ABSTRACTS
Oral communications and Posters

Oral Communications

OR01.1
IMPROVING KNOWLEDGE OF ORAL CHEMOTHERAPY WILL HELP PHARMACISTS TO COUNSEL CANCER PATIENTS

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Background and Objective: More patients with cancer are being treated with oral anticancer drugs and these agents are often dispensed by community pharmacists. Several recent studies (Abbott 2014, Suzuki 2017) have shown that pharmacists lack knowledge of oral chemotherapy (OC) and demonstrated need for additional education and training in OC.

Design: An educational programme was developed and introduced as e-learning course for all pharmacists in Estonia within international project EPIC (*Empowering pharmacists to improve health care for oral chemotherapy patients*) lead by European Society of Oncology Pharmacy. The programme is divided to three modules including topics such as principles of chemotherapy, hormonal therapy and targeted therapy; side-effects and their management; interactions with medicines and food supplements; safe handling of chemotherapy etc. Materials for e-training were prepared by multidisciplinary team including oncology pharmacists, physicians and nurses. Every module has to be completed by passing the test. The programme will run April-December 2017. A survey was conducted before starting the e-training to assess pharmacists' confidence in and knowledge to counsel cancer patients on OC.

Results: 504 pharmacists (28% of all pharmacists working in pharmacies in Estonia) were registered in e-training course; most of them are working in the community pharmacies (88%). Participants had different experience dispensing OC in their settings. 70% of pharmacists dispense OC monthly or less than monthly; 18% have patients with OC visiting their pharmacy daily or weekly. Only 3% of respondents felt that they had received adequate training about OC previously and 39% had attended some educational event related to oncology in the past 2 years. However, majority of participants (97%) stated that they lack confidence in counselling patients with OC.

Conclusion: Pharmacists expressed great interest in the educational activities organized within EPIC project. Introducing the training programme could help pharmacists to get more knowledge about OC and ensure that they could provide appropriate pharmaceutical care for cancer patients receiving OC. Post educational survey should be conducted to evaluate participants' knowledge and attitudes after completing the training.

Disclosure of Interest: None Declared

OR01.2

THERAPEUTIC ADHERENCE OF PATIENTS TO DASATINIB OR NILOTINIB WITH CHRONIC MYELOID LEUKEMIA IN A BELGIAN UNIVERSITY HOSPITAL

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Background and Objective: The success of oral therapy demands a huge responsibility of the patient to take his medication as prescribed. Studies with imatinib have proven that suboptimal responses were significantly higher in chronic myeloid leukaemia (CML) patients with adherence rates below 90 %. The goal of this study was to evaluate the therapeutic adherence of CML patients to the second generation tyrosine kinase inhibitors dasatinib and nilotinib based on the prescription refills in the pharmacy of the Ghent University Hospital.

Setting and Method: The Medication Possession Ratio (MPR) was calculated for dasatinib and nilotinib delivered from 1/1/2013 until 29/2/2016 to CML patients treated in UZ Gent.

Main outcome measures: Therapeutic adherence determined by the Medication Possession Ratio.

Results: A total of 48 treatment periods have been evaluated, 18 with nilotinib and 30 with dasatinib. The duration of the treatment periods varied from 24 to 1164 days. MPRs between 90 and 110 % were calculated for 8 (44.4%) nilotinib treatments and 12 (40.0%) dasatinib treatments. MPRs below 90 % were observed in 5 (27,8 %) nilotinib treatments and 2 (6.7 %) dasatinib treatments. For 43.8 % of the treatments an excess of medication was delivered by the pharmacy to the patients, this means that the patients got more refills than needed. The cost of the excess pills for some patients ranged from 16021,00 € for a treatment with dasatinib to 27073,53 € for a treatment with nilotinib.

