

**MicroRNA profiles in Anorexia Nervosa and its Remission: identification of Epigenetic Biomarkers of diagnostic and prognostic**

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**Authors**

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**Aim**

The aim of the project is the identification of epigenetic biomarkers of diagnostic and prognostic of anorexia nervosa.

**Background**

The epigenetic regulations are strongly suggested in Anorexia Nervosa (AN). We and other groups have performed methylation studies in AN and found that the differentially methylated CpG sites are located around genes involved in biological processes like brain development and its plasticity. Another epigenetic regulation is the small non-coding RNAs (miRNAs) that are antisense sequences expressed by the genome that hybridize with the messenger RNAs expressed by genes to suppress or reduce their proteins translation.

**Method**

To identify the expression profiles of these miRNAs in AN, we will perform a high-throughput miRNA profiles using affymetrix miRNA array on 24 current AN patients, 24 remitters and 48 controls. We will replicate the top 10 miRNAs differentially expressed by TaqMan® MicroRNA Assays in 50 actual patients, 25 remitters 100 controls and validate also in 36 subjects including 18 remitters, recruited at 2 times, from the longitudinal cohort MONTAN.

**Execution**

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