

**ERRATUM**

Due to production errors, items in Table 4 in the article, "Prevalence of Adverse Reactions in Nuclear Medicine," by Silberstein et al. (January 1996, pp. 185-192) were printed incorrectly. The table is reprinted here in its entirety.

**TABLE 4**  
Reported Adverse Reactions to Radiopharmaceuticals Used in the U.S.\*

	Chills	Fever	Nausea	Vomiting	Erythema, flushing	Diffuse rash	Puritus	Hives/urticaria	Cardiac arrest	Chest pain, tightness or heaviness	Hypertension	Hypotension	Respiratory reaction	Tachycardia	Bradycardia	Seizures	Syncope or faintness	Dizziness, vertigo	Headache	Diaphoresis	Cyanosis	Anaphylaxis	Facial swelling	Abdominal pain	Arthralgia	Metallic taste	Asthenia	Pain/burning at inj. site	None	Comments, other reactions										
<sup>57</sup> Co-cyanocobalamin																																								
Rubratope-57																																								
Dicopac kit																																								
[ <sup>51</sup> Cr]sodium chromate																																								
Chromitope																																								
[ <sup>18</sup> F]fludeoxyglucose, FDG,																																								
fluorodeoxyglucose																																								
[ <sup>59</sup> Fe]ferrous citrate																																								
[ <sup>67</sup> Ga]gallium citrate																																								
Neoscan																																								
[ <sup>111</sup> In]indium oxyquinoline																																								
Oxine																																								
[ <sup>111</sup> In-pentetate (DTPA)																																								
MPI-DTPA																																								
[ <sup>111</sup> In-pentetreotide																																								
Octreoscan																																								
[ <sup>111</sup> In-saturnomab pentetide																																								
OncoScint CR/OV																																								
[ <sup>123</sup> I]Iobenguane																																								
metaiodobenzylguanidine, MIBG																																								
[ <sup>123</sup> I]iodohippurate sodium																																								
Nephroflow, Nephropure																																								
[ <sup>123</sup> I]Iofetamine (l-d, l-N-isopropyl-p-																																								
iodoamphetamine																																								
hydrochloride, IMP)																																								
Spectamine																																								
[ <sup>123</sup> I]sodium iodide																																								

TABLE 4 (Continued)

	Chills	Fever	Nausea	Vomiting	Erythema, flushing	Diffuse rash	Puritus	Hives/urticaria	Cardiac arrest	Chest pain, tightness or heaviness	Hypertension	Hypotension	Respiratory reaction	Tachycardia	Bradycardia	Seizures	Syncope or faintness	Dizziness, vertigo	Headache	Diaphoresis	Cyanosis	Anaphylaxis	Facial swelling	Abdominal pain	Arthralgia	Metallic taste	Asthenia	Pain/burning at inj. site	None	Comments, other reactions								
[ <sup>125</sup> I]iodinated albumin (I-HSA, iodinated human serum albumin)					29																																	
[ <sup>125</sup> I]sodium iothalamate																																						
Glifil																																						
[ <sup>131</sup> I]jobenguane																																						
metaiodobenzylguanidine, MIBG																																						
[ <sup>131</sup> I]iodinated albumin (IISA, radiiodinated serum albumin)																																						
Megatope																																						
[ <sup>131</sup> I]iodohippurate sodium																																						
Hippurate, Hippuran																																						
[ <sup>131</sup> I]sodium iodide																																						
Iodotope																																						
<sup>131</sup> I-6-beta iodomethyl-18-norcholesterol																																						
NP-59																																						
<sup>81m</sup> Kr-krypton																																						
<sup>13</sup> N-ammonia																																						
[ <sup>67</sup> Ga]chromic phosphate suspension																																						
Phosphocol																																						
<sup>32</sup> P-sodium phosphate																																						
<sup>82</sup> Rb-rubidium																																						
<sup>88</sup> Sr-strontium chloride																																						
Metastron																																						
<sup>99m</sup> Tc-albumin colloid																																						
Microlite																																						
<sup>99m</sup> Tc-albumin (HSA, human serum albumin)																																						
<sup>99m</sup> Tc-antimony trisulfide colloid																																						
Lymph-scan																																						

TABLE 4 (Continued)

