循环肿瘤DNA（ctDNA）等新概念。本文就血液中CTC、ctDNA在结直肠癌诊断中的研究进展作一综述。

Abstract: Colorectal cancer（CRC） is the third most common type of cancer in the world and the fourth leading cause of death from cancer.Conventional treatment strategies for CRC include surgery,neoadjuvant therapy,and adjuvant therapy.Unfortunately,approximately 50% of CRC patients are diagnosed only late and therefore significantly reduce the availability of different treatment options.Scholars continue to search for more accurate methods of diagnosing colorectal cancer.In addition to new serum tumor biomarkers through proteomics,new concepts such as circulating tumor cells (CTC) and circulating tumor DNA (ctDNA) have been introduced.This article reviews the research progress of CTC and ctDNA in the diagnosis of colorectal cancer.

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