**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