commercialised as a new promising treatment alternative, and pharmacist-led long-term monitoring could be beneficial to ensure treatment effectiveness and safety.

Aim and Objectives Assess the long-term real-life effectiveness and safety of cabotegravir/rilpivirine.

Material and Methods This was an observational, longitudinal and prospective study performed between March and September 2023. Patients were included if they started treatment with either a one-month oral lead-in (OLI) with cabotegravir/rilpivirine followed by long-acting therapy or directly with the long-acting injection regimen (at month 0, 1, 3 and 5) and received at least 4 injectable doses and excluded if participated in FLAIR and ATLAS studies. Sociodemographic (age, sex at birth), anthropometric (body mass index [BMI]) and viral (HIV-RNA viral load at baseline and 5-month follow-up) data were collected. Treatment was considered effective when patients achieved or maintained virological suppression

Drug adverse effects were collected and followed-up through active pharmacist validation, and clinical and nursing-staff monitoring.

Results 30 patients were included (90% male sex at birth, mean age 43.7 years). 1 patient had a BMI>30. At baseline, all patients had undetectable viral load (HIV-RNA<50 copies/mL) and 6(20%) started with OLI.

At 5-months follow-up, 28(93.3%) patients had an undetectable viral load. 2 patients abandoned treatment after 1 month, due to an unknown archived rilpivirine mutation (one patient had a VL of 113,146 copies/mL and the other remained undetectable).

90% of patients reported at least 1 adverse effect, being the most frequent: injection-site reactions (83.3% of patients reported gluteal pain, 13.3% induration), followed-by low-grade fever (10%), fatigue (6.7%) and diarrhoea (6.7%).

Conclusion and Relevance Cabotegravir/rilpivirine effectiveness and safety were favourable in this cohort of baseline virologically suppressed patients. No treatment interruptions due to adverse effects were observed but resistance mutations need to be considered.

Although small sample size, low proportion of female patients and a short-term follow-up due to recent commercialisation, this study could be of help due to lack of studies reporting data on cabotegravir/rilpivirine effectiveness in real-life population and long-term pharmacist treatment monitoring

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

4CPS-099 CHIMERIC ANTIGEN RECEPTOR-T CELLS (CAR-T CELLS) AND ANTIBIOTICS: A NOT-SO-INNOCENT ASSOCIATION

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Background and Importance According to an American study[1], prior exposure to Piperacillin/tazobactam (P/T), Imipenem/cilastatin (I) and meropenem (M) is correlated with reduced overall survival and a 71% higher risk of death in patients treated with CAR-T cells (Chimeric Antigen Receptor T cells). This exposure is also associated with an increased risk of immune effector cell-associated neurotoxicity syndrome (ICANS).

Aim and Objectives The aim is to demonstrate if the American results apply to our real-life results.

Material and Methods For each patient who received a CAR-T cells injection between January 2019 and August 2023, the 'CAR-T cells' pharmaceutical team checked: antibiotic prescription 4 weeks prior to CAR-T cells injection, post-injection toxicities (ICANS and cytokine release syndrome (CRS)) and death within 6 months of CAR-T cells injection.

To have populations comparable to those in the study, we defined two groups: 'P/T/I/M' is patients who received P/T/I/M antibiotics, and 'Other antibiotics and naive' is patients who received antibiotics other than P/T/I/M or antibiotic naive. we selected all CAR-T cells with marketing authorisation.

Statistical comparisons were made using the Fischer test (risk = 5% bilateral).

Results Two-hundred and five patients received CAR-T cells: 172 'Other ATB and naive' patients (84%) and 33 'P/T/I/M' patients (16%) in the 4 weeks prior to injection.

In the 'P/T/I/M' population, there were 12 CRS (36.5%), 0 ICANS, 12 ICANS+CRS (36.5%) and 9 (27%) without toxicities. Seven (21%) patients died.

In the 'Other antibiotics and naive' population, there were 100 CRS (58%), 2 ICANS (1%), 43 ICANS+CRS (25%) and 27 no toxicities (16%). Twenty-four patients (14%) died.

A higher risk of CRS has been identified in the 'P/T/I/M' group (p=0.02).

No other significant difference was found between the 2 groups on: ICANS+CRS (p=0.2), ICANS (p=1), or death (p=0.29).

Conclusion and Relevance Our study shows a higher risk of CRS for patients exposed to P/T/I/M 4 weeks prior to injection.

Our study also shows no excess risk of ICANS nor toxicities and death for 'P/T/I/M' patients. Our results are therefore not similar to those of the American study.

These differences could be explained by the size of our population and the fact that the American study only selected anti-CD19 CAR-T cells.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. https://doi.org/10.1038/s41591-022-01702-9

Conflict of Interest No conflict of interest.

4CPS-100 THE UTILITY OF EARLY PHARMACEUTICAL VALIDATION OF SELECTED HIGH-RISK DRUGS IN A HOSPITAL EMERGENCY DEPARTMENT

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Background and Importance High-risk medication and the associated errors represent a potential source of adverse effects and readmissions for patients.

Aim and Objectives To analyse the utility of early pharmaceutical validation of direct oral anticoagulants (DOACs) and long-acting insulins (LAIs) in a Hospital Emergency Department (ED).

