

to two drugs, one patented (RPV) and one generic drug (FTC/TDF). Both were administered once-daily, providing the same therapeutic efficacy and treatment compliance but in a more cost-effective way.

Purpose To describe the procedure to implement this strategy and patient's acceptance of it.

Material and methods After several meetings between the Pharmacy (PD) and the Infectious Diseases Department (IDD) it was decided to make the change at the following patient's visit to the HS, either in the PD when the patient attended to pick up the medication or in the IDD in the patient's scheduled consultations.

Inclusion criteria: HIV patients treated with FTC/TDF/RPV up to June 2018 using e-prescribing records. Patients that did not contact our HS were excluded.

A retrospective review from July to October 2018 was conducted. Patients that would not accept the PD's change were referred to the IDD.

Collected data were: age, gender, treatment after the change and acceptance.

Results Out of 133 patients, seven were excluded. Mean age 47.6 years, 20% women. PD was responsible for 86% of the changes.

Out of 126 patients included, 16 (13%) did not accept the change.

Of these 16 patients, five ended up accepting it (three after visiting the IDD and two on their second visit to the PD) and 11 declined to switch therapy for the following reasons: swallowing problems (one) (actual treatment: elvitegravir/cobicistat/emtricitabine/tenofovir-alafenamide); adverse events (actual treatment: dolutegravir ±TDF/FTC (one); abacavir/lamivudine (two) or lamivudine (one); and six patients continued with FTC/TDF/RPV (four waiting for IDD next consultation and two due to medical decisions).

Conclusion By the time this abstract was written, the change was made in 115/126 patients (91%).

It is very important to highlight the efficient teamwork between the PD and the IDD in order to implement the new strategy in a short period of time.

Although initially 13% disagreed, finally only 9% of patients did not accept the proposed change.

On the other hand, this strategy has reduced the economic impact of HIV treatment in 51% of patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Infectious Diseases Department.

No conflict of interest.

11SG-006

HEPATITIS C TREATMENT: COST AND EFFECTIVENESS

A Brito*, A Fernandes, L Lourenço, S Domingos, A Soares, A Alcobia. *Hospital Garcia de Orta, Pharmacy, Almada, Portugal*

10.1136/ejhp-2019-eahpconf.6

Background The hepatitis C virus (HCV) infection is one of the major causes of chronic liver disease. Due to the HCV infection prevalence in European regions (1.5%), increasing health expenditure has been made in order to eradicate HCV.

Purpose Assess the cost, effectiveness and safety of treated HCV patients with pegylated interferon-ribavirin (IFN-RIB) compared to new direct acting antivirals (DAA).

Material and methods Retrospective observational comparative study of two cohorts of patients including HCV patients who started and finished treatments with IFN-RIB in 2011 (except the above 12 months) and with DAAs in 2017. Exclusion criteria: deaths, no therapeutic adherence and transfer to another hospital. Data were extracted from electronic records.

Results In 2011, 49 patients (87.8% male) with a mean age 44.4 ± 7.1 years were included: 12.2% were previously treated, 40.8% co-infected and genotypes 1 was predominant (51.0%), and 73.5% were treated with IFN α 2a-RIB and the remaining with IFN α 2b-RIB.

In 2017, 185 patients (75.0% male) were included, with a mean age 52.2 ± 9.9 years, 28.1% co-infected. Genotype 1 (64.9%) was the most common: 79.3% patients had severe or moderate fibrosis (FD ≥ 2). Only 11.4% were previously treated (four with DAA). Treatments were: 71.9% Ledipasvir/Sofosbuvir; 7.6% Sofosbuvir/Velpatasvir; 7.0% Sofosbuvir; 7.0% Elbasvir/Grazoprevir; 3.2% Ombitasvir/Paritaprevir/Ritonavir+Dasabuvir; 2.2% Daclatasvir +Sofosbuvir; 0.5% Sofosbuvir +Ombitasvir/Paritaprevir/Ritonavir+Dasabuvir; and 0.5% Ombitasvir/Paritaprevir/Ritonavir.

Comparing treatments of two cohort patients (IFN-RIB/DAA): in 2011 average treatment length was 8.1 months/patient much longer than 2017 (3.5 months/patient) and 12 weeks' length in 70.4%. In 2011, drug discontinuation occurred in 36.7% treatments because the patients had serious adverse reactions (AR) or were non-responders. In 2017, DAA had fewer and lower severity AR (100% compliance). According to guidelines' alterations, eight patients had shortened their initial duration of treatment. Treatments with IFN-RIB (€4287.7/patient) were less expensive than DAA (€14867.1/patient), representing an increase of €1309.2% annually. Although the success rate was significantly higher with DAA (96.8%) than with IFN-RIB (53.1%), 23/49 patients, in 2011, were posteriorly treated with DAA. The incremental cost-effectiveness ratio (DAA/IFN-RBV) was €238.1/patient successfully treated. Costs are higher, but, in 2018, the costs of treatment/patient are half that of 2017.

Conclusion DAA treatments have higher effectiveness against HCV infection (>95%) and treatments are shorter, more effective and safer than older therapies, despite higher costs.

REFERENCE AND/OR ACKNOWLEDGEMENTS

WHO Guidelines for the screening, care and treatment of persons with chronic HCV infection 2016.

No conflict of interest.

11SG-007

PEMETREXED'S LESSON

AM Soares*, A Alcobia. *Hospital Garcia de Orta, Pharmacy Department, Almada, Portugal*

10.1136/ejhp-2019-eahpconf.7

Background In May 2008, the European Medicines Agency (EMA) granted authorisation to Pemetrexed as a first-line treatment for locally advanced or metastatic non-small cell lung cancer (NSCLC), other than predominantly squamous cell (non-SC) histology patients. A phase III trial compared Pemetrexed with Gemcitabine, both in association with cisplatin, and found a similar overall survival between both groups (10.3 months). The EMA authorisation was only based in a

subgroup analysis of this phase III trial. In late 2008, the first Gemcitabine generic was commercialised.