Conclusion: Although MPR is nor an indirect indication of therapy adherence, as it does not proof the intake of the pill by the patient, it is demonstrated in this study that in 14,6 % of the treatments the patient did not have enough medication ($< 90\%$) to adhere to the therapy as prescribed by the haematologist. On the other hand there was an excess of refill deliveries by the pharmacy to almost half of the patients, but this does not implicate good adherence. These results demonstrate the need for a tool to keep up the balance between the number of pills prescribed and the exact number needed for therapy. These data should allow the clinical pharmacist to contribute to the empowerment of the patient by positive feedback and information because immediate action can be taken by interviewing the patient and to reduce unnecessary costs by preventing excess delivery of expensive medication.

Disclosure of Interest: None Declared

OR01.3

ADVANCE OF ORAL CANCER THERAPIES: PHARMACOVIGILANCE REPORT IN A COMMUNITY BASED HOSPITAL.

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Background and Objective: The growing availability of oral cancer drugs offer a number of potential benefits for patients, such as unneeded hospitalization and better quality of life. On the other hand, oral administration leads to problems of adherence to medication treatment and

unexpected adverse drug reactions (ADRs). Is essential a close treatment monitoring, in order to guarantee adherence, detection and even prevention of any suspect ADR. In our hospital, hospital pharmacists and clinicians work together in monitoring these aspects, reporting all the suspected ADRs into the National Pharmacovigilance System. The purpose of this study is to analyse ADRs due to oral cancer therapy occurred in Fatebenefratelli Hospital in Milan, between 2015 and October 2017.

Setting and Method: We collected data regarding ADRs to oral cancer drugs, detected in our Hospital from 2015 to October 2017. Toxicities were categorised by gravity (according to the criteria defined by the National Pharmacovigilance System) and clustered by specific target organ toxicity. Incidence of ADRs by tumour, gender, and specific target therapy were analysed. De-challenge and re-challenge of the cancer drug were also evaluated.

Main outcome measures: Main outcome measures were:
- ADRs in relation to drug and neoplasia;
- Incidence of ADRs by gender;
- Number of hospitalization due to ADRs;
- Number of de-challenge, re-challenge of the cancer drug.

Results: 25 patients underwent at least one ADR during oral target therapy treatment. 16 (64%) patients were female. 52% of ADRs were severe, whose 8% resulted in hospitalization of patients (sepsis and candidiasis caused by idelalisib, pleural effusion by dasatinib). 44% of ADRs were related to haematological therapies (most of all were observed 3 cases with thalidomide, 2 with imatinib, lenalidomide and dasatinib); 24% related to breast cancer therapies (in particular 3 cases of G3 neutropenia caused by palbociclib and 2 cases of erythema with pruritus by everolimus); 16% associated lung cancer therapy (2 cases with gefitinib and 2 with crizotinib). The most common toxicities were skin reactions (32%) followed by haematological (20%), neuropathic (16%) and cardiovascular toxicity (12%). 13 (52%) ADRs led to interruption of treatment: re-challenge was considered in 8 cases (61%) but ADRs recurrence was observed in 6 of these (75%).

Conclusion: Oral cancer therapies are an easier way for patients to accept tumour burden as they can manage it directly at home. Nevertheless, observing our results, it is clear that the course of treatments must be closer monitored by healthcare providers because of unexpected side effects which could threaten patients' safety. Hospital pharmacists play a key role as pharmacovigilance monitor, who can support clinicians in assuring patients safety.

Disclosure of Interest: None Declared

OR02.1
PATIENTS' LIVED EXPERIENCES WITH ANTINEOPLASTIC MEDICINES PRESCRIBED FOR THE MANAGEMENT OF MALIGNANT SOLID TUMOURS: A SYSTEMATIC REVIEW

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Background and Objective: Cancer is a growing international health burden. It is a considered as a leading cause of morbidity and mortality with incidence expected to rise from 14 million in 2012 to 22.2 million by 2030 worldwide. In the last century, the introduction of antineoplastic medicines was revolutionary as these resulted in increased survival and improved quality of life. The aim of this systematic review was to critically appraise, synthesise and present the available evidence of patients' lived experiences with antineoplastic medicine for the management of malignant solid tumours.

