

**Background** Daptomycin is an antibiotic only active against Gram-positive bacteria, with rapid bactericidal activity, a concentration-dependent and post-antibiotic effect. Indicated for complicated skin or soft tissue infections in adults (cSSTI), right side endocarditis due to *Staphylococcus aureus* and *S. aureus* bacteraemia associated with right-side infective endocarditis.

**Purpose** To perform a retrospective observational study of the use and effectiveness of daptomycin in our hospital.

**Materials and Methods** We extracted from the hospital computer system (SAP) prescribing data about daptomycin from January to December 2011. The data collected included age, sex, history number, diagnosis, causative organism, prescriber service, treatment duration and reason for suspension.

**Results** Were treated 85 patients (69% male) with an average age of 63.3 years (range 22–86 years). The average duration of treatment was 20.5 days. Prescribers' services were: cardiac surgery/cardiology (27%), UCI (15%), haematology (12%), internal medicine (12%), nephrology (12%) and others (22%). The diagnoses for which daptomycin was used were: 32% endocarditis, 32% cSSTI, 20% bacteraemia, 11% osteoarticular infection and 5% others. Microorganisms identified were: 11% methicillin-resistant *S. aureus* (MRSA), 20% coagulase-negative *Staphylococcus*, 5% others and 64% was empirical treatment. In 36.5% of prescriptions, daptomycin was used as second-line antibiotic treatment, either because the patient did not respond to previous antibiotic treatment (32%) or due to side effects (39% anaemia with linezolid and 29% renal damage with vancomycin). The reasons for suspending daptomycin were: 77% for improvement/patient discharge or who ended treatment or switched to oral treatment, 9% change in treatment and 14% deceased.

**Conclusions** In 84% of cases the prescription complied with the authorised indications in datasheet. Daptomycin was prescribed first-choice in 63.5% of treatments. In 64% of case treatment was empirical without subsequent confirmation of the causative organism. It is necessary to establish a mechanism to decrease the rate of use of this antibiotic in the hospital for frontline empirical treatments.

No conflict of interest.

#### DGI-064 STUDY OF THE USE OF FERRIC CARBOXYMALTOS (FC) WITHIN THE SYSTEM FOR PREOPERATIVE OPTIMIZATION OF HAEMOGLOBIN (HB) IN SCHEDULED SURGERY

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**Background** In our hospital there is a protocol for preoperative Hb optimization with the aim of reducing blood transfusions in patients with anaemia and upcoming surgery.

**Purpose** To evaluate the use of FC in terms of adherence to protocol and effectiveness.

**Materials and Methods** Descriptive observational study. The study included patients who had received at least one dose of FC in 2011. We collected from the electronic medical record: age, sex, cause of anaemia, iron administered, Hb level, iron saturation, transferrin and ferritin before administration of IV iron and surgery. We evaluated adherence to the protocol and analytical results.

**Results** We studied 47 patients with an age range between 23 and 87 years (median = 62). 78.7% of the patients met the optimization of Hb protocol (inclusion criteria: anaemia and upcoming surgery). The average increases in Hb after a single administration of 500 mg and 1000 mg of FC were 0.6 g/dl and 1 g/dl respectively. In the case

of patients who had also been given other forms of IV iron before surgery (total average dose of iron administered: 1150 mg) levels increased by a median of 2.05 g/dl. Erythropoietin was also administered to 32.43% of the patients. The mean differences in the rest of the analytical parameters studied before and after administration of iron IV were: serum iron: 40.7 µg/dl, %, iron saturation: 15.8%, transferrin: -41.8 mg/dl ferritin: 378.1 ng/ml. The median time between administration and surgery was 6 days.

**Conclusions** Our results show a fast increase in Hb in a short time. Restriction of the FC implied making a good selection of patients who may benefit from the higher dose (average increase of 2.05 g/dl needs an average dose of 1150 mg iron to be administered) and higher speed of action (median time between administration and surgery: 6 days). Its use would be justified for fast increases in Hb when, due to the impending surgery, with they would not be obtained in time with other presentations of iron.

Mean differences (for average dose of iron administered: 891.89 mg) in patients who met the Hb optimization protocol

#### Abstract DGI-064 Table 1

	Hb	Serum iron	% iron saturation	Transferrin	Ferritin
Mean differences	1 g/dl	40.7µg/dl	15.80%	-41.8 mg/dl	378.1 ng/ml

No conflict of interest.

#### DGI-065 STUDY USING FOSCARNET IN HAEMATOLOGICAL PATIENTS

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**Background** Cytomegalovirus (CMV) commonly affects bone marrow transplant patients causing significant morbidity and mortality. Foscarnet is a broad-spectrum antiviral agent, active against CMV, but is not the treatment of choice.

**Purpose** To find out why it was prescribed, to cheque the treatment efficacy and its adverse effects.

**Materials and Methods** Retrospective study (2011). Data were obtained from patient clinical records and the pharmacy database. We produced a database with information on demographics, underlying disease, indication, treatment duration, dosage, adverse effects and treatment results based on PCR viral load negativization. We also examined whether there had been prior treatment with ganciclovir and the reason for the change, or the reason for not starting treatment with ganciclovir.

**Results** 12 patients (8 male) in the haematology department were treated with foscarnet. Median age was 31. Underlying diseases: aplastic anaemia (3), lymphocytic leukaemia (4), myeloblastic leukaemia (1), Hodgkin's lymphoma (1), Burkitt's lymphoma (1), T-cell lymphoma (1), myelodysplastic syndrome (1). In 10 cases a bone marrow transplant had been performed. The indication was to treat cytomegalovirus infection except one case in which it was used for suspected infection by herpes virus 6. In 6 patients ganciclovir was not used first (pancytopenia and problems with engraftment). The other 6 patients had been given ganciclovir and switched due to development of resistance (4) and haematological toxicity (2). Treatment started at low doses and increased as tolerated up to 90 mg/kg.

Efficacy: The average length of treatment was 11.4 days. The treatment was effective in 11 patients (91.6%).

Safety: four patients had no toxicity. We found ulcers on the glans (2), impaired renal function (3) (1 of them requiring dialysis and 1 suspension of treatment), hypomagnesaemia which responded to magnesium supplements (2) and 3 gastric discomfort.