Purpose Our aim was to highlight the limited evidence of the quality of Pemetrexed's efficacy considered on its approval and its impact on its use.

Material and methods The literature was reviewed and a retrospective analysis of the first-line treatment options in non-SC NSCLC in our hospital was made between July 2013 and June/2017.

Results An opinion article was published in January 2018 in *JAMA Oncology*.¹ It discussed if an approval based in a subgroup analysis of a clinical trial, predefined but never tested in a phase III trial design for its validation, was strong enough to influence clinical practice. It is well known that any data retrieved from a clinical trial subgroup analysis is indicative and non-conclusive. It is uncertain when a subgroup analysis should influence clinical practice. The non-SC NSCLC treatment guidelines replace Gemcitabine for Pemetrexed as a first option, with evidence level II, using efficacy and not safety as a reason, which could be an argument.

In the 4 years' analysed, 71 patients were treated with Pemetrexed and 22 patients with Gemcitabine, both associated with platin. The cost difference per patient (six cycles considered) was € 10 554 (€ 7 49 334 for the 71 patients).

Conclusion Pemetrexed was preferred to Gemcitabine as a first-line treatment of non-SC NSCLC, beside its limited evidence quality. A change in clinical practice should require better evidence levels. In our hospital, this change in clinical practice had a relevant economic impact.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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No conflict of interest.

1ISG-008 FLAT DOSES OF ANTI-PD1: WHAT IS THE ECONOMIC IMPACT?

A Meurant*, G Michel, V Morin-Légier, R Delplanque. *Hôpital Jacques Monod, Pharmacy, Montivilliers, France*

10.1136/ejhp-2019-eahpconf.8

Background In 2018 the European Summary of Product Characteristics (SPC) of Opdivo (nivolumab) and Keytruda (pembrolizumab) used in monotherapy were modified. The weight-based doses were replaced by flat doses.

Purpose We studied the economic impact of these changes in posology at the level of our hospital.

Material and methods The data: indications, weight and doses prescribed were extracted from our chemotherapies' prescription and preparation database software.

We selected patients treated by Opdivo for a melanoma or a non-small cell lung cancer (NSCLC) and those treated by Keytruda for a melanoma.

The patients selected were currently treated with a weight-based dose, then with a flat dose after modification of the SPC.

For each patient the economic impact associated with the change of dose was quantified.

Results Twenty-eight patients treated by Opdivo were analysed. Before modification of the SPC the average dose prescribed was 233 mg (147 mg; 375 mg). An increase in dose was observed for 18 patients (64%) and a decrease in dose was

observed for 10 patients (36%). The average additional cost per cure per patient with a flat dose was € 73 (€ 10.6/mg of Opdivo) and the estimated additional annual cost for our hospital is € 53 319.

Six patients treated by Keytruda were analysed. Before modification of the SPC the average dose prescribed was 175.4 mg (138 mg; 200 mg). An increase in dose was observed for five patients (80%), and the dose was maintained for one patient (20%).

The average additional cost per cure per patient with a flat dose was € 647€ (€ 26.3/mg of Keytruda) and the estimated additional annual cost for our hospital is € 67 445.

Conclusion The flat doses now recommended increase on average the anti-PD1 dose administered to the patients.

This generates an additional estimated cost for the hospital of about € 1 20 000 a year.

The toxicity data with superior doses are reassuring, but no clinical benefit is demonstrated. Benefits on the safety side and on the organisation side with flat doses appear debatable in view of the derived additional costs.

This approach could be applied to the posology of Keytruda as first line of the NSCLC. A weight-based dose would decrease the cost by € 3 78 000 per year for our hospital, with 11 patients currently treated.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

1ISG-009 AVOIDED COST STUDY OF DRUGS IN CLINICAL TRIALS AT A TERTIARY HOSPITAL

A Henares López*, JC del Río Valencia, R Tamayo Bermejo, MÁ Rosado Souviron, I Muñoz Castillo. *Hospital Regional Universitario de Málaga, Servicio de Farmacia Hospitalaria, Málaga, Spain*

10.1136/ejhp-2019-eahpconf.9

Background Clinical trials (CT) in oncology constitute a continued growth area. Besides contributing new molecules which improve patients' prognosis, they also involve a saving measure due to drugs that are supplied by the sponsor.

Purpose To determine the avoided cost attributable to supplied drugs by CT in oncology during one year.

Material and methods Observational, retrospective study of CT done in an Oncology Department of a tertiary hospital from July 2017 to June 2018. Data were obtained from the Pharmacy's clinical trial programme, PKensayos: number of patients; number of drug units dispensed per clinical trial; avoided cost (supplied drugs by sponsor with label indication and marketed in the European Union (EU)); and total cost (supplied drugs by both sponsor and Pharmacy with label indication and marketed in the EU). More prevalent pathologies were reviewed. Exclusion criteria: investigational, not marketed drugs and blinded samples.

Drugs' prices were collected of average price, purchased in the Pharmacy.

Results During the whole period of study, 76 CT were done in the Oncology Department, of which 38 met the requirements of this study. The number of patients was 261. The average of drug units dispensed per CT: 58.5 (1–1512); avoided cost: € 3,482,662; and what supposes € 13,343/patient. Total cost: € 5595 and € 21,438/patient.

Drugs with highest avoided cost: nivolumab (€ 1,336,303), >pemetrexed (€ 543,717), and >ipilimumab (€ 467,006).