**Materials and Methods**

We examined the pharmacoeconomic data for the first half of 2011. Data were extracted from the Hospital Information Systems.

**Results**

14,996 patients were hospitalised in CGH and 15,520 patients in SGH with a mean number of nursing days 3.99 vs. 3.55.

The total cost of drugs was €6,705,297 vs. €4,933,028 (P < 0.05) respectively.

The drugs cost for the inpatients was €5,034,701 vs. €3,965,127 and the mean cost per inpatient per nursing day was €77.67 vs. €67.23.

The drugs cost for the insured outpatients was €1,452,668 vs. €713,203 (1,595 prescriptions vs. 2,016 P < 0.05) and the mean prescription was €909.42 vs. €619.10 (P < 0.05).

For the uninsured outpatients the drugs bill was €217,923 vs. €254,694 (3,506 prescriptions vs. 2,016, P < 0.05), and the mean prescription cost was €62.16 vs. €126.34 (P < 0.05).

The percentage cost for the main categories of drugs were: cytostatics 16.50% vs. 10.65%, antibiotics 21.65% vs. 24.51%, antirheumatics 7.54% vs. 4.55%, cardiovascular 5.57% vs. 3.98% and erythropoietins 11.45% vs. 3.11% (P < 0.05).

The ratio of generics to patented medicines was 40.32%:59.68% and 39.14%:60.86%

**Conclusions**

We found statistical differences among the pharmacoeconomic data of the two hospitals. In SGH, HIV+ patients are served (27.47% of uninsured and 47.35% of insured outpatients) and this is reflected in the increased cost of the outpatients while this is reflected in the increased cost of the outpatients and cytostatics cost differences are related to the hospital departments (Oncology, Haematology, Pulmonary clinics), the different DRGs and treatment protocols followed in each hospital.

No conflict of interest.

**Results**

1. Manual dispensing error rate was 0.93% (n = 5805 ordered lines; wrong drug: 0.36%, missing drug/quantity: 0.31%, additional quantity: 0.26%). By decreasing this error rate to 0.27% (n = 5840; only convery errors leading to missing drug/quantity and additional quantity), the automation avoided more than 4500 errors each year.

2. With the distribution of 850 boxes of drugs/hour (reduced to 630 when the automated ‘Pro-log’ filling system was working simultaneously), the robot significantly increased the distribution speed in comparison with the manual picking (305 boxes/hour).

**Conclusions**

This reorganisation contributed to safer and more efficient distribution of drugs. No more incorrect picking of medicines occurred thanks to the high reliability of the robot. Remaining errors could still be reduced by improving the conveying software.

With one single person operating the robot, 2 full-time equivalents were saved, leading to an estimated return on investment in 4.5 years. For medicines remaining outside the robot (i.e. controlled drugs, cold chain drugs or those with an unusual size, shape or weight), a scanning system will be introduced and evaluated by the same protocol.

No conflict of interest.
limitation of the study is that the costs of maintenance and the human resources reengineering required need to be further explored.

Abstract DSL-004 Table 1

<table>
<thead>
<tr>
<th>Advantages and disadvantages of the two systems</th>
<th>System A</th>
<th>System B</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAFETY</td>
<td>All DUs can be unequivocally identified with batch expiry date</td>
<td>Partial identification with batch barcode and expiry date</td>
</tr>
<tr>
<td></td>
<td>Complete record, including batch, administration by scanner</td>
<td>Record drug administration with bar code without batch</td>
</tr>
<tr>
<td></td>
<td>Closed system</td>
<td>Partially open systems, error risks</td>
</tr>
<tr>
<td>EFFICIENCY</td>
<td>Entire integrated system including outpatients and elderly residences</td>
<td>Immediate availability of nursery doses needed to the patient</td>
</tr>
<tr>
<td></td>
<td>Full return of unmanaged DUs</td>
<td>Full expiry date control is difficult</td>
</tr>
<tr>
<td></td>
<td>Allows automatic checking of expiry dates</td>
<td></td>
</tr>
<tr>
<td>QUALITY</td>
<td>Complete record of all movements of both drugs and users</td>
<td>Partial recording of users, batches, drugs in drug use chain</td>
</tr>
<tr>
<td></td>
<td>High cost</td>
<td>High cost</td>
</tr>
<tr>
<td></td>
<td>Additional cost per DU (euros)</td>
<td>0.19 0.20</td>
</tr>
</tbody>
</table>

No conflict of interest.

