days from 314 in 2013 to 252 in 2018 was measured. The main decreases were observed for amphotericin B (ratio=0.3), voriconazole (ratio=0.50) and caspofungin (ratio=0.59). The most important increases have been shown for: flucytosine (ratio=10.25), micafungin (ratio=2.73) and fluconazole (ratio=1.22). Fluctuation in consumption is linked to several factors: drug shortages, evolution in recommendations and patient profiles. French drug market supplies break of oxacillin/penicillin M increases first- and second-generation cephalosporin prescriptions. A local guideline for transplant patients recently replaces fluconazole by mycamin in antifungal prophylaxis.

Conclusion Both the overall numbers of antibiotics and antifungals DDD/1000 beds-days decrease over the 5 year study period. A multidisiplinary analysis comprehends the consumption evolution in our paediatric ICU. It should be monitored on a continuous basis by pharmacists in healthcare settings.

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No conflict of interest.

4CPS-225 THE ROLE OF CLINICAL PHARMACISTS MONITORING REGARDING THE EFFECTIVENESS AND TOLERANCE OF EXPENSIVE DRUGS PRESCRIBED OFF-LABEL

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Background Since 2015 in our French hospital, prescribers must fill out a justifying form (JF) for each off-label initiation of expensive treatments. The medical and financial follow-up is carried out by clinical pharmacists regarding chronic diseases. Furthermore, the patient must be informed about the off-label use of his treatment, and the JF must be included in the patient’s file.

Purpose In this context, a retrospective study was performed over 2 years to ensure the justified maintenance of of-label treatments in terms of effectiveness, tolerance and cost.

Material and methods The off-label JF includes references to publications, clinical argument, criteria of effectiveness and tolerance. For each chronic indication, the traceability of the JF, and the evaluation of effectiveness and tolerance were researched in the computerised patient file (Orbis). The 2016 and 2017 dispensing data and treatment costs were extracted from Phedra software.

Results Seventy-seven patients were involved with 63 JF found (82%). Ninety-three per cent of the files were archived at the pharmacy, but none were found in Orbis. Only 17.5% of the JF were fully completed. The most filled item was the clinical argument (86%) and the least filled item was the date of the multidisciplinary consultation meeting (43%). Sixty-three patients had a chronic condition. The most prescribed treatments were Toscilizumab, Adalimumab, Infliximab and intravenous immunoglobulin, mostly in the internal medicine and rheumatology departments. Horton and Behçet’s diseases have recently obtained their label, strengthening the validity of these prescriptions. The clinical pharmacist monitoring of treatment effectiveness and safety permits a quick discontinuation in expensive and inefficient treatment.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-226 ADHERENCE TO TREATMENT IN OLDER ADULTS ADMITTED TO AN ACUTE GERIATRIC UNIT AND ASSOCIATED FACTORS

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Background Treatment adherence is a very important issue in ensuring the correct effectiveness of treatments, and it is often compromised in older patients. To assess and improve patients’ treatment adherence is an important role of clinical pharmacists, and knowing which factors are usually associated with a lack of adherence could help to enhance this task.

Purpose To estimate the prevalence of a lack of treatment adherence in older adults admitted to an acute geriatric unit, and to assess associated factors.

Material and methods Cross-sectional observational study of over 75 years old patients consecutively admitted to an acute geriatric unit in a third-level hospital. A clinical pharmacist performed a semi-structured clinical interview with the patient and their families, including the 4-items Morisky–Green test. Socio-demographic and clinical characteristics of included participants were registered from medical records and patient interview. Multivariate logistic regression was used to identify predictors of a lack of adherence. The following factors were included in the analysis: age, sex, polypharmacy (>5 chronic medications), comorbidities (age-adjusted Charlson Comorbidity Index), functional and cognitive impairment (Barthel Index and degree of impairment: none, mild, moderate, severe), dependence for taking medications, use of weekly pill-box, multi-compartment compliance aid (MCA), visual and hearing deficiency, and changes in treatment in the past 3 months.

Results Two-hundred and fifty patients were included, 150 were females (60.0%) and mean age was 87.6 years (SD 4.6). An important lack of adherence was detected in 55 patients (22.0%, 95% CI: 16.83 to 27.17). Forty-eight patients (19.2%) used a weekly pill-box to organise their medications and 32 (12.8%) used a MCA; 52 (20.8%) changed their medications recently; 168 (67.2%) were dependent for taking their medications; 39 (15.6%) had visual deficiency; and 71 (28.4%) hearing deficiency. Only two
factors were (inversely) associated with a lack of adherence: female sex (OR 0.50, 95% CI: 0.255 to 0.974) and dependence for taking medications (OR 0.26, 95% CI: 0.109 to 0.630).

Conclusion Between older adults admitted to an acute geriatric unit, males and patients that can handle their own medications are more likely to present worse adherence to their medications. Hospital pharmacists in this setting should pay special attention to this population to focus their interventions, addressing the lack of adherence in very old adults.

REFERENCES AND/OR ACKNOWLEDGEMENTS
No conflict of interest.

4CPS-227  EVALUATION OF ADHERENCE TO INHALED MEDICATIONS IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE
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Background Chronic obstructive pulmonary disease (COPD) treatment consists mainly of inhaled medications. The evolution of this illness is linked with good compliance.

Purpose The aim of the study was to assess patients’ compliance and their ability to use the inhaled medical devices.

Material and methods A prospective, observational, monocentric study was conducted in a university hospital for 2 months. Included patients were treated by inhaled devices for a COPD. A compliance survey (Girerd’s questionnaire) was proposed to them during their hospitalisation. Patients were classified in three groups: fully observant (score equal to 6); poorly observant (score equal to 4 or 5); and non-observant (score inferior to 3). The evaluation of their ability to use the inhaled medical devices is realised, based on national health insurance recommendations. These recommendations stand on the three common steps to inhaled treatment intake: expiration, drug inspiration and holding breath for 10 s. Patients were divided into groups according to the number of accomplished steps. The mean number of steps was collected.

Results Forty-five patients were included in the study. The mean age was 73 years old and, on average, each patient has two inhaled medical devices. Out of these 45 patients, 16% were considered fully observant, 40% poorly observant and 44% non-observant. The mean compliance score was 3.5 out of 6. Aptitude testing showed that 13%, 16% and 53% of patients, respectively, accomplished 3, 2 and 1 step out of 3, whereas 18% of them respected none. The mean number of steps during inhaled treatment intake was 1.2 out of 3.

Conclusion This study stresses a limitation in compliance in COPD patients with inhaled treatments. Indeed, we can observe a high level of non-observant patients and a majority of them not respecting the necessary steps for the good use of inhalators. This misuse is also confirmed by a limited mean number of accomplished steps during inhalation. These results may suggest that a clinical pharmacist’s intervention towards COPD patients using inhaled medication could improve their adherence.

REFERENCES AND/OR ACKNOWLEDGEMENTS
None.
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