β-BLOCKERS

Generic	Brand	Cardio-selectivity	ISA*	MSA**	Lipid Solubility	Protein Bound (%)	Metabolism	Elimination	Vaso-dilatory
Acebutolol	**Sectral**	•	•	•	Low	26	Hepatic	Bile, renal	
Atenolol	**Tenormin**	•			Low	6–16		Renal (primarily), fecal	
Betaxolol	**Kerlone**	•			Low	50	Hepatic	Renal	•
Bisoprolol	**Ziac†**	•			Low to Medium	~30	Hepatic	Renal, fecal	
Carvedilol ◊	**Coreg**				High	98	Hepatic (CYP2C9, CYP2D6)	Fecal (primarily), renal	•
Labetalol ◊	**Trandate**			•	Medium	~50	Hepatic (glucuronidation)	Renal, fecal	•
Metoprolol	**Lopressor**	•			Medium	12	Hepatic (CYP2D6)	Renal	
	Toprol-XL	•							
Nadolol	**Corgard**				Low	30	Hepatic	Renal	
Nebivolol	**Bystolic**	•			Low	98	Hepatic	Renal, fecal	•
Penbutolol	**Levatol**		•		Medium	80–98	Hepatic (conjugation, oxidation)	Renal	
Pindolol	N/A		•	•	Medium	40	Hepatic	Renal	
Propranolol	**Inderal**			•	High	90	Hepatic (CYP2D6, CYP1A2)	Renal	
	InnoPran XL			•					
Timolol	N/A				Medium	<10	Hepatic	Renal	

NOTES

◊ These have both α- and β-blocking activity.

†This drug is a combination product. It has more than one active drug ingredient.

Cardioselective products are less likely to cause bronchospasm, peripheral vasoconstriction, or hypoglycemia than non-cardioselective ones.

*__ISA: Intrinsic sympathomimetic activity__ may partially reduce the cardiac depressant and bronchoconstricting effects of β-blockade.

**__MSA: Membrane stabilizing activity__ may contribute to the clinical management of cardiac arrhythmias.

Lipid solubility determines how readily the drug passes through the blood brain barrier and possibly the placenta. Those drugs that have high lipid solubility pass through more readily than those agents with low lipid solubility. The incidence of CNS side effects may be higher in products with higher lipid solubility. (Rev. 10/2009)