effect profile compared to methotrexate at doses used in oncology.(3) Hence this study aimed to clarify whether low dose methotrexate carried a risk of hair fall.

Objectives: Determine the mean change in number of hair strands obtained by the hair pull test at the start of the trial and at 3 weeks, 2 months and 3 months among rheumatoid arthritis patients on methotrexate in comparison to healthy controls.

Methods: After ethics committee approval and informed consent, consecutive patients attending a rheumatology OPD and who were planned to be initiated on methotrexate were enrolled into the study. Patient relatives, hospital staff and healthy blood donors were recruited as healthy controls. Patients with prior exposure to methotrexate in the last 6 months, currently on other medications known to cause hair fall or those suffering from diseases which could predispose to alopecia were excluded.

Results: During the 6 month enrolment phase 98 patients and 82 controls were enrolled. Patients were 85% female with a mean age of 48.1 ±13.4. Rheumatoid factor positivity was seen in 56%. Average duration of the disease was 9.6 months (Range 15 days to 3 years) Patients were started on 10 to 15 mg of methotrexate which was escalated at the 1st visit at 3 weeks. Only 3 patients had received prior DMARDs. Controls also constituted predominantly women (90%) with a slightly lower average age of 44.4 ±10.9 years. The mean no of hair in the hair pull test at the start of the study was 1.21±2.01 (range 0-12) in patients vs 0.84 ±1.25 (range 0-4) in controls. The mean change in the hair count in the same test repeated at 3 weeks, 2 months and 3 months was -0.29, -0.31 & -0.26 respectively, (i.e. reduction in hair fall). In comparison healthy controls showed values of 0.31, 0.11, 0.1 at the same follow up points. There was no statistical significant difference in the proportion of patients having more than 5 hairs in the test at the onset of treatment vs healthy controls or during any point during the follow up period

Conclusion: Low dose methotrexate did not appear to predispose to increased hair fall during this short term study. In fact many patients showed reduction in the number of hair in the hair pull test on methotrexate

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FR10158

COMPARISON OF THE EFFICACY AND SAFETY OF TOFACITINIB AND UPADACITINIB IN PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS: A BAYESIAN NETWORK META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

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Background: A class of targeted synthetic disease-modifying anti-rheumatic drugs (tsDMARDs) has emerged as an alternative treatment option for rheumatoid arthritis (RA). Tofacitinib is an orally administered JAK (Janus kinase) inhibitor with functional cellular specificity for JAK-1 and JAK-3 over JAK-2 and upadacitinib, a new JAK inhibitor, has been engineered to confer greater selectivity for JAK1 than for JAK2, JAK3, and Tyk2.

Objectives: The aim of this study is to assess the relative efficacy and safety of tofacitinib and upadacitinib at different doses were assessed in patients with RA with an inadequate response to conventional synthetic (cs) or biologic (b) DMARDs.

Methods: We performed a Bayesian network meta-analysis to combine direct and indirect evidence from randomized controlled trials (RCTs) to examine the efficacy and safety of tofacitinib and upadacitinib in combination with methotrexate (MTX) in RA patients with an inadequate cs- or b-DMARD response.

Results: Nine RCTs including 5,794 patients met the inclusion criteria. There were 15 pairwise comparisons including 10 direct comparisons of six interventions. Upadacitinib 15 mg+MTX and upadacitinib 30 mg+MTX were among the most effective treatments for active RA with an inadequate cs- or b-DMARD response, followed by tofacitinib 10 mg+MTX, tofacitinib 5 mg+MTX, and adalimumab 40 mg+MTX. Ranking probability based on the surface under the cumulative ranking curve (SUCRA) indicated that upadacitinib 15 mg+MTX and upadacitinib 30 mg+MTX had the highest probability of being the best treatment in terms of the ACR20 response rate (SUCRA = 0.820, 0.762), followed by tofacitinib 10 mg+MTX (SUCRA = 0.623), tofacitinib 5 mg+MTX (SUCRA = 0.424), adalimumab+MTX (SUCRA = 0.371), and placebo+MTX (SUCRA = 0.001). No significant differences were observed in the incidence of serious adverse events after treatment with tofacitinib+MTX, upadacitinib+MTX, adalimumab+MTX, or placebo+MTX.

Conclusion: In RA patients with an inadequate response to cs- or b-DMARDs, upadacitinib 15 mg+MTX and upadacitinib 30 mg+MTX were the most efficacious interventions and were not associated with significant risks of serious adverse events.

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FR10159

REAL-WORLD EVIDENCE OF EFFECTIVENESS OF SWITCHING FROM TOFACITINIB 5MG BID TO TOFACITINIB 11MG QD IN A COHORT OF PATIENTS WITH RHEUMATOID ARTHRITIS: A SINGLE-CENTER, OBSERVATIONAL STUDY IN TAIWAN

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Background: Rheumatoid arthritis (RA) is a chronic autoimmune disorder, precipitating chronic inflammation of the joints, also affecting organs throughout the body. For chronic conditions, such as RA, a once-daily (QD) dosing option has the potential to optimize patient adherence, and may enhance patient convenience and ease of use. Real-world data on effectiveness of switching from tofacitinib 5mg BID to 11mg QD is scarce.

Objectives: This study aimed at evaluating the effectiveness and safety of RA patients switching from tofacitinib 5mg BID to tofacitinib 11mg QD in a real-world setting.

Methods: A retrospective chart review of patients with RA was performed at the rheumatology department of an integrated secondary teaching hospital in Taiwan. The following cohorts were defined: RA patients who switched from tofacitinib 5mg BID to tofacitinib 11mg QD between 1 July 2018 and October 2018, and the follow-up period was at least 3 months. The clinical demographics and laboratory variables were obtained from clinic records.

Results: As of December 2018, 71 patients were included (85% of women), with a mean (SD) age of 57.4 (12.7) years, 70.1% were biologic-experienced; 78.9% rheumatoid factor positive and 80.3% anti-citrullinated peptide antibody (ACPA) positive. At baseline (before patients initiated tofacitinib 5mg BID treatment), the mean DAS28-ESR was 5.0 (8.4% patients with low disease activity, and 2.8% in clinical remission), the mean CDAI was 23.0 (11.2% patients with low disease activity, and 0% in clinical remission). After an average duration of 20 months treatment on tofacitinib 5mg BID treatment, the mean DAS28-ESR was 3.3 (29.6% patients with low disease activity, and 2.8% in clinical remission),