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Abbreviations

\(^{18}\) F-FLT \(^{18}\) F-3’-fluoro-3’-deoxy-l-thymidine

\(^{18}\)F-FDG \(^{18}\) F-fluoro-deoxyglucose

ACR Activity concentration recovery

ADC Apparent diffusion coefficient

AIF Arterial input function

ANOVA Analysis of variance

APD Avalanche photodiode

AUC Area under the curve

BL Burkitt’s lymphoma

BOLD Blood oxygen level dependent

CA Contrast agent

CCC Concordance correlation coefficients

CEA Carcinoembryonic antigen

CoV Coefficients of variation

CPT Camptothecin

CT Computer tomography

CWSSIM Complex wavelet structural similarity index
DCE-MRI  Dynamic-contrast enhanced MRI

DOI  Depth of interaction

DOTA  1,4,7,10-tetraazacyclodecane-1,4,7,10-tetraacetic acid

DTPA  Diethylene triamine pentaacetic acid

DWBA  Digital whole-body autoradiography

EPI  Echo planar imaging

EPR  Enhanced permeability and retention

FA  Flip angle

FLASH  Fast low-angle shot MRI

fMRI  Functional MRI

FOV  Field of view

FWHM  Full width at half maximum

GUI  Graphical user interface

i.p.  Intraperitoneal

i.v.  Intravenous

ID  Inner diameter

LSO  Lutetium oxyorthosilicate

LV  Left ventricle

MAP  Maximum a posteriori

MR  Magnetic resonance

MRI  Magnetic resonance imaging
<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>MRS</td>
<td>MR spectroscopy</td>
</tr>
<tr>
<td>NIM</td>
<td>Nuclear instrumentation module</td>
</tr>
<tr>
<td>NMR</td>
<td>Nuclear magnetic resonance</td>
</tr>
<tr>
<td>OD</td>
<td>Outer diameter</td>
</tr>
<tr>
<td>OSEM</td>
<td>Ordered-subset expectation maximization</td>
</tr>
<tr>
<td>PAF</td>
<td>Platelet activating factor</td>
</tr>
<tr>
<td>PCC</td>
<td>Pearson’s correlation coefficients</td>
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<td>PET</td>
<td>Positron emission tomography</td>
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<td>PMT</td>
<td>Photomultiplier tubes</td>
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<tr>
<td>PSAPD</td>
<td>Position-sensitive avalanche photodiode</td>
</tr>
<tr>
<td>PSF</td>
<td>Point spread function</td>
</tr>
<tr>
<td>PSNR</td>
<td>Peak signal-to-noise ratio</td>
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<tr>
<td>QAR</td>
<td>Quantitative autoradiography</td>
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<tr>
<td>RARE</td>
<td>Rapid acquisition with relaxation enhancement</td>
</tr>
<tr>
<td>RF</td>
<td>Radiofrequency</td>
</tr>
<tr>
<td>RMSE</td>
<td>Root mean squared error</td>
</tr>
<tr>
<td>ROI</td>
<td>Region of interest</td>
</tr>
<tr>
<td>SD</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>SE</td>
<td>Spin echo</td>
</tr>
<tr>
<td>SEM</td>
<td>Standard error of the mean</td>
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<tr>
<td>SiPM</td>
<td>Silicon photomultiplier</td>
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<tr>
<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>---------</td>
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<tr>
<td>SNR</td>
<td>Signal to noise ratio</td>
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<tr>
<td>SPECT</td>
<td>Single–photon emission computer tomography</td>
</tr>
<tr>
<td>SSIM</td>
<td>Mean structural similarity index</td>
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<tr>
<td>TE</td>
<td>Echo time</td>
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<tr>
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<td>Repetition time</td>
</tr>
<tr>
<td>TRT</td>
<td>Treatment related toxicity</td>
</tr>
<tr>
<td>TTL</td>
<td>Transistor transistor logic</td>
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<tr>
<td>TUNEL</td>
<td>Terminal nucleotidyl transferase-mediated nick end labeling</td>
</tr>
<tr>
<td>VEGF</td>
<td>Vascular endothelial growth factor</td>
</tr>
<tr>
<td>VOI</td>
<td>Voxel of interest</td>
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