**Table S1:** Mean, max and peak SUV values (g/mL) within contrast enhanced VS lesions at approximately 75-105 minutes following the injection of FDG using the TrueV PET-CT scanner with and without RM.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Patient | Side | Rapidly Growing? | FDG No-RM (g/ml) | | | FDG RM (g/ml) | | |
|  |  | Mean | Max | Peak | Mean | Max | Peak |
| A | Right | Yes | 1.94 | 4.37 | 2.23 | 1.67 | 3.08 | 1.87 |
| Left | Yes | 4.35 | 9.53 | 5.09 | 4.70 | 10.53 | 5.77 |
| B | Right | No | 1.87† | 5.29† | 2.79† | 1.81† | 5.46† | 2.99† |
| Left | No | 2.23† | 5.56† | 3.13† | 2.19† | 5.51† | 3.12† |
| C | Right | No | 3.18† | 7.44† | 3.65† | 3.23† | 6.23† | 4.02† |
| Left | Resected 1 year prior to the study | | | | | | |
| D | Right | Yes | 4.67 | 7.89 | 5.50 | 4.66 | 10.39 | 5.68 |
| Left | No | 2.90 | 5.36 | 3.06 | 2.25 | 4.35 | 2.42 |
| E | Right | Yes | 2.99 | 7.04 | 3.52 | 3.41 | 9.60 | 4.32 |
| Left | No | 1.25 | 2.98 | 1.46 | 1.14 | 2.07 | 1.19 |
| F | Right | No | 0.76† | 1.61† | 0.86† | 0.54† | 1.01† | 0.61† |
| Left | No | 2.56† | 4.95† | 3.02† | 2.90† | 6.30† | 3.55† |

†Theses values have been interpolated from measurements during scan 1 and scan 3

**Table S2:** Mean, max and peak SUV values (g/mL) within contrast enhanced VS lesions at approximately 75-105 minutes following the injection of FLT using the TrueV PET-CT scanner with and without RM.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Patient | Side | Rapidly Growing? | FLT No-RM (g/ml) | | | FLT RM (g/ml) | | |
|  | Mean | Max | Peak | Mean | Max | Peak |
| A | Right | Yes | 0.78 | 1.82 | 0.85 | 1.07 | 2.33 | 1.15 |
| Left | Yes | 1.34 | 3.58 | 1.58 | 1.60 | 3.98 | 1.95 |
| B | Right | No | 0.65† | 1.54† | 0.83† | 0.65† | 1.32† | 0.86† |
| Left | No | 0.93† | 3.12† | 1.32† | 1.01† | 2.49† | 1.48† |
| C | Right | No | 1.40† | 4.10† | 1.75† | 1.66† | 4.12† | 2.17† |
| Left | Resected 1 year prior to the study | | | | | | |
| D | Right | Yes | 1.67 | 4.53 | 2.19 | 1.96 | 4.83 | 2.67 |
| Left | No | 0.80 | 2.18 | 1.04 | 0.94 | 2.96 | 1.22 |
| E | Right | Yes | 1.29† | 3.95† | 1.88† | 1.84† | 6.58† | 2.73† |
| Left | No | 0.22† | 0.73† | 0.24† | 0.11† | 0.27† | 0.12† |
| F | Right | No | 0.45 | 1.48 | 0.50 | 0.32 | 0.86 | 0.37 |
| Left | No | 1.56 | 4.13 | 1.80 | 1.88 | 5.29 | 2.25 |

†Theses values have been interpolated from measurements during scan 1 and scan 3

**Table S3:** Mean, max and peak SUV values (g/mL) within contrast enhanced VS lesions at approximately 75-105 minutes following the injection of FDG using the HRRT PET scanner with and without RM.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Patient | Side | Rapidly Growing? | FDG No-RM (g/ml) | | | FDG RM (g/ml) | | |
|  | Mean | Max | Peak | Mean | Max | Peak |
| A | Right | Yes | 1.77† | 9.27† | 2.25† | 1.76† | 5.66† | 2.30† |
| Left | Yes | 3.47† | 15.41† | 4.62† | 3.49† | 10.20† | 4.67† |
| B | Right | No | 1.97 | 9.75 | 2.49 | 1.90 | 4.85 | 2.44 |
| Left | No | 2.10 | 10.49 | 3.06 | 2.03 | 7.08 | 2.97 |
| C | Right | No | 3.07 | 16.93 | 3.71 | 3.17 | 9.48 | 3.98 |
| Left | Resected 1 year prior to the study | | | | | | |
| D | Right | Yes | 3.88† | 17.44† | 4.91† | 3.79† | 9.73† | 4.86† |
| Left | No | 1.15† | 5.50† | 1.67† | 0.89† | 2.92† | 1.31† |
| E | Right | Yes | 2.72† | 17.87† | 3.49† | 2.75† | 10.42† | 3.61† |
| Left | No | 1.33† | 9.95† | 1.39† | 1.01† | 2.84† | 1.09† |
| F | Right | No | 0.53 | 4.18 | 0.67 | 0.36 | 1.43 | 0.44 |
| Left | No | 2.51 | 17.24 | 2.96 | 2.58 | 9.31 | 3.08 |

†Theses values have been interpolated from measurements during scan 1 and scan 3

**Table S4:** Mean, max and peak SUV values (g/mL) within contrast enhanced VS lesions at approximately 75-105 minutes following the injection of FLT using the HRRT PET scanner with and without RM.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Patient | Side | Rapidly Growing? | HRRT  FLT No-RM (g/ml) | | | HRRT  FLT RM (g/ml) | | |
|  |  | Mean | Max | Peak | Mean | Max | Peak |
| A | Right | Yes | 0.60† | 5.36† | 0.76† | 0.81† | 3.85† | 1.02† |
| Left | Yes | 1.11† | 8.06† | 1.49† | 1.32† | 7.02† | 1.74† |
| B | Right | No | 0.62 | 5.42 | 0.93 | 0.65 | 2.30 | 0.88 |
| Left | No | 0.90 | 8.63 | 1.34 | 0.92 | 4.39 | 1.49 |
| C | Right | No | 1.12 | 12.55 | 1.53 | 1.38 | 10.00 | 2.01 |
| Left | Resected 1 year prior to the study | | | | | | |
| D | Right | Yes | 1.53† | 12.49† | 2.31† | 1.71† | 8.10† | 2.61† |
| Left | No | 0.64† | 6.16† | 1.01† | 0.72† | 4.77† | 1.19† |
| E | Right | Yes | 1.27 | 14.80 | 1.89 | 1.53 | 9.58 | 2.33 |
| Left | No | 0.28 | 6.07 | 0.45 | 0.23 | 1.94 | 0.35 |
| F | Right | No | 0.17† | 2.80† | 0.25† | 0.09† | 1.21† | 0.13† |
| Left | No | 1.06† | 9.92† | 1.28† | 1.21† | 6.15† | 1.53† |

†Theses values have been interpolated from measurements during scan 1 and scan 3