accordingly. Conservatively, MWPC was estimated as 6.3 for FACIT-F total score, and 2.8 and 3.6 for FACIT-F Experience and Impact domain scores, respectively.

Figure. Relationship between FACIT-F total score and PtGA in a) Study 1 and b) Study 2

Conclusion: This quantitative analysis of data from two clinical studies of tofacitinib demonstrates the validity and reliability of the FACIT-F scale in adult pts with active AS. Therefore, these findings support the use of FACIT-F in AS studies.

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OP0240

EPIDEMIOLOGY, PREDICTORS OF MORTALITY AND ROLE OF PROPHYLAXIS FOR PNEUMOCYSTIS JIROVECI PNEUMONIA AMONG RHEUMATIC PATIENTS: A TERRITORY-WIDE STUDY

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Background: *Pneumocystis jiroveci* pneumonia (PJP) is an opportunistic infection affecting immunocompromised individuals. Due to its high mortality, PJP prophylaxis is commonly recommended for many immunocompromising conditions. However, evidence regarding the burden and role of prophylaxis in PJP among rheumatic patients remains limited. There is lack of consensus for when and for whom to initiate prophylaxis. Delineating the epidemiology, predictors of mortality and efficacy of prophylaxis in PJP among rheumatic patients is urgently needed.

Objectives: To delineate the epidemiology of PJP, identify predictors of mortality and evaluate the usefulness of prophylaxis in rheumatology patients.

Methods: We performed a big-data cohort study based on the territory-wide healthcare database of the Hong Kong Hospital Authority. All patients with a diagnosis of anti-neutrophil cytoplasmic antibody-associated vasculitis (AAV), immune-mediated myositis (IMM), rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), systemic sclerosis (SSc), or spondyloarthritis (SpA) between 2015-2019 were included. PJP were identified based on physician diagnosis and/or positive microbiological results from deep respiratory tract specimens. Prophylaxis was defined as prescription of a prophylactic dose of co-trimoxazole for at least 2 weeks and/or inhaled pentamidine. Prevalence of PJP, prophylaxis and mortality among rheumatic patients were calculated. Demographics, blood parameters and immunosuppressants use was also collected for multivariate analysis. Number needed to treat (NNT) analysis was performed based on absolute risk reduction of PJP in patients with and without prior PJP prophylaxis.

Results: A total of 21,587 unique rheumatic patients were analysed (54% RA, 25% SLE, 13% SpA, 5% IMM, 2% AAV and 1% SSc). Between 2015-2019, 1141 (5.3%) patients were prescribed PJP prophylaxis and 48 (0.2%) developed PJP. None of those patients who developed PJP had received prophylaxis prior to infection. The risk of PJP was highest among SSc (1.8%), AAV (1.4%) and IMM (0.7%) patients, with NNT of SSc 36, AAV 48 and IMM 114. Within these disease entities, the majority of PJP occurred at prednisolone dose of 15mg/day (P15) or above (100% in SSc and IMM, 66.7% in AAV). Overall, PJP was associated with a mortality-rate of 39.6%. Glucocorticoid dose (daily prednisolone dose equivalent 29.1±23.5mg vs 11.4±7.2mg, P<0.01) and lymphopenia (0.44x10⁹/L vs 0.90x10⁹/L, P= 0.04) at PJP diagnosis were associated with PJP mortality in rheumatic patients.

Conclusion: PJP is an uncommon but important infection in rheumatic patients associated with significant mortality. PJP prophylaxis is effective and should be considered in patients with SSc, AAV and IMM, especially in those receiving a steroid dose above P15.

Disclosure of Interests: None declared

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