Supplement 2 – Tables 1 to 10

General information

Institution			Position held			
Academic Hospital	General hospital	Oncology Centre	Neuro-radiologist	General radiologist	Trainee radiologist	Other profession
58.7 *(129)*	37.9 *(83)*	14.6 *(32)*	80 *(176)*	9.5 *(21)*	5.9 *(13)*	4.5 *(10)*
Hospital services			**Physicist support**			
Neurosurgery	Radiotherapy	Neuro-oncology	None	General physicist	Neurophysicist	
84.5 *(186)*	81.4 *(179)*	76.4 *(168)*	39.5 *(87)*	35.5 *(78)*	23.6 *(52)*	

Table 1 Demographic data and hospital services at participating institutions. Results are shown as % of answers *(absolute number of answers)*.

Structural MRI

Glioma primary diagnosis (MRI per week)			Glioma follow up (MRI per week)		
< 1 study	1-5 studies	> 5 studies	< 5 studies	5-10 studies	> 10 studies
16.4 *(36)*	54.1 *(119)*	28.6 *(63)*	26.4 *(58)*	34.5 *(76)*	37.3 *(82)*

Protocol duration (in minutes)				Routine structural sequences					
< 20	20-30	31-60	> 60	T2w	FLAIR	T1w	T1w+C	DWI	T2*/SWI
5 *(11)*	45.9 *(101)*	46.4 *(102)*	2.7 *(6)*	95.5 *(210)*	98.6 *(217)*	99.1 *(218)*	99.1 *(218)*	99.1 *(218)*	65 *(143)*

Table 2 Structural imaging practices in Europe. Results are shown as % of answers *(absolute number of answers)*.

Volumetric Imaging

Which 3D sequences do you use?					2D only users wishing 3D acquisition				
T2w	FLAIR	T1w	T1w+C	T2*/SWI	T2w	FLAIR	T1w	T2*/SWI	Other
3.9 *(7)*	31.1 *(56)*	9.4 *(71)*	98.3 *(177)*	15.6 *(28)*	30.8 *(8)*	65.4 *(17)*	69.2 *(18)*	15.4 *(4)*	19.2 *(5)*

T1w sequence(s) used to depict enhancement				Comfortable with FSPGR/MPRAGE only?		
2D-SE	FSPGR/ MPRAGE	3D-SE	Other	Yes	No	Don't know
52 *(111)*	72.2 *(159)*	12.8 *(28)*	8.8 *(20)*	40.5 *(89)*	44.5 *(98)*	15 *(30)*

Table 3 Volumetric imaging. Results are shown as % of answers *(absolute number of answers)*.

Diffusion-weighted MRI		
Assessment of ADC map		
Visual only	ROI comparison	Advanced analysis
78.2 *(172)*	17.7 *(39)*	3.2 *(7)*

Table 4 Respondents' practices for ADC assessment. Results are shown as % of answers *(absolute number of answers)*.

Perfusion MRI (pMRI)						
When do you acquire pMRI?						
Always in glioma		Primary diagnosis only		Follow up only		Upon indication only
49.1 *(108)*		10.9 *(24)*		3.6 *(8)*		21.4 *(47)*
Reasons for using pMRI				**pMRI protocol duration**		
For clinical diagnosis	Biopsy guidance	To guide therapy	Mainly research	≤5 mins	≤2 mins	Don't know
79.7 *(149)*	46 *(86)*	61.5 *(115)*	13.4 *(25)*	83.5 *(71)*	45 *(38)*	5 *(4)*
Reasons for always acquiring pMRI						
I want it to be available when I need it						43.6 *(61)*
I (almost) always find it useful						55.7 *(78)*
It impacts patient care and management						56.4 *(79)*
Clinicians always want it						7.9 *(11)*
I acquire it for logistical reasons (e.g. standardised protocols)						30 *(42)*
For research purposes						24.3 *(34)*
To maintain radiographers' level of experience						15.7 *(22)*
pMRI method				**Preload**		
DSC	DCE	ASL	≥ 2 methods	Yes	No	Don't know
81.8 *(153)*	29.4 *(55)*	12.3 *(23)*	21.4 *(40)*	46.5 *(87)*	46 *(86)*	7.5 *(14)*
Preload bolus size (of typical contrast dose)					**Total contrast given (of typical contrast dose)**				
1/3	½	Full	Don't know	Other	Single	1+1/3	1+1/2	Double	Don't know
42.5 *(37)*	16.1 *(14)*	10.3 *(9)*	11.5 *(10)*	19.5 *(17)*	53.8 *(99)*	13 *(24)*	8.2 *(15)*	14.7 *(27)*	7.6 *(14)*
pMRI analysis				**How do you assess glioma perfusion?**		
Scanner software	NordicICE	Olea	Other	Qualitatively only	ROI comparison NAWM	Other technique
78.5 *(146)*	4.8 *(9)*	4.8 *(9)*	7 *(13)*	43.5 *(81)*	51.1 *(95)*	5.4 *(10)*

Table 5 Perfusion MRI (pMRI). Results are shown as % of answers *(absolute number of answers)*.

