considered to be at risk to each healthcare professional, offering them other treatment options based on efficacy, safety and cost.

Results We reviewed 36 patients under treatment with tofacitinib, 28 females (73%), average age 51.6 years. 32 patients had rheumatoid arthritis and 4 patients had ulcerative colitis. We identified 13 (36%) patients with an increased risk of major adverse cardiovascular events and malignances, and all of them had rheumatoid arthritis: 7 patients were aged 65+ years, 5 patients had cardiovascular risk factors, and 2 patients had a malignancy process. We sent 11 personalised reports to healthcare professionals.

Conclusion and relevance One in three patients being treated with tofacitinib were affected by the security alert, and were considered to be a population at increased risk of major adverse cardiovascular events and malignances. This study allowed us to find these patients and communicate this information to healthcare professionals, providing them with an alternative treatment option based on efficacy, safety and cost.

References and/or acknowledgements https://www.aemps.gob.es/informa/notasinformativas/medicamentosusohumano-3/seguridad-1/2021-seguridad-1/xeljanz-tofacitinib-nuevas-precauciones-de-uso/

Conflict of interest No conflict of interest

5PSQ-137 MEDICATION ERRORS RELATING TO ISOAPPEARANCES IN THE EMERGENCY ROOM

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Background and importance Medication errors (ME) are a common cause of harm to patients, especially in an emergency setting. The International Organization for Standardization (ISO) includes among the main objectives safety in the administration of medicines, sharing best practices and minimising the possibility of ME due to confusion of denominations and the external appearance of the products. This has the potential to significantly improve patient safety and the quality of healthcare. The World Health Organization (WHO) estimates that the annual cost of medication errors amounts to $42 billion, all potentially avoidable.

Aim and objectives The aim of this study was to determine the prevalence of ME related to isoapperances in the emergency room (ER), and to give visibility and enhance the importance of the recently created Isoappearance Group in the Emergency Department to achive ISO's objectives.

Material and methods A retrospective observational study was performed. ME that occurred in the ER in our hospital during the years 2019, 2020 and the first half of 2021 were analysed through our hospital's corporative electronic platform *SNAPS* (Patient Safety Notification and Learning System), developed by the Spanish Ministry, and available to all hospital professionals. In addition, the bibliography at the Institute for Safe Medication Practices (ISMP) website about 'sound-alike' and 'look-alike' errors was reviewed.

Results In the study period, 237 incidents were reported in the ER, and 44 of them were related to medication (18.5%). Specifically 22 of them (9.2%) corresponded to isoappearances (7 'sound-alike' and 15 'look-alike'). Six (27%) of the registered isoappearances reached the patient and could have been avoided. Although they could have harmed the patients, all the incidents were resolved.

Conclusion and relevance 'Sound-alike' and 'look-alike' errors have a high frequency, and it is a priority to work specifically on them. To work on this objective, a multidisciplinary isoappearances group formed by a clinical pharmacist, a nurse, and two physicians has been set up on site in the ER to optimise stocks by reducing the available concentrations, changing the providers so that the medications' appearance was different, and promoting safety culture.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-138 IMPACT OF HIGH TEMPERATURE, SHAKING AND LIGHT ON QUALITY OF THE THERAPEUTIC PEPTIDE TEDUGLUTIDE (REVESTIVE) EVALUATED BY LC/MS/MS (ORBITRAP) PEPTIDE MAPPING ANALYSIS AND STRESS

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Background and importance Teduglutide (Revestive) is a recombinant human GLP-2 analogue indicated in the treatment of short bowel syndrome, a serious and highly disabling condition which results from either loss of portions of intestine or loss of critical intestinal function. A proteinaceous-based medicine, teduglutide is indicated to have low stability, thus the study of the effect of possible in-use mishandling and in-stress conditions are welcome to gain knowledge of its stability and degradation.

Aim and objectives To evaluate the impact on teduglutide's chemical structure when subjected to in-use mishandling and when it is degraded by the characterisation of its post-translational modifications (PTMs) obtained by liquid chromatography with tandem mass spectrometry **(LC/MS/MS) (Orbitrap) peptide mapping analysis after submitting teduglutide samples to 40°C and 60°C, to smooth shaking and to accelerated light exposition.**

Material and methods Samples of reconstituted teduglutide (Revestive) were submitted to 40°C and 60°C (3 hours), to smooth shaking (3 hours) and to accelerated light exposition (24 hours). Tryptic digestion was performed on these samples and the resulted fragments were separated and quantified by LC/MS/MS. BiopharmaFinder 3.1 software (Thermo Scientific) was used for PTMs identification.

Results Different PTMs related to the quality of the medicine were monitored in the primary structure of teduglutide (ie, deamidations, isomerisations and oxidations) [1]. No changes in the PTMs profiles were found in samples subjected to temperature and agitation in comparison to the PTMs profiles of fresh teduglutide. High percentages of oxidations were detected in the samples submitted to light exposition.

Conclusion and relevance The exposition to light modified the PTMs profile of teduglutide inducing oxidations in the primary structure (methionine and tryptophan residues). These