Background Advanced treatments represent a source of hope for rare diseases. However, they are complex as they require the participation of several professionals and experience is necessary for optimal use.

Purpose To describe the outcome and collaborative multidisciplinary process undertaken for the appropriate use of allogeneic mesenchymal cells (AMC) in the treatment of graft versus host disease (GVHD) developed by a paediatric patient after hematopoietic stem cell transplantation.

Materials and Methods Retrospective study of clinical outcomes, steps taken and requirements for the preparation of AMC (Prochymal). The case involved a 2-year-old paediatric patient with steroid-refractory severe GVHD with severe gastrointestinal manifestations. The treatment involved the administration of two doses per week for a total period of 4 weeks. If the patient responds completely or not at all, the treatment is completed, if there is a partial response the treatment can be completed plus an additional weekly dose for 4 extra weeks.

Results There was cooperation between the Paediatrics, Haematology and Pharmacy Services. A protocol was developed for use based on the instructions provided by the supplier. Pharmacy processed the application as a compassionate use (expanded access clinical trial) with the agreement of the supplier and hospital management. Haematology built on its expertise in handling blood cells to ensure storage (−135°C) and initially collaborated with Pharmacy in the preparation of the doses: controlled defrosting, bottling and packaging in aseptic conditions. The treatment resulted in a partial response at completion so an additional cycle was administered. No adverse reactions to AMC were observed.

Conclusions Interdisciplinary collaboration through the optimization of hospital resources and the rapid training of participating staff allowed the administration of a new and urgent treatment of advanced treatment, allogeneic mesenchymal cells. Tolerance was good and the response to treatment was initially favourable.

No conflict of interest.
Clinical pharmacy and clinical trials

87.5% of the patients completing the study had repeat MRI scans. Of those, 85.7% were found to have new or gadolinium-enhancing lesions.

JC Virus antibody testing was performed after two years of NAT. Of the thirteen samples, eight (61.5%) tested positive. Two of those (25%) discontinued NAT due to previous IV mitoxantrone treatment. The remaining patients continued treatment under close supervision by the attending neurologist.

No cases of Progressive Multifocal Leukoencephalopathy were reported.

Conclusions Long-term therapy with natalizumab proved to be safe and effective in our population. Strict follow-up criteria were implemented for JCV antibody-positive patients remaining on treatment with natalizumab for more than two years.

No conflict of interest.

**CPC-092 NEUROPSYCHOLOGY OF SAUDI COLON CANCER PATIENTS**

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**Background** Colorectal cancer is a common disease and its prevalence is second to that of breast cancer worldwide. In Saudi Arabia the disease is ranked second after breast cancer and accounts for 5.7% of all tumours. Evaluation of Quality of life (QOL), anxiety and depression of such patients, as well as neurocognitive properties, is important to assess the impact of both malignancy and/or exposure to treatments including chemotherapy and surgery.

**Purpose** To assess the neuropsychology of a group of Saudi colon cancer patients 6 months after treatment was completed.

**Materials and Methods** Patients (18-60 years) were recruited from the oncology clinic at King Khaled University Hospital (KKUH) at Riyadh, the capital city of Saudi Arabia. Exclusion criteria included smoking, psychiatric or cerebrovascular disease, sensory impairment, abnormal electrolytes, anaemia or uncontrolled blood pressure. Healthy volunteers were randomly recruited from the same hospital, however the availability of matched age controls was difficult. Cognition was assessed using the Rey Auditory-Verbal Test RAVLT (learning & memory); the Rey-Osterrieth complex figure (RCF, visuo-spatial organisation and visuo-spatial memory); semantic verbal fluency (executive function); letter cancellation (attention); digit-symbol (sustained attention, visual searching, visual sequencing). The Arabic version of 36-item Short-Form Health Survey SF-36 and the Hospital Anxiety and Depression Scale (HADS) were also used to assess QOL, anxiety, and depression, respectively.

**Results** A total of 32 colon cancer patients in remission were recruited, their mean age was 44.8 years. 23 of them were males (71.9%), while their mean years of education was 13.1 ± 4.06 years. Healthy controls (n = 36), were significantly younger than the patients (34 Years) (t(66) = −4.2, P < 0.05). There were no differences between the groups in terms of QOL, anxiety, depression, attention, executive function, oral and visuospatial memory. Healthy controls had significantly better RCF recall task (t (67) = 2.61, p < 0.01) and delayed recall task (t(67) = 3.16, p = 0.002) than colon cancer patients.

**Conclusions** This study indicates that neither colon cancer nor its treatment, has any significant impact on the psychological well-being of the patients in comparison to healthy controls. The significant differences in recall may reflect the differences in age between the groups.

No conflict of interest.

**CPC-093 NOSOCOMIAL INFECTIONS IN A COHORT OF EXTRA-CORPOREAL LIFE SUPPORT PATIENTS**

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**Background** Extra-Corporeal Life Support (ECLS) is a method of life support used to treat patients with severe respiratory and/or cardiac failure refractory to conventional modes of treatment. Nosocomial infections in these patients are associated with increased morbidity and mortality along with increased lengths of intensive care unit (ICU) and hospital stay. No international best-practice consensus guidelines exist for treatment and/or prophylaxis of infections in this patient group.

**Purpose** To examine the rate of nosocomial infection in MMUH ECLS patients as well as the consumption of antimicrobials in the treatment and prevention of these infections.

**Materials and Methods** In a retrospective cohort study, the pharmacy records from a daily multi-disciplinary microbiology round reviewed all patients who are on ECLS. The use of prophylactic and therapeutic antimicrobials in these patients was assessed as well as the background ICU bloodstream infection rate.

**Results** Data analysis yielded a total of 17 patients over a two-year period, with a total of 444 ECLS days. In total, there were 17 infections in this cohort including 4 (24%) blood-stream infections (yielding a rate of 9.0 per 1000 ECLS days). The first four ECLS patients received antibacterial (vancomycin) and antifungal (caspo-fungin) prophylaxis for the duration of ECLS, whereas the later cohort of 13 did not. In the cohort of patients who received prophylactic antimicrobials, defined daily doses (DDDs) per 100 ECLS days for vancomycin and meropenem were 49.54 and 49.63 respectively. For the non-prophylaxis cohort this was 25.31 and 37.73 respectively.

**Conclusions** The infection rate in this cohort was low. In particular, the bloodstream infection rate compared favourably with previously published rates, and was comparable with the ‘background’ bloodstream infection rate of the ICU population as a whole. Antimicrobial use in ECLS patients was high relative to overall ICU antimicrobial use.

No conflict of interest.

**CPC-094 NUTRITIONAL STATUS OF HOSPITALISED PATIENTS WITH HEAD AND NECK CANCER**

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**Background** Malnutrition is common in hospitalised patients with head and neck carcinoma.

**Purpose** The aim of this study was to analyse the causes of hospitalisation of patients with head and neck cancer and to evaluate the nutritional status; type and route of nutrition therapy during hospitalisation and at discharge.

**Materials and Methods** Retrospective study of patients with head and neck cancer, between October 2011 and March 2012 at 420-beds hospital.

We examined demographic data, cause of admission to hospital, type and location of tumour, nutritional status before admission and at discharge by CONUT® (system for early detection and monitoring of clinical undernutrition based on biochemical parameters and immune indicator) and type of nutritional therapy. We used the data source as medical record (IANUS®).