	Chills	Fever	Nausea	Vomiting	Erythema, flushing	Diffuse rash	Pruritus	Hives/urticaria	Cardiac arrest	Chest pain, tightness or heaviness	Hypertension	Hypotension	Respiratory reaction	Tachycardia	Bradycardia	Seizures	Syncope or faintness	Dizziness, vertigo	Headache	Diaphoresis	Cyanosis	Anaphylaxis	Facial swelling	Abdominal pain	Arthralgia	Metallic taste	Asthenia	Pain/burning at inj. site	None	Comments, other reactions	
<sup>99m</sup> Tc-bicisate dihydrochloride (ethyl cysteininate dimer, ECD) NeuroLite			29			29				29			29*			29	29	29	29	29	29					29			Neurologic adverse events may have been related to underlying disease, including hallucinations, parosmia, also cardiac failure; *respiratory arrest		
<sup>99m</sup> Tc-disofenin Hepatolite		28	29		16	28				28	22	16*	25†			25†				29	25	22	28	16				16			
<sup>99m</sup> Tc-exametazime (hexamethylpropylene amine oxime, HMPAO) Ceretec		29				29				29												29									
<sup>99m</sup> Tc-gluceptate Glucoscan, Technescan Gluceptate	24	18	18	18	18	28	28	28			18*	18	18	18	18	18	18	18	16	18										*Dyspnea	
<sup>99m</sup> Tc-iodofenin Technescan HIDA	28	28				29		29														29									
<sup>99m</sup> Tc-macroaggregated albumin (MAA) AN-MAA, Macrotec, MPI-MAA, Pulmolite, Technescan MAA	17	28	28	18	18	18	24	17	18	28	17	18	24	17	18	18	18	18	28	28	28	25	16	16			24			*Dyspnea, throat tightness; 16-arm numbness; 17-parosmia	
<sup>99m</sup> Tc-mebrofenin Choletec								28																							
<sup>99m</sup> Tc-mecronate (MDP, methylene diphosphonate) Osteolite, Technescan MDP, AN-MDP, MPI-MDP	16	16	16	16	16	16	2	17	28	16	27	27	16	27	27	27	16	2	16	16	18	18	16	16			27	27	27	27-photophobia; *one death secondary to cardiac arrhythmia	
<sup>99m</sup> Tc-meritaitide (MAG3, mercaptoacetyl-glycylglycylglycine) Technescan MAG3	28	28	27	27	21	21	16	21	29*	17	28	18	28	18			27	16	18			27	27	27							
<sup>99m</sup> Tc-oxidronate (HDP, hydroxymethylene diphosphonate)	29	29	28	28	27	27	21	27	27	27	29	29	29	29	28	27	28	27	28	27	28	27	28	27							
<sup>99m</sup> Tc-meritaitide (MAG3, mercaptoacetyl-glycylglycylglycine) Technescan MAG3		25	25	25	16												27														27-sore, thick throat
<sup>99m</sup> Tc-oxidronate (HDP, hydroxymethylene diphosphonate)	7	28	28	7	27	29	27		27*		25					25	25	25	25	25	27									*Heart burn	

TABLE 4 (Continued)

	Chills	Fever	Nausea	Vomiting	Erythema, flushing	Diffuse rash	Puritus	Hives/urticaria	Cardiac arrest	Chest pain, tightness or heaviness	Hypertension	Hypotension	Respiratory reaction	Tachycardia	Bradycardia	Seizures	Syncope or faintness	Dizziness, vertigo	Headache	Diaphoresis	Cyanosis	Anaphylaxis	Facial swelling	Abdominal pain	Arthralgia	Metallic taste	Asthenia	Pair/burning at inj. site	None	Comments, other reactions			
Osteoscan-HDP	18	28																															
<sup>99m</sup> Tc-pentetate (DTPA, diethylenetri-aminopentaacetic acid) Technescan DTPA, AN DTPA, MPI-DTPA, Techniplex	27	19																															
<sup>99m</sup> Tc-pyrophosphate (PYP) Pyrolite, Technescan PYP, Phosphotec, MPI-Pyrophosphate, AN Pyrotec, Ultratag	18*	18*	18	29	18*	16	18*	27	18*		18*	18*	18*																		*Cough; wheezing; trisodium salt can cause neurologic signs if given intrathecally		
<sup>99m</sup> Tc-sestamibi Cardiolite	28	28	16	28	28	28	28																								*Also from nonradioactive PYP reagent kits; 4-tinnitus		
<sup>99m</sup> Tc-sodium pertechnetate Minitec, UltratecKow	27	18	18	18	18	18	18	29	18	18	18	18	29																				
<sup>99m</sup> Tc-succimer (DMSA, dimercaptosuccinic acid) MPI-DMSA, Nephrosint	29	28	28	28	28	28	28							28																			
<sup>99m</sup> Tc-sulfur colloid AN-Sulfur Colloid, Technecoll, TcSC, Tesuloid	18	28	16	28	29	27	16	28	29	28	29	28	28*	18	28	27	18	28	18	18	18	18	18	18	18	28	28	29	28	28		*Wheezing, dyspnea, choking; 27-sneezing, itchy throat; 17-paresthesia, weakness 27-hand, arm numbness	
<sup>99m</sup> Tc-teboroxime CardioTec	16			16*	2	27																										*Erythema possibly due to dipyrindamole	
<sup>127</sup> Xe-xenon																																	
<sup>133</sup> Xe-xenon																																	

The radiopharmaceutical appears first. Chemical names are in parentheses. Commercial or trade names of the radiopharmaceutical appear last. Numbers in table are either reference sources or letters to the author.