

**Conclusions** In conclusion, we notice a good level of quality concerning prescriptions in this geriatric unit where software-assisted prescribing with pharmaceutical analysis has been effective since 2009. This software does not allow physicians to organise prescriptions by disease area. Concerning the patients' weight, senior clinicians will inform junior clinicians of its importance in the patients' file and prescription. Another evaluation will be scheduled to analyse the link between the number of drugs and the number of diseases. The final aim is to reduce the number of drugs in order to avoid drug-related adverse events.

No conflict of interest.

#### GRP-068 EVALUATION OF SPECTRAL SPECIFICITY OF TAXANES FOR THE ON-LINE ANALYTICAL CONTROL OF HOSPITAL CHEMOTHERAPY PRODUCTION

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**Background** On-line control of chemotherapy production is used for 27 molecules at European Georges Pompidou Hospital which corresponds to 70% of the production. Flow injection analysis (FIA) constitutes the optimal method under ultra-violet spectral data identification. If the spectra are similar, the retention time after chromatographic separation has to be used for identification. The FIA spectral differences of taxanes (docetaxel, paclitaxel, cabazitaxel) are too poor for identification.

**Purpose** The aim of this study was to develop an ultra-fast high performance liquid chromatographic technique for on-line analytical checking of taxane preparations.

**Materials and Methods** Docetaxel (Sanofi-Aventis), paclitaxel (Hospira) and cabazitaxel (Sanofi-Aventis) were prepared in sodium chloride 0.9% solution. Chromatography was performed using Prostar Varian chromatographic equipment with a Photodiode Array Detector. All the separation was done with a Polaris C18 pre-column (3  $\mu$ m, 10 mm  $\times$  2 mm). The mobile phase was ultra-pure water/acetonitrile (60–40 v/v). Taxanes were eluted at the flow rate of 1.2 mL.min<sup>-1</sup>.

**Results** Paclitaxel spectra obtained after chromatographic separation differ significantly from those of cabazitaxel and docetaxel, which are very similar. So the latter have to be identified by their retention time: 0.7 min for cabazitaxel and 0.4 min for docetaxel with a resolution of 1.7. Paclitaxel retention time was 0.39 with a resolution of 0.11 with docetaxel. The linear range corresponds to the therapeutic concentrations. The 3 methods were linear ( $R > 0.995$ ) with intra-day precision from 0.27% to 2.68% and inter-day precision from 0.95% to 3.7%.

**Conclusions** Ultra-fast chromatographic separation methods have been successfully developed for the identification and quantification of 3 different taxane molecules. Less than 1 min is needed when spectral and retention data are combined as the main parameters.

No conflict of interest.

#### GRP-069 EVALUATION OF THE CLINICAL IMPACT OF MEDICINES RECONCILIATION IN THE COMPIÈGNE HOSPITAL CENTRE AFTER ONE YEAR OF EXPERIENCE

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**Background** The literature shows that there are errors in the drug treatment in 30% of patients at hospital admission. These medicines

errors (MEs) may be continued throughout hospitalisation and can cause the patient adverse effects.

To reduce MEs and thus improve patient safety, the Compiègne Hospital Centre (HCC) has established a practise of medicines reconciliation (MR) since July 2011. Any unintentional discrepancies (UIDs) detected between the home treatment and the hospital treatment during MR are discussed and corrected with physicians to ensure continuity of the patient's medicines.

**Purpose** After one year of experience, the objective was to evaluate the clinical impact of our interventions on patient safety.

**Materials and Methods** Patients older than 65 years, hospitalised in Geriatrics and Cardiology after admission by the emergency department, were eligible for MR.

To evaluate the clinical impact of MR, we assessed the potential aftermath of uncorrected UIDs on patient safety. To do this, any UIDs detected and corrected were classified into two groups:

- those with a high potential clinical impact: potentially life-threatening, that increase the length of hospitalisation and/or decompensation/aggravation of an existing disease.
- those with a low potential clinical impact.

**Results** 485 patients have benefited from MR, 30% of whom had a ME in their hospital prescription. Average age of patients: 84.6 years  $\pm$  7.8. Sex ratio M/F: 0.67.

259 UIDs were detected of which 101 (39%) were classified as having a high potential clinical impact. This demonstrates the importance of MR for the safety of patients at their admission.

**Conclusions** After one year of MR in HCC, the results were positive.

The results on the clinical impact of our intervention were very encouraging and demonstrated the importance of continuing and developing medicines reconciliation. Our experience confirms the benefit of a pharmaceutical presence in the care units to improve patient safety.

No conflict of interest.

#### GRP-070 EVALUATION OF THE EFFECT ON PATIENT SAFETY OF A NEW LABEL DESIGN FOR MEDICINAL PRODUCTS

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**Background** In Denmark some of the medicinal products for hospitals are produced by the hospital pharmacies and registered by Amgros (SAD products). In 2007 the Danish Society for Patient Safety, Amgros, and the private foundation TrygFonden organised a design competition with the purpose of improving patient safety in label design. The winner "Medilabel Safety System" was designed by e-Types and incorporated 9 design features. The new labels were implemented in 2008.

**Purpose** To evaluate the effects of the new label design on patient safety.

**Materials and Methods** Reports of medication errors related to SAD products before and after the introduction of the new design (2007 and 2010) were compared. Medication errors were obtained from the Danish Patient Safety Database (DPSD).

In another study patient simulation and a sorting exercise were used to evaluate the effects of the new design. 11 physicians and 9 nurses participated.

**Results** In 2007 and 2010 a total of 6781 and 10188 medication errors were reported to DPSD. Of these, 85 (2007) and 80 (2010) dispensing errors could be related to misinterpretation of the SAD label. Thus, while no overall effect on the number of errors related