with 23 patients presenting a hyperproteinic intake and 15 patients with a normal protein intake.
Conclusion and Relevance It would be necessary to have a wider variety of commercially available nutritional products in order to meet both the caloric and protein needs of our patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS
Conflict of Interest No conflict of interest

4CPS-169 PHYSICOCHEMICAL CHARACTERISATION OF ORAL LIQUID FORMS AND REVIEW OF THE LITERATURE FOR SAFE AND EFFECTIVE ADMINISTRATION BY ENTERAL FEEDING TUBES

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Background and Importance Although the choice of oral liquid forms facilitates administration in patients with enteral feeding tubes, it can cause adverse effects such as diarrhoea, vomiting or additional gastrointestinal intolerance associated with an osmolarity >500 mOsm/L, pH <3.5 and high sorbitol content of these preparations.
Aim and Objectives The objective of the study is to obtain updated data on physicochemical and gastrointestinal absorption properties from the main drugs marketed as oral liquid forms in order to establish practical instructions to increase the safety and efficacy of their administration by transpyloric tube.
Material and Methods 45 formulations were analysed for which the pH, osmolality and density were experimentally determined in triplicate. In addition, the sorbitol content was reviewed from the descriptions of the technical data sheet. The pH was measured with a pH meter (Crison-2006, Hach-Lange-Spain, S.L.U., Spain). Osmolarity was determined using the Micro-Osmometer-Fiske Model 210 apparatus (John-Morris-Scientific Pty Ltd., Australia). The osmolality data provided (mOsm/kg), is multiplied by the density of the solution (g/ml) to obtain the osmolarity (mOsm/L). The density data was obtained with two Nahita densimeters with ranges of 1000–1200 mg/ml and 1200–1400 mg/ml.
Results According to the literature, only 23,3% of the drugs presented a similar bioavailability when administered by transpyloric tubes in comparison to oral administration. Of the formulations analysed, only 7% complies with optimal physicochemical properties for transpyloric administration. The causes detected that discouraged a transpyloric administration were that 17,5% had extreme pH values, 92,5% had high osmolarities and 10% contained a high sorbitol content.
Conclusion and Relevance In most of the active ingredients studied, the gastrointestinal absorption of the drug is not sufficiently characterised, which generates uncertainty in its bioavailability when administered by transpyloric tube. Most formulations have a high osmolarity, so prior dilution is necessary. The pH values of some of them can be an added factor for the development of digestive intolerances.

REFERENCES AND/OR ACKNOWLEDGEMENTS
Conflict of Interest No conflict of interest

4CPS-174 EFFECTIVITY AND SAFETY OF CYCLIN-DEPENDENT KINASE INHIBITORS IN METASTATIC BREAST CANCER PATIENTS

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Background and Importance Breast cancer is among the most frequent cancers worldwide. Standard of care for locally advanced or metastatic luminal breast cancer is a cyclin-dependent kinase inhibitor (CKI) (abemaciclib, palbociclib, ribociclib) plus endocrine therapy. All three have shown efficacy and safety in clinical trials, but real-life effectivity and safety data is required.
Aim and Objectives - To determine real-life progression-free survival (PFS) amongst patients treated with abemaciclib, palbociclib and ribociclib.
- To describe their safety profile.
Material and Methods Unicentric, observational and retrospective study, including patients from 11/2017 to 12/2021. No exclusion criteria. Variables obtained: age, gender, treatment start and end dates, reason for treatment termination, adverse events (AE) and severity evaluated by CTCAE criteria.
Descriptive statistical analysis percentages for qualitative results and mean, standard deviation (SD) and ranks for quantitative ones. PFS estimated with Kaplan-Meier method, statistical significance being p<0,05.
Results Patients included: 103, 102(99%) women. Characteristics displayed at table 1:

Abstract 4CPS-174 Table 1 Patients' characteristics and PFS

	Patients (number)	Age (years, mean ± SD)	Ongoing patients at study end (%)	PFS, median, months (95% CI)
Abemaciclib	20	55.2 ± 11.8 (30–76)	20	6.5(6–7.04)
Palbociclib	61	60.7 ± 13.9 (33–86)	24.6	10(3–15)
Ribociclib	22	51.9 ± 12.4 (33–80)	36.4	11.8(8.5–15.2)
Total	103	57.8	26.2	9.8(7.3–12.3)

At study end, 50.5% had suffered disease progression, while 13.6% had discontinued due to toxicity, 4.9% to death, 1% to personal choice and 3.9% to other reasons; 26.2% still ongoing. Median PFS was 9.8 months (table 1), without statistically significant differences among the three drugs (ribociclib-abemaciclib: p=0,055; abemaciclib-palbociclib: p=0,12; ribociclib-palbociclib: p=0,296). Ribociclib presented the longest PFS and abemaciclib the shortest one.

