The Local Health Board of Chiavari (ASL4) received 1525 applications (59% on-line).
Conclusions This method has led to an increase in appropriate prescriptions and to better collaboration among medical staff.

No conflict of interest.

DGI-013 ANTIRETROVIRAL TREATMENT SWITCHING IN VIROLOGICALLY UNSUPPRESSED HIV-INFECTED PATIENTS

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Background Antiretroviral treatment (ART) has markedly decreased the morbidity and mortality due to HIV; however, in a percentage of patients a change of treatment is needed.
Purpose To determine the rates of treatment switching in HIV virologically unsuppressed patients, the reasons for changing treatment, to estimate adherence levels and to find the profiles of drug-resistant mutations.
Materials and Methods Retrospective study involving patients switching ART with HIV RNA values >20 copies/ml in 2011. Patients under 18 and those who had been on their first-line treatment no longer than 24 weeks, were excluded. Data collected: gender, age, ART and HIV RNA values before and after switching, cause of changing, adherence level (dispensing records for the last three months) and resistance testing. Data source: medical records and pharmacy database.
Results Of 1103 patients receiving ART, a total of 16% (177) of regimens were switched, 102 cases met the inclusion criteria (57.6%), 62% males, average age 44 ± 9.5 years. In patients switching treatment, viral load was <500 copies/ml in 57.8% (59/102) (<200 in 51 of them (84%)). Drug-resistant mutations were assessed in 40.2% (41/102), and mutations were found in 41.5% of them, the more frequent mutations were: M184V (6/17), K103N (6/17), Y181C (5/17) and K65R (3/17). The main reasons for switching treatment were toxicity (52.9%) and treatment failure (29.3%), other reasons were regimen simplification, drug interactions and pregnancy (17.7%). The average adherence level was 70.4%, but only 38.4% of patients had high levels of adherence (>95%). The rate of adherent patients (>95%) was 55.9% in patients with viral load <500 copies/ml versus 14.1% with viral load >500 ($p < 0.05$).
Conclusions Toxicity was the main reason for changing ART. The percentage of 'well-adherent' patients was very low in virologically unsuppressed HIV-infected patients, especially in those patients with high viral loads; therefore adequate adherence to treatment is a key factor in viral suppression.

No conflict of interest.

DGI-014 APPROPRIATENESS OF TREATMENT AND COST ANALYSIS IN THE TREATMENT OF SYSTEMIC FUNGAL INFECTIONS IN A TRANSPLANT CENTRE

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Background Invasive fungal infections (IFIs) increase morbidity and mortality in immunocompromised patients (IPs).Controlling antifungal use is fundamental in avoiding drug resistance and containing costs.
Purpose To identify risk factors associated with IFIs in IPs, and monitor appropriateness and cost of antifungal treatment.
Materials and Methods A retrospective analysis was done at ISMETT, a 78-bed transplant centre in Palermo, Italy, from 1 January to 31 December 2010. One hundred and one IPs received intravenous antifungal treatment with fluconazole (F), liposomal amphotericin-B (A), caspofungin (C), itraconazole (I) for 4 or more days. Patient treatment was divided into three groups: prophylactic, empirical and target. Immunosuppressive treatment (IT), total parenteral nutrition (TPN), dialysis, central line, steroid treatment, stent use, neutropenia, and mechanical ventilation were evaluated. Variables were treatment duration, DDD (defined-daily-dose) consumption and DDD average cost.
Results Main risk factors were central line (65.3%), TPN (56.4%), dialysis (46.5%), IT (42.6%), mechanical ventilation (32.7%), neutropenia (24.8%), steroid treatment (23.8%), and stent use (14.9%). Average duration of prophylactic treatment was 7 days, F (61%), A (26%), C (13%) were used. Average duration of empirical treatment was 8 days, and F (52.9%), A (26.5%), C (8.8%), I (2.9%), and in association A+C, A+F, C+F (8.9%) were used. Average duration of target treatment was 9 days, and F (40.4%), A (23.1%), C (15.4%), I (7.7%), and in association A+C, A+F, C+F (13.4%) were used. DDD consumption and DDD average cost were, respectively, C 50 mg vial: 273 DDD, €381.1; C 70 mg vial: 33.6 DDD, €389.6; F 200 mg vial: 768 DDD, €11.8; F 100 mg vial: 89 DDD, €10.6; I 250 mg vial: 62.5 DDD, €68.8; and A 50 mg vial: 2200 DDD, €93.4.
Conclusions Data showed appropriate use of antifungals. The best treatment alternative (cheaper antifungal) was prescribed for most patients. The high cost of A and C was justified by resolution of the IFI.