Design: A systematic review protocol was registered with PROSPERO. The search was applied to six databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, Cochrane Database of systematic reviews, Embase, International pharmaceutical abstracts and PsycArticles. Screening was initially conducted on titles, followed by abstracts and then full papers to identify potentially relevant research. Quality assessment and data extraction of all selected papers were conducted independently by two reviewers. A data collection tool was developed. Quantitative and qualitative research findings were analysed using narrative and meta-synthesis approach respectively.

Results: The search retrieved 31,004 articles with only 10 studies meeting the inclusion criteria. Two studies were quantitative studies and 8 studies followed qualitative methodology. These studies were published between 2005 and 2016 in Europe (n=6), America (n=3) and Asia (n=1). Three interrelated themes contribute to patients' lived experience with medicines. These are medication related burden, medication related beliefs and medication taking practice. The review showed that patients were highly adherent to treatment. They commonly suffered from adverse effects that were delayed to be reported to healthcare professionals, possibly due to fear of modification or discontinuation of treatment. This adversely affected treatment outcomes.

Conclusion: The findings show that patients undergo a continuous process of reinterpretations of their experience with medicines throughout their treatment journey. The patients' lived experience with medicines require more in-depth studies to enable tailoring of services and policies in the healthcare system and support patients in their treatment journey.

Disclosure of Interest: None Declared

OR02.2
QUANTITY AND ECONOMIC VALUE OF UNUSED ORAL CANCER DRUGS AMONG PATIENTS WHO DISCONTINUE THEIR THERAPY

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Setting and Method: At least one-third of patients using oral cancer drugs (OCD) discontinue their therapy early due to a lack of efficacy, adverse events or high out-of-pocket costs. Therapy discontinuation may lead to medication waste if the patient has not used all dispensed medication. Insight into the waste of OCDs could provide guidance for the development of waste-minimizing strategies. The objective of this study was therefore to determine the proportion of patients who have unused OCDs after therapy discontinuation, the reasons thereof, and the quantity and economic value of these unused medications.

A retrospective follow-up study was conducted using a Dutch outpatient pharmacy database. Patients (≥18 years) who did not refill an OCD prescription, which was dispensed between November 2015 and February 2016, were contacted by phone and asked about their unused medication. The economic value was calculated using Dutch medication prices. Data were descriptively analysed in STATA13.

Main outcome measures: The proportion of patients with unused OCDs after therapy discontinuation, their reason for discontinuation, and the quantity of packages that remained unused, including the economic value.

Results: The database included 605 patients, of whom 90 patients likely had discontinued therapy and were contacted. Of these, 42 were excluded (18 had refilled their medication, 23 could not be contacted, 1 other). Of the 48 patients who had discontinued therapy (mean age 62.6 (SD ±13.0) years, 52.1% female), 22 (45.8%) patients had unused medications. Patients primarily discontinued therapy early due to adverse effects (43.5%), followed by therapy changed (17.4%) and insufficient effect (17.4%). A total of 31 packages remained unused, with a median value of €179 (IQR €24–2487), amounting to a total of €34.500. Most patients kept the unused medications at home (60.9%) or returned them to the pharmacy (26.1%).

Conclusion: Almost half of patients who discontinue OCD therapies have unused medications. The majority of patients do not dispose of their unused medications. Pharmacist interventions are needed to reduce the waste of expensive cancer therapies and to educate patients about safe disposal of unused medications.

Disclosure of Interest: None Declared.

OR02.3
THE ROLE OF THE CLINICAL PHARMACIST IN THE CARE FOR PATIENTS TREATED WITH ORAL ANTICANCER DRUGS

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Background and Objective: Clinical pharmacists (CPs) can play a vital role in the care for patients treated with oral anticancer drugs (OACD) because of their expertise in pharmacotherapy and insight in interactions with other drugs, herbs and food. However, CP are not always integrated in the care team. The objective of this study was to investigate the level of involvement of CPs in the care process of patients treated with OACD and to gain insight in perspectives from different stakeholders on their future role.

