Conclusions Pazopanib may be better tolerated than sunitinib, with an acceptable adverse event profile and fewer dose adjustments.

Also, the severity of adverse events looks lower with pazopanib. However, the number of patients was too small to arrive at definitive conclusions, so it is necessary to enlarge this study.

No conflict of interest.

**Consecutive screening for clinically relevant interactions in liver transplant patients**

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**Background** Drug-drug interactions are a frequent problem in liver transplant patients, further hindering pharmacotherapy management, which is a very important risk to the patient’s life.

**Purpose** To detect drug-drug interaction of clinical relevance in LT patients in a tertiary hospital.

**Materials and Methods** Descriptive transversal study of the LT patients in our hospital during 2011 who were admitted to the Digestive Surgery Unit (DSU). Variables analysed were: sex, number of drugs prescribed at admission and number of days of hospitalisation in the DSU. Data were collected from clinical and pharmacotherapeutic histories and the unit dose dispensing log.

Drug-drug interactions were detected and analysed by the Micromedex Healthcare series® database. The results were analysed with the SPSS v.19 statistics software.

**Results** Of a total of 51 transplant patients, we included 44 (5 patients died and in 2 patients the medicines were not recorded at admission to the DSU).

75% of patients were male and 25% female, mean age of patients was 53 ± 12 years. The median number of days in hospital was 11 [9;18] days. The mean number of drugs prescribed on admission was 11 ± 2.5 drugs/patient.

The total number of drug interactions detected was 210 of which 153 (72.9%) were clinically relevant, representing a prevalence of 94.1% of liver transplant patients.

Of the main variables studied, only the number of drugs prescribed was found to be directly proportional (p < 0.05) to the number of clinically relevant interactions detected, thus no relationship was obtained between age or the number of days hospitalised.

**Conclusions** Liver transplant patients are critically ill patients with highly complex treatment. A high prevalence of clinically relevant interactions was detected related to polypharmacy and the use of high-risk medicines.

The presence of a pharmacist in this Unit would be beneficial to comprehensively review these patients’ treatment.

No conflict of interest.

**Securing intrathecal injections: what about non-luer connectors?**

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**Background** Episodes of accidental injection of medicines intended for intravenous administration into the intrathecal space have been reported worldwide, often leading to death. Since 2001, international guidelines have been issued to prevent such risks. A major recommendation is to develop a non-luer connector to use in neuraxial procedures.

**Purpose** To give an overview of the development and marketing of medical devices fitted with non-luer connectors.

**Materials and Methods** Manufacturers’ catalogues have been consulted. A literature review was conducted using the PubMed and Science Direct databases, including the following MeSH keywords ‘non luer’, ‘connectors’, ‘safety’ and ‘intrathecal’. European Health Authorities websites have been also consulted. All searches were performed between August and October 2012.

**Results** The United Kingdom, which has been a pioneer in guidance, was the first to implement such connectors. Five different non-luer connectors have been designed thanks to the National Patient Safety Agency (NPSA) initiative. Literature research identified few individual tests of these new devices. Some incidents such as mismatching connectors have been documented. So the NPSA has updated recommendations about introducing secure non-luer connectors. These devices are coming onto the French and Belgian market soon. To our knowledge safety connectors are not yet available in other countries.

**Conclusions** Non-luer connectors for intrathecal drug administration were initially launched in Great Britain. This process obviously
improves the safety of intrathecal injections and leads other countries in the same way. However more advanced scientific studies of these connectors should be published. The main line of thought should be the standardisation of these connectors. Lack of standardisation is generating some hazards and supervised implementation of these medical devices is required.

No conflict of interest.

**Background**

The Health Information and Quality Authority (HIQA) in Ireland are currently promoting and guiding the development of key performance indicators and minimum data sets to monitor health care quality. A third of Irish hospital pharmacies surveyed in 2006 believed that performance indicators were the most effective quality assessment tool. Despite this, performance indicators for clinical pharmacy services in Ireland have not been published.

**Purpose**

To obtain consensus on whether performance indicators identified from the literature provide a valid and feasible method of measuring the quality of the Mater Misericordiae University Hospital (MMUH) clinical pharmacy service and whether they could be introduced as a regular quality measurement.

**Materials and Methods**

Review the literature relating to the use of performance indicators in a clinical pharmacy setting and identify performance indicators which have been piloted or used in other institutions.

Achieve consensus of a multidisciplinary panel, using a Delphi method of the most valid and feasible performance indicators for the MMUH clinical pharmacy service.

Implement one of the selected performance indicators.

Make recommendations on the further use of performance indicators.

**Results**

Performance indicators relating to hospital pharmacy are available (n = 240) in the literature. The Delphi method achieved consensus and rated the following three performance indicators as both valid and feasible:

- Percentage of reserve antimicrobials checked by a clinical pharmacy for approval by microbiology or infectious disease
- Percentage of patients discharged on warfarin who receive warfarin counselling by a clinical pharmacist
- Percentage of medication orders for intermittent therapy that have been reviewed by a clinical pharmacist for safe prescribing.

The indicator chosen for measurement was the percentage of medication orders for intermittent therapy that were reviewed by a clinical pharmacist for safe prescribing. A 79% compliance with this performance indicator was achieved by the clinical pharmacy service.

**Conclusions**

A multidisciplinary panel achieved consensus that three of the performance indicators identified from the literature provide valid and feasible methods of measuring the quality of the clinical pharmacy service of the MMUH. One of these was successfully implemented and consideration will be given to implementing further performance indicators.

No conflict of interest.