

Parameter	Application Examples	PET	SPECT	Optical Imaging
<b>Glucose metabolism</b>	Oncology, Inflammation, Infectious diseases, ..	<sup>18</sup> F-FDG		
<b>Proliferation</b>	Therapy response in oncology	<sup>18</sup> F-FLT		
<b>Amino acid metabolism</b>	Brain tumor imaging	<sup>18</sup> F-FET, <sup>11</sup> C-Methionine		
<b>Bone matrix synthesis</b>	Bone metabolism	<sup>18</sup> F-Fluorid	<sup>99m</sup> Tc-MDP	
<b>Membrane synthesis</b>	Oncology	<sup>11</sup> C-Choline		
<b>Hypoxia</b>	Oncology	<sup>18</sup> F-HX4		
<b>MMP activity</b>	Inflammation, Oncology,...	<sup>18</sup> F-BR351, ..	<sup>99m</sup> Tc-MEA223, ..	Cy5.5-AF489,...
<b>Microglia activation</b>	Neuroinflammation	<sup>18</sup> F-DPA714		
<b>Macrophage activation (S100A9)</b>	Inflammation			Cy5.5-CES271
<b>Cell tracking (ex vivo labelling)</b>	Cell-based diagnosis and therapy	<sup>18</sup> F-FDG	<sup>99m</sup> Tc-HMPAO <sup>111</sup> Indium	DIR DID
<b>Noradrenaline uptake</b>	Cardiac neuronal imaging	<sup>11</sup> C-HED		
<b>M<sub>2</sub> receptors</b>	Cardiac imaging	<sup>11</sup> C-MQNB		
<b>Dopaminergic system</b>	Neuropsychiatric and malignant diseases	<sup>18</sup> F-DOPA	<sup>123</sup> I-FP-CIT	
<b>Somatostatin receptors</b>	Neuroendocrine tumors	<sup>68</sup> Ga-Dotatate		
<b>Prostate-spec. membrane-antigen</b>	Prostate cancer	<sup>68</sup> Ga-PSMA		
<b>Alzheimer Amyloid</b>	Alzheimer's disease	<sup>18</sup> F-Florbetaben		
<b>Perfusion (myocardium)</b>	Cardiovascular diseases	<sup>13</sup> NH <sub>3</sub>	<sup>99m</sup> Tc-MIBI <sup>99m</sup> Tc-Tetrofosmin	