Safety results are shown in table 2:

Abstract 4CPS-174 Table 2 Safety profile of CKI

	Most frequent AE, any grade(%)	AE grade >=3(%)	Discontinuation due to toxicity(%)	Mean ± SD of AE per patient
Abemaciclib	Diarrhoea(75%) Fatigue(55%) Neutropenia(45%)	35	25	4.2 ± 2.4 (0–9)
Palbociclib	Neutropenia(80.3%) Fatigue(72.1%) Arthralgia/myalgia (24.6%)	62.3	9.8	4.1 ± 2.2 (0–9)
Ribociclib	Neutropenia(81.8%) Fatigue(54.4%) Arthralgia/myalgia (31.8%)	63.6	13.6	3.8 ± 1.6 (1–6)

Conclusion and Relevance No statistically significant differences were found among abemaciclib, palbociclib and ribociclib PFS. While PFS is lower than reported in clinical trials, safety profile is similar, being neutropenia, fatigue and diarrhoea the most common AE. Study limitations include the reduced sample size and its retrospective and unicentric character.

REFERENCES AND/OR ACKNOWLEDGEMENTS
Conflict of Interest No conflict of interest

4CPS-178 DURABILITY OF TREATMENT AND REASONS FOR DISCONTINUATION OF DIMETHYL FUMARATE AND TERIFLUNOMIDE IN PATIENTS WITH MULTIPLE SCLEROSIS

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Background and Importance Dimethyl fumarate (DMF) and teriflunomide (TRF) are oral immunomodulatory drugs used in the treatment of relapsing-remitting multiple sclerosis (RRMS) since 2015.
Aim and Objectives To determine the durability of treatment and to analyse the reasons for discontinuation of DMF and TRF in patients with RRMS.
Material and Methods An observational, retrospective and longitudinal study was conducted. All patients with RRMS treated with DMF and TRF from 2015 to September 2022 were included. The variables analysed were sex, age, initial Expanded Disability Status Scale (EDSS) score, previous treatments, treatment starting date and treatment discontinuation date, reasons for discontinuation and adverse reactions that led to treatment discontinuation. Treatment discontinuation free-survival was calculated using a Kaplan-Meier method and survival curves were compared using log-rank test. Statistical significance was set at $p < 0.05$.
Results 97 patients were included, 66 treated with DMF (median age 43.6 ± 10.5 years, women 57.6%, 2 ± 1.4 EDSS at baseline) and 31 treated with TRF (median age 49.1 ± 8.9 years, women 58.1%, 1.5 ± 1.6 EDSS at baseline). Treatment was discontinued by 41 patients (62.1%) in the DMF group and 22 patients (70.9%) in the TRF group ($p = 0.27$). Median of treatment discontinuation free-survival in DMF group was 24.2 months (IC95% 0 – 62.2) and 17.5 months (IC95% 0 – 44.1) in TRF group ($p = 0.29$). Reasons for treatment discontinuation were due to disease progression (43.9% in DMF vs 63.9% in TRF, $p = 0.13$), adverse reaction (53.7% in DMF group vs 31.8% in TRF group, $p = 0.09$), loss to follow-up (2.4% in DMF group) and patient's decision (4.5% in TRF group). Adverse reactions leading to discontinuation of treatment in the DMF group were limphopenia (36.6%), gastrointestinal intolerance (9.7%), diarrhoea (2.4%), generalised severe pruritus (2.4%) and hypotension (2.4%). Adverse reactions that led to treatment discontinuation in the TRF group were diarrhoea (13.6%), elevated transaminases (9.1%), allergy (4.5%) and alopecia (4.5%).
Conclusion and Relevance In this study, no statistically significant differences were found in the durability of DMF and TRF treatments in patients with RRMS.

Patients with DMF tend to discontinue more due to adverse reactions and patients with TRF more due to disease progression.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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

4CPS-179 REVERSAL OF ANTICOAGULATION IN ORTHOGERIATRIC PATIENTS WITH HIP FRACTURE REQUIRING EARLY SURGICAL INTERVENTION

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Background and Importance Hip fractures are excruciating for the elderly. Reducing hospital stays can improve health results, and entail important savings for healthcare centres.
Aim and Objectives To estimate the hypothetical cost of anticoagulation reversal and the potential hospital stay reduction by early surgery.
Material and Methods Retrospective, observational study among orthogeriatric patients candidates for hip fracture surgery between January 1/2020-December 31/2021. Variables: number of patients, admission/surgery timespan, anticoagulant, reversal drugs and costs, pretreatment INR, potential days and admission costs saved. Calculation of reversal strategy:

Vitamin K antagonists: prothrombin complex concentrate, 4-factor, unactivated (4F-PCC):

- Pretreatment INR<1,4: no reversal; 1,4 to <4: 25IU/kg, maximum: 2,500IU; 4–6: 35IU/kg, maximum: 3,500IU; >6: 50IU/kg, maximum: 5,000IU. All patients would require simultaneous vitamin K administration (1 injectable solution/patient, intravenous dose =1–10mg, based on INR).

Factor Xa inhibitors direct oral anticoagulants: 4F-PCC:

- Intravenous fixed-dose: 2000IU.

Dabigatran: idarucizumab:

- 5g (two separate 2.5g doses).