No conflict of interest.

DGI-015 ASSESSMENT OF THE TREATMENT WITH A TWO-DRUG ANTIRETROVIRAL REGIMEN

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Background Antiretroviral treatment with a three drug-regimen is the initial treatment recommended for chronic HIV infection. For various reasons, the combination of three drugs can be modified to a two-drug regimen.
Purpose To analyse the change from a three-drug antiretroviral treatment regimen (HAART) to a two-drug regimen in HIV+ patients: reason for change and effectiveness.
Materials and Methods Cross-sectional retrospective study of HIV-infected patients in treatment with two active antiretroviral drugs from January 2010 to April 2012. The data was obtained from the medical history and the Farmatools application for external patients. Effectiveness was evaluated by the viral plasma load (VPL) and the CD4 cell count, measured at 24 weeks. Viral load suppression (VLS) was defined as less than 50 copies/ml.
Results A total of 30 patients were studied, with the following two-drug regimens: 5 patients with boosted Atazanavir (ATZr)/Maraviroc (MRV); 4 patients with boosted Darunavir (DRVr)/Etravirina (ETV); 13 patients with DRVr/MRV; 6 patients with DRVr/Raltegravir (RAL); 1 patient RAL/MRV and 1 patient with boosted Fosamprenavir (FPVr)/RAL. The reasons for the change to a two-drug regimen were the following: 12 changes were determined by drug resistance tests, 6 due to side effects of previous HAART treatment and 12 to simplify their antiretroviral treatment. The answers obtained are shown in table 1. Patients who did not reach viral load suppression at 24 weeks were taking a regimen composed of ATZr/MRV (2 patients) and DRVr/MRV (1 patient).

Conclusions The main reasons for changing from HAART to two-drug regimens were drug resistance tests and simplification of the antiretroviral treatment. Taking into account the limitation of the study due to its short follow-up and the limited number of patients, we can say that in our study, the change to a treatment with two active antiretroviral drugs seems to be at least as effective as the three-drug HAART regimen.

Abstract DGI-015 Table 1

	VPL at start of two-drug regimen	CD4 at start of two-drug regimen	VPL 24 weeks	CD4 24 weeks
Change due to drug resistance test 12 patients	2 patients VLS 10 patients Medium VPL 5449 c/ml	433/ml	9 patients VLS 3 patients Medium VPL 44388 c/ml	461/ml
Change due to side effects 6 patients	4 patients VLS 2 patients Medium VPL 142515 c/ml	306/ml	6 patients VLS	336/ml
Change for simplification 12 patients	12 patients VLS	589/ml	12 patients VLS	427/ml

No conflict of interest.

DGI-016 ASSESSMENT OF TOCILIZUMAB PRESCRIPTIONS AT A UNIVERSITY HOSPITAL

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Background Tocilizumab (TCZ) is an anti-IL-6 agent given as second-line biotherapy in the treatment of rheumatoid arthritis (RA). Guidelines for the prescription of TCZ indicate that it must be administered after anti-TNF-α failure at the University Hospital of Montpellier (UHM).
Purpose To assess the prescriptions for TCZ and cheque them against the existing guidelines since an increasing number of patients are treated at the UHM.
Materials and Methods The study was conducted over a period of 20 months, from January 2010 (marketing of TCZ) to July 2011. Patients treated with TCZ were identified thanks to the hospital information database. Data collected were: indications, previous treatment, number of anti-TNF-α drugs used before TCZ, association with conventional treatment, and biotherapy implemented if TCZ fails.
Results 149 patients were treated with TCZ: RA 93.4%, juvenile idiopathic arthritis 3.7%, Still's disease and ankylosing spondylitis 2.9% (off-label).