Setting and Method: This study was performed in four hospitals in Flanders. Healthcare professionals (HCPs) from different disciplines – physicians, nurses, nurse specialists, clinical pharmacists, psychologists – completed in group, per discipline, the Care Process SelfEvaluation Tool (CPSET), a 29-item scale divided in 5 themes in which the general characteristics of a care process are evaluated. Mean scores per theme (max. 10) and per discipline were calculated. Additionally, semi-structured interviews with different HCPs were performed.

Main outcome measures: Level of involvement of CP in care process of patients treated with OACD; perspectives of different stakeholders on their future role.

Results: CPs scored the care process for patients treated with OACD on the level of follow-up of care, coordination of care and communication with patients relatively low (4,8/10; 5,4/10 and, 5,3/10 respectively). Collaboration with primary care was perceived as moderate (6,6/10). In the interviews afterwards, CPs acknowledged that the low scores were a reflection of their level of involvement in current care. Furthermore, the interviews revealed that in all hospitals their current role is limited to dispensing the OACD. In 2/4 hospitals this is accompanied by some patient education. However, the different disciplines stressed the need for a formal integration of the CP in the care process in terms of pharmacotherapy support for physicians and nurses, management of interactions and patient education.

Conclusion: There is currently a limited involvement of the CP in the care process for patients treated with OACD. Their added value is, however, stressed by physicians, nurses and pharmacists themselves. These insights should be taken into account when redesigning the care process.

Disclosure of Interest: None Declared.

Posters

PP02
DRUG-PLANT INTERACTIONS IN ONCOLOGY: THE CHALLENGE FOR OUTPATIENTS

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Background and Objective: The increasing scepticism about conventional cancer medicine and treatments is leading to an increase in the use of natural medicine like plants or complementary and alternative medicine. This may cause a decrease in drug effectiveness, an increase of side effects or treatment failure. This study investigates the risks of interaction between the daily use of plants and the taking of oral chemotherapy drugs for ambulatory patients. The aim is to provide an assessment of current patient practices.

Setting and Method: A 7-month prospective study from May to November 2017 in a cancer centre. Our study focuses on 10 oral chemotherapy drugs currently used for ambulatory cancer treatment. Literature review of plant interaction. Each patient is asked about their use of herbal medicine, complementary therapy and co-medication with an exhaustive questionnaire and a mandatory patient talk led by a pharmacist or a pharmacy resident.

Main outcome measures: To understand the demographic, to assess types of plant and food supplements currently used and patient procedures to follow.

Results: The study involved 656 patients, aged 29 to 87 (62% female, 38% male). The mean age of participants was 61,5. 10,1% of the patients (n=66) took herbal medicine daily. Curcuma (17,6%), desmodium (13,5%) and spirulin (6,8%) were the most commonly used, along with olaparib (31,3%), idelalisib (24,5%) and pomalidomid (18,2%). Curcuma is an inhibitor of CYP450 1A2, 2B6, 2D6, 3A4 and spirulin inhibits 1A2 and 2E1. Olaparib, idelalisib and pomalidomid are substrates of 3A4 and olaparib is a great inductor of 1A2 and 2B6. In contrast, desmodium has no enzymatic properties but could have a potential liver toxicity. 99 pharmaceutical interventions were realised: 54,5% of participants had medication discontinued, 18,2% had a reduction to their medication, and for 27,3% we found a compromise as patients did not want to discontinue medication: we advised patients not to take plant-based medicine alongside drugs and to reduce quantity. For each patient, we propose to optimise medication with a personal therapeutic plan.