DSL-005 COMPARATIVE STUDY OF THE COST OF ERYTHROPOIETIC FACTORS, ORIGINAL MEDICINES AND BIOSIMILARS IN FRENCH CARE FACILITIES
doi:10.1136/ehjpharm-2013-000276.248

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Background The patent expiries of leading biological products and the development of biosimilars create opportunities for cost savings. No studies have been carried out in the French hospital market.

Purpose To perform a cost saving modelling analysis and investigate the potential factors that could affect the price of drugs.

Materials and Methods We carried out a comparative study in French healthcare facilities, representing about 65% of national hospital beds, of the price of erythropoietic factors. The data were collected on procurement procedures operative as of 1 January 2012.

Results 25 care facilities agreed to participate in the study. The overall sales turnover reached €15 M. Biosimilars represent less than 1% market share. All the establishments granted a discount of between 5% and 6% on the prices fixed by negotiation between the Comité Economique des Produits de Santé and the manufacturers, depending on the category (drugs, biosimilars or original biopharmaceuticals). The average discounts ranged from 11% to 73%. Binocrit, the main biosimilar represented was 25.6% less expensive than the global prescription-drug market. Many top-selling biologicals are due to lose patent protection over the next few years. The great potential for cost savings apparent in our study could be investigated in other countries.

Conclusions The market for biosimilars is growing at a faster rate than the global prescription-drug market. Many top-selling biologicals are due to lose patent protection over the next few years. The great potential for cost savings apparent in our study could be investigated in other countries.

No conflict of interest.

DSL-006 COST ANALYSIS OF ADULT PARENTERAL NUTRITION SYSTEMS: THREE-COMPARTMENT BAG VERSUS CUSTOMISED
doi:10.1136/ehjpharm-2013-000276.249

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Background Parenteral nutrition (PN) is a costly technology used widely to provide nutrition to patients who have an inaccessible or non-functioning intestine. Two all-in-one systems currently being used are customised formulations, prepared by hospital pharmacies, and three-compartment bags.

Purpose To provide a systematic cost comparison of the two all-in-one PN systems: individualised (made from nutrient solutions) versus manufactured (made from three-compartment bag), both prepared in hospital pharmacies.

Materials and Methods We conducted a prospective study to analyse the total cost of PN bags, accounting for all of the processes involved in preparing and delivering them (the cost of manpower, nutrition solutions, medical supplies and quality controls) in three different healthcare settings. To compare therapeutic alternatives of equivalent nutritional value, the study was performed for the most frequently-employed formulation, which was similar to commercial preparations. A univariate sensitivity analysis was performed to evaluate the impact of different rates of use of three-compartment PN bags.

Results 157 routine acts of PN bag preparation (65 hospital compounded and 92 three-compartment) were observed and timed over 9 days. Total costs of the 157 PN bags were included in the study. Mean costs of hospital-compounded bags were higher than three-compartment bags, 51.16 ± 5.63€ versus 39.69 ± 3.00€ respectively (p < 0.01). Manpower costs were responsible for the majority of the differences found (70%). In scenarios using a three-compartment system for 30%, 70% and 90% of PN provision, a cost savings of 4.3%, 10.1% and 12.9% respectively could be achieved. Greatest rates of changing from hospital compounded bags (70% and 90%), in a hospital with 1,800 PN bags/year, might reduce the annual budget by 950€ and 11,964.8€, respectively. Meanwhile, in a large facility the savings for 8,000 TPN days would be 64,248€ and 82,605€ respectively.

Conclusions Since we need to reduce the costs of effective treatments, three-compartment bags could be used for standard adult PN to save money.

No conflict of interest.

DSL-007 DOES PHARMACY CONTRIBUTE TO DELAYS IN HOSPITAL DISCHARGE?
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Background Efficient management of patient flow including timely discharge from hospitals is vital. Patients in UK hospitals are commonly given individually labelled medicines to take home (TTOs). It is perceived by the multidisciplinary team at our hospital that waiting for these medicines is a significant rate-limiting step in the discharge process.

Purpose We examined the timeframes around TTO prescribing, dispensing and patient discharge in order to identify delays and any negative impact of the pharmacy processes involved.

Materials and Methods All TTO prescriptions entered into the pharmacy electronic log on one day in May 2012 were examined