(p<0.001), older age of onset (p=0.019), higher levels of RF IgM (p=0.027) and anti-CCP (p<0.001). Development of persistent spontaneous remission negatively correlated with polyarthritis (p=0.033), PF-positivity (p=0.034), anti-CCP-positivity (p=0.035). Positive seroconversion was observed: of RF in 10 (4.7%) patients, 8 developed RA, of anti-CCP – in 3 (1.4%) patients, all developed RA.

Conclusion: Seronegative oligoarticular disease and highly seropositive disease are different subtypes of UFA. Combination of seronegativity and oligoarticular disease (n=52) associated with relatively rare development of RA (36.2%) and high proportion of spontaneous remission (22.4%). Patients who were highly positive (>3 ULN) for both RF and anti-CCP developed RA in 97% of cases and never remitted spontaneously.

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Figure 1. Kaplan Meijer curves on inflammatory arthritis development stratified for number of points based on LASSO regression. Legend: Points were based on the regression coefficients yielded by Cox LASSO-regression. 2 points were assigned for the risk factors ACPA-positivity and ≥2 locations of subclinical inflammation and 1 point was assigned for RF-positivity and presence of MCP-extensor peritendinitis.

these data are based on one observational cohort study and have not been validated in independent cohorts, limiting the relevance. To support future research in the field of arthralgia, it is needed that different research groups work together to come to risk estimations that are validated and accepted.

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[1] Matthijssen XME et al. ART 2019;21(1):249-

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FR0543

BIRTH REGISTRY OF WOMEN WITH SYSTEMATIC LUPUS ERYTHEMATOSUS AND COURSE OF THE DISEASE DURING FIRST YEARS POST-PARTUM: THE GREEK EXPERIENCE

S. Ntal1, 2, L. Pantazi2, K. Boki2, D. Nikolopoulou3, A. Fanourakis2, D. Dimopoulou4, I. Kalitsakis5, C. Papagoras6, V. Dania7, E. Emmanouilidou7, G. Bertias7, 1private practitioner, Thessaloniki, Greece; 2Sismanoglio GUH, Rheumatology Unit, Athens, Greece; 3GUH Attico, 4th Internal Medicine University Clinic, Athens, Greece; 4Aristoteles University, 4th Internal Medicine University Clinic, Thessaloniki, Greece; 5Private Practitioner, Chania, Greece; 6Democritus University of Thrace, Laboratory of Rheumatology, Alexandroupoli, Greece; 7University Of Crete, Rheumatology and Immunology Department, Herakleion, Greece

Background: Pregnancy in women with SLE Systematic Lupus Erythematosus (SLE) has been related with adverse events both in the mother and the foetus.1 Many studies have reported relapse of the disease during the pregnancy and post-delivery, whereas others have not confirmed this finding.2 To this end, most of these results originate from retrospective studies with patients of diverse ethnicities.

Objectives: To record the Greek experience with pregnancies in mothers with SLE and their outcomes, as well as the course of the disease during first years post labor.

Methods: This is a prospective, multicentre, observation study lasting three years. Women diagnosed with SLE who became pregnant consented to be monitored by their treating Rheumatologist. A structured questionnaire is used for monitoring at the beginning of pregnancy (positive pregnancy test) and at least every 3 months thereafter, depending on the course of the disease and pregnancy, until one year after childbirth.

Results: A total 64 women and 81 pregnancies were recorded (1.27 pregnancies per patient). Patient's age at conception was 32.8 ± 5.9 years (mean ± standard deviation). Thirteen patients (20.3%) had past history of nephritis. Regarding pregnancy outcomes, 62 (76.5%) pregnancies ended in live births, miscarriages during 1st, 2nd and 3rd trimester occurred in 13 (16%). Six pregnancies were lost to followup. Prematurity occurred in 28 live births (45.1% in total), 26-32w (3.2%), 32-36w (22.5%), <37w (19.3%). No cases of preeclampsia occurred. Mean age of birth 36.9 weeks and mean birth weight 2750gr. The majority (72.5%) of deliveries were performed by caesarean section. In terms of disease activity, most of the women had mild disease at conception, (SLEDAI-2K: 2.67±2.69) that
declined during the 1st/2nd pregnancy trimester (SLEDAI-2K: 1.91±2.09, 1.70±2.22) but increased during the 1st and 2nd trimester post labor (SLEDAI-2K: 2.47±4.29 and 2.52±3.2)."

**Conclusion:** This is the first Greek inception cohort with prospective monitoring of pregnant SLE patients. Adverse outcomes occur with prematurity being the most frequent. In our cohort disease activity tends to increase during the 1st and 2nd trimester post-labor without serious relapses. Vigilant monitoring during pregnancy and post-labour is advised.

**References:**


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**Figure 1.** Flow diagram for study selection.

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**FR10544**

**THE EFFECT OF PATERNAL EXPOSURE TO IMMUNOSUPPRESSIVE DRUGS ON SEXUAL FUNCTION, REPRODUCTIVE HORMONES, FERTILITY, PREGNANCY AND OFFSPRING OUTCOMES: A SYSTEMATIC REVIEW**

J. F. Perez1, R. Dolhain1, S. Vorstenbosch2, W. Bramer3, E. Van Puijenbroek1, J. Hazes1, B. te Winkel2, E. van Puijenbroek2, J. Hazes1, E. van Puijenbroek2, J. Hazes1, E. van Puijenbroek2, 1Erasmus MC, University Medical Center, Rotterdam, Netherlands; 2University of Groningen, Groningen Research Institute of Pharmacy, PharmacoTherapy, Epidemiology and Economics, Groningen, Netherlands.

**Background:** Information regarding the possible influence of immunosuppressive drugs on male sexual function and reproductive outcomes is scarce. Men diagnosed with immune-mediated diseases and a wish to become a father represent an important neglected population since they lack vital information to make balanced decisions about their treatment.

**Objectives:** To systematically review the literature for the influence of paternal immunosuppressive drug use on many aspects of male sexual health, such as sexual function, fertility, pregnancy outcomes and on their offspring health outcome.

**Methods:** A systematic literature search was performed in the bibliographic databases: Embase (via Elsevier embase.com), MEDLINE ALL via Ovid, Cochrane Central Register of Trials (via Wiley) and Web of Science Core Collection. Additionally, Google Scholar and the Clinical trial registries of Europe and the USA were searched. The databases were searched from inception until August 31th 2019. The searches combined keywords regarding male sexual function and fertility, pregnancy outcomes and offspring’s health with a list of immunosuppressive drugs. Studies were included if they were published in English and if they included original data on male human exposure to immunosuppressive drugs.

**Results:** A total of 5867 references were identified among which we identified 163 articles fulfilling the eligibility criteria. Forty nine articles included pregnancy and offspring outcomes and 116 articles included sexual health outcomes. With the exception of large Scandinavian cohorts, most of the identified articles included a small number of participants. While a clear negative effect on sperm quality was evident for sulfasalazine and cyclophosphamide a dubious effect was identified for colchicine, methotrexate and sirolimus. In 3 articles exposure to TNF-a inhibitors in patients diagnosed with ankylosing spondylitis resulted in improved sperm quality. The information regarding pregnancy and offspring outcomes was scant but no large negative effect associated with paternal immunosuppressive drug exposure was reported.

**Conclusion:** Evidence regarding the safety of immunosuppressive drugs in men with a wish to become a father is inconclusive. The lack of standardization on how to evaluate and report male sexual function, fertility and reproduction as study outcomes in men exposed to immunosuppressive drugs is an important contributor to this result. Future research on this topic is needed and should be preferably done using standardized methods.