Conclusion: The results are underestimated due to sizable patient bias (patient oversight, indirect information given by family members). Pharmaceutical care and patient advice on drug-plant interaction is critical to avoid treatment failure in oncology; the precautionary principle is the watchword. For patients refusing to discontinue herbal medication, we plan to dose oral cancer therapeutics accordingly in order to provide physicians with reliable data for dosage adjustment.

Disclosure of Interest: None Declared

PP03
PREVALENCE OF POTENTIAL DRUG–DRUG INTERACTIONS (PDDIS) IN PATIENTS TREATED WITH ORAL CANCER DRUGS IN FATEBENEFRATELLI HOSPITAL IN MILAN.

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Background and Objective: Cancer therapy has acquired a focus on personalized medicine: the variability among patients in the response to standard therapy has led to an increased awareness of all factors that alter drug metabolism. Cancer patients often have unrelated medical conditions that require medications: concomitant medications can directly interact with chemotherapy drugs, change the pharmacokinetic of drugs, and can alter the effectiveness of the therapy. Drug interactions in oncology are of particular importance because of the narrow therapeutic index and the toxicity of anticancer agents.

Setting and Method: A study of the prevalence of PDDIs was conducted in outpatients treated with oral anticancer drugs in the Department of Oncology in Fatebenefratelli Hospital in Milan. We perform a retrospective analysis on clinical charts of patients who started a oral cancer drug from June 2017 to October 2017: the lists of concomitant medications were checked for PDDIs, appropriate time and dosage of administration. For drug interactions, approved product labelling, primary literature, and databases (Rxlist, Medscape Drug Interaction Checker and Drugs.com) were searched.

Main outcome measures: Main outcome measures were: number of PDDIs among total prescriptions identified; number of PDDIs involving oral cancer drugs identified.

Results: Patients eligible for analysis were 23. Oral target therapy for cancer started were: enzalutamide (5), lenalidomide (4), gefitinib (3), thalidomide (2), bosutinib (1), crizotinib (1), dabrafenib (1), dasatinib (1), imatinib (1), lapatinib (1), regorafenib (1), sunitinib (1), vismodegib (1). Total concomitant drugs were 133, with a medium of 5,7 concomitant drugs/patient. PDDIs identified were 70; of these, 22 involved oral cancer drugs: 14 moderate and 8 major. Cancer drug with the highest number of PDDIs were gefitinib (5), lapatinib (4), lenalidomide (4) and crizotinib (2). Among all the potential interactions detected, only 7 were indicated in the summary of product carachteristics (SPC) of cancer drugs. Among the 48 PDDIs identified among concomitant drugs, 5 were minor, 35 moderate and 8 major.

Conclusion: Oral chemotherapy is associated with a significant number of medication interactions. It is essential to evaluate concurrent medications to provide accurate patient education, therapeutic monitoring, and, if necessary, alternative recommendations. Data collected in this study, although in a short period of time, suggest that efforts should be made to encourage and perform a medication reconciliation process at the beginning of oral cancer treatment.

Disclosure of Interest: None Declared

PP04

SEQUENCING CURRENT THERAPIES IN THE TREATMENT OF METASTATIC PROSTATE CANCER: CASE ANALYSIS IN A COMMUNITY BASED HOSPITAL

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Background and Objective: Several treatment options for men with metastatic castration-resistant prostate cancer (mCRPC) have reached the market over the past few years including abiraterone (2011), enzalutamide (2013) and cabazitaxel (2011). Little data is available to guide the optimal treatment sequencing in the context of efficacy and known cross-resistance. The aim of the study is to analyse the treatment options used at the centre.

Setting and Method: All patients with mCRPC treated with enzalutamide, abiraterone or cabazitaxel between 2013 and 2017 in Fatebenefratelli Hospital in Milan were included. Data were obtained from the monitoring register of the Italian Medicine Agency (AIFA) and clinical records.

Main outcome measures: Main outcome measures were: previous treatment with docetaxel-based chemotherapy; Gleason score at diagnosis; number of cycles; treatment sequencing; causes of discontinuation; adverse drug reactions (ADRs).

