Conclusions  The implementation of medicines reconciliation in the EPP ensures it is done and reduces the discrepancies to 9.6%.

No conflict of interest.

GRP-103 INTEGRATION OF ORAL ANTICANCER DRUGS INTO STANDARDISED COMPUTERISED PHYSICIAN ORDER ENTRY SYSTEMS

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Background Oral anticancer drugs still contain some of the most critical issues in terms of right use and compliance. Patients need to be advised and guided concerning dosing schedules, risks and important supportive measures. Package sizes distributed by the pharmaceutical industry often contain more doses than one patient needs especially for short-term stays in the hospital.

Purpose Our goal was to dispense patient-individual unit doses of oral anticancer drugs based on individual computerised prescriptions.

Materials and Methods For this purpose we implemented evidence-based treatment regimens in the prescription software to prevent errors and support the use of standardised treatment plans. Additionally patient information leaflets were created. The first drugs to be computerised in this way were capecitabine and temozolomide.

Results Individual dispensing of oral anticancer drugs allows more extensive pharmaceutical care of these patients. In view of the risks described above oral anticancer drugs have to undergo a pharmaceutical plausibility cheque and the amount has to be found suitable according to the treatment regime before dispensing. Moreover, the available instructions for use e.g. treatment schedules including supportive measures and the patient information brochure improve the information flow and the safe use.

Conclusions Due to the positive feedback from the operators we are extending the procedure to all oral anticancer drugs.

No conflict of interest.

GRP-104 INTERACTIONS BETWEEN MEDICINAL GASES AND OTHER MEDICINAL PRODUCTS: DEVELOPMENT OF A HOSPITAL DRUG DATABASE

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Background Deliberation no. 56/CD/2008 from the Portuguese Authority of Medicines and Health Products (INFARMED) approves the regulation of medicinal gases set out by Decree-Law no. 176/2006, which considers them as medicines for human use. This Deliberation addresses the manufacture, packaging, labelling, package leaflet, technical management, transportation, distribution, marketing, supply and home delivery of medicinal gases. In this context pharmacists play a proactive role by providing essential information about the proper use of these medicines.

Purpose To develop a database of medicinal gases that allows hospital pharmacists to detect medicinal gases/other medicinal product interactions and validate medical prescriptions in a quick, safe and effective way.

Materials and Methods Review of the summary of product characteristics (SPC) of all medicinal gases currently available in Portugal and consultation with the manufacturers of medicinal gases and analysis of responses. A literature review was also performed, through research and analysis of articles obtained from PubMed.
since January/2007 to September/2012, intersecting the terms ‘medicinal gases’ and ‘medical gases’.

**Results**  A total of 6 medicinal gases currently available in Portugal were analysed: medicinal air, nitric oxide, nitrous oxide, nitrous oxide/oxygen, oxygen and xenon. The main interactions of these gases with other medicinal products are: i) nitric oxide: oxygen, almitrine, nitroglycerin, sodium nitroprusside, phentylephrine, phosphodiesterase inhibitors, prilocaine, sulfonamides; ii) nitrous oxide: cyanocobalamin, drugs that depress the central nervous system (CNS), methotrexate; iii) oxygen: antiarrhythmics, bleomycin, chloroquine, chlorpromazine, corticosteroids, daunomycin, doxorubicin, nitrofurantoin, phthyomenedione, sympathomimetics; iv) xenon: antihypertensives, drugs that depress the CNS, other inhaled anaesthetic agents, sympathomimetics. No interactions were found with medicinal air. The database developed also describes the interaction mechanisms for each medicinal gas with each drug mentioned and the measures recommended to prevent major side effects.

**Conclusions**  The database produced is a valuable tool for Portuguese hospital pharmacists who dispense medicinal gases, contributing to validating prescriptions for these medicines quickly and effectively.

No conflict of interest.

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**INTRODUCTION OF A MEDICINES RECONCILIATION PROGRAMME IN THE ORTHOPAEDIC SURGERY UNIT**

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**Background**  The average hospitalised patient is subject to at least one medicines error per day. More than 40% of medicines errors are believed to result from inadequate medicines reconciliation.

**Purpose**  To investigate the introduction of a medicines reconciliation programme in the orthopaedic surgery unit.

**Materials and Methods**  January 2010–March 2012. The patient selection criteria were ≥65 years old, home treatments ≥5 drugs and anticipated hospital stay ≥3 days. The reconciliation treatment was also performed for any other patients when requested by the doctor. Patients were found to be sensitive to the reconciliation by the pharmacist. Any Drug Related Problems (DRPs) detected were recorded and categorised. A prescription was given with the home treatment, with the aim of continuing treatment, discontinuing it or performing a therapeutic exchange. The process ended with oral and written pharmacotherapeutic information on the day of discharge.

**Results**  Medicines reconciliation was carried out on 300 patients with an average age of 75.86, average stay of 9.57 days and distribution by gender 224 women (75%) and 76 men (25%). The number of medicines/patient was 6.57. During the prescription by the pharmacist, 1058 drugs were provided according to guidelines, 276 were suspended and in 663 cases a therapeutic exchange was performed. As regards the DRPs detected, 50 were caused on admittance and 15 at discharge. The DRPs were classified as follows: safety 51, effectiveness 2, adherence 2 and indication 2. Types of DRPs: overdose 17, adverse reaction 4, need of extra treatment 6, unnecessary medicine 2, unsuitable drug 10, insufficient dosage 4, not dispensed 1.

As to the seriousness of the DRPs: class 1: 5 patients didn’t use the medicines that they needed; class 2, 24 patients used medicines that they didn’t need; class 3, 23 patients used an erroneously chosen medicine; class 4, 10 patients used an erroneously chosen medicine; class 5, 3 patients used a lower dose and/or a different dosage schedule from that required and/or don’t continue treatment for the full duration of the treatment indicated, according to the Granada consensus of 1998.

**Conclusions**  Participation of the pharmacist in the reconciliation of treatment allows DRPs to be detected at admission and discharge and educated the patient on his or her treatment at discharge from the hospital.

No conflict of interest.