

## BIOMARKERS OF DEPRESSION: NEW CHALLENGES

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As one of the most widespread illnesses today, depression has a big social and economical significance. Therefore, enormous efforts are made in getting deeper insights into its etiology and pathogenesis, which are still unknown to us. Owing to the fast technological development, neurosciences have started to develop intensively. Neuroimaging technologies and new sensitive laboratory tests enable the discovery of active molecules that take part in pathophysiological processes so that they can be considered as potential biomarkers.

Although the biomarker which would be specific for depression has not been isolated yet, there are a lot of studies that confirm the existence of changes of the level of active substances in depressive patients with the regard to control ones. In this paper, we will take a look into potential biomarkers that are in the centre of the research: the factors of growth, that is, brain-derived neurotrophic factor (BDNF), inflammatory and neuroendocrine biomarkers, as well as potential indicators of the oxidative and nitrosative stress.

This kind of the possibility of the insight into biological bases of the depressive processes would enable new ranges in diagnostics, therapies and prognosis of this disorder and would contribute to the better quality of life of patients and their families. *Acta Medica Medianae 2017;56(1):44-49.*

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