Clinical pharmacy and clinical trials

Conclusions
- It showed better clinical outcomes in the gemcitabine plus nab-paclitaxel group in PFS.
- The nab-paclitaxel can be an effective second-line chemotherapy in gemcitabine resistant patients.

No conflict of interest.

**CPC-127**  
**SEVERAL TYPES OF PROTEINURIA AND ASSOCIATED FACTORS AMONG HIV-INFECTED ADULTS IN THE HAART ERA**

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**Background**  
HIV-infected individuals have an increased risk of chronic kidney disease.

**Purpose**  
To evaluate the prevalence of different types of proteinuria and associated factors in a HIV-infected population with a high percentage (92%) of Caucasian origin.

**Materials and Methods**  
Cross-sectional study of all HIV-infected adults seen at the Montpellier University Hospital HIV outpatients unit over 6 months. Demographics, treatment history, comorbidities and laboratory data were collected from an electronic database and manual review chart. Spot urine protein to creatinine (uPCR) and albumin to creatinine (uACR) ratios, estimated glomerular filtration rate using the MDRD equation (eGFR) were assessed. Three types of proteinuria were defined: tubular proteinuria (uPCR > 200 mg/g and albuminuria/proteinuria <0.5), glomerular proteinuria (uPCR > 200 mg/g and albuminuria/proteinuria > 0.5), microalbuminuria (uPCR < 200 mg/g and uACR 30–500 mg/g). Multivariate logistic regression was used to identify independent factors of proteinuria for patients with eGFR > 60 ml/min/1.73 m².

**Results**  
Characteristics for 1210 patients were: median age 48 years, 26% women, 7.1% black, 93% on HAART, 54% on tenofovir, median CD4 cell count 488 cell/µL, 73% with HIV viral load <20 copies/ml, 7.8% hypertensive, 3.4% diabetic, 18.2% HCV positive, 2.1% with history of kidney disease. eGFR was >90 for 59.3%, 60 to 90 for 36% and <60 for 4.5%. Of 1156 patients with eGFR > 60 ml/min/1.73 m², proteinuria was observed in 159 patients (13.7%) [tubular: 124 (10.7%), glomerular: 35 (3%)] and microalbuminuria for 51 patients (4.4%). Factors associated with tubular proteinuria were: current regimen with tenofovir (OR 2.70), diabetes (OR 2.54), for 51 patients (4.4%)

**Microalbuminuria**  
30 to 300 mg/g prot. < 0.5

**Glomerular proteinuria**  
albumin/proteinuria > 0.5

**Conclusions**  
The prevalence of proteinuria or microalbuminuria was 18.1% in this predominantly white, cART (current antiretroviral therapy)-experienced cohort. Measuring uPCR and albuminuria may assist in the diagnosis of early renal disease.

**Abstract CPC-127 Table 1**

<table>
<thead>
<tr>
<th></th>
<th>DFG &lt; 60</th>
<th>DFG &gt; 60</th>
<th>No Proteinuria</th>
<th>Proteinuria = uPCR &gt; 200 mg/l</th>
<th>No Microalbuminuria</th>
<th>Microalbuminuria</th>
<th>Tubular proteinuria</th>
<th>Glomerular proteinuria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1210 patients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54 patients</td>
<td>1156</td>
<td></td>
<td>No Proteinuria</td>
<td>uPCR &lt; 200 mg/l</td>
<td>Proteinuria = uPCR &gt; 200 mg/l</td>
<td>86.3% (997/1156)</td>
<td>13.7% (159/1156)</td>
<td></td>
</tr>
<tr>
<td>Microalbuminuria</td>
<td>30 to 300 mg/g</td>
<td>prot. &lt; 0.5</td>
<td>4.4% (51/1156)</td>
<td>10.7% (124/1156)</td>
<td>3% (35/1156)</td>
<td></td>
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</tr>
</tbody>
</table>

No conflict of interest.

**CPC-128**  
**START SMART THEN FOCUS – A SURVEY OF ANTIMICROBIAL STEWARDSHIP GUIDELINES IMPLEMENTATION IN ENGLAND**

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**Background**  
Start Smart then Focus Antimicrobial Stewardship (AMS) guidance for England was launched in November 2011 on European Antimicrobial Awareness Day.