Results: 37 patients were included in the analysis: mean Gleason score at diagnosis was 7.0 and all patients had at least one metastasis (lymph nodes, liver, bone). Most patients had previously been treated with docetaxel-based chemotherapy (73%): 41% received abiraterone after docetaxel (DA), with 50% being treated with cabazitaxel after abiraterone (DAC); 26% received cabazitaxel after docetaxel, followed by abiraterone (DCA) and 37% received enzalutamide after docetaxel (DE), with 10% being treated with cabazitaxel after enzalutamide (DEC). 27% patient were treated in a pre-chemo setting: 90% received abiraterone and 10% enzalutamide followed by docetaxel and cabazitaxel (EDC). The average number of cycles received were: 6 for abiraterone, 6.5 for enzalutamide and 5 for cabazitaxel. All patients discontinued treatment for disease progression, except one patient who stopped cabazitaxel for toxicity. Treatments were well tolerated: only 7 ADRs were detected (4 with cabazitaxel, 2 with abiraterone and 1 with enzalutamide). All ADRs were non-serious except one, which caused treatment discontinuation.

Conclusion: Abiraterone is the most prescribed drug in both settings (pre- and post-docetaxel) and is well tolerated. Cabazitaxel is the drug that leads to the highest number of ADRs (33% of patients), but may depend on the setting (only post-chemo). Enzalutamide is starting to be prescribed also in the pre-chemo setting. The optimal treatment sequencing remains uncertain and the results of ongoing studies are needed to inform us about rational therapy selection. Reference: Curr. Treat. Options in Oncol.(2016)17:64.

Disclosure of Interest: None Declared

PP07
EVALUATION AND OPTIMIZATION OF MANAGEMENT AND HOME CARE FOR PATIENTS TREATED WITH ORAL ANTICANCER THERAPIES
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Background and Objective: Development of oral anticancer treatments presents many advantages, especially in terms of quality of life for the patient. However, there are also many factors of non-adherence to the treatment. Considering the emergence of these new drugs, optimal management seems essential. The main objective of this study was to evaluate the satisfaction of patients treated with oral anticancer therapies, regarding their overall management, including home follow-up by a team of hospital oncology nurses. The secondary objectives were to assess patients' knowledge of their antitumor treatment, to analyze the reported adverse effects in patients treated with oral anticancer therapies and to measure the satisfaction of the medical and nursing staff.

Setting and Method: The study ran from November 2016 to April 2017 in the East Belgium Regional Hospital Centre (CHR Verviers). Two interviews separated by 3 months were conducted by a hospital pharmacist to assess patient satisfaction. Patients' knowledge of their anti-tumour treatment was evaluated during these interviews. The pharmacist collected data for

anticancer treatments and adverse effects in the computerized medical records of patients followed (N=30) and patients not followed (N=50) at home by oncology nurses. A satisfaction survey was sent to physician and nurses specialized in oncology.

Main outcome measures: Patients were satisfied with the management they were offered. Only 4 of the 15 topics assessed did not reach at least 85% of satisfied patients. Furthermore, all subjects satisfied at least 75% of the patients interviewed.

Results: The introduction of home follow-up has been well received by both patients and physicians. Follow-up at home led to a greater number of reported side effects (p<0.001) and early management (p<0.001). Regarding the patient's knowledge of their anticancer treatment, the average score during the first interview was 2.6/4.

Conclusion: Patient satisfaction with the proposed management is confirmed. Follow-up at home helps support the patient at the beginning of their oral anticancer treatment, highlighting and managing more quickly treatment-related side effects. Having a pharmacist on the team seems essential.

Disclosure of Interest: None Declared

PP08
USE OF ORAL CANCER DRUGS AT HOME : AN OPPORTUNITY FOR THE COMMUNITY PHARMACIST?

