Acknowledgement: Study funded by GSK. Gosia Carless, PhD, Fishawack Indicia Ltd, UK, provided editorial assistance funded by GSK.

Disclosure of Interests: Christopher Collins Grant/research support from: Exagen, Consultant for: Exagen, AbbVie, Speakers bureau: Exagen, AbbVie, Novartis, Josefin Cortés-Hernández Grant/research support from: GSK, Speakers bureau: GSK, Mercedes García Grant/research support from: GSK, Speakers bureau: GSK, Johannes von Kempis: None declared, Andreas Schwarting Grant/research support from: GSK, Pfizer, AbbVie, Novartis, Roche, Speakers bureau: GSK, Novartis, Zahi Touma Grant/research support from: GSK Canada, Consultant for: UBC, Pfizer, Janssen, Inc, Shannon Ferrante Shareholder of: GSK, Employee of: GSK, Milena Kurtinecz Shareholder of: GSK, Employee of: GSK, Kerry Gairy Shareholder of: GSK, Employee of: GSK

DOI: 10.1136/annrheumdis-2019-eular.7637

FRI0190

INCIDENCE OF ANTIMALARIALS-INDUCED RETINOPATHY IN INFLAMMATORY RHEUMATIC DISEASES, USING OCT AND VISUAL FIELD TEST : A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Antimalarials (AM) are frequently used as first-line therapy in mild inflammatory diseases, because of a good benefit/risk ratio. Recently, their benefit on long term cardiovascular risk in RA patients has been demonstrated [1, 2]. Their most severe side effect is retinopathy, which can potentially lead to blindness, but remains reversible if detected early, provided the treatment is stopped. This complication has been described early [3], but its incidence remains uncertain. A recent update of the American Association of Ophthalmology (AAO) recommendations on screening for chloroquine and hydroxychloroquine retinopathy, suggests to screen patients under AM treatment, with a frequency depending on risk factors, and with the systematic and minimal use of Optical Coherence Tomography (OCT) and Visual Field (VF) test, completed by others tests if required [4].

Objectives: We aimed at estimating the exact incidence of AM-induced retinopathy, based on available published literature about this issue, with particular reference to detection performed with OCT and VF test.

Methods: A systematic literature search was conducted in Pubmed, Cochrane and Embase databases until April 6th 2018, completed by a manual search in references from the resulting selected articles. We first selected all publications about the incidence of AM-associated retinopathy in patients treated for inflammatory diseases and included them in the systematic literature search. Among them, and in order to minimize heterogeneity of results, we focused on those which had used at least OCT and VF test, as recommended by the AAO, to perform a meta-analysis. Analysis was conducted using MetaXL for Microsoft Excel, applying the Inverse of Variance method.

Results: Among the 3890 articles of potential interest, we selected 91 articles appropriately addressing the topic and included them in the systematic literature search. They were published between 1964 and 2018, with variable population sizes (10 to 3580 patients). Patients were treated with hydroxychloroquine, chloroquine or both for an inflammatory disease (usually lupus or rheumatoid arthritis). Mean treatment duration ranged from 1 to 14,1 years. Most of them were retrospectively designed, and diagnostic methods were diverse. For the aforementioned meta-analysis, we used data from 16 articles published between 2010 and 2018, in which every patient had at least OCT and VF Test. We found a pooled estimate of incidence of 6.05% (IC 95% [5.18 – 7.31]), with a I2 heterogeneity coefficient of 80%.

Conclusion: We found a pooled incidence of approximately 6% of AM-induced retinopathy when OCT and VF test are used. However diagnostic criteria are not consensually well-defined, leading to heterogeneous data.

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Disclosure of Interests: Hélène DE CAGNY: None declared, Jacques Morel: None declared, Bernard Combe Consultant for: Abbvie, Bristol-Myers Squibb, Gilead, Janssen, Eli Lilly, MSD, Novartis, Pfizer, Roche-Chugai, Sanofi, UCB, Cecile Gaujoux-Viala Consultant for: Speaking and/or consulting fees from AbbVie, Amgen, Bristol-Myers Squibb, Celgene, Eli Lilly, Gilead, Janssen, Merck-Serono, Medac, Nordic Pharma, Novartis, Pfizer, Roche, Sandoz, Sanofi and UCB Pharma., Speakers bureau: Speaking and/or consulting fees from AbbVie, Amgen, Bristol-Myers Squibb, Celgene, Eli Lilly, Gilead, Janssen, Merck-Serono, Medac, Nordic Pharma, Novartis, Pfizer, Roche, Sandoz, Sanofi and UCB Pharma., Cédric Lukas: None declared

DOI: 10.1136/annrheumdis-2019-eular.5146

FRI0191

TREATMENT OF REFRACTORY POOR APL-RELATED OBSTETRIC OUTCOMES WITH TNF-ALPHA BLOCKERS: MATERNAL-FETAL OUTCOMES IN A SERIES OF 18 CASES

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Background: No absolute data on the treatment of antiphospholipid antibodies (aPL) related to refractory obstetric complications exist to date. TNF- α play a major role in this disorder.

Objectives: To assess the effectiveness of TNF- α blockers in 18 aPL-positive women with recurrent infertility after therapy with low-molecular-weight heparin (LMWH) plus aspirin (LDA) plus hydroxychloroquine (HCQ).

Methods: Prospective case-series of 12 women fulfilling Sydney criteria for obstetric antiphospholipid syndrome (OAPS) and 6 with incomplete forms (OMAPS). All women tested positive for aPL at least twice. Non-criteria aPL were tested in 15/18. Complement, TNF- α and IL-10 were also evaluated. Women were closely monitored for fetal well-being and possible malformations throughout gestation and the postpartum period.

Results: Sixteen patients were started on adalimumab and 2 on certolizumab. Twelve women completed gestation: 9 at term and 3 pre-term. Differences in laboratory categories and outcomes were observed when OAPS and OMAPS were compared. First trimester miscarriage or implantation failure occurred in 6 cases, all of the OAPS group. Malformations were not seen in the newborns.

Conclusion: Overall, good obstetric results were obtained in 70% of previous LMWH-LDA+HCQ refractory cases. TNF- α blockers were well tolerated without adverse effects. The combination of LMWH plus LDA plus TNF- α blockers appears to be a promising treatment for refractory obstetric complaints related to aPL; nevertheless, outcome differences between OAPS and OMAPS do exist.