Methods: We performed a pooled *post hoc* analysis on paediatric CS I GCT patients enrolled in 3 prospective trials: INT-0097 (phase II), INT-0106 (phase III), and AGCT0132 (phase III). Pathology was centrally reviewed. Patient demographics, pT stage, serum tumour markers, margin status, histology, relapse, and survival were compiled. Cox regression analyses were used to identify predictors of outcomes.
Results: 88 patients were identified with histological data available. Most patients were pT1-2 stage. Yolk-sac tumour was present in 75%, while 16% had embryonal carcinoma and 9% had choriocarcinoma. When evaluable, lymphovascular invasion (LVI) was present in 36/66 (55%) of patients. Over a median follow-up of 5.0 years, no patients died and 24 patients (27%) relapsed (median relapse-free survival not reached). Predictors of relapse included presence of choriocarcinoma (HR 4.3, p = 0.004), embryonal carcinoma (HR 3.8, p = 0.002), pT3 stage (HR 6.9, p = 0.027), and age ≥12 years (HR 3.1, p = 0.011). LVI (HR 2.4, p = 0.072), serum tumour markers, and dominant tumour size did not reach significance. Paediatric CS I GCT patients exhibit remarkable 5-year survival. Using combined data from multiple prospective trials, our study identifies clinicopathological features that predict relapse and potentially inform personalized treatment for these patients.

GCT-36 Carboplatin AUC10 monotherapy for metastatic seminoma – an updated multicentre review of outcomes in 216 patients

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Background: The standard-of-care for good prognosis metastatic seminoma includes radiotherapy in stage 2 disease, and in more advanced disease combination cisplatin-based chemotherapy. Long-term and short-term morbidity of cisplatin-based chemotherapy for young men with germ-cell-tumours is increasingly recognised and alternate strategies have been sought to retain cure rate and improve on toxicity and burden of treatment. Previous reports of Carboplatin AUC10 have explored safety and deliverability in early-phase studies. This current study reports on the outcomes of 216 patients treated at two UK referral centres utilising single-agent carboplatin AUC10.
Methods: We performed a retrospective analysis of patients treated for IGCCCG good prognosis metastatic seminoma with carboplatin AUC10 monotherapy in St Bartholomew's Hospital and Mount Vernon Hospital, London. We identified 216 cases. Patient characteristics and outcomes were reviewed.
Results: In the 216 treated patients, the median follow up is 56 months. 75 patients had stage IIa disease and 141 had stage 2b and above including 3 mediastinal seminomas. The 2-year progression-free survival is 96.5% with a 3-year overall survival rate of 99.3%. The disease-specific survival at 3-years is 100%. Seven cancer relapses occurred and 3 deaths from unrelated diseases. In univariate analysis, age >38 y was significant (p = 0.032) as a predictor for relapse. Of the 7 relapses, 5 were salvaged with further chemotherapy ± surgery and remain progression-free. Carboplatin AUC10 in this large cohort has a low-risk of failure, and the efficacy observed is comparable to results seen with established combination chemotherapy regimens.

GCT-37 The effect of lowering haematological cut-offs for treatment and blood product support on the deliverability of carboplatin AUC10 in metastatic seminoma

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Background: The standard-of-care for good prognosis metastatic seminoma includes radiotherapy in stage 2 disease, and combination cisplatin-based chemotherapy in more advanced disease. Long and short-term morbidity of cisplatin-based chemotherapy for young men with germ cell tumours is increasingly recognised and alternate strategies have been sought to retain cure rate and reduce toxicity. Previously reported studies of carboplatin AUC10 monotherapy have described its efficacy [1]. This study reports on the toxicity and deliverability of this regimen.
Material and methods: We performed a retrospective analysis of patients treated for IGCCCG good prognosis metastatic seminoma in St Bartholomew's Hospital, London, UK in the last 2 years (since our protocol changed to allow treatment if platelets >75 and neutrophils >0.5). We identified 33 patients who received a total of 105 cycles of carboplatin AUC10 and analysed toxicity data including need for blood product support. Cut-offs for blood product support were platelet <10 and haemoglobin <70 (lower than previous cut-offs).
Preliminary results: There was one admission for febrile neutropenia and one admission for non-neutropenic fevers; 3% of patients were admitted for neutropenic fever throughout treatment. A total of 8 transfusions of blood products (3 red cells and 5 platelets) were required; 6 of 33 patients (18%) required blood products. 16 cycles (15%) were delayed by >48 hours to enable haematological recovery. There were no treatment-related deaths. In summary, carboplatin monotherapy is associated with low rates of neutropenic fever compared to cisplatin-based chemotherapy, and new treatment cut-offs have reduced delays [1].

Reference

[1] Shamash J. *et al.* A phase II study of carboplatin AUC-10 guided by positron emission tomography–defined metabolic response in metastatic seminoma. *European Journal of Cancer*. July 2019; 115: 128–135.

GCT-38 Which germinomas/dysgerminomas should be treated with chemotherapy? Is any patient high-risk?

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Background: Germinomas are considered good responders to chemotherapy. The majority of protocols in the literature stratify patients according to risk group to treat as low-, intermediate- or high-risk.
Methods: Our First Brazilian National Protocol started in 1991 and 3 different protocols were proposed after that. The last patient from the