

led to an improvement in the incidence of ADRs reports and to the highlighting of side effects not detected during the clinical trials.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of Interest** No conflict of interest.

### 5PSQ-069 COMPARISON OF RENAL GLOMERULAR FILTRATION ESTIMATION FORMULAS IN VANCOMYCIN PHARMACOKINETIC MONITORING

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10.1136/ejhpharm-2024-eahp.403

**Background and Importance** This retrospective study aimed to assess the utility of renal glomerular filtration rate (GFR) estimation formulas, including Cockcroft-Gault (CG), Modification of Diet in Renal Disease (MDRD-4), and Chronic Kidney Disease Epidemiology (CKD-EPI), in the pharmacokinetic monitoring of vancomycin.

**Aim and Objectives** The study aimed to evaluate the correlation between estimated GFR using different formulas and the actual clearance of vancomycin in patients, providing valuable insights for pharmacokinetic monitoring and dosing adjustments.

**Material and Methods** Retrospective study (October 2022 to March 2023) on patients monitored by the Clinical Pharmacokinetics Unit during vancomycin treatment. Inclusion criteria: age  $\geq 18$ ,  $\geq$  two vancomycin trough plasma concentrations (C<sub>min</sub>), and stable serum creatinine ( $\pm 0.5$  mg/dL) during monitoring. Recorded variables: gender, age, weight (kg), height (cm), serum creatinine (mg/dL), estimated glomerular filtration rate (eGFR) (mL/min) using various formulas, observed vancomycin C<sub>min</sub> (mcg/mL), and predicted C<sub>min</sub> (mcg/mL) based on Bayesian adjustment (software: Mw-Pharm++<sup>®</sup>). Linear regression analysed the relationship between initial estimated vancomycin plasma clearance (Cl<sub>p</sub>) using eGFR data and patient's actual Cl<sub>p</sub> obtained through Bayesian estimation (considering monitored vancomycin concentrations).

**Results** A total of 34 patients were recruited (65.70% males, mean age  $\pm$  standard deviation:  $68.06 \pm 16.89$  years). The mean estimated glomerular filtration rate (GFR) values were:  $84.44 \pm 49.87$  mL/min,  $116.23 \pm 52.95$  mL/min,  $91.53 \pm 28.22$  mL/min for the CG, MDRD-4, and CKD-EPI formulas, respectively. The mean observed vancomycin C<sub>min</sub> in the second analytical determination was  $16.13 \pm 6.56$  mcg/mL. The mean predicted C<sub>min</sub> values were  $17.15 \pm 8.08$  mcg/mL,  $14.03 \pm 8.26$  mcg/mL, and  $14.57 \pm 7.56$  mcg/mL for the CG, MDRD-4, and CKD-EPI formulas, respectively. Based on the coefficients of determination calculated from the regression lines, 83%, 76%, and 86% of the variations found in the actual vancomycin clearance can be explained by variations in the estimated clearance using GFR data obtained with the CG, MDRD-4, and CKD-EPI formulas, respectively.

**Conclusion and Relevance** In this study, the Cockcroft-Gault and CKD-EPI formulas exhibited better correlation with actual vancomycin clearance compared to MDRD-4. The findings suggest a potential risk of overdosing when using MDRD-4.

Although initial vancomycin dosing based on estimated GFR formulas provides a reasonable approach, pharmacokinetic monitoring of plasma concentrations remains a safer approach for antibiotic dosing.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of Interest** No conflict of interest.

### 5PSQ-070 DUPILUMAB IS A MONOCLONAL ANTIBODY USED FOR THE TREATMENT OF ATOPIC DERMATITIS. THIS STUDY EVALUATES THE EFFECTIVENESS AND PERSISTENCE. DUPILUMAB PRESENTS GOOD EFFECTIVENESS AND PERSISTENCE

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10.1136/ejhpharm-2024-eahp.404

**Background and Importance** Atopic dermatitis (AD) is a relapsing inflammatory skin disease characterised by severe itching, skin lesions and dysregulation of the immune system. Dupilumab is an anti-IL-4/13 monoclonal antibody approved for the treatment of moderate to severe AD.

**Aim and Objectives** To evaluate the effectiveness and persistence of dupilumab in moderate-severe AD.

**Material and Methods** Observational and retrospective study of patients on treatment with dupilumab for moderate-severe AD from March 2020 to September 2023 in a tertiary hospital. Variables collected: age, sex, previous use of topical (Ct) and systemic (Ci) corticosteroids, topical tacrolimus, antihistamine and cyclosporine, dosage, and duration of treatment. The effectiveness variables are the EASI (Eczema Area and Severity Index) and IGA (Investigator Global Assessment) scales in weeks 16, 24 and 52. Treatment was considered effective when the EASI had been reduced by 50% (EASI50) and when the IGA had been reduced by  $<2$  points. Data were obtained from the electronic medical record (Abucasis<sup>®</sup>). Quantitative variables were described as mean (minimum and maximum) and qualitative variables as percentages.

**Results** A total of 39 patients were included, mean age 30.7 years (4–64), 58.9% of the patients were male. 100% of the patients have worn Ct and 30% continue to wear them. 69% have taken Ci, 31% tacrolimus, 79% antihistamines, 66% cyclosporine. 56% of patients are on the 300 mg every 2 weeks regimen. The median treatment time with dupilumab in the included patients was 21.7 months (0.9–68.4). At week 16, 89.6% (n=33) of the included patients reached EASI 50, at week 24 EASI 50 was reached by 93% (n=32) and at week 52 it was reached by 100% (n=25). 63% (n=33) of the patients achieved an IGA of 0–1 at week 16, 81% at week 24 and at week 52 the percentage was 100% (n=27) achieving an IGA of 0–1. 10% of patients had treatment failure with Dupilumab, 7% switched to tralokinumab and 3% to upadacitinib.

**Conclusion and Relevance** Dupilumab treatment shows good persistence and effectiveness in AD, although further studies of longer duration are needed to establish the usefulness of dupilumab in long-term clinical practice conditions.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

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