Material and Methods This retrospective study was conducted between May 15, 2023, and September 28, 2023. Two groups of high-risk medications (HRMs) were selected: DOACs

(apixaban/dabigatran/edoxaban/rivaroxaban) and LAIs (degludec/detemir/toujeo (glargine)) due to their high-risk nature, requiring validation by a pharmacist for the early in the morning dispensation. On weekdays, these medications were identified in the ED through the electronic prescription program and subjected to pharmaceutical validation. All locations, appropriateness, and, in cases of inappropriateness, both the underlying reasons and their acceptance were recorded. Recommendations were communicated through the patient's electronic medical record or by telephone to the attending physician. Locations reviewed on previous days were excluded to prevent duplication. The primary variable was the degree of total non-appropriateness, both overall and by therapeutic group. Secondary variables included the reasons for non-appropriateness, the degree of acceptance of pharmaceutical recommendations, and, in cases of non-acceptance, the occurrence of adverse drug events (ADEs) for each therapeutic group. The analysis was performed using Microsoft Excel® for Microsoft 365 MSO (2308 version).

Results During the study period, a total of 338 locations were recorded: 193 DOACs and 145 LAIs. The overall degree of non-appropriateness was 16.6% (56/338), with 13.0% (25/193) for DOACs and 21.4% (31/145) for LAIs. The main reasons for non-appropriateness for DOACs were 52.0% temporary contraindication (13/25), 36.0% inappropriate dosage (9/25), and 12.0% reconciliation (3/25); for LAIs: 58.1% inappropriate dosage (18/31), 32.3% contraindication (10/31), and 9.7% inappropriate presentation (3/31). The overall acceptance rate of recommendations made was 86.0% (49/57), with rates of 100% (13/13) and 88.0% (22/25) for DOACs and LAIs, respectively. No ADEs occurred.

Conclusion and Relevance Early and proactive validation by the pharmacist in the Emergency Department of selected high-risk drugs appears to optimise pharmacotherapy and reduce the occurrence of adverse events associated with these medications.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

4CPS-101 MONITORING METABOLIC SYNDROME IN OLANZAPINE TREATED PATIENTS

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Background and Importance Neuropsychiatric disorders are associated with significant reduction in life expectancy and increased risk of cardiovascular mortality. Olanzapine, can exacerbate the development of metabolic síndrome (MS), especially at the beggining of treatment

Aim and Objectives Main objetives are to analyse the metabolic monitoring of patients receiving oral olanzapine treatment, to study the association between olanzapine use and the development of metabolic alterations (MA) and to investigate the prescription of specific treatments for MS in patients who develop it

Material and Methods This was an observational, descriptive, and retrospective study that included adult patients admitted to the psychiatric hospital unit and prescribed oral olanzapine between January 2023 and April 2023.

The collected variables included sex, age, risk factors (smoking and substance use) and Body Mass Index (BMI).

It was recorded whether there was an initial blood test and a follow-up test conducted between two and twelve months after the start of treatment, along with the time elapsed until the follow-up test. The following parameters were collected: cholesterol, triglycerides, high-density lipoprotein (HDL), low-density lipoprotein (LDL), and blood glucose.

For patients developing MA, the study examined the prescription of hypoglycemic and lipid-lowering medications.

Results 42 patients were included, 57% women and Mean age (±SD) was 40±15.5 years. Risk factors included substance use in 19.05% of patients and tobacco use in 16.6%. The mean BMI was 24.5±5 kg/m^2.

Only 45% of patients underwent an initial blood test. None of them had hyperglycemia, but 31.6% had lipid abnormalities (LA), with hypertriglyceridemia in 50% of cases followed by high cholesterol and elevated LDL.

Within the first few months of treatment (4.5 ± 2.5), 54.8% had follow-up blood tests. None of these patients had hyperglycemia, but 52.17% showed LA, increased TG in 50% and decreased HDL in 41.6%.

Only one of these received lipid-lowering medication.

Conclusion and Relevance A substantial percentage of patients were not monitored for the potential development of MS associated with olanzapine use. There was an observed increase in LA, possibly linked to it. Importantly, lipid-lowering medication use was limited when LA were present.

The study highlights the need to raise awareness among healthcare professionals about the importance of monitoring MS in these patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

4CPS-102 AMIODARONE AND LITHIUM-INDUCED THYROID DYSFUNCTION: WHO INITIATES THE PRESCRIBING CASCADE?

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Background and Importance Prescribing cascades occur when an unrecognised adverse drug reaction (ADR) leads to the initiation of additional medication, contributing to polypharmacy. It remains unclear whether prescribing cascades are initiated by physicians from specialties other than the initial prescriber. This study focuses on amiodarone and lithium, two medications exclusively initiated in hospitals, while the ADR thyroid dysfunction occurs in primary care (median: after two years).

Aim and Objectives To assess whether the specialty of the physician initiating amiodarone or lithium differs from the specialty of the physician initiating the thyroid medication.

Material and Methods A retrospective study was conducted (two teaching hospitals and 22 community pharmacies). Patients initiating amiodarone or lithium (index) and subsequently receiving thyroid medication (marker) within 24 months were included. The primary outcome was the