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Background and Objective: In Belgium, an average of 179 persons a day get the diagnosis of cancer. Pharmaceutical care has to be provided by the community pharmacist when oral cancer drugs are used and the patient is staying at home. This is a challenge since the pharmacist is not trained in this area and often does not receive any information on the oral cancer drugs prescribed to the patient and delivered by the hospital.

Design: · Detection of problems and needs with community pharmacists giving pharmaceutical care to patients using oral cancer drugs.

· Development and try out of an education program.

· Evaluation of education program and next steps

Detection of problems and needs was done by a group discussion with 16 pharmacists. Participants were responsible pharmacists united in the board of directors of KOVAG. Based on the results we developed an 10 hours education program, which has been tested and evaluated.

Results: 1. Main barriers for providing good pharmaceutical care were: (1) practical guidelines for the community pharmacy are missing, (2) pharmacists are not informed at all about the oral cancer drugs given in the hospital, (3) pharmacists depend on the oral information given by their patients, (4) there is no single point of contact for quick and correct information, (5) oncologists are often not available for questions and the GP is poorly informed, (6) there is not a clear guideline or website for interactions with food supplements.

2. We developed an education program with following main topics : most common oral cancer treatments, side effects, interactions, adherence, pharmaceutical care and additional nutrition for cancer patients. For the most common oral cancer drugs we developed an information sheet for use in the pharmacy.

3. The program was well appreciated with an average evaluation score of 15/20. The participants admitted their poor knowledge and insist to receive medication information from the hospital.

Conclusion: It is clear that pharmacist needs extra education, practical pharmaceutical guidelines and medication information from the hospital to give good pharmaceutical care to patients with oral cancer drugs.

KOVAG started a workgroup with community and hospital pharmacists to improve the transfer of medication information in East-Flanders. Currently, we are planning a new project for patients on oral cancer treatment. Some hospitals already have initiatives to improve this communication but everyone is working in a different way . This all makes it very confusing for the community pharmacist. Our goal is to find one clear method for sharing medication information for all hospitals in East-Flanders. It's important that patients using oral cancer drugs receive the necessary pharmaceutical care in their precarious situation.

Disclosure of Interest: None Declared

PP10
EVALUATION OF RISK EVALUATION AND MITIGATION STRATEGY COMPLIANCE IN THE NATIONAL CENTER FOR CANCER CARE AND RESEARCH CLINICS.

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Background and Objective:
Background: Risk Evaluation and Mitigation Strategies (REMS) are required risk management plans that use risk minimization strategies beyond the professional labelling to ensure that the benefits of certain prescription drugs outweigh their risks.

Lenalidomide oral capsule is angiogenesis Inhibitor; Antineoplastic Agent; it's a thalidomide analogue indicated for the treatment of patients with: Multiple myeloma (MM).
To avoid embryo-foetal exposure to lenalidomide is only available through a restricted distribution program, the Lenalidomide REMS® program.
Since the medication is introduced to the National Centre for Cancer Care and Research (NCCCR) formulary, the REMS program was implemented. A discrepancy is noticed between the prescribed amount and the approved amounts on the authorization form.

Objective: In order to provide continuity of care to each patient at NCCCR, the purpose of this project is to evaluate and identify the compliance of NCCCR Clinics to the FDA's REMS requirements for Lenalidomide dispensed. Necessary measures will be implemented to increase compliance in the clinics.
Design: A multidisciplinary team was formed including major stakeholders. The pharmacy team reviewed the REMS components and registered patients receiving Lenalidomide. They

found: 41 registered patients from the period of 1/3/2015 to 30/3/2017, with 270 dispensing activity, 7(58%) registered physician in the program, 5(25%) registered pharmacists.

The pharmacies reported an initial average compliance of 70 percent. These discrepancies are mainly consisted of 53 percent documentation discrepancies in the patient initiation and patient authorization forms, 36 percent unfulfilled pharmacist education requirements and 11 percent program designee not identified.

