

### 5PSQ-177 CARDIOVASCULAR RISK AND ALTERED LIPID PROFILE ASSOCIATED WITH TREATMENT WITH THE KINASE JAK INHIBITORS, TOFACITINIB AND BARICITINIB

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**Background and importance** Alterations in the lipid profile and increased cardiovascular risk (CV) have been described in those patients treated with JAK kinase inhibitors, such as baricitinib and tofacitinib.

**Aim and objectives** To determine the CV risk factors and alteration of the lipid profile in patients treated with baricitinib/tofacitinib in a reference hospital.

**Material and methods** A retrospective, 25 month, observational study was conducted between January 2018 and February 2020 in all patients treated with tofacitinib/baricitinib. The following variables were collected: age, sex, and diagnosis and duration of treatment. In each case, the CV risk factors were analysed: obesity, smoking, high blood pressure (HTA) and diabetes mellitus (DM). To determine the appearance of hyperlipidaemia, levels of total cholesterol (TOT COL), LDL cholesterol (LDL COL) and triglycerides (TG) were analysed prior to and during the administration of tofacitinib/baricitinib. Prescription of statin-type antihyperlipaemic drugs in the electronic prescriptions was determined.

**Results** During the study period, 60 patients were included (71.7% women; mean age 52.9 years (24–70)). 70% were treated with tofacitinib (n=42). The classification according to diagnosis was: 81.6% (n=49) rheumatoid arthritis, 8.3% (n=5) non-rheumatoid arthritis and 10% other (n=6). Average duration of treatment was 11 months. Lipid parameters, pre versus post treatment, were the following: elevated TG levels: 13.3% (n=8) versus 31.7% (n=19); high LDL COL levels: 3.3% (n=4) versus 28.3% (n=17); and high TOT COL levels: 18.3% (n=11) versus 55% (n=33). 65% of patients (n=39) presented some CV risk factors: smoking 69.2% (n=27), HTA 46.2% (n=18), obesity 17.9% (n=7) and DM 25.6% (n=10). Of these, 43.6% (n=17) had  $\geq 2$  associated factors. 33.3% of patients (n=20) had a statin-type drug prescribed in their electronic prescription. In 70% of cases (n=14), hyperlipidaemia was observed despite the statin treatment.

**Conclusion and relevance** The study showed how most patients have baseline CV risk factors. The use of these drugs caused worsening of the lipid profile in more than 50% of patients, with increases in TG, LDL and total cholesterol, despite receiving lipid lowering treatment. Therefore, it is necessary to monitor this type of AE, as well as to evaluate other therapeutic alternatives to avoid possible harmful long term CV effects.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of interest** No conflict of interest

### 5PSQ-178 HEPATOTOXICITY ASSOCIATED WITH ACUTE TOCILIZUMAB TREATMENT IN PATIENTS WITH SARS-COV-2 INFECTION

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**Background and importance** Tocilizumab (TCZ) has been proposed to mitigate the cytokine storm syndrome associated with SARS-CoV-2. However, acute administration of this drug has been shown to cause serious adverse effects at the level of the liver, including acute liver failure.

**Aim and objectives** To evaluate the liver toxicity profile associated with the acute use of TCZ in patients with SARS-CoV-2 infection.

**Material and methods** A retrospective single centre study, lasting 2 months (March to April 2020), was conducted in all patients with a clinical suspicion/diagnosis confirmed of SARS-CoV-2 infection and who had received treatment with TCZ. The following variables were collected: age, sex, posology scheme of TCZ, admission to the intensive care unit (ICU), need for orotracheal intubation (OTI) and death during the hospital stay. The hepatic profile was analysed for levels of hepatic transaminases (GOT/AST and GPT/ALT) and total bilirubin (TOT BL) pre and post completion of treatment with TCZ. Alteration of liver parameters was classified as mild ( $1-3 \times$  upper limit of normality (UPN)), moderate ( $3-5 \times$  UPN) and severe ( $\geq 5 \times$  UPN).

**Results** During the study period, 44 patients with SARS-CoV-2 infection were treated with TCZ (65.9% men (n=29); mean age 62.3 years (31–82)). The posology scheme of TCZ used was the following: single dose (68.2%, n=30), double dose (18.2%, n=8) and triple dose (11.6%, n=6). Two patients (4.5%) received a 50% reduced dose because of previous liver failure. During admission, 56.8% (n=25) of patients required a stay in the ICU. 36.4% (n=16) needed OTI. 9.1% (n=4) died during admission. Liver profile analysis showed that 72.7% of patients (n=32) presented with normal levels of GPT/ALT and GOT/AST before treatment. 59.1% (n=26) presented with normal levels of BL TOT and 4.5% (n=2) had high levels. In 34.1% (n=15) there were no data. After treatment with TCZ, 86.3% (n=38) developed hepatotoxicity. Elevation of GPT/ALT was observed: mild (42.1%), moderate (28.9%) and severe (28.9%); elevation of GOT/AST: mild (44.7%), moderate (31.6%) and severe (13.2%). 42.9% (n=12) presented with high levels of BL TOT after receiving TCZ.

**Conclusion and relevance** The study showed how a high proportion of patients with SARS-CoV-2 infection developed severe liver toxicity after the use of the drug. However, future studies will be needed to clarify the involvement of SARS-CoV-2 itself in the development of hepatotoxicity.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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### 5PSQ-179 REASON FOR DISCONTINUATION OF BIOLOGICAL DRUG TREATMENT IN RHEUMATOID ARTHRITIS

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**Background and importance** Rheumatoid arthritis is a chronic, autoimmune disease, with unknown aetiology, characterised by chronic inflammation of synovial articulations. Biologic disease