

Table 2 Drug interactions with mIBG (adapted from the Radiopharmacy Protocol of the Nuclear Medicine Department, Queen Elizabeth Hospital, Birmingham, UK)

Drug group	Approved name	Recommended withdrawal time	Mechanism of interaction ^a
Cardiovascular and sympathomimetic drugs			
Antiarrhythmics for ventricular arrhythmias	Amiodarone	Not practical to withdraw	1,3
Combined α/β -blocker	Labetalol	72 hours	1,3
Adrenergic neurone blockers	Bretylium	48 hours	2,3
	Guanethidine	48 hours	2,3
	Reserpine	48 hours	2,3
α -Blocker	Phenoxybenzamine (intravenous doses only)	15 days	5
Calcium channel blockers	Amlodipine	48 hours	4,5
	Diltiazem	24 hours	4,5
	Felodipine	48 hours	4,5
	Isradipine	48 hours	4,5
	Lacidipine	48 hours	4,5
	Lercanidipine	48 hours	4,5
	Nicardipine	48 hours	4,5
	Nifedipine	24 hours	4,5
	Nimodipine	24 hours	4,5
	Nisoldipine	48 hours	4,5
	Verapamil	48 hours	4,5
Inotropic sympathomimetics	Dobutamine	24 hours	3
	Dopamine	24 hours	3
	Dopexamine	24 hours	3
Vasoconstrictor sympathomimetics	Ephedrine	24 hours	1
	Metaraminol	24 hours	3
	Norepinephrine	24 hours	3
	Phenylephrine	24 hours	3
β_2 stimulants (sympathomimetics)	Salbutamol	24 hours	3
	Terbutaline	24 hours	3
	Eformoterol	24 hours	3
	Bambuterol	24 hours	3
	Fenoterol	24 hours	3
	Salmeterol	24 hours	3
Other adrenoceptor stimulants	Orciprenaline	24 hours	3
Systemic and local nasal decongestants, compound cough and cold preparations	Pseudoephedrine	48 hours	3
	Phenylephrine	48 hours	3
	Ephedrine	24 hours	1
	Xylometazoline	24 hours	3
	Oxymetazoline	24 hours	3
Sympathomimetics for glaucoma	Brimonidine	48 hours	3
	Dipivefrine	48 hours	3
Neurological drugs			
Antipsychotics (neuroleptics)	Chlorpromazine	24 hours	1
	Benperidol	48 hours	1
	Flupentixol	48 hours, or 1 month for depot	1
	Fluphenazine	24 hours, or 1 month for depot	1
	Haloperidol	48 or 1 month for depot	1
	Levomepromazine	72 hours	1
	Pericyazine	48 hours	1

Table 2 (continued)

Drug group	Approved name	Recommended withdrawal time	Mechanism of interaction ^a
Sedating antihistamines	Perphenazine	24 hours	1
	Pimozide	72 hours	1
	Pipotiazine	1 month for depot	1
	Prochlorperazine	24 hours	1
	Promazine	24 hours	1
	Sulpiride	48 hours	1
	Thioridazine	24 hours	1
	Trifluoperazine	48 hours	1
	Zuclopenthixol	48 hours, or 1 month for depot	1
	Amisulpride	72 hours	1
	Clozapine	7 days	1
	Olanzapine	7–10 days	1
	Quetiapine	48 hours	1
	Risperidone	5 days or 1 month for depot	1
	Sertindole	15 days	1
	Zotepine	5 days	1
	Promethazine	24 hours	1
Opioid analgesics	Tramadol	24 hours	1
Tricyclic antidepressants	Amitriptyline	48 hours	1
	Amoxapine	48 hours	1
	Clomipramine	24 hours	1
	Dosulepin (dothiepin)	24 hours	1
	Doxepin	24 hours	1
	Imipramine	24 hours	1
	Lofepramine	48 hours	1
	Nortriptyline	24 hours	1
	Trimipramine	48 hours	1
Tricyclic-related antidepressants	Maprotiline	48 hours	1
	Mianserin	48 hours	1
	Trazolone	48 hours	1
	Venlafaxine	48 hours	1
	Mirtazepine	8 days	1
	Reboxetine	3 days	1
CNS stimulants	Amphetamines, e.g. dexamfetamine	48 hours	3
	Atomoxetine	5 days	1
	Methylphenidate	48 hours	5
	Modafinil	72 hours	5
	Cocaine	24 hours	1
	Caffeine	24 hours	5

^a Mechanisms of interaction:

1: Inhibition of sodium-dependent uptake system (i.e. uptake-one inhibition)

2: Transport interference: inhibition of uptake by active transport into vesicles, i.e. inhibition of granular uptake, and competition for transport into vesicles, i.e. competition for granular uptake

3: Depletion of content from storage vesicles/granules

4: Calcium-mediated

5: Other, possible, unknown mechanisms