cancer patients. Most relevant interactions described are paclitaxel with antiepileptics, docetaxel with ketoconazole or cyclophosphamide with benzodiazepines. No clinically relevant interactions were found in our patients. Patients with comorbidities on multiple drug therapy (in addition to the drugs used for cancer treatment) would most benefit from pharmaceutical care.

No conflict of interest.

**DGI-061** SAFETY OF TRIPLE TREATMENT IN CHRONIC HEPATITIS C
doi:10.1136/ejhpharm-2013-000276.327

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**Background** Efficacy of chronic hepatitis C genotype 1 treatment has been improved with protease inhibitors (PIs) telaprevir and boceprevir. However, triple therapy (PI, peginterferon alfa and ribavirin) has increased the number, type and severity of adverse events.

**Purpose** To assess the safety of triple therapy in the first 12 weeks of treatment with telaprevir and boceprevir used for chronic hepatitis C treatment in clinical practise.

**Materials and Methods** Between March and September 2012, all patients treated with telaprevir and boceprevir receiving medicines in the outpatient pharmaceutical care unit of a tertiary hospital were interviewed. Adverse events were collected in a predefined questionnaire. Anaemia, neutropenia and thrombocytopenia were also included as adverse effects if the patient had been treated for any of them. Interviews were conducted during the medicines dispensing (monthly).

**Results** Fifty-one patients with triple therapy were interviewed; 34 of them were treated with telaprevir and 17 with boceprevir. All patients had at least one adverse event on any of the visits. Globally, the most frequent adverse events were tiredness (84.3%), digestive disorders (70.6%), dermatological disorders (64.7%) and influenza-like syndrome (62.7%). Patients being treated with telaprevir mainly suffered from tiredness (85.3%) and dermatological disorders (70.6%). However, tiredness (82.4%) and mood disorders (70.6%) were the most usual adverse events in patients being treated with boceprevir. The frequencies of other side effects are listed in Table 1.

**Conclusions** Efficacy in the first 12 weeks of triple therapy results in a high frequency of adverse events. Information on possible side effects and how to prevent or treat them is important for patients. Moreover, the high frequency of adverse events makes pharmaceutical care more important than usual as a result of the increase in number, type and severity of adverse events.

No conflict of interest.

**DGI-062** SORAFENIB, SUNITINIB AND EVEROLIMUS IN METASTATIC RENAL CELL CARCINOMA: EFFICACY AND SAFETY
doi:10.1136/ejhpharm-2013-000276.328

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**Background** Tyrosine kinase inhibitors (TKIs) and m-TOR inhibitors (m-TORIs) have demonstrated clinical efficacy in patients with advanced renal cell carcinoma (aRCC).

**Abstract DGI-062 Table 1**

<table>
<thead>
<tr>
<th>Adverse event</th>
<th>Telaprevir (%)</th>
<th>Boceprevir (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza-like illness</td>
<td>61.8</td>
<td>64.7</td>
</tr>
<tr>
<td>Tiredness</td>
<td>85.3</td>
<td>82.4</td>
</tr>
<tr>
<td>Mood disorders</td>
<td>32.4</td>
<td>70.6</td>
</tr>
<tr>
<td>Digestive disorders</td>
<td>67.7</td>
<td>78.5</td>
</tr>
<tr>
<td>Dermatological disorders</td>
<td>70.6</td>
<td>52.9</td>
</tr>
<tr>
<td>Hair loss</td>
<td>5.9</td>
<td>17.7</td>
</tr>
<tr>
<td>Non-productive cough</td>
<td>8.8</td>
<td>29.4</td>
</tr>
<tr>
<td>Itchy eyes</td>
<td>0.0</td>
<td>5.9</td>
</tr>
<tr>
<td>Oral disorders</td>
<td>32.4</td>
<td>33.3</td>
</tr>
<tr>
<td>Haemorrhoids</td>
<td>64.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Tachycardia</td>
<td>2.9</td>
<td>23.5</td>
</tr>
<tr>
<td>Decreased libido</td>
<td>2.9</td>
<td>11.8</td>
</tr>
<tr>
<td>Oedema</td>
<td>11.8</td>
<td>11.8</td>
</tr>
<tr>
<td>Anaemia</td>
<td>55.9</td>
<td>47.6</td>
</tr>
<tr>
<td>Neutropenia</td>
<td>17.7</td>
<td>11.8</td>
</tr>
<tr>
<td>Thrombocytopenia</td>
<td>14.7</td>
<td>5.9</td>
</tr>
</tbody>
</table>

**Purpose** To describe one centre’s experience with the use of TKIs and an oral m-TORI in patients with aRCC.

**Materials and Methods** Retrospective observational study of patients with aRCC treated with TKIs (sorafenib, sunitinib) and an m-TORI (everolimus) from March 2007–May 2012. Variables: demographics, initial ECOG, line number, duration (TT) and reason for stopping treatment, best response (partial response (PR), stable disease (SD), progression) according to clinical and radiological criteria; progression-free survival (PFS) and overall survival (OS) in weeks (w) and toxicity.

