EXPLORING A LINK BETWEEN ALZHEIMER’S AND GLIOMA BY INVESTIGATING SORL1 NETWORK
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AIMS: Use bioinformatics methods to identify and validate associated proteins and network for the SORL1 network. Generate a bank of potential drug targets and inhibitors.

RESULTS: A total of 41 genes (30 from GeneCards and 43 from STRING) were obtained. 63 genes from 30 from GeneCards and 43 from STRING) were obtained. 63 genes from STRING were linked to SORL1. Protein-protein interactions linked to SORL1 was explored in STRING. Clinical validation differential expression was investigated by comparing genomic data from GTEX and TCGA available at XenaBrowser. For survival analysis Kaplan-Meier curves were generated on cBioPortal. The five most significant interactions found were P-value 0.008. Those continuing to receive at least 4 cycles for 18 months (95% confidence interval 14 – 21), P=0.06; significant on Cox regression modelling. (P-value 0.008). Those unable to complete 4 cycles (10 vs 20 months). On cox analysis the number of adjuvant cycles of TMZ significantly affects OS, P-value 0.0003. Of these significant predictors of OS when combined (n=12) median OS was 18 months. Compared to 16 months for those who did not receive Glidel wafer and could not complete 4 cycles of TMZ following CRT, OR log-rank test P-value 0.4. CONCLUSION: We were not able to demonstrate a statistically significant improved OS for those undergoing wafer insertion and TMZ. Data may be inconclusive due to the small numbers, we conclude standard of care should still remain maximal safe debulking followed by CCRT and TMZ.

COPTING BETTER TOGETHER
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AIMS: Copping Better Together is a patient education course that is offered by The Walton Centre for brain tumour patients following surgery. The diagnosis and treatment of brain tumours impacts patients and families long past the time of diagnosis, surgery and adjuvant treatment. The Copping Better Together Course recognises the impact on health and wellbeing and aims to equip patients and families with information, strategies and resources that improve quality of life. METHOD: The course comprises of education sessions from a wide range of health care professionals, consultants, clinical nurse specialists and allied health care professionals. It provides opportunity for networking allowing patients and families to meet others facing similar difficulties. Prior to the impact of the Covid pandemic this course was run off site and solely in person. The impact of Covid has brought the course within The Walton Centre allowing for both face to face attendance and virtual access, thus making it more accessible. The feedback from the day is highly favourable and valued by those who attend. Patients and families report that they receive valueable information and go away better equipped in dealing with both symptoms and living with the effects of their diagnosis, CONCLUSION: This innovative course has an impact on quality of life and improves patient experience. The course provides a framework that can be easily utilised, followied and adapted by other health care professionals in providing education and support to brain tumour patients and their families.

IMPACT OF TUBULAR RETRACTOR-ASSISTED TRANSCRANIAL INVASIVE PARAFASCIAL APPROACH FOR DEEP-SEATED LESIONS IN CORtical VASCULARIZATION
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AIMS: Assess the impact of tubular retractor-assisted transcranial minimally invasive parafascial approach (iPMAs) in the cortical vasculization using indocyanin green angiography(icGA) during removal of deep-seated cerebral tumours. METHOD: Single-centre prospective cohort study of patients with deep-seated lesions – distance to nearest sulcus > 10mm - where iCGA was performed. Zeiss FLOW800 Software was used to analyse the following variables - delay time, speed, time to peak and rise time - before and after insertion of the tubular retractor (NICO BrainPath). RESULTS: 13 patients were enrolled, 60 regions-of-interest were analysed. The most common pathology was high grade glioma (69%). The average depth of tumours was 34.2mm (23-45mm) and the time-under-retraction 166mins (45-280 mins). The most common vascular pattern before-after tubular retractor was: increase on the delay time, time to peak and rise time (present in 7 patients) and a decrease on the speed (present in 8 patients). Two patients had a major neurological deficit after the surgery. Both had the same flow pattern with an increase on the speed and decrease on the time to peak and rise time, the delay was indifference. CONCLUSION: This is the first study assessing the impact of tubular retractor-assisted iPMAs in cortical vascularization during deep-seated lesion resection. The most common cortical vascular pattern is: an increase on the delay time, time to peak and rise time and a decrease on the speed. The two patients who presented vascular injury shared the same pattern (increase on the speed, decrease on the time to peak and rise time, with indifferece delay).

THE EVALUATION OF NON-2 TARGETS FOR CAR T THERAPY IN GLIOBLASTOMA
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AIMS: The basis of this research revolves around the issue of limited expression of targetable tumour-specific antigens, heterogeneity, and muta- tion, which impede the development and success of CAR T therapy for glioblastoma. The research will identify an off-tumour cell target involved