unfavourable outcome (spontaneous abortion/stillbirth/induced abortion). We then compared prospective versus anamnestic pregnancy outcomes.

Results: Between 2005 and 2016, 862 women were evaluated. We included in the study 201 patients followed prospectively during 261 pregnancies. The patients were affected by 19 different rheumatic diseases, alone or in association.

The most represented diagnoses were undifferentiated connective tissue disease (UCTD) (72 patients, 33.03%), rheumatoid arthritis (33, 15.14%), systemic lupus erythematosus (LES) (22, 10.09%), ankylosing spondylitis (14, 6.42%), psoriatic arthropathy (12, 5.5%), antiphospholipid antibody syndrome (APS) (10, 4.59%). Maternal age at conception was 34 years (range 18.3–45.7); 19 patients underwent medically assisted reproductive techniques. The most frequent obstetric complications were fluximetric changes, premature rupture of membranes, hypertension and related disorders, gestational diabetes, hypothyroidism and intrauterine growth retardation. The average gestational age at delivery was 38.24 weeks (range 26.71–41.29) with higher frequency of prematurity in patients with APS (55%), LES (39%) and UCTD (19%), as well as in the two pregnancies of patients with mixed connective tissue disease and systemic sclerosis. The comparison between favourable outcomes of prospective versus anamnestic pregnancies showed a significant difference ($p < 0.001$) for prospectively followed pregnancies, regardless of maternal diagnosis.

Figure 1: Outcome of anamnestic vs prospective pregnancies in patients followed in our dedicated clinic.

Abstract THU0674 – Figure 1 Outcome. of anamnestic vs prospective pregnancies in patients followed in our dedicated clinic.

Conclusions: Pre-conception counselling and close multidisciplinary follow-up during pregnancy are essential for a better maternal-fetal outcome in patients with rheumatic diseases.

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THU0675

THE IMPACT OF AUTOIMMUNE RHEUMATIC DISEASES ON BIRTH OUTCOMES IN AN ETHNICALLY DIVERSE COHORT OF WOMEN IN THE UNITED STATES

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Background: Autoimmune rheumatic diseases (ARDs) often affect women of childbearing age and have been associated with adverse pregnancy outcomes. Most of the literature on the impact of ARDs on birth outcomes to date has focused on the burden of common ARDs (e.g., rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE)) within Caucasian populations. The effect of race/

ethnicity on birth outcomes among women with ARDs is not well understood. Identification of groups who are at highest risk of adverse birth outcomes may aid in increased prenatal surveillance and prevention of maternal and fetal morbidity.

Objectives: To evaluate the impact of ARD on adverse birth outcomes, specifically preterm birth (PTB), congenital anomalies, and low birth weight (LBW), in a large, ethnically diverse cohort.

Methods: We conducted a matched cohort analysis of retrospective data from all singleton live births in California occurring between 2007 and 2012. Data on ARD diagnosis, including RA, SLE, antiphospholipid syndrome (APS), psoriatic arthritis (PsA), ankylosing spondylitis (AS), or juvenile idiopathic arthritis (JIA), and birth outcomes were derived from birth certificate records linked to hospital/discharge ICD9 codes present anytime at or one year prior to delivery. Women without any of the previously mentioned rheumatic diseases were age- and ethnicity-matched in 2:1 ratio to women with ARD; their characteristics were compared using conditional logistic regression. We also examined the association between specific ARD diagnoses and birth outcomes stratified by race/ethnicity.

Results: We identified 10 975 women with a recorded ARD diagnosis (RA: 3129 (26%), SLE: 3863 (33%), APS: 4180 (35%), PsA: 173 (2%), AS: 144 (1%), and JIA: 354 (3%). The odds of PTB were increased for women with any ARD (aOR 1.90 (95% CI 1.76–2.05)) and among those with RA (aOR 1.65 (95% CI 1.47–1.85)), SLE (aOR 2.25 (95% CI 2.05–2.47)), APS (aOR 1.82 (95% CI 1.64–2.01)), and JIA (aOR 1.76 (95% CI 1.32–2.35)) compared to women without ARD. After stratifying by race/ethnicity, the odds of PTB and congenital anomalies were highest among Asian women and the odds of LBW were highest among Hispanic women compared to other race/ethnicity-matched controls (table 1). Further sub-analyses revealed that it was predominantly women with SLE who were contributing to the adverse outcomes seen in the combined ARD group.

Abstract THU0675 – Table 1. Odd of adverse birth outcomes among women with autoimmune rheumatic disease (ARD) compared with women without a recorded ARD by race/ethnicity.

Variable	Total Population		White, non-Hispanic		Hispanic		Black		Asian	
	No ARD n/N (95% CI)	ARD n/N (95% CI)	No ARD n/N (95% CI)	ARD n/N (95% CI)	No ARD n/N (95% CI)	ARD n/N (95% CI)	No ARD n/N (95% CI)	ARD n/N (95% CI)	No ARD n/N (95% CI)	ARD n/N (95% CI)
Sample size	71,960	10,975	6,960 (64.7)	4,488 (28.3)	7,544 (66.7)	3,779 (23.3)	1,544 (66.7)	772 (23.3)	1,086 (66.7)	948 (23.3)
Median gestational age (SD, weeks)	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
Any	1,888 (2.1)	1,888 (2.1)	544 (8.3)	588 (13.4)	583 (7.7)	799 (18.8)	1,041 (11.0)	701 (28.6)	1,041 (11.0)	1,041 (11.0)
Any PTB	333 (2.3)	333 (2.3)	137 (3.3)	153 (13.4)	132 (1.6)	143 (3.8)	40 (2.8)	40 (2.8)	40 (2.8)	40 (2.8)
Preterm labor	798 (3.8)	798 (3.8)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)
Medically indicated	308 (2.1)	308 (2.1)	122 (3.4)	122 (3.4)	122 (3.4)	122 (3.4)	122 (3.4)	122 (3.4)	122 (3.4)	122 (3.4)
Congenital anomalies	3,173 (2.4)	3,173 (2.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)
Low birth weight	1,041 (2.4)	1,041 (2.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)	1,041 (13.4)

Conclusions: Consistent with prior literature, we found that women with ARDs tend to be more likely to have PTB and infants of LBW. To our knowledge, this is the largest study to date to analyse these associations in Asian women. Our results suggest that Asian and Hispanic women with ARDs may disproportionately benefit from additional monitoring throughout pregnancy. Our study raises the need for public health initiatives that can help improve pregnancy outcomes in women with autoimmune rheumatic diseases across all races and ethnicities.

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