**Purpose**  
To identify the extent of guideline implementation, whether the guidelines had improved AMS, and to collect examples of good practice.

**Materials and Methods**  
A web-based survey was developed using SurveyMonkey software, piloted, and then distributed through the microbiology, infectious diseases and pharmacy networks in July 2012.

**Results**  
There were 74 responses (44%) to the Start Smart then Focus (SSF) guidance by September. SSF was rated excellent or good by 69% for making AMS a Trust priority; by 57% for improving their AMS infrastructure; by 51% for improving prescribing practice; by 57% for improving audit and by 31% for improved usage reporting. Only 12% to 22% thought it was poor or less than satisfactory for the same criteria.

A formal review of SSF has been done by 41%, with 17% planning to do so. 86% had done an informal review. 52% had developed an action plan.

The main barriers to implementation were a lack of microbiology/infectious diseases time, then pharmacist time. An established AMS group, an enthusiastic pharmacist or microbiologist, or adequate time, were the main facilitators.

Putting the indication and duration or a review date on inpatient antimicrobial prescriptions were in place prior to SSF in 67% and 75% of centres respectively. Since SSF a further 9% have started and another 13% and 10% plan to implement these suggestions by April 2013.

Additional antimicrobial ward rounds have started or are planned since SSF in medical wards by 20%, surgical wards by 19% and paediatrics by 10% of centres.

**Conclusions**  
The Start Smart then Focus Antimicrobial Stewardship guidance has helped to further implement AMS in England.

No conflict of interest.

**CPC-129**  
**STUDY OF A PHARMACISTS CONTRIBUTION TO MEDICINES RECONCILIATION IN CRITICALLY ILL PATIENTS**

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**Background**  
Medicines reconciliation in intensive care units (ICU) is essential in preventing medicines errors. Medicines reconciliation errors have been found to occur mainly in the transition of care.

**Purpose**  
To develop and evaluate a medicines reconciliation programme in critically ill patients.

**Materials and Methods**  
Prospective study. Discrepancies between chronic treatment and treatment prescribed by the hospital physician in patients admitted to the ICU were analysed. Medicines histories were obtained from the medical history and patient interview. If discrepancies were found, the ICU physician was contacted.

No conflict of interest.
Clinical pharmacy and clinical trials

Results A total of 50 patients were studied (mean age 62.7 years, SD 13.2). 60% of patients showed at least one reconciliation error. The average number of drugs involved in reconciliation errors was 1.8 (SD 1.2) per patient. A total of 54 (17%) drugs discrepancies were found. The most common error was omission of a regularly used medicine (74%), followed by discrepancies in the frequency (9%), incorrect drug (9%) and incorrect dose (8%). Antihypertensive drugs represented 37% of all discrepancies. Pharmacists made interventions in 98% of discrepancies. Most pharmacist interventions consisted of the addition of an omitted drug (66%) and dosage adjustment (9.4%). 81% of recommended interventions were accepted by ICU physicians. Most rejected interventions were due to the patient’s clinical status (70%).

Conclusions Critically ill patients showed a high incidence of medicines reconciliation errors. Most reconciliation errors consisted of omissions of chronic medicines and involved antihypertensive drugs. 81% of pharmacist interventions were accepted. Medicines reconciliation could reduce medicines errors in critically ill patients and should be incorporated into the daily routine of the pharmacist responsible for the unit.

No conflict of interest.

CPC-130 SWITCHING FROM ADEFOVIR TO TENOFOVIR IN HEPATITIS B-INFECTED PATIENTS
doi:10.1136/ejhpharm-2013-000276.587

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Background Adefovir disoproxil (ADF) was the second nucleoside analogue to be approved for Hepatitis B Virus (HBV) treatment. Later studies showed that tenofovir had better and more cost effective clinical outcomes for HBV treatment.

Purpose To analyse the treatment changes in patients with chronic infection on ADF treatment. To define treatment changes and their clinical causes and effects in our population.

Materials and Methods A retrospective observational study was performed in a tertiary hospital including all patients treated with ADF between January 2005 and September 2012. Data collected: demographics (sex, age) previous treatment, ADF treatment duration, reasons for changing from ADF, new drug prescribed, HBV DNA viral load at the moment of change and 6 months later.

