**Supplementary table 1 – Description of the reconstruction parameters by study**

| Study_abbr. | Scanner model | Recon type | Recon parms | Recon options | Matrix/Vox size | PVC | Frames |
|-------------|---------------|------------|-------------|---------------|----------------|-----|--------|
| GE          | 1) SIEMENS Biograph CT 2) ECAT EXACT HR+ 3) Discovery RX 4) Discovery STE (multicenter) | 1) 2D OSEM 2) FBP 3) 3D FBP 4) 3D OSEM | 1a) 84 updates 1b) 96 updates | 1) High Res 2,3) 3 mm post filter | 128x128 1) 81 slices | No | 20 min dyn (4 x 5 min) |
| KAROLINSKA | Siemens Biograph mCT PET/CT | 3D OSEM | (multicenter) | 5 it, 21 subsets | Psf, TOF, zoom factor 2 Gaussian filter: 1,2) 3 mm, 3) 2 mm | 1) 128x128, [2) 256x256, 3) 400x400 for comparative analysis] | No | 20 min list-mode 90 min postinjection |
| MCK         | PET and PET/CT scanners from GE, Siemens and Philips (multicenter) | 3D OSEM (when possible) | (multicenter) | 5 it, 21 subsets | correction for attenuation (CT-based when possible) (multicenter) | (multicenter) | No | (multicenter) |
| SLC         | Philips Gemini PET/CT TF TOF 16 or 64 (64 slices after 2016) | LOR-RAMLA | 2 it, 33 subsets | TOF | 128x128/isometric 2 mm | No | 30 min dyn (6 x 5 min) 90 min postinjection |
| AUMC        | Philips Gemini TF PET/CT 64 | LOR-RAMLA | 2 it, 33 subsets | No PSF, no TOF | 128x128x90 | No | 20 min dyn (4x 5 min) |
| ALFA+       | Siemens Biograph mCT PET/CT | 3D OSEM | 8 it, 21 subsets | PSF, TOF | 400x400/1.02x1.02x2.03mm | No | 20 min dyn (4 x 5 min) |
| BIOFINDER   | Philips Gemini | LOR-RAMLA | 3 it, 33 subsets | - | 128x128<00 slice thickness 2 mm | No | 20 min dyn (4 x 5 min) | 90 min postinjection |
| INVICRO     | Philips Gemini | LOR-RAMLA | 3 it, 33 subsets | - | 128x128<00 slice thickness 2 mm | No | 20 min dyn (4 x 5 min) | 90 min postinjection |
| AIBL        | 1) Siemens PET/CT mCT 128 2) Philips Allegro PET (only 22 subjects) 3)Discovery 710 (72 subjects) | 1) 3D OSEM 2) 3D-RAMLA 3) VPHD | 1) 4it, 4 subsets 2) 4 subsets 3) VPHD | 1) no TOF 2) Sharp 3) 5mm post filter, Z axis filter light | 1) 1.99 x 199x3.0 2) 2.0x2.0x2.0 3) 1.17x1.17x3.27 | No | 20 min dyn (4 x 5 min) 90 min postinjection |
**Supplementary Figure 1** – Correlation between Reference reconstruction parameters (Ref-128) and Alt-256 (a) and Alt-400 (b)

![Graph a)](image)

**Supplementary Figure 2** – Bland-Altman plot between Reference reconstruction parameters (Ref-128) and Alt-256 (a) and Alt-400 (b)

![Graph a)](image)
Supp Figure 3 Sensitivity analysis of Percentual Agreement with Pons reference region in the ALFA+ cohort with two different pipelines