|  |  |
| --- | --- |
| **Table S1.**  Patient and Imaging Characteristics (*n*=20) | |
| Sex and age | Values for age |
| Mean (range) age (in years) | 50.0 (23–84) |
| Mean (range) weight (in kg) | 81 (47–130) |
| Men | 8 |
| Women | 12 |
| Lymphoma subtype | Number of patients |
| Hodgkin lymphoma  High clinical suspicion, NOS  NHL  - DLBCL  - Follicular lymphoma  - ALCL  - BCL NOS  - NHL NOS | 5  1  14  - 6  - 2  - 1  - 3  - 2 |
| Indication | Number of patients |
| Initial staging  Assessment of treatment response  Suspicion for recurrence | 6  12  2 |
| Imaging characteristics |  |
| Mean administered activity ±SD  Mean uptake time ± standard deviation | 340±72  73±11 |

NOS: Non otherwise specified; NHL: Non-Hodgkin lymphoma; DLBCL: Diffuse B-Cell

Lymphoma; ALCL: anaplastic large-cell lymphoma; BCL: B-cell lymphoma, NHL: Non-

Hodgkin lymphoma

**Table S2**

Overview of the Lesion detectability using images reconstructed with OSEM-TOF+PSF 4i (served as reference) in comparison with the detectability using images reconstructed with OSEM-TOF 4i (short) and OSEM-TOF 2i (reduced).

|  |  |  |  |
| --- | --- | --- | --- |
| Patient No. | OSEM-PSF+TOF 4i (reference) | OSEM-PSF+TOF 4i (reduced) | OSEM-PSF+TOF 2i (reduced) |
| 5 | 1/0/0 (II) | 1/0/0 (II) | 1/0/0 (II) |
| 9 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 10 | 0/0/1 (IV) | 0/0/1 (IV) | 0/0/1 (IV) |
| 11 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 12 | 0/0/1 (I) | 0/0/1 (I) | 0/0/1 (I) |
| 13 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 14 | 1/1/0 (III) | 1/1/0 (III) | 1/1/0 (III) |
| 15 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 16 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 17 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 18 | 1/0/1 (IV) | 1/0/1 (IV) | 1/0/1 (IV) |
| 19 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 20 | 1/1/0 (III) | 1/1/0 (III) | 1/1/0 (III) |
| 21 | 1/0/0 (I) | 1/0/0 (I) | 1/0/0 (I) |
| 22 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 23 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 24 | 0/1/0 (II) | 0/1/0 (II) | 0/1/0 (II) |
| 25 | 1/0/0 (II) | 1/0/0 (II) | 1/0/0 (II) |
| 26 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 27 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |

Supradiaphragmal positive? / infradiaphragmal positive? / Extranodal positive? (Ann-Arbor-Stage); „1“: yes, „0“: no

**Table S3**

Overview of the lesion detectability using images reconstructed with OSEM-TOF 4i (served as reference) in comparison with the detectability using images reconstructed with OSEM-TOF 4i (short) and OSEM-TOF 2i (reduced).

|  |  |  |  |
| --- | --- | --- | --- |
| Patient No. | OSEM-TOF 4i (reference) | OSEM-TOF 4i (reduced) | OSEM-TOF 2i (reduced) |
| 5 | 1/0/0 (II) | 1/0/0 (II) | 1/0/0 (II) |
| 9 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 10 | 0/0/1 (IV) | 0/0/1 (IV) | 0/0/1 (IV) |
| 11 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 12 | 0/0/1 (I IS) | 0/0/1 (IS) | 0/0/1 (IS) |
| 13 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 14 | 1/1/0 (III) | 1/1/0 (III) | 1/1/0 (III) |
| 15 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 16 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 17 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 18 | 1/0/1 (IV) | 1/0/1 (IV) | 1/0/1 (IV) |
| 19 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 20 | 1/1/0 (III) | 1/1/0 (III) | 1/1/0 (III) |
| 21 | 1/0/0 (I) | 1/0/0 (I) | 1/0/0 (I) |
| 22 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 23 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 24 | 0/1/0 (II) | 0/1/0 (II) | 0/1/0 (II) |
| 25 | 1/0/0 (II) | 1/0/0 (II) | 1/0/0 (II) |
| 26 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |
| 27 | 0/0/0 (0) | 0/0/0 (0) | 0/0/0 (0) |

Supradiaphragmal positive? / infradiaphragmal positive? / Extranodal positive? (Ann-Arbor-Stage); „1“: yes, „0“: no