

## A Preliminary View on Some Genetic Aspects of Irritable Bowel Syndrome with Regards to Neuropsychiatric Manifestations

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**Abstract.** *Since the newest functional gastrointestinal disorders diagnostic criteria (ROME IV), the formerly functional bowel disorder – irritable bowel syndrome (IBS) – is currently known as a common chronic disorder of the brain – gut interaction. The main clinical symptomatology including abdominal pain, discomfort, and altered gastrointestinal motility, as well as the absence of any organic impairment or significant histological changes led to the confirmed hypothesis of multicomponent pathology and multifactorial etiogenesis. Thus, considering our previous experience in this area of research, this mini-review aimed to present a preliminary view of the possible genetic component underlying or predisposing to neuropsychiatric and gastrointestinal impairments co-occurring in IBS.*

**Key words:** irritable bowel syndrome, affective disorders, anxiety, depression, polymorphisms, genetic predisposition

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### **Irritable bowel syndrome – is it the brain or is it the gut?**

The recent studies on the irritable bowel syndrome (IBS) physiopathology and etiology showed that despite the former diagnostic criteria guide (ROME III) described IBS as a functional gastrointestinal disorder, it is currently associated with the brain – gut bidirectional interaction impairment [1,2]. One of the issues addressing this change in classification consisted in the pathophysiological features of IBS that suggested a multicomponent process [3]. Moreover, the description of the multiple non-gastrointestinal co-occurring impairments led to the assumption that the loss of gastrointestinal functionality could also be an effect additional to the formerly reported causes [4].