The process of patient registration and patient education is reviewed. The medication guide is distributed. The discrepancies are discussed in a multidisciplinary meeting.

Results: After implantation of the new process of patient registration and fulfil all the requirement of physician and pharmacist registration.

The average compliance reaches 99 percent in the time period from 13/4/2017 till 30/11/2017, for 38 registered patients with 208 dispense.

Conclusion: This project evaluates the necessary compliance for the FDA's REMS requirements and identified areas for improvement.

Working in multidisciplinary facilitate the improvement of the process to achieve better patient care.

Disclosure of Interest: None Declared

PP11
ASSESSMENT OF PATIENTS' KNOWLEDGE AND SELF-CARE BEHAVIORS IN MANAGING SIDE EFFECTS OF CHEMOTHERAPY

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Setting and Method: A prospective cross sectional study was conducted at King Abdulaziz University Hospital in Jeddah, Saudi Arabia.

Main outcome measures: The study was conducted by using a self-administered questionnaire consists of two parts. First part is to assess the knowledge of patient about chemotherapy side effects. In the second part, patients will report their behaviours toward the management of these side effects.

Results: 90 patients were invited to participate in the study, 72 (80%) of them returned back completed questionnaire and 18 patients apologized to participate in the study. The total mean score showed that 45.8 % (n=33) scored higher knowledge in this domain while 11.1 % (n=8) have low knowledge. 36.1% (n=26) of patients reported that they were completely comply with the self-care behaviours to manage chemotherapy side effects, while 43.1% (n=31) reported that they were partially comply and 20.8% (n=15) reported that they were less in compliance. When patients asked about their source of information, Physician was reported 80.6% (n=58) as their main source of information while no body 0% (n=0) ticked that pharmacist as their source of information.

Conclusion: The study showed that about half cancer patients have good knowledge and about one third of the patients surveyed have proper self-care behaviours regarding the side effects of chemotherapy. Involving pharmacist and increase his role in the education of patients on chemotherapy will improve patients' outcomes and thereby improve their quality of life.

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DEVELOPMENT OF A DRUG-DRUG INTERACTION WEBSITE TO SUPPORT PRESCRIBING OF ONCOLYTICS

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Setting and Method: A review of literature and registration documents was performed to evaluate the available evidence for potential DDIs of several oncolytics. Decision trees based on the FDA guideline on DDI studies were used to assess clinical relevance of DDIs. Co-medications that are frequently used by cancer patients were selected. Interaction potential of drug combinations was classified using a straightforward 'traffic light' classification and quality of evidence was classified using the GRADE system. Advice on management of the interaction was included where appropriate. All records were reviewed by an expert panel of clinical pharmacists/pharmacologists.

Main outcome measures: Patients treated for cancer are at high risk of drug-drug interactions (DDI), which affects nearly 60% of patients on therapy. We developed a freely available DDI resource (www.cancer-druginteractions.org) to support anti-cancer drug prescribing, based on successful implementation for HIV (www.hiv-druginteractions.org) and hepatitis (www.hep-druginteractions.org) treatments.

Results: Thus far, twelve targeted oncolytics for the indications renal cell, hepatocellular and ovarian carcinoma, gastrointestinal stromal tumours, neuroendocrine tumours and sarcoma have been reviewed. Potential DDIs between oncolytics and > 450 co-medications have been classified (Table 1). Tyrosine kinase inhibitors (TKI) show potential interactions which require action of prescribers in more than 20% of reviewed drug combinations. Monoclonal antibodies (MoAB) show clinically relevant DDIs in only 0.7% of reviewed drug combinations.

Conclusion: The DDI checker currently includes comprehensive and ready-to-use advices for DDIs with oncolytics for six indications (these are due to be expanded in the coming months). The freely available, independently developed website with 'traffic light' classification will facilitate health care professionals' and patients' awareness of potential DDIs between oncolytics and frequently used co-medications.