

Table 4: Characteristics of specific Angiotensin II Type-1 Receptor Blockers and an ARB/neprilysin-inhibitor.

AT₁R blocker	Active molecule	Pharmacokinetics: Dog (unless otherwise noted)	Dosage & Doses/Day All dosages are oral
Species	Excretory route <i>(Human data)</i>		
Candesartan cilexetil ^{1,2} H, V	Candesartan (U=0.3%; F=99.7%)	Bio: 5% active drug, with peak concentration at 1.3h; ET _{1/2} 4-5h	D: 1mg/kg q24h
Eprosartan ³ H	Eprosartan (U=10%; F=90%)	----	----
Irbesartan ^{4,5} HV	Irbesartan (U=20%; F=80%)	Peak concentration at 5.5h; ET _{1/2} = 3.7h	D: 5mg/kg q24 to 12h C: 6 mg/kg q24h (experimental)
Losartan ^{6,7} V	E-3714; Losartan activity 1/3 of E-3714 (U=10%) <i>Enterohepatic recirculation in dog</i>	Bio: 23-33% with peak concentration at 1h; ET _{1/2} = 1.7-2.5h (single 5 to 20mg/kg dose)	Azotemic dogs: 0.125mg/kg q24h up-titrate to 0.5mg/kg q24h Non-Azotemic dogs: 0.5mg/kg q24h up-titrate to 1 mg/kg q24h
Olmesartan ⁸ H	RNH-6270 = active drug (U=40%; F=60%)	----	----
Telmisartan ^{7,9} V	Telmisartan Primarily eliminated as unchanged compound in feces (cat)	Dog: ET _{1/2} ~5.4h Cat: 33% bioavailability. Highly protein bound (>99.5%); ET _{1/2} 7.7 hr	D: 2mg/kg q24h C: 1mg/kg q24h (Semintra® label) C: 3mg/kg q24h (experimental)
Valsartan ¹⁰ H, V	Valsartan (U=30%; F=70%)	ET _{1/2} ~7.4h At 10 and 30 mg/kg no effect on blood pressure or cardiac output in normal dogs	D: Experimental dosages of 10-30mg/kg
Valsartan and Sacubitril ¹¹ (neprilysin Inhibitor) H, V	Valsartan (see above) Sacubitrilat (LBQ657) (U=52-68%)	45mg/kg/day significantly increases cGMP and lowers aldosterone in dogs with RAAS activation from a sodium restricted diet	D: Experimental dosages of 15-45mg/kg/day

AT₁R angiotensin II type-1 receptor; Bio, bioavailability; C, cat; D, dog; ET_{1/2}, elimination half-life; F, fecal excretion; H, human marketed only; h, hour; **V**, veterinary and human marketed; **V**, veterinary research/clinical use – not marketed; U, urinary excretion; (i) – italicized in parentheses, human data

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