

Correction to: Radiopharmaceutical tracers for cardiac imaging

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CORRECTION TO: J NUCL CARDIOL

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Regrettably the original version of the above article contained errors in the three chemical structures presented in the ‘Atherosclerosis imaging’ section of

Table 5, namely: ^{99m}Tc annexin V, ⁶⁸Ga DOTATATE, and ⁶⁴Cu DOTATATE; the chemical structures have been corrected in Table 5 presented here. In addition, the radiopharmaceutical for isotope ⁶⁷Ga has been corrected to ⁶⁷Ga citrate, and many of the radiopharmaceuticals presented at the end of the table have been corrected.

The original article can be found online at <https://doi.org/10.1007/s12350-017-1131-5>.

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Table 5. Inflammation and atherosclerosis imaging

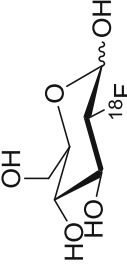
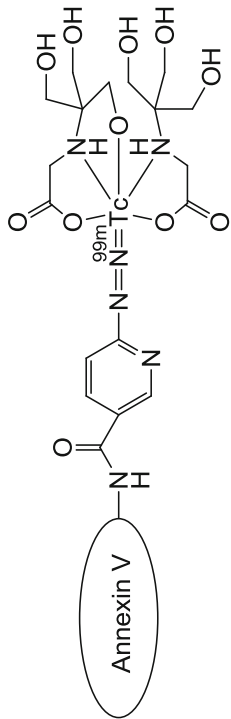
Isotope	Radiopharmaceutical	Chemical structure	Type of tracer	Study population
General inflammation ^{18}F	^{18}F -FDG		Organic compound	Carotid and coronary plaque imaging
^{67}Ga	^{67}Ga citrate		Metal cation	Inflammatory heart disease Cardiac sarcoidosis
Infection ^{111}In	^{111}In WBC		Radiolabeled cell	Infectious disease
Atherosclerosis imaging $^{99\text{m}}\text{Tc}$	$^{99\text{m}}\text{Tc}$ annexin 5		Radiometal-tagged Annexin V	Apoptosis imaging

Table 5 continued

Isotope	Radiopharmaceutical	Chemical structure	Type of tracer	Study population
⁶⁸ Ga	⁶⁸ Ga DOTATATE		Radiometal-tagged octreotide analog	Symptomatic carotid atherosclerosis Unstable angina
⁶⁴ Cu	⁶⁴ Cu DOTATATE		Radiometal-tagged octreotide analog	Symptomatic carotid atherosclerosis

Table 5 continued

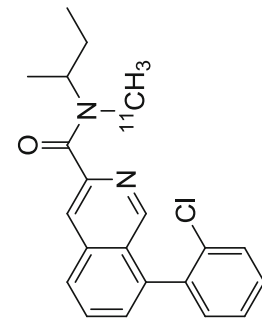
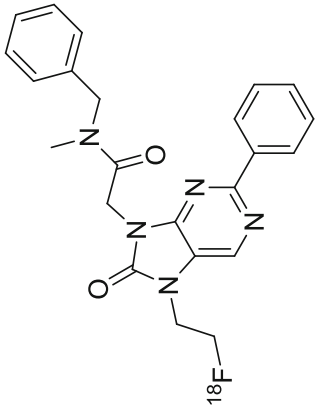
Isotope	Radiopharmaceutical	Chemical structure	Type of tracer	Study population
^{11}C	Translocator protein ^{11}C -PK11195		Organic compound	Symptomatic carotid atherosclerosis
^{18}F	^{18}F -FEDAC		Organic compound	
^{18}F	^{18}F -NaF	$^{18}\text{F}^-$	Inorganic anion	Aortic stenosis Coronary artery disease Carotid artery plaque

Table 5. continued

Radiopharmaceutical	Characteristics	Approval year		
		FDA	Europe	Japan
General inflammation ¹⁸ F-FDG	Accumulating macrophage Strong signal Limitation: non-specific myocardial accumulation	-	1994*	2012 (cardiac sarcoidosis)
⁶⁷ Ga citrate	No physiological uptake Limitation: suboptimal image quality	1976	1972*	1982
Infection ¹¹¹ In WBC	Accumulates in WBC Limitation: suboptimal image quality	1985	1980**	1992
Atherosclerosis imaging ^{99m} Tc annexin 5	Lesion specific Limitation: weak signal intensity	-	-	-
⁶⁸ Ga DOTATATE	Accumulates activated macrophages No physiological myocardial uptake Generator produced Good image quality	2016	-	-
⁶⁴ Cu DOTATATE	Accumulates in activated mononuclear phagocyte Accumulates in activated mononuclear phagocyte High affinity and better image quality Accumulates in calcification lesion	-	-	-
Translocator protein ¹¹ C-PK11195	-	-	-	-
¹⁸ F-FEDAC	-	-	-	-
¹⁸ F-NaF	-	2012	-	-

⁶⁸Ga DOTATATE Gallium-68-labeled [1,4,7,10-tetraazacyclododecane-N,N',N'',N'''-tetraacetic acid]-d-Phe¹, Tyr³-octreotate, ¹⁸F-FDG ¹⁸F-fluorodeoxyglucose, ¹⁸F-FEDAC N-benzyl-N-methyl-2-[7,8-dihydro-7-(2-[¹⁸F]fluoroethyl)-8-oxo-2-phenyl-9H-purin-9-yl]acetamide, WBC white blood cell
* EURD List Jul 2017: http://www.ema.europa.eu/docs/en_GB/document_library/Other/2012/10/WC500133159.xls
** EURD list 2012: http://www.ema.europa.eu/docs/en_GB/document_library/Other/2012/04/WC500124999.xls