Results Fifty-nine patients started treatment with ADF during the study period; men (81.4%), mean age: 42 years. Previous treatment: 45 treatment-naïve, 2 Peginterferon-a-2a and 12 lamivudine. Fourteen patients were lost to follow-up. Of the 45 patients included mean duration of treatment with ADF was 44.96 months (range: 3–92). 40 patients changed treatment with ADF: 27 patients switched to TDF with undetectable HBV DNA viral load (two of them returned to ADF due to intolerance); 15 patients switched due to detectable HBV DNA-viral load: 10 patients to TDF and 5 to ETV. 5 patients remain on ADF.

Conclusions Nearly every patient treated with ADF has changed treatment at some point and are no longer treated with this drug. Most patients switched from ADV to TDF without any clinical reason; this may be related to better clinical outcomes and cost-effectiveness.

No conflict of interest.

CPC-131 SWITCHING STRATEGY. THE PHARMACIST’S POINT OF VIEW ON COST, ADHERENCE AND VIROLOGICAL OUTCOME
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Background HIV infection is a complex medical problem that requires careful monitoring of adherence to treatment, efficacy, development of resistances and toxicities. The estimated life expectancy of patients is increasing, this makes it necessary to find efficient ways to optimise switching therapy away from HAART in order to reduce costs and increase its efficacy. At Amedeo di Savoia Hospital of Turin, the regional centre in Piedmont for HIV infection diagnosis and treatment, hospital pharmacists work in a multidisciplinary team with infectiousologists, nurses, psychologists and dieticians. The team follows every aspect of the clinical pathway, leading to an improvement in the clinical management of HIV patients.

Purpose
- To monitor HAART for all patients on therapy
- To identify patients with a switch of therapy
- To create a multidisciplinary database including adherence, economic and clinical data before and after the switch
- To monitor the distribution of available resources in relation with virological outcome and adherence response of patients
- To achieve a rational use of resources

Materials and Methods Collecting data from Oliamm Software and File F using a specific software application, we analysed cost and adherence by the pharmacy refill method (days supplies between refill dates/duration of dispensed therapy x 100) for each switch of treatment between March 2010 and March 2012. From clinical reports we also evaluated the reasons for switching (toxicity, simplification, treatment failure) and the success of variation in term of virological outcome.

Results Switching of antiretroviral treatments occured in 250 patients (male 177, female 73, median age 48 years), out of about 1,835 HIV-positive people in treatment, considering overall 310 switches (about 8% at the patient’s request). In 151 cases the switch led to a financial saving and in 159 cases to an increase in cost, leading overall to an excess of cost of €4396.60 each month (an additional €17.59 for each patient for each month). The reasons for the variation were: treatment failure in 30%, simplification of the treatment in 20%, toxicity in 44% and other causes in 6%. Focus on simplification evidenced: 13% decrease in pill burden, 17% on STR, 55% on LDR, 10% on QD therapy. We also analysed the causes of toxicities. From our study we observed an increased number of patients with suppressed viral load (from 60% to 77%) as evidence of efficacy. 67 out of 125 patients (54%) with pre-switch viral load non-suppressed, had a suppression after switch. 172 patients out of 185 patients (93%) with pre switch viral load suppressed, conserved suppression after switch, but 13 patients (7%) had viral rebound. The change of the treatment didn’t impact on adherence in 50.52% cases and produced an improvement in adherence in 39.03% of switched patients. Only in 10.69% did a decrease of adherence improve. We have also analysed the cost distribution, observing a better use of resources to obtain a viral load under 20 cp/ml and a financial saving for treatment of patients already suppressed pre-switch.

Conclusions In our study an analysis of switching treatment has demonstrated a correct distribution of budget and an improvement in adherence. It has also demonstrated the importance of working in team for better management of the therapeutic path.

No conflict of interest.

CPC-132 SYNDROME OF INAPPROPRIATE ANTIDIURETIC HORMONE SECRETION AS ADVERSE DRUG REACTION IN HOSPITALISED PATIENTS TREATED WITH TOLVAPTAN
doi:10.1136/ejhpharm-2013-000276.589

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Background Some drugs can cause Syndrome of Inappropriate Antidiuretic Hormone Secretion (SIADH). Tolvaptan is a new drug...