occurrence and type of thrombotic events, obstetric complications and presence of atheroma plaques were demonstrated. Transfection studies further confirmed the relationship between specific miRNAs and their identified target genes. In vitro studies demonstrated the specific modulation of several genes/miRNAs by aPLs. Furthermore, those autoantibodies promoted the increase in several secreted miRNAs, found simultaneously altered in plasma and monocytes, and deeply involved in the development of inflammation and cardiovascular disease.

Conclusion: 1. Gene and microRNA expression profiles allowed the identification of relevant genes and pathways altered in monocytes and plasma of APS patients, associated with the pathogenesis of the disease and modulated, at least partially, by aPLs. 2. Specific microRNA-miRNA regulatory networks control the biological processes and factors related to the CV pathology in APS. 3. aPL antibodies induce the secretion by monocytes of specific microRNAs that might act as messengers in the bloodstream to propagate their deleterious effects.

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THU0226

DOES THE PRESENCE OF CLASSIC AND NOVEL ANTIPHOSPHOLIPID ANTIBODIES INFLUENCE THE RISK OF THROMBOSIS DEVELOPMENT IN PATIENTS WITH UTERINE MALIGNANCIES?

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Background: Patients with uterine malignancies (UM) are at a higher risk of venous thromboembolism (VTE) than the general population. The malignancy itself, the treatment modalities including medication, surgery and also increased levels of leukocytes, platelets, and tissue factor-positive microvesicles contribute to the risk of developing VTE.

Objectives: Several authors have shown that the antiphospholipid antibodies (aPLs) can be detected in peripheral blood of patients (pts) with malignancies. However, whether or not the aPLs could induce thrombosis in pts with UM is not yet known.

The aim of our study was to determine whether the presence of aPLs in patients with **uterine malignancies** is associated with higher VTE risk than in pts with **non-cancer gynecological disorders (NCGD)**.

Methods: The study involved 151 female pts scheduled for gynecological surgery divided into two groups:

Group I with UM (70 pts) confirmed by histopathological examination after surgery; group II with non-cancer gynecological disorders (NCGD) (81pts). The presence of aPLs was detected in patients' serum before surgery using the commercially available test aPL-immunodot assay Anti-Phospholipid 10 Dot, for the qualitative detection of IgG or IgM antibodies. The statistical data analysis was performed using Statistica v13.0.

The following aPLs were assessed in the study groups: IgM and IgG of a- cardiolipin; a-phosphatidic acid; a-phosphatidylcholine; a-phosphatidylethanolamine; a- phosphatidylglycerol; a-phosphatidylinositol; a-phosphatidylserine; a-annexin V; a-β 2-GP I and a-prothrombin.

Results: The VTE occurred significantly more frequently in pts with UM, compared to pts with NCGD.

In UM group VTE was diagnosed before surgery in 9/70 (12.9%) pts; in NCGD group VTE was diagnosed in 3/81 (3.7%) pts, $p=0.0001$.

We have obtained positive test results for classic and novel aPLs significantly more frequently in group I pts with UM (mainly a-β 2-GP I IgM and IgG; a-prothrombin IgM, a-annexin V IgM) than in group-II NCGD pts. The positive test for classic or novel aPLs was detected in 17/70 pts with UM (24.3%) and in 6/81 pts with NCGD (7.4%). The differences were statistically significant ($p=0.003$). All pts with thrombosis in group I (9 pts UM) were positive for at least 3 aPLs (a-β 2-GP I IgM and IgG; a-prothrombin IgM, a-annexin V IgM).

Conclusion: The classic and novel aPLs are found more frequently in pts with uterine malignancies than in pts with **non-cancer gynecological disorders**. The higher risk of thrombosis is connected with malignancy and the presence of classic and novel aPLs.

The better understanding of the relationships between thrombosis in cancer patients and its immunological determinants (presence of aPLs) may lead to reducing the morbidity and mortality associated with thrombosis in cancer and non-cancer **gynecological disorders**. We suggest that aPLs could be a novel biomarker of thrombosis risk in gynecological malignancies.

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THU0227

BIOLOGICAL MONITORING OF REMISSION IN SYSTEMIC LUPUS ERYTHEMATOSUS: ABNORMAL SERUM INTERFERON-ALPHA LEVELS PREDICT RELAPSE

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Background: Remission and relapses prevention are the main objectives of the treatment of Systemic Lupus Erythematosus (SLE). Interferon alpha (IFNα) is a key cytokine in SLE, but its usefulness for the definition of remission and for the prediction of flare has not been validated in clinical practice.

Objectives: To study the association between serum IFNα level, remission and risk of relapse.

Methods: 502 SLE patients were assessed for serum IFNα level using a biological functional assay(1). Remission was defined by the absence of clinical manifestation of lupus activity (clinical SELENA-SLEDAI = 0) and a prednisone intake ≤ 5 mg/day(2). Patients in remission were subsequently followed for one year. The SELENA-SLEDAI Flare Index was used to identify SLE flare. Uni- and multivariable analyses were performed to define disease parameters associated with serum IFNα positivity in patients in remission at baseline. Survival curve analysis, log-rank tests and Hazard Ratios (HR) were calculated to evaluate the risk of flare depending on IFNα, dsDNA Abs and C3 levels at baseline.

Abstract THU0227 – Figure 1