the cure rate in patients with a poor prognosis and to decrease toxicity in patients with a low risk of relapse. A trend is emerging to avoid chemotherapy in totally resected (of any grade) and grade 1 (any stage) ovarian IT. For grade 2 and 3 incompletely resected ITs, the ideal strategy remains controversial; adjuvant chemotherapy remains the recommendation in current international guidelines. This emphasizes the urgent need for cooperation between adult and paediatric teams.
Disclaimer: Please note that the views expressed in this abstract, and during the debate *per se*, may not necessarily reflect the views and beliefs of those individuals proposing and/or opposing the motion.

Stage I and Good-Risk Tumour Patients – Rationale for Reducing Therapy

GCT-33 Rational trial design for stage I nonseminomatous germ cell tumour (NSGCT) patients

R.A. Huddart Prof.[1]
[1]Department of Radiotherapy and Imaging Institute of Cancer Research and Royal Marsden Hospital, Sutton, Surrey, UK

Background: Prognosis of adult stage 1 germ cell tumours (GCTs) is excellent with expected survival rates approaching 100%. Despite this, controversy exists over optimal treatment strategies with the focus on minimising treatment burden and treatment toxicity. As such, 'classic' clinical trial designs such as randomised trials based on survival or progression free survival may not address these issues. This presentation will discuss recent stage 1 trial designs [1].
Methods: The UK have recently completed two stage 1 GCT trials ('111' and TRISST) based on novel trial designs which will inform future rational trial design.
Results: The single-arm phase III '111' trial (245 patients) [2] assessed efficacy of single-cycle adjuvant BEP chemotherapy in stage 1 NSGCT at high-risk of relapse. It excluded >5% recurrence rate, as robust data from 2 BEP cycles showed recurrence rate of <2% and pre-trial consensus was that recurrence ≤5% would be acceptable. A formal randomised trial would have require >800 patients and not been feasible. The trial demonstated 2-year recurrence rate of 1.3% with upper confidence limits less than 5%. The TRISST trial [3] examined role of MRI and follow-up intensity for stage 1 seminoma and used the stage at recurrence as primary endpoint, aiming to exclude a defined increase in the development of stage IIC disease. PROVINCE is in trial development and will test a novel prognostic index integrating the CXCL12 biomarker. In summary, when survival is excellent, clinically relevant questions need novel/imaginative clinical trial design.

References

[1] Hall E, Cruickshank C, Joffe J, Huddart R, Cullen M; on behalf of the 111 Trial Management Group. Trial design in rare cancers: 111 – a single group non-randomised trial in non-seminomatous germ cell tumours of the testis (NSGCTT) (CRUK/09/011). Poster session presented at: 7th National Cancer Research Institute Cancer Conference; 2011 Nov 6–9; Liverpool, UK.
[2] Huddart *et al.* 111: A single-arm trial evaluating one cycle of BEP as adjuvant chemotherapy in high-risk, stage 1 non-seminomatous or combined germ cell tumors of the testis (NSGCTT). *Journal of Clinical Oncology* 35, no. 6_suppl (February 20 2017) 400–400. DOI: 10.1200/JCO.2017.35.6_suppl.400
[3] TRISST trial. https://www.ctu.mrc.ac.uk/studies/all-studies/t/trisst-mrc-te24/

GCT-34 Rational treatment reductions for good-risk metastatic seminoma patients

J. Shamash[1]
[1]Department of Oncology, St. Bartholomew's Hospital, London, UK

Background: Metastatic seminoma is very treatable – rapid durable responses to chemotherapy are consistently reported. For metastatic, high-volume disease, therapy with combination chemotherapy (cisplatin and etoposide with/without bleomycin) should be used. For lower-volume disease (clinical stage 2A/2B), either chemotherapy or radiotherapy with/without limited chemotherapy are acceptable. Historically, a number of randomised trials have compared combination chemotherapy to single agent carboplatin but increased relapse rates were seen and such therapy discarded.
Methods: Studies of escalated doses of carboplatin monotherapy (area-under-the-curve – AUC-10) given every 3 weeks were explored in metastatic IGCCC good-risk patients.
Results: AUC 10 carboplatin monotherapy is feasible with similar outcomes to combination chemotherapy in such patients. Anaemia and thrombocytopenia appeared more commonly whilst other side effects were less. Developing strategies to test this as a replacement for combination treatment will rely on patient-reported-outcome-measures (PROMs) – in particular, many trials have underestimated the risk of long-term oto- and neuro-toxicity, as well as quality-of-life reduction during therapy. For low-volume disease, particularly clinical stage 2A – further reduction in treatment intensity with the use of primary retroperitoneal lymph-node dissection with additional limited chemotherapy may be possible. The presence of residual masses post-therapy has always created a problem with follow-up: PET-CT has a limited role in assessing the likelihood of cancer – but alternatives, such as monitoring of circulating microRNA, may prove more attractive. Dysgerminoma – the ovarian equivalent of seminoma – lends itself to the same potential opportunities and should be included in any attempts at treatment de-escalation.

GCT-35 Clinicopathologic predictors of outcomes in children with stage I germ cell tumours: A pooled *post hoc* analysis of trials from the Children's Oncology Group

S. Singla MD[1], J. Wong BS[2], N. Singla MD[3], M. Krailo PhD[4], L. Huang PhD[5], F. Shaikh MD[6], D. Billmire MD[7], F. Rescorla MD[7], J. Ross MD[8], B. Dicken MD[9], J.F. Amatruda MD, PhD[1], A. Lindsay Frazier MD[9], A. Bagrodia MD[3]
[1]Department of Pediatrics, Division of Hematology and Oncology, University of Texas Southwestern Medical Center, Dallas, TX, USA; [2]University of Texas Southwestern Medical School, Dallas, TX, USA; [3]Department of Urology, University of Texas Southwestern Medical Center, Dallas, TX, USA; [4]University of Southern California, Los Angeles, USA; [5]Childrens Oncology Group; [6]The Hospital for Sick Children, Toronto, Canada; [7]Indiana University, Indiana, USA; [8]Rainbow Babies and Childrens Hospital, Cleveland, USA; [9]University of Alberta, Canada; [10]Dana-Farber Cancer Institute, Boston, USA

Background: Patients with clinical stage I (CS I: cN0M0) germ cell tumours (GCT) exhibit favourable oncological outcomes. While prognostic features can help inform treatment in adults with CS I GCT, we lack reliable means to predict relapse among paediatric patients. We sought to identify predictors of relapse in children with CS I GCT.