**DGI-045** MANAGEMENT OF THE HEMATOLOGICAL TOXICITY INDUCED BY BENZAMUSTINE

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**Background** Bendamustine is approved in Spain for the treatment of chronic lymphocytic leukaemia (CLL), Non Hodgkin Lymphoma (NHL) and multiple myeloma (MM). The most frequent adverse reactions are haematological. Usually patients require supportive treatment with granulocyte colony-stimulating factors (G-CSF) for neutropenia and erythropoietins for anaemia.

**Purpose** To describe the approach to neutropenia and anaemia caused by bendamustine in patients diagnosed with NHL, CLL and MM in our Hospital.

**Materials and Methods** Descriptive and retrospective study of patients treated with bendamustine between November 2008 and February 2012 in our hospital. We collected data on age, sex, diagnosis, neutrophils count and haemoglobin before treatment and after receiving bendamustine, the proportion of patients requiring G-CSF (filgrastim or pegfilgrastim) or erythropoietins (darbepoetin alfa). Average number of G-CSF and erythropoietins doses.

**Results** A total of 38 patients received bendamustine, of whom 13 were women and 25 were men, with a mean age of 67 years old. 28 patients were diagnosed with NHL, 4 with MM and 6 with CLL. Before treatment, the neutrophils count was 4,846/mm³ and haemoglobin 11.7 g/dL. Later these figures were 2,440/mm³ for neutrophils and 11 g/dL for haemoglobin. 75.7% of patients required G-CSF and 10.5% erythropoietins. The median number of doses of G-CSF and darbepoetin alfa respectively were 6 and 2.5.

**Conclusions** Bendamustine appears well tolerated. Supportive treatment with G-CSF is required in the majority of patients to maintain neutrophil count. This is not the case for anaemia, which occurs less frequently, requiring less rescue treatment. However, these patients require close monitoring during treatment.

No conflict of interest.

**DGI-046** MONITORING OF ADHERENCE TO TREATMENT AND ADVERSE EVENTS IN THE MANAGEMENT OF PATIENTS WITH HIV INFECTION

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**Background** Highly active antiretroviral treatment (HAART) is associated with improved health outcomes for people living with HIV/AIDS. Successful long-term treatment of HIV/AIDS requires near-perfect adherence to HAART. Constant monitoring of adherence to HAART and evaluation of related adverse events are two essential aspects for optimal management of patients with HIV.

**Purpose** To monitor adherence to antiretroviral treatment and adverse events of the outpatients of an HIV referral centre (department of Clinical Infectious Diseases, Policlinico S. Orsola-Malpighi, Bologna).

**Materials and Methods** The pharmacist was introduced in the department of Clinical Infectious Diseases in order to distribute the antiretroviral drugs and give information on the proper storage, use and possible interactions associated with the treatment. The pharmacist gives out an adherence questionnaire (10 questions about adherence, co-administered drugs and adverse events) to each patient to complete and return during the following visit. This information was entered into a database (Access) and the adherence to treatment and incidence of adverse events was calculated.

**Results** We analysed the adherence questionnaires of 659 patients, 74% of whom reported 100% adherence to treatment. Co-administered medicines may lead to poorer HAART adherence: patients taking polypharmacy showed medium-low adherence to treatment. Adherence was found to correlate inversely with the daily pill burden.

In terms of adverse effects, we developed a pharmacovigilance system, reporting 15 adverse drug reactions, 27% of which were rated severe. We analysed physical changes, gastrointestinal disorders and neuropsychiatric symptoms associated with the following regimens: efavirenz/emtricitabine/tenofovir, emtricitabine/tenofovir + atazanavir/ritonavir, efavirenz/emtricitabine/tenofovir, emtricitabine/tenofovir + atazanavir/ritonavir, emtricitabine/tenofovir + darunavir/ritonavir, abacavir/lamivudine + emtricitabine/tenofovir + darunavir/ritonavir, abacavir/lamivudine + atazanavir/ritonavir, abacavir/lamivudine + darunavir/ritonavir. Our results showed that the regimens with darunavir correlated with a lower incidence of side effects and perception of physical changes.

**Conclusions** The physician-pharmacist collaboration is an important support in monitoring adherence and adverse events related to HAART and contributes significantly to the optimal management of patients with HIV infection.

No conflict of interest.

**DGI-047** MORPHINE, OXYCODONE AND FENTANYL PRESCRIBING PATTERNS IN THE LOCAL HEALTH AUTHORITY OF MESSINA, ITALY

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**Background** Pain is associated with significant economic, social and health impact. The cost of uncontrolled pain is enormous, both to individuals and to society as it leads to a decline in quality of life and disability. Several publications and guidelines stress the efficacy and safety of opioid-based treatment for cancer and non-cancer pain management. Until recently Italian legislation was very restrictive concerning the use of opioids, making Italy one of the lowest users of medical opioids in Europe. In 2010 law no. 38 eased the prescription of opioids for cancer and non-cancer pain.

**Purpose** To evaluate the incidence and cost of using morphine (N02AA01), oxycodone (N02AA05) and fentanyl (N02AB05) in order to assess prescribing patterns in the Local Health Authority (LHA) between 01/01/2010 and 30/09/2012.

**Materials and Methods** Data were collected from ‘Farmanalisi.it’ database which records all prescriptions reimbursed by the Messina LHA. All consumption data were expressed in a standardised way and costs as direct costs to the LHA and recorded on a data sheet.

**Results** During the 2010–2011 period the consumption of morphine (N02AA01) oxycodone (N02AA05) and fentanyl (N02AB05) remained substantially stable (1,763 units in 2010 vs. 1,730 in 2011). By contrast, consumption of oxycodone and transdermal fentanyl rose (for oxycodone 3,742 units in 2010 vs. 3,888 in 2011). By contrast, consumption of oxycodone and transdermal fentanyl were higher than the value reported for oxycodone (180,042.89) and morphine (46,279.96).

**Conclusions** Data obtained confirm that, in the Messina LHA, many patients received transdermal fentanyl as a first option although it is recommended only when oral morphine is inadequate. This data could allow an evolution of strategies adopted to control...