MR spectroscopy (MRS)

When do you acquire MRS?			
Always in glioma	Primary diagnosis only	Follow up only	Upon indication only
21 *(46)*	22.4 *(49)*	1.8 *(4)*	35.2 *(77)*

Reasons for using MRS				MRS protocol duration		
For clinical diagnosis	Biopsy guidance	To guide management	Mainly research	≤ 15 mins	≤10 mins	Don't know
87.5 *(154)*	26.7 *(47)*	46.6 *(82)*	10.8 *(19)*	75.9% *(60)*	59.5 *(47)*	10.1 *(8)*

MRS method		TE		
SVS	MVS/CSI	Short (30 ms)	Intermediate (144 ms)	Long (270 ms)
75 *(132)*	60.8 *(107)*	68.8 *(119)*	67.1 *(117)*	13.3 *(23)*

Table 6 MRS in glioma imaging. Results are shown as % of answers *(absolute number of answers)*. Comment: In free text answers, approximately one third of users expressed doubts about the clinical value and impact of MRS, whereas others reported a moderate to high impact. MRS reporting was most commonly undertaken together with structural MRI reporting.

Functional MRI (fMRI)

Do you use fMRI?			Why do you use fMRI?		
Yes	No	Import into navigation	Pre-surgical	Guide management	Research
49.8 *(109)*	50.2 *(110)*	62.4 *(68)*	95.4 *(104)*	16.5 *(18)*	15.6 *(17)*

fMRI protocol duration				Which function(s) do you assess with fMRI (depending on lesion site?)			
< 15 mins	15-30 mins	>30 mins	Don't know	Language lateralisation	Language localisation	Motor cortex localisation	Visual cortex localisation
45.1 *(23)*	21.6 *(11)*	23.5 (12)	9.8 *(5)*	90.8 *(99)*	79.8 *(87)*	97.2 *(106)*	42.4 *(46)*

Table 7 fMRI. Results are shown as % of answers *(absolute number of answers)*

Diffusion tensor imaging (DTI)

Do you use DTI?			Why do you use DTI?		
Yes	No	Import into navigation	Pre-surgical	Guide management	Research
63.9 *(140)*	36.1 *(79)*	59.3 *(83)*	87.9 *(123)*	22.1 *(31)*	20.0 *(28)*

DTI protocol duration		Which function(s) do you assess with DTI (depending on lesion site?)						
≤10 mins	Don't know	Cortico-spinal tract	Arcuate Fasciculus	Optic radiation	IFOF	Uncinate fasciculus	FA maps	Other
92.5 (50)	11.1 *(6)*	94.2 (131)	61.2 *(85)*	54.0 *(75)*	25.9 (*36*)	28.8 *(40)*	48.9 *(68)*	3.6 *(5)*

Table 8 DTI. Results are shown as % of answers *(absolute number of answers)*.

Specific clinical situations								
Used for tumour progression vs. radiation necrosis					**Glioma follow up assessment**			
pMRI	Structural	MRS	DWI	Other	Qualitative	RANO	Volumetric	Segmentation
55.7 *(122)*	20.1 *(44)*	5.9 *(13)*	4.6 *(10)*	13.7 *(30)*	60.6 *(132)*	27.1 *(59)*	7.3 *(16)*	2.8 *(6)*
Early postoperative imaging					**Reporting**			
< 24 hrs	< 48 hrs	< 72 hrs	CT only		Reporting a percentage of completeness of resection	Use of a reporting template	Protocol development together with clinicians	
16.1 *(35)*	33.5 *(73)*	12.4 *(72)*	7.3 *(16)*		17.2 *(28)*	23.3 *(51)*	24.2 *(53)*	

Table 9 Clinical situations. Results are shown as % of answers *(absolute number of answers)*.

Technical				
MRI Post-processing				
	pMRI	MRS	fMRI	DTI
Radiologist/radiology fellow	71.5 *(133)*	62.5 *(110)*	61.5 *(67)*	64 *(89)*
Resident in training	22.6 *(42)*	18.2 *(32)*	15.6 *(17)*	10.1 *(14)*
Technologist/radiographer	21.5 *(40)*	31.3 *(55)*	19.3 *(21)*	20.1 *(28)*
Physicist	8.1 *(15)*	20.5 *(36)*	22.9 *(25)*	22.3 *(31)*
Researcher/research fellow	5.4 *(10)*	6.3 *(11)*	15.6 *(17)*	14.4 *(20)*
Other	7 *(13)*	5.7 *(10)*	6.4 *(7)*	8.6 *(12)*
Reasons for non-use				
	pMRI	MRS	fMRI	DTI
I have no technical MRI facility	42 *(14)*	46.5 *(20)*	49.5 *(54)*	40.5 *(32)*
I don't know how to implement it	15.2 *(5)*	11.6 *(5)*	23.9 *(26)*	13.9 *(11)*
I have no post-processing facility	39.4 *(13)*	32.6 *(14)*	34.9 *(38)*	35.4 *(28)*
I am not trained to interpret	27.3 *(9)*	34.9 *(15)*	40.4 *(44)*	22.8 *(18)*
Clinicians do not request it	36.4 *(12)*	32.6 *(14)*	35.8 *(39)*	*32.9 (26)*
I don't find it useful	0 *(0)*	23.3 *(10)*	6.4 *(7)*	10.1 *(8)*
It is not reimbursed	15.2 *(5)*	14 *(6)*	11 *(12)*	12.7 *(10)*
There is not enough time to perform it	21.2 *(7)*	16.3 *(7)*	33.9 *(37)*	25.3 *(20)*
Other	3 *(1)*	2.3 *(1)*	11 *(12)*	7.6 *(6)*

Table 10 Advanced imaging data post-processing and reasons stated for non-use of modalities. Results are shown as % of answers *(absolute number of answers)*.

General comment: A number of questions included the option 'other'. Please note, if this was answered by few individuals (< 5%), percentages are not quoted in the results. A small numbers of free text answers could not be deciphered, so these were excluded from the analysis.