

**SUPPLEMENTAL TABLE 1.** Tumor size in orthotopic glioblastoma xenograft determined by MRI and by PET using [<sup>18</sup>F]FAC, [<sup>18</sup>F]FDG, and [<sup>18</sup>F]FET.

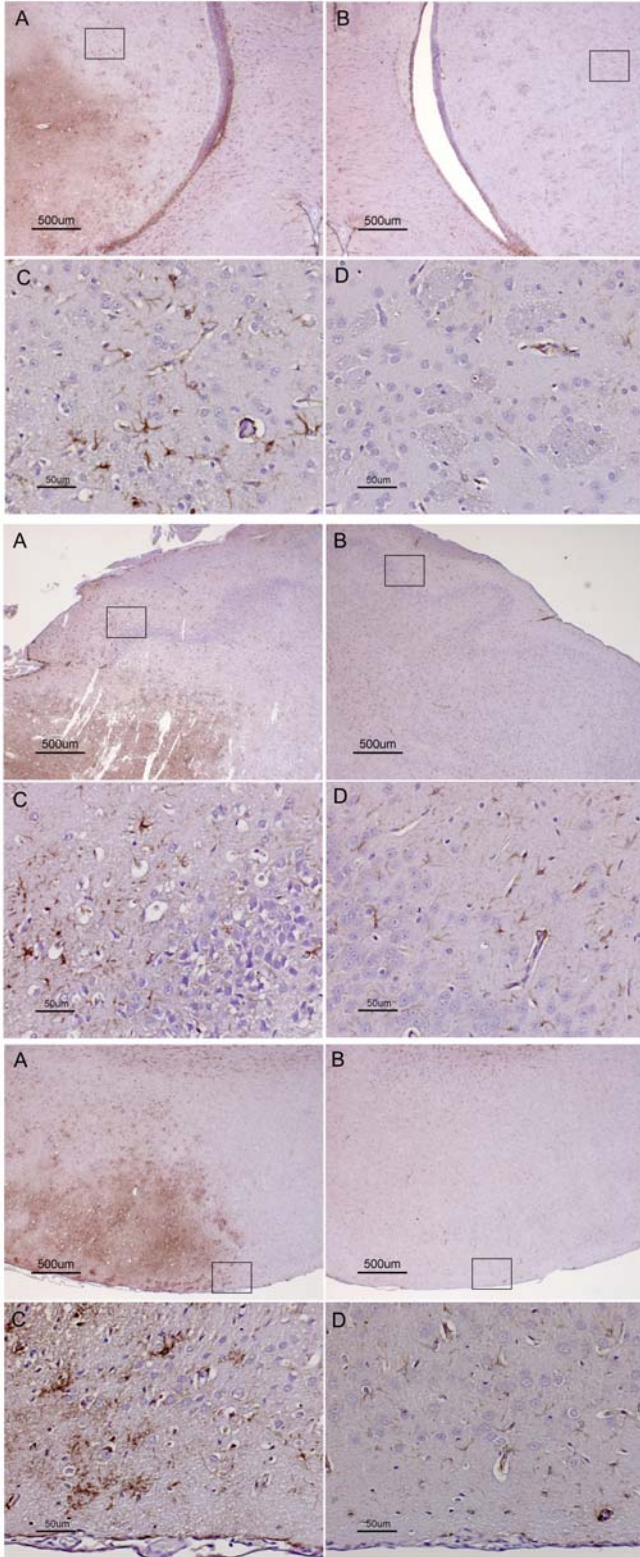
Animal number	MRI [mm <sup>3</sup> ]	[ <sup>18</sup> F]FAC [mm <sup>3</sup> ]	[ <sup>18</sup> F]FDG [mm <sup>3</sup> ]	[ <sup>18</sup> F]FET [mm <sup>3</sup> ]
1	13.0	12.2	6.9	n/d
2	20.4	17.6	11.0	15.4
3	4.5	1.3	5.3	n/d
4	8.0	7.6	1.1	n/d
5	7.6	7.9	8.5	n/d

n/d = lesion not detected

**SUPPLEMENTAL TABLE 2.** Tumor area in coronal sections of orthotopic glioblastoma xenograft determined *ex vivo* by H&E and *in vivo* by MRI and PET using [<sup>18</sup>F]FAC, [<sup>18</sup>F]FDG, and [<sup>18</sup>F]FET. Tumor size determined by MRI correlated well with that determined by H&E ( $R^2 = 0.990$ ,  $P = 0.0004$ ).

Animal number	H&E [mm <sup>2</sup> ]	MRI [mm <sup>2</sup> ]	[ <sup>18</sup> F]FAC [mm <sup>2</sup> ]	[ <sup>18</sup> F]FDG [mm <sup>2</sup> ]	[ <sup>18</sup> F]FET [mm <sup>2</sup> ]
1	5.6	5.4	6.4	2.6	n/d
2	10.6	8.6	6.7	7.8	8.8
3	2.9	2.8	0.8	3.8	n/d
4	4.2	3.7	4.2	0.6	n/d
5	3.5	3.7	4.0	4.6	n/d

n/d = lesion not detected



**SUPPLEMENTAL FIGURE 1.** Immunohistochemical analysis (anti-GFAP) of three representative sections of rat brain 24 hours post MCAO surgery. Upper panels (A, B) are

2.5× objective, and lower panels (**C**, **D**) are 20× objective. Magnified areas are indicated by box in panels **A**, **B**. Panels **A**, **C** are infarct side, and panels **B**, **D** are non-infarct side. Acutely infarcted tissue in the cortex and striatum was diffusely stained where neuronal and glial cell integrity had been lost. Around these areas, intact astrocytes were visible, and were focally more intensely stained around the infarcted tissue than on the control side.