tissue from surgical resection was tested for MAGE-A3 expression, by quantitative reverse-transcription polymerase chain reaction (RT-PCR).

Findings: The overall rate of MAGE-A3 expression was 41% (37% in Taiwan and 48% in Thailand, from 132 valid samples). MAGE-A3 expression was lower in patients with HBV infection (33.3%) than in HCV-infected patients (63.0%). No difference in MAGE-A3 expression was noted for the following factors: age, gender, liver cirrhosis, Child-Pugh class, chronic alcohol abuse, number and size of (largest) tumours. No clinical effects on survival were associated with MAGE-A3 expression in this HCC Asian population. The hazard ratio (HR) for the disease-free interval for MAGE-A3-positive versus MAGE-A3-negative patients was 1.06 ($p = 0.82$; HR adjusted for T stage, tumour number and size, cirrhosis, Child-Pugh score, and ECOG performance status was 1.40 [$p = 0.29$]). HRs for disease-free and overall survival were 1.03 ($p = 0.91$) and 0.97 ($p = 0.94$), respectively; adjusted HRs were 1.32 ($p = 0.37$) and 1.33 ($p = 0.63$). However, because of the small number of patients, no subset analysis by stage or other variables that affect disease-free and overall survival could be done.

Interpretation: MAGE-A3 can be assessed by RT-PCR on surgically resected HCC. The overall expression rate is sufficient to consider MAGE-A3 a target for active immunotherapy. The relatively higher expression in HCV-infected patients has no explanation, so far. Clinical evaluation of MAGE-A3 antigen-specific cancer immunotherapeutics in early HCC after resection is being discussed.

Funding: GlaxoSmithKline Biologicals.

D.D., J.L., A.M., and P.T. are employed by GlaxoSmithKline.

doi:10.1016/j.ejcsup.2011.02.027

P27 HIGH DOSE RATE BRACHYTHERAPY BOOST FOR RESIDUAL MALIGNANT GLIOMA – CLINICAL RESULTS FROM A SINGLE INSTITUTION

M. El-Naggar [a], A. Fakhr [b], H. Abdel-Baki [a], A. Hassouna [a,*], M. El Sayed [a]. [a] *Radiation Oncology Department, National Cancer Institute, Cairo University, Cairo, Egypt.* [b] *Neurosurgery Department Faculty of Medicine, Ain Shams University, Cairo, Egypt*

Background: This study investigated the role of additional high dose rate (HDR) brachytherapy boost, in patients with malignant glioma who have residual lesions after conventional external-beam radiotherapy (EBRT).

Methods: Thirty patients were included in this prospective, non-randomised trial. After initial surgical intervention and EBRT given as 60 Gy/30 fractions/6 weeks, patients with a post-radiation residual lesion not more than 6 cm in maximum dimension were selected: 16 patients in the experimental group and 14 in the control group. Patients in the experimental group received a brachytherapy boost dose of 24–25 Gy/5–6 fractions daily, using a high dose rate Ir192 source.

Findings: Median follow-up was 1 year (range 0.4–7.5 years). Median overall survival (OS) was 14 months for the boost group and 11 months for the control group ($p = 0.49$). Median progression-free survival (PFS) was 10 months for the boost group and 8 months for control ($p = 0.44$). Acute and late toxicities were low. Two patients developed limited CSF leakage, and one patient reported severe pain.

Interpretation: Increasing the dose of radiation by additional HDR brachytherapy boost prolonged the median OS by 3 months and PFS by 2 months, but the number of patients was too small to reach statistical significance. The implant was tolerable and the toxic effects of an additional HDR brachytherapy boost were low, so this may be considered a safe treatment option.

Funding: None.

The authors declared no conflicts of interest.

doi:10.1016/j.ejcsup.2011.02.028

P28 CHILDHOOD CANCER AND ITS IMPACT ON THE FAMILY—AN ASIAN EXPERIENCE

L. Aung [a,*], M.Y. Chan [a], S.M. Sabai [b], T.D. Khaing [b], H.M. Verkooijen [c]. [a] *Paediatric Medicine and Subspecialties, KK Women's and Children's Hospital, Singapore.* [b] *Division of Pediatric Hematology-Oncology, National University Hospital, Singapore.* [c] *National University of Singapore, Singapore*

Background: In Singapore, there is a lack of information on the impact of childhood cancer on the family as a whole. We set out to assess medical and non-medical costs of childhood cancer and its psychosocial impact.

Methods: All patients diagnosed and treated at the Department of Pediatrics, KK Women's and Children's Hospital and National University Hospital, Singapore, were eligible. Families were given two self-administered questionnaires: one about the child and family, and an impact-on-family scale. The total score was obtained by summation of all scores, with a high score correlating to high impact.

Findings: 79 parents were enrolled during the study period (October, 2008–February, 2009). 48 of the children (61%) were male. 57 (72%) of respondents were mothers and 51% had children younger than 5 years. Most respondents were Chinese (54%), followed by foreign (not from Singapore) patients at 33%. 44 (56%) had children with haematological malignancies, and 38% had children with solid tumours. Reported financial burden was higher than in US and Italian studies. No Malaysian or Indian care-givers reported a high familial or social burden ($p = 0.05$). All Malaysian and Indian care-givers reported low-to-moderate psychological burden, whereas a large proportion of Chinese reported a high burden ($p = 0.03$). Chinese reported the highest levels of mastering (ie, coping strategies) within ethnic subgroups ($p = 0.001$). Cronbach's alpha internal reliability was 0.64.

Interpretation: Overall, the burden of childhood cancer in Singapore is comparable to other countries. Factors associated with high impact are ethnicity, employment status, and leave status. Use of the impact-on-family scale needs further research to see whether all domains are applicable to our local culture.

Funding: None.

The authors declared no conflicts of interest.

doi:10.1016/j.ejcsup.2011.02.029