All patients had previously been treated with methotrexate (MTX).

TCZ was administered after failure of anti-TNF-α in 79.2% of the cases. 13.4% received TCZ as first-line biotherapy.

For 59.1% of patients, TCZ was associated with the conventional treatment. 62.6% were treated with MTX.

We evaluated the effectiveness of TCZ in 88 patients (patients who had not started their treatment in clinical trials in the last 6 months of the study): the treatment was successful for 67 of them (76.1%). TCZ was not effective in 23.9% with a mean treatment duration of 7.1 months. For these patients, TCZ was switched to abatacept (anti-CTLA4) 47.6%, anti-TNF-α 33.3% or rituximab (anti-CD20) 19.1%.
Conclusions TCZ is an active molecule in the treatment of RA. Our guidelines are not always respected since TCZ was used as first-line biotherapy in 13.4% of patients. Further evaluation of this early use is needed to understand the practise of the prescribers.

No conflict of interest.

DGI-017 BEVACIZUMAB PLUS IRINOTECAN IN MALIGNANT GLIOMAS

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Background Malignant gliomas (MG) comprise the most common types of primary central nervous system tumours.
Purpose An observational study to evaluate the efficacy and safety of bevacizumab plus irinotecan used off-label in recurrent malignant gliomas.
Materials and Methods Pharmacy records were reviewed to identify patients with histologically proven MG who had been treated with bevacizumab plus irinotecan as second- or third-line chemotherapy. Eligible patients: radiological evidence of tumour recurrence or progression prior to initiation of chemotherapy and STUPP regimen as first line. Patients were treated with IV bevacizumab (10 mg/kg) on days 1, 15 and 29 every 6 weeks and IV irinotecan (340 mg/m^2 if concomitant enzyme-inducing antiepileptic drugs (EIAEDs) or 125 mg/m^2 if no EIAEDs) on days 1, 15 and 29 every 6 weeks. Treatment was continued until disease progression or unacceptable toxicity. Tumours were evaluated by brain MRIs. Response to treatment was assessed at baseline and every 3 cycles or whenever progression was clinically suspected. The Macdonald criteria were used to evaluate the response. Toxicity was assessed before each cycle by medical history, haematology and biochemistry. Adverse events were graded according to NCI-CTCAEv4. Antiepileptics were administered as medically indicated.
Results Seven patients (5 men, 2 women) were evaluated. Mean age was 52.4 years and glioblastoma multiforme (GBM) was the major histotype (71%). 71.4% of patients had had a total resection as primary surgery and 14.3% of patients had undergone second surgery at disease recurrence. The median number of cycles administered was 4. Overall activity comprised 3 partial responses (42.86%); and 1 (14.28%) disease stabilisation for a Disease Control Rate of 57.14%. Three patients (42.86%) experienced disease progression. The median progression-free survival was 8.2 months (95% confidence interval (CI): 5.4–10.9) and the median overall survival was 11.8 months (95% CI: 6.1–17.5). No central nervous system haemorrhages occurred, but one patient developed deep venous thromboses.
Conclusions The combination of bevacizumab and irinotecan seems to run as an alternative and active regimen for recurrent MG with acceptable toxicity but it is necessary to expand the study population to draw definitive conclusions.

No conflict of interest.

DGI-018 BUDGET IMPACT ANALYSIS ON NEW 3-YEAR IMATINIB ADJUVANT TREATMENT FOR PATIENTS WITH OPERABLE GIST AT HIGH RISK OF RECURRENCE

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Background The results of Phase III of the (SSG)XVIII/AIO clinical study on imatinib (IM) in adjuvant treatment of GIST show that, after five years of follow up, 3 years of treatment lead to 66%