### GRP-012 ADHERENCE, PERSISTENCE AND FINANCIAL EVALUATION IN THE TREATMENT OF PROSTATE CANCER

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P Sorice, F Santoleri, R Lasala, RC Rizzo, A Costantini. General Hospital of Pescara, Hospital Pharmacy, Pescara, Italy

**Background** The success of home treatment is strongly influenced by patient adherence to treatment. Non-adherence to treatment represents not only an important issue for the patient, affecting both the clinical efficacy and safety of the drug treatment, but also has financial and social implications for the community.

**Purpose** This study evaluated the adherence to treatment, persistence, and the daily cost of treatment in patients with prostate cancer treated with gonadotropin-releasing hormone agonists, comparing leuprorelin 3.75–11.25, leuprorelin 7.5–22.5 and triptorelin.

Materials and Methods Adherence to treatment was measured as the ratio between the Received Daily Dose (RDD) and the Prescribed Daily Dose (PDD), using software developed for this purpose by hospital pharmacists. The RDD was calculated as the sum of the number of days between two consecutive drug refills, whilst the PDD was determined based on the treatment regimen as prescribed by the physician. The persistence was calculated as the sum of the number of days the patient had stayed on treatment.

The cost of daily treatment was calculated on the basis of the

Results 126 patients were enrolled in this study for triptorelin, 143 for leuprorelin 3.75–11.25 and 31 for leuprorelin 7.5–22.5. The adherence values for all drugs ranged between 0.95 and 1.10, showing good quality management of domiciled treatment. The analysis of persistence conducted over three years showed a decrease by 20% for leuprorelin 3.75–11.25, 25% for triptorelin and 50% for leuprorelin 7.5–22.5. The cost per RDD was  $\epsilon$ .2.15,  $\epsilon$ .2.24 and  $\epsilon$ .2.84 for leuprorelin 7.5–22.5, leuprorelin 3.75–11.25 and triptorelin respectively.

Conclusions The excellent adherence values showed that all the drugs studied have a good safety profile and easy administration. In fact, patients complied with the dosage and medication regimens as recommended by prescribers. The persistence values were overlapping. The cost per RDD for triptorelin was 23% higher than leuprorelin.

No conflict of interest.

# GRP-013 ADVERSE DRUG REACTIONS IN THALIDOMIDE TREATED PATIENTS

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T Gramage Caro, S Orbe Izquierdo, C Pérez Menéndez-Conde, C Palomar Fernández, M Muñoz García, T Bermejo Vicedo. Hospital Ramón y Cajal, Pharmacy, Madrid, Spain

**Background** Thalidomide is a chemotherapeutic agent approved by the EMA for multiple myeloma treatment. It is considered a high risk drug and should be prescribed and dispensed within a special pharmacovigilance programme.

Purpose To evaluate the incidence of adverse drug reactions (ADRs) to thalidomide; to analyse their type and severity.

Materials and Methods Retrospective cohort study, conducted between January 2008 and December 2011 in a university hospital. Patients treated with thalidomide were selected through the Pharmacy Department Outpatient Unit medicines records.

Patient clinical records were reviewed. Any doubts were checked with the attending physicians.

Data recorded: personal data (age, gender), main diagnosis, thalidomide ADRs, start and end dates of both thalidomide treatment and ADRs.

ADR incidence was calculated. Association between ADRs and thalidomide discontinuation was determined.

ADR causal relation was determined by the Karch Lasagna algorithm (definite, probable, possible, conditional). ADR type was classified according to the Rawlins and Thompson classification (type A: dose-dependent or type B: not dose-dependent) and ADR severity and outcome according to Spanish Pharmacovigilance System criteria.

**Results** Twelve patients were included (mean age  $59 \pm 12$  years, 50% men).

Medical diagnosis: multiple myeloma 91.66% (11 patients) and cutaneous, vascular and digestive systemic sclerosis 8.3% (1).

The incidence of thalidomide ADRs was 83.3%. 8.3% (1) of treatment discontinuations were due to thalidomide ADR.

64.71% (11) of patients showed neurotoxicity, 17.64% (3) blood disorders, 11.76% (2) oedema and 5.88% of them (1) digestive

ADRs detected were type A (dose-dependent) in 100% of cases (17 patients), probable in 41.18% (7), and possible in 58.82% (10) of

Overall, 41.18% of ADRs were severe (7). ADR outcomes: 64.70% of ADRs (11 patients) were resolved, 17.65% (3) unresolved and 17.65% (3) were classified as 'death unrelated to the drug'.

Every ADR detected was notified to the Spanish Pharmacovigilance System.

**Conclusions** Although the incidence of thalidomide ADRs was high (83.3%), ADRs only caused treatment discontinuation in 8.3% of cases.

Neurotoxicity was the most frequent ADR.

Almost half of patients had severe ADRs and these did not resolve in 17.65% of cases.

No conflict of interest.

## GRP-014 AN E-LEARNING PROGRAMME ON HIGH-RISK DRUGS -**DOES IT ACTUALLY INCREASE USER KNOWLEDGE?**

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<sup>1</sup>M Creed. <sup>1</sup>M McGuirk. <sup>1</sup>C Meegan, <sup>2</sup>D Murray. <sup>1</sup>Mater Misericordiae University Hospital, Pharmacy Department, Dublin, Ireland (Rep.); <sup>2</sup>Peamount Hospital, Pharmacy Department, Dublin, Ireland (Rep.)

Background High-risk drugs are involved in serious medicines errors. Studies have identified a range of contributory factors including lack of training. The MMU Hospital developed a E-learning programme 'A Guide to High-risk Drugs' to enable teaching; incorporating an inbuilt evaluation tool to assess the learning outcome.

**Purpose** To evaluate the learning from undertaking an e-learning programme on high-risk drugs.

To ascertain if the programme is suitable for different types of institutions.

To identify user knowledge deficits.

Materials and Methods The programme was trialled in two different hospitals. The MMUH, a 600 bed acute hospital and Peamount Hospital, a 380-bed rehabilitation and continuing care hospital. The participants were qualified Doctors, Nurses and Pharmacists. All 170 participants undertook 20 pre-assessment questions followed by the programme then the same questions in a post-assessment. Results from each institution and discipline were analysed.

**Results** 29 Interns completed the programme at the MMUH and 11 SHOs/Registrars in Peamount. A mean pre-assessment score of 58% (MMUH) and 56% (Peamount) increased to a post score of 83% in both hospitals. MMUH Nurses (n = 38) yielded an improvement, 48% to 73%; and Peamount Nurses (n = 40), 39% to 65%. MMUH Pharmacists (n = 20) improved from 83% to 94%.