developing IRR (OR 2.5, 95% CI 1.3-4.7, $p=0.006$). Seventy (78.7%) of the patients with SjS had positive anti-SSA antibody, but the presence of anti-SSA antibody was not a significant risk for IRR after controlling for the diagnosis of SjS. The IRR per infusion was not related to the RTX dose. The IRR in an infusion did not lead to stopping of the therapy, although infusion rate and premedication can be adjusted in the following therapies. Only 39.6% of the patients with an IRR had suffer from more IRR in the following infusions. Besides, male gender and the increasing cycles were associated with less IRR ($p=0.029$ and 0.007 , respectively). In the 100 patients received more than 4 cycles, the rate of IRR decreased along with the cycles. No life-threatening IRR happened in the 1893 infusions.

Conclusion: Our study had found that patients with SjS had higher IRR compared to other diseases. Female had more frequent IRR might due to the sexual distribution of these diseases.

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FRI0127 IMPACT OF JANUS KINASE INHIBITORS ON RISK OF CARDIOVASCULAR EVENTS IN PATIENTS WITH RHEUMATOID ARTHRITIS: SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

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Background: Janus kinase inhibitors (JAKis) are emerging as novel therapies for patients with rheumatoid arthritis (RA). Two JAK inhibitors have been approved and more pipeline products are ongoing to be launched, but their safety profiles of cardiovascular events (CVEs) have not been fully-established yet.

Objectives: To identify the association between CVEs and JAKis therapies in adult patients with RA via a meta-analysis of randomized controlled trials (RCTs).

Methods: RCTs reporting safety issues in RA patients treated with JAKis were reviewed in PubMed, Embase, and Cochrane Library (from inception to October 2018). CINAHL and the major relevant congress (2016-2018) were searched for additional reports. Mantel-Haenszel fixed-effects method with odds ratios (ORs) and 95% confidence intervals (CIs) were performed on extracted data.

Results: Out of 405 references screened, 26 RCTs involving 11 800 patients were included. No statistically significant difference was observed in risk of CVEs associated with the use of JAKis in general (OR 1.04, 95% CI 0.61-1.76, $p=0.89$), tofacitinib (OR 0.63, 95% CI 0.26-1.54, $p=0.31$), baricitinib (OR 1.21, 95% CI 0.51-2.83, $p=0.66$), upadacitinib (OR 3.29, 95% CI 0.59-18.44, $p=0.18$), peficitinib (OR 0.43, 95% CI 0.07-2.54, $p=0.35$), decernotinib (OR 1.12, 95% CI 0.13-10.11, $p=0.92$) (Figure 1). Regarding frequently-used dosage, dose-ranging impact of JAKis on the risk of CVEs was not observed in tofacitinib (5mg vs. 10mg, twice daily), upadacitinib (15mg vs. 30mg, once daily), while baricitinib at 2mg once daily was found to be safer than 4mg (OR 0.19, 95% CI 0.04-0.88, $p=0.03$) (Figure 2).

Conclusion: The existing evidence from RCTs indicated that JAKis-based therapies are not related to statistically significant risk of CVEs in RA patients during the limited randomized controlled periods. However, a special focus on baricitinib 4mg once daily is needed concerning the cardiovascular safety in the future.

Disclosure of Interests: None declared

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Figure 1. Odds ratio (OR) of cardiovascular events (CVEs) in patients treated with JAKis compared with placebo in randomized controlled trials using Mantel-Haenszel fixed-effects method. JAKis, janus kinase inhibitors; P-Y: person-year; CI: confidence interval; df, degrees of freedom

Figure 2. Odds ratio (OR) of cardiovascular events (CVEs) in patients treated with different dosages of JAKis in randomized controlled trials using Mantel-Haenszel fixed-effects method. JAKis, janus kinase inhibitors; P-Y: person-year; CI: confidence interval; df, degrees of freedom.