Abstracts

PP19. ARHGAP GENE EXPRESSION IN ESTABLISHED GLIOMA CELL LINES AND GLIOMA TUMOUR SAMPLES AND THEIR ASSOCIATION WITH CELL MIGRATION
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INTRODUCTION: A highly invasive phenotype is a hallmark of the malignant process in Glioblastoma multiforme, which remains a poorly understood field. The diffuse and infiltrative nature of these cancers presents a need for novel, anti-migratory treatment to prevent tumour cells migrating to healthy parts of the brain and to improve the success of the current standard care. The actin polymerization pathway is part of a complex set of cellular mechanisms which allow cells to change their shape and for the development and silencing of the pro-migratory candidates and for the development to target cell migration by overexpression of the anti-migratory candidates in the results from the immunofluorescence study correlated with the previous microarray analysis that presented the ARHGAPs as potential targets. The results from the immunohistochemistry study will also be discussed.

CONCLUSION: From our preliminary results we have established that the members of the ARHGAP family have very different roles in the actin polymerization pathway and cell migration. These contrasting roles have been presented an approach in which we can target cell migration. There is scope to target cell migration by overexpression of the anti-migratory candidates and silencing of the pro-migratory candidates and for the development of novel small molecule inhibitors to improve treatment and survival in glioma patients.

PP21. AWAKE CRANIOTOMY FOR RESECTION OF BRAIN TUMOURS: SURVEY OF THE UNITED KINGDOM PRACTICE IN 2015
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ABSTRACT: Awake craniotomy (AC) is a useful surgical technique to help identify and preserve eloquent areas during cortical and subcortical tumour resections. Here the UK practice of AC in 2015 is reviewed. MATERIAL AND METHODS: An online survey (SurveyMonkey LTD) supported by the British Neuro-Oncology Society (BNSO) regarding AC practice was sent to a neurosurgical consultant with a specialist interest in oncology at all thirty neurosurgical centres in the UK. RESULTS: 100% of units responded to the survey. 27/30 UK neurosurgical units performed AC in 2015. 575 AC were performed by 60 neurosurgical consultants (range 1–4, median 2 per unit). 87 anaesthetic consultants routinely covered AC lists (range 1–6, median 3 per unit). A general anaesthetic/ awake/ general anaesthetic or awake technique was performed in 18 units, while conscious sedation/ awake/ conscious sedation was performed in 14 units. Desmethylmethotrexate and Remifentanil were the favoured agents used in 6 units with the rest using Propofol and Remifentanil. Depending on patient factors AC was performed purely under local anaesthetic in 10 units. All neurosurgical units would consider AC for resection of low grade glioma (LGG), 20 units for high grade glioma (HGG), 10 units for metastases, 8 units for epilepsy and 3 units for some vascular indications. Less than half of units offered AC for resection of LGG, 20 units for high grade glioma (HGG), 10 units for metastases, 8 units for epilepsy and 3 units for some vascular indications.

REFERENCES

PP22. PROGRESSING RADIOTHERAPY-DRUG COMBINATIONS TOWARDS EARLY PHASE CLINICAL TRIALS
Dr Hazel Jones, Dr Julie Stock, Prof Anthony Chalmers; CRUK Centre for Drug Development

The Radiotherapy-Drug Combinations consortium (RadCom) works with UK-based investigators to design and deliver high quality preclinical projects evaluating specific radiotherapy-drug combinations. We have several collaborations with industry, from in vitro projects to understand the novel agent in the context of radiobiology, through to preclinical studies that will generate data to support the development of radiotherapy combination trials. RadCom facilitates the coordination of industry interactions, triage new proposals, monitor active projects, and engages with the radiotherapy community to promote collaboration and networking (via a capability map). The CRUK New Agents Committee Preclinical Combination Grant scheme provides one of the funding options for these studies, with the potential to feed into early phase clinical trials via the ECMC Combinations Hub. The CRUK RadCom also supports a number of collaborative Radiotherapy research initiatives, including those within the Broad, radiotherapy research network, by working to improve preclinical quality assurance and identifying a route to registration for radiotherapy-drug treatments. These activities will place the UK at the forefront of radiotherapy-drug preclinical research and provide a significant incentive for pharmaceutical companies to invest in this area of research. Further information can be found on our webpage: http://crtad.ncri.org.uk/research-support/radiation-drug-combinations-radcom Successful projects from RadCom can then move into early phase combination trials within the Combinations Alliance. The Combinations Alliance supports early phase combination studies in the UK via the ECMC (Experimental Cancer Medicine Centres) network. It focuses on translational research, and enables clinical project teams to work with disease experts to set up investigator led trials. The CRUK Centre of Drug Development (CDD) supports these studies with further management and