**Additional file 2**

**Table S2.** Comparison of diagnostic values between PET/CT using the optimized cut-off values and the fixed cut-off value of 2.5 in patients with low (<13.0) and high (>13.0) SUVmax of primary tumor

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Cut-off values | Sensitivity (%) | Specificity (%) | PPV\* (%) | NPV† (%) | Accuracy (%) | AUC‡ | *p* |
| Low tumor SUVmax |  |  |  |  |  |  |  |  |
|  Overall | 2.5 | 30.8  | 98.3  | 88.9  | 76.0  | 77.4  | 0.645  | 0.201  |
| Opt | 88.5  | 62.1  | 51.1  | 92.3  | 70.2  | 0.753  |
|  Small LN | 2.5 | 13.3  | 100.0  | 100.0  | 79.0  | 79.7  | 0.567  | 0.070  |
| 1.0 | 93.3  | 61.2  | 42.4  | 96.8  | 68.8  | 0.773  |
|  Large LN | 2.5 | 54.5  | 88.9  | 85.7  | 61.5  | 70.0  | 0.717  | 0.908  |
| 1.3 | 90.9  | 55.6  | 71.4  | 83.3  | 75.0  | 0.732  |
| High tumor SUVmax |  |  |  |  |  |  |  |  |
|  Overall | 2.5 | 39.0  | 96.1  | 88.9  | 66.2  | 70.7  | 0.676  | 0.502  |
| Opt | 73.2  | 70.6  | 66.7  | 76.6  | 71.7  | 0.719  |
|  Small LN | 2.5 | 23.5  | 100.0  | 100.0  | 74.0  | 75.9  | 0.618  | 0.177  |
| 1.1 | 88.2  | 64.9  | 53.6  | 92.3  | 72.2  | 0.766  |
|  Large LN | 2.5 | 50.0  | 85.7  | 85.7  | 50.0  | 63.2  | 0.679  | 0.491  |
| 2.1 | 75.0  | 71.4  | 81.8  | 62.5  | 73.7  | 0.732  |

\*PPV: positive predictive value; † NPV: negative predictive value; ‡AUC: area under the curve; [§](https://en.wikipedia.org/wiki/Section_sign)Opt: optimal cut-off values of SUVmax