

Selected References on Testosterone Administration Using ALZET® Osmotic Pumps

Testosterone Dose	Vehicle	