

**Project title: Investigation of molecular factors in early pregnancy disorders and subfertility in women**

**Project code:** KP-06-KOCT/6, 18 June 2019

**Project type:** National co-funding for participation in the framework of CliniMark EU-COST Action

**Project funding:** National Science Fund, Republic of Bulgaria

**Project duration:** 18<sup>th</sup> June 2019 – 17<sup>th</sup> June 2021

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**Short project description:**

Trafficking of molecular factors is the principal mode of communication among cells. However, the physiologic thresholds of metabolic indicators could shape into disparate signaling profiles in health and pathology. Discovering measurable indicators (biomarkers) of developmental stage and endpoint states in disease can serve for diagnostic, prognostic and therapeutic management of patients. Similarly to the established biomarkers in oncology (examples: PSA in prostate, CEA in colon, CA125 in ovary cancers and etc.), identifying biomarkers indicating severity of subfertility and pathologies of human pregnancy in reproductive medicine is necessary. Normal, rejected pregnancy groups and subfertility patients with endometriosis will be screened for secreted immune factors in blood circulation. Adhesion and regulatory markers will be of interest in the investigation of the eventual immunobased component of these fertility dysfunctions.