**Results** Of the 22 patients studied 81.8% were male with an average age of 65.77 years (SD: 11.76). 5 treated with sorafenib, 13 with sunitinib and 4 with everolimus.

Reasons for discontinuing were: 40% (2/5), 46.15% (6/13) and 75% (3/4) progression/clinical worsening; 40% (2/5), 53.85% (6/11) and 62.7% (4/6) toxicity; and 20% (1/5), 53.85% (7/13) and 16.6% (2/12) and 0% death. Treatment-related adverse events: sorafenib 60% asthenia and 40% rash; sunitinib: 53.85% rash, 46.15% diarrhoea and 38.46% neutropenia, mucositis and asthenia, and everolimus: 75% hypercholesterolemia, 50% hypertriglyceridemia and 25% pneumonitis.

**Conclusions** In our study, median OS was lower than those obtained in pivotal trials, instead, median PFS was higher, except everolimus. Regarding safety, sorafenib had similar toxicity; sunitinib had higher rates of hand-foot syndrome and everolimus had higher rates of hypercholesterolemia. However, the small number of patients limits our conclusions.

No conflict of interest.

**DGI-063** STUDY OF THE USE AND EFFECTIVENESS OF DAPTOMYCIN IN A TERTIARY HOSPITAL
doi:10.1136/ejhpharm-2013-000276.329

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**Background** to describe one centre’s experience with the use of TKIs and an oral m-TORI in patients with aRCC.

**Materials and Methods** Retrospective observational study of patients with aRCC treated with TKIs (sorafenib, sunitinib) and an m-TORI (everolimus) from March 2007–May 2012. Variables: demographics, initial ECOG, line number, duration (TT) and reason for stopping treatment, best response (partial response (PR), stable disease (SD), progression) according to clinical and radiological criteria; progression-free survival (PFS) and overall survival (OS) in weeks (w) and toxicity.

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Reasons for discontinuing were: 40% (2/5), 46.15% (6/13) and 75% (3/4) progression/clinical worsening; 40% (2/5), 53.85% (6/11) and 62.7% (4/6) toxicity; and 20% (1/5), 53.85% (7/13) and 16.6% (2/12) and 0% death. Treatment-related adverse events: sorafenib 60% asthenia and 40% rash; sunitinib: 53.85% rash, 46.15% diarrhoea and 38.46% neutropenia, mucositis and asthenia, and everolimus: 75% hypercholesterolemia, 50% hypertriglyceridemia and 25% pneumonitis.

**Conclusions** In our study, median OS was lower than those obtained in pivotal trials, instead, median PFS was higher, except everolimus. Regarding safety, sorafenib had similar toxicity; sunitinib had higher rates of hand-foot syndrome and everolimus had higher rates of hypercholesterolemia. However, the small number of patients limits our conclusions.

No conflict of interest.
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 63.8 years (range 22–86 years). The average duration of treatment was 20.5 days. Prescribers’ services were: cardiology/cardiology (27%), UCI (15%), haematology (12%), internal medicine (12%), nephrology (12%) and others (22%). The diagnoses for which daptomycin was used were: 52% endocarditis, 52% 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.

STUDY OF THE USE OF FERRIC CARBOXYMALTOSE (FC) WITHIN THE SYSTEM FOR PREOPERATIVE OPTIMIZATION OF HEMOGLOBIN (HB) IN SCHEDULED SURGERY

doi:10.1136/ejhpharm-2013-000276.330

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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**

<table>
<thead>
<tr>
<th>Hb</th>
<th>Serum iron</th>
<th>% iron saturation</th>
<th>Ferritin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean differences</td>
<td>1 g/dl</td>
<td>40.7µg/dl</td>
<td>15.8%</td>
</tr>
<tr>
<td>Mean differences (for average dose of iron administered: 891.89 mg)</td>
<td>1 g/dl</td>
<td>40.7µg/dl</td>
<td>15.8%</td>
</tr>
</tbody>
</table>

No conflict of interest.

STUDY USING FOSCARNEST IN HAEMATOLOGICAL PATIENTS

doi:10.1136/ejhpharm-2013-000276.331

EGarcía-Sanz, M Manso Manrique, ESantiago Prieto, ATorralba Arranz. University Hospital Puerta de Hierro Majadahonda, Pharmacy, Madrid, Spain

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 normalization. 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 (5), 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: 4 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), hypomagnesemia which responded to magnesium supplements (2) and 3 gastric discomfort.