



**Fund “Nauka” Project № 21016 Resume – Competitive-based Session 2021:**

“Significance of plasma miRNAs as epigenetic markers in some forms of juvenile idiopathic arthritis”

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Studies in recent years have identified some microRNAs as diagnostic markers in adult patients with ankylosing spondylitis (AS).

The main goal of this research is to determine the expression levels of certain microRNAs in children with enthesitis-related arthritis (ERA) compared to patients with other forms of juvenile idiopathic arthritis (JIA) as well as to a control group of healthy individuals and to determine their potential as epigenetic biomarkers of diagnostic and prognostic significance. Such studies in foreign language literature are scarce, and in Bulgarian literature – non present.

Patients up to 18 years of age will be included in the study. They will be divided into three groups: patients diagnosed with ERA; patients with another form of JIA and positive antinuclear antibodies (ANA) and healthy controls.

Laboratory analysis includes molecular biological method: extraction and quantitative characterization of plasma microRNAs by real-time PCR.

The prospective result of this study is to establish the significance of some microRNAs in both clinical presentation and evolution of ERA, and to compare it to AS and other forms of JIA, as well as to establish those microRNA-s as new biomarkers of diagnostic and prognostic value for early diagnosis and timely treatment.