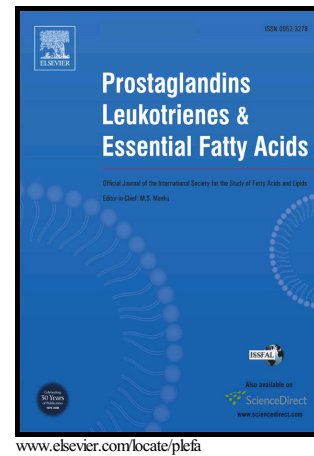


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Serum polyunsaturated fatty acid metabolites as useful tool for screening potential biomarker of colorectal cancer

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Abstract

The biomarker identification of cancer is benefit for early detection and less invasion. Polyunsaturated fatty acid (PUFA) metabolite as inflammatory mediators can affect progression and treatment of cancer. In this work, the serum was collected from colorectal cancer patients and healthy volunteers, and then we tested the change of serum PUFA metabolites in both of them by ultra-high performance liquid chromatography tandem mass spectrometry (UPLC-MS/MS). Of the 158 PUFA and their metabolites, we found that abnormal change of 2, 3-dinor-8-iso-PGF₂ α , 19-HETE and 12-keto-LTB₄ from arachidonic acid were observed in colorectal cancer patients. Meanwhile, 9-HODE and 13-HODE from linoleic acid were

¹ These authors contributed equally to this work and should be considered co-first authors

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