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**Metabolomics profile in gastrointestinal cancers: Update and future perspectives**Nannini *et al.* NMR metabolomics in GI cancers

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**Abstract**

Despite recent progress in diagnosis and therapy, gastrointestinal (GI) cancers remain one of the most important causes of death with a poor prognosis due to late diagnosis. Serum tumor markers and detection of occult blood in the stool are the current tests used in the clinic of GI cancers; however, these tests are not useful as diagnostic screening since they have low specificity and low sensitivity. Considering that one of the hallmarks of cancer is dysregulated metabolism and metabolomics is an optimal approach to illustrate the metabolic mechanisms that belong to living systems, is now clear that this -omics could open a new way to study cancer. In the last years, nuclear magnetic resonance (NMR) metabolomics has demonstrated to be an optimal approach for diseases' diagnosis

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Metabolomics profile in gastrointestinal cancers: Upda



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Evidence Acquisition: We searched PubMed, Medline and Web of Science for studies about **metabolomics** and bladder **cancer** published before October 2017. We performed a review of the literature, trying to clarify what is already known about the application of **metabolomics** in bladder **cancer** and what are the **future** prospects.

**Cited by:** 1

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**Publish Year:** 2018

## Metabolomics in bladder cancer: a systematic review

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**Bladder cancer** (BC) is the most common **urological malignancy**. Early diagnosis of BC is crucial to improve patient outcomes. Currently, **metabolomics** is a potential technique that can be used to detect BC. We reviewed current publications and synthesised the findings on BC and **metabolomics**, i.e. **metabolite upregulation** and downregulation.

**Cited by:** 16

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3. Typical applications of **functional metabolomics** 3.1. **Cancers**. **Cancer cells** prefer glucose and glutamine consumption. In 1924, the discovering of Warburg effects attracted much attention of scientists for **cancer metabolism studies** [124–125]. The preferring utilization of aerobic glycolysis than oxidative