

**Conclusion** Because of high osmolality, BIOINVERT, like SUCRAID, has to be diluted 10 times before use. The enzyme activity is lower than Kerry's specifications (11 020–13 340 IU/mL at 55°C). It is also lower than SUCRAID (8500 IU/mL). For pharmaceutical qualification, heavy metals research is required. Then, the clinical effectiveness of BIOINVERT 200 could be tested.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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No conflict of interest

#### PP-058 EVOLUTION OF THE PAEDIATRIC PARENTERAL NUTRITION BAG PRESCRIPTIONS FURTHER TO NUMETAH (THREE CHAMBER BAG) MARKETING

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**Background** The use of parenteral nutrition (PN) is necessary for a child waiting for optimum enteral nutrition or when this is not possible or contraindicated. Three different types of PN bags exist: bag with marketing authorisation (AMM), standardised bag and bag on demand. According to the IGAS Report (General Inspection of Social Affairs) on paediatric PN practices, it is necessary to promote, as far as possible, specialities with AMM, in order to guarantee optimum safety clinically, microbiologically and physicochemically. The first multichamber PN bag with a ternary combination, intended for paediatrics, was commercialised under the name Numetah and has been listed in AP-HM since August 2015.

**Purpose** This study's purpose was to determine the product marketing influence on PN bag prescription in paediatrics.

**Material and methods** The study was based on a comparison before/after Numetah commercialisation. Consumption of different bag types was analysed in 4 paediatric departments (paediatric intensive care (RP), paediatric surgery (CP), paediatric oncology (OP) and multidisciplinary paediatrics (PP)). Two periods were defined: period 1, from August 2014 to March 2015 (before Numetah) and period 2, from August 2015 to March 2016. Data were collected using Pharma software.

**Results** In RP, the number of bags on demand decreased, whereas it increased for standardised bags and 664 Numetah were delivered. In CP, the number of bags on demand decreased, there were no difference for standardised bags and 79 Numetah were delivered. In OP, the number of bags on demand decreased, as did standardised bags, and 209 Numetah were delivered. In PP, the number of bags on demand and standardised bags increased, and 139 Numetah were delivered. We observed a decrease in prescription of manufactured bags in favour of Numetah, especially in RP. Numetah represents about 50% of prescriptions, except in PP, which could be explained by the presence of a PN specialist.

**Conclusion** Commercialisation of Numetah allowed the nutritional needs of more newborn babies and hospitalised children to be met, particularly in RP. As a result, the Numetah bag is the best match with the IGAS recommendations in paediatric parenteral nutrition. Nevertheless, some patients with

particular needs still require standardised bags on demand prescriptions.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

Timone's Pharmacy.

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## Patient safety and risk management

#### PS-001 MEDICATION RELATED EMERGENCY VISITS LEADING TO HOSPITAL ADMISSIONS IN A TERTIARY CARE HOSPITAL IN SAUDI ARABIA

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**Background** Medication related problems (MRPs) are an unintended event caused by a drug and result in undesirable health outcome. MRPs could require a patient to visit the emergency department (ED). Unfortunately, many of these visits lead to hospital admissions depending on the severity of the presented cases. Internationally, many studies have addressed the incidence, preventability and causes of MRPs leading to hospitalisation. However, few studies have looked into the relation of the occurrence of MRPs with patient factors, hospital setting and the healthcare system that regulates each country.

**Purpose** To investigate the frequency of MRPs that lead patients in Saudi Arabia (SA) to visit the ED. The study examined the severity and factors contributing to medication related emergency visits leading to hospital admission (MREA) at a tertiary care hospital in SA.

**Material and methods** A retrospective observational study was conducted over a 6 month period. All medical record numbers listed in the quality records for patients admitted through the ED and reviewed by a pharmacist for medication reconciliation were examined retrospectively for possible MRPs causing admission.

**Results** Of 2199 emergency admissions over the period October 2015–March 2016, a sample of 698 patients was reviewed. 92 (13%) were MREA. Adverse drug reactions were the primary cause of admission (47%), as well as compliance (14%), drug prescribing (30%) and drug dosing (9%). The majority of cases were of moderate severity (83%). Most medications involved in emergency admission were antihypertensive, chemotherapy, anticoagulant and antidiabetic agents.

**Conclusion** There was insignificant difference in the incidence of MREA in a tertiary care hospital in SA compared with other tertiary care hospitals nationally and internationally. For the purpose of reducing the incidence of MRPs, it is recommended to involve pharmacists in emergency and ambulatory care settings to counsel and educate patients, and to support healthcare providers in making best medication related decision. It is also recommended to motivate physicians to apply patient centred strategies during prescribing.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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1. <http://www.cdc.gov/index.htm>.
2. <http://www.ncbi.nlm.nih.gov/pubmed/21938851>.

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