

# Imaging Timing After Surgery for Glioblastoma (INTERVAL GB)

INTERVAL-GB Collaborative

DOI:

[10.1016/j.bas.2023.102127](https://doi.org/10.1016/j.bas.2023.102127)

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*Document Version*

Publisher's PDF, also known as Version of record

*Citation for published version (Harvard):*

INTERVAL-GB Collaborative 2023, 'Imaging Timing After Surgery for Glioblastoma (INTERVAL GB): A multi-centre, UK and Ireland retrospective cohort study', *Brain and Spine*, vol. 3, no. Supplement 1, 102127. <https://doi.org/10.1016/j.bas.2023.102127>

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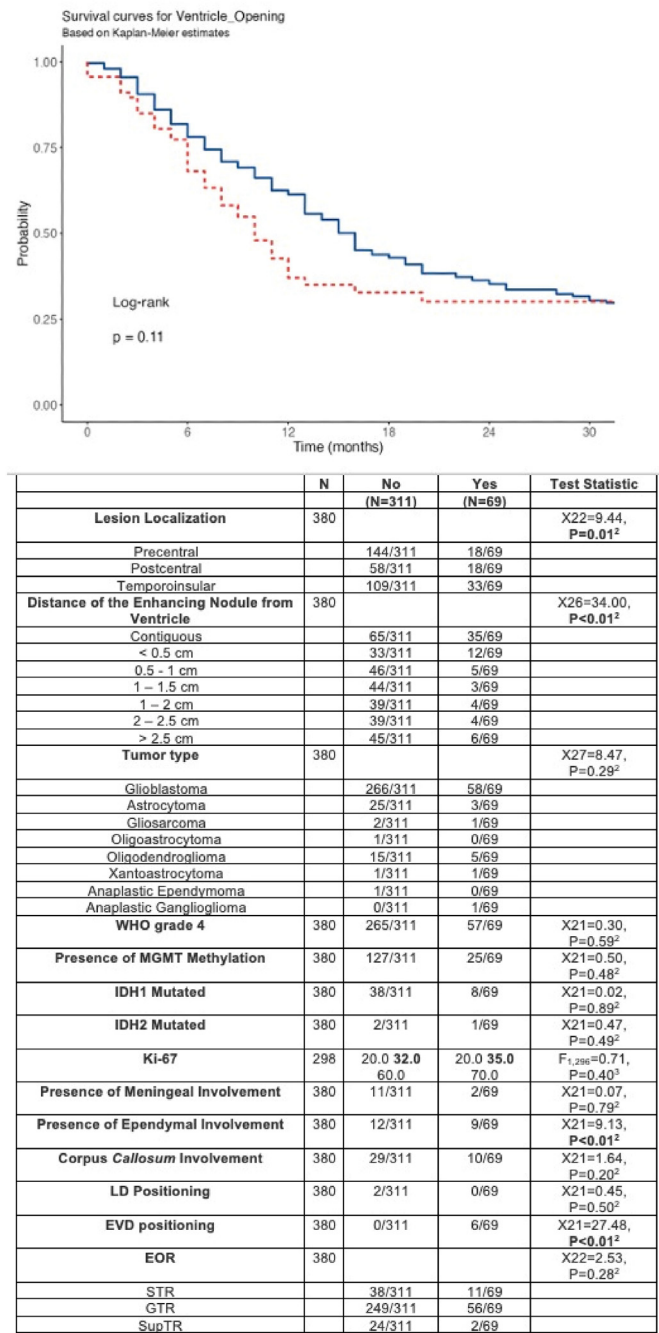
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1583  
BRAIN AND SPINE 3 (2023) 101794 102127  
IMAGING TIMING AFTER SURGERY FOR GLIOBLASTOMA (INTERVAL GB):  
A MULTI-CENTRE, UK AND IRELAND RETROSPECTIVE COHORT STUDY

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Oral e-Poster Presentations - Booth 3: Neuro-Oncology A (Malignant glioma),  
September 25, 2023, 1:00 PM - 2:30 PM

**Background:** The benefit of regular, scheduled follow-up MRI on glioblastoma  
patient management and outcomes is unclear. Our aim was to investigate na-  
tional follow-up MRI surveillance practice after surgery for glioblastoma, assess  
compliance with recommendations from the National Institute for Health and  
Care Excellence (NICE), and determine the association with overall survival (OS)  
and progression-free survival (PFS).

**Methods:** Multi-centre retrospective observational cohort study of histopatho-  
logically confirmed glioblastoma (operated August 2018-February 2019) who  
received any adjuvant oncological treatment. Follow-up MRI schedules, in-  
dications, and clinical outcomes were collected. Primary objective was to assess  
compliance with NICE recommendations (Post-operative scan <72 hrs, MRI  
every 3-6 months). Secondary objectives were OS and PFS.

**Results:** 754 patients from 26 neuro-oncology centres were included. Most pa-  
tients had post-operative MRI <72 hours of surgery (88.1%, N=407/462). 28.1%  
of patients had follow-up MRI in accordance with NICE recommendations  
(N=212/754). Median follow-up period was 10.5 months (IQR 5.3-19.4  
months). Median overall survival was 15.1 months (95% CI 12.9-17.3) in the  
scheduled MRI group and 9.1 months (95% CI 7.8-10.4) in the non-compliant  
group. On multivariable cox regression analysis, regular, scheduled MRI was  
independently associated with longer overall survival (HR 1.67, 95% CI 1.33-  
2.10, P<0.001), but not PFS (HR 1.20, 95% CI 0.98-1.47, P=0.074). Having  
three or more scheduled scans in the first 12 months of follow-up was inde-  
pendently associated with increased OS (HR 2.03, 95% CI 1.41-2.94, P<0.001)  
and PFS (HR 1.67, 95% CI 1.25-2.23, P<0.001).

**Conclusions:** Following regular scheduled surveillance follow-up MRI for glio-  
blastoma is associated with longer overall survival. Prospective trials are needed  
to determine whether regular or symptom-directed MRI influences survival  
outcomes and quality of life.

38  
BRAIN AND SPINE 3 (2023) 101794 102128  
THE ROLE OF P16 IMMUNOHISTOCHEMISTRY AS A PROGNOSTIC  
BIOMARKER IN MENINGIOMAS

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Oral e-Poster Presentations - Booth 3: Neuro-Oncology B (Meningiomas &  
Metastasis), September 26, 2023, 1:00 PM - 2:30 PM

**Background:** Despite best clinical management many patients suffering from  
meningioma experience tumor recurrence. During the last decades efforts have  
been made to improve the prognostic stratification regarding meningioma  
recurrence. In many other tumor entities, loss of p16 is associated with tumor  
progression. Evaluation of p16 staining for routine diagnostics and prognostic  
significance to identify meningiomas at risk for recurrence is of clinical interest.

**Methods:** In this retrospective single-institutional study the immunohisto-  
chemical staining for p16 was analyzed in 397 paraffin-embedded meningioma  
samples. The distribution and association with tumor grading, clinical data and  
progression-free survival according to follow-up MRI were assessed.

**Results:** Of 397 meningioma samples 69 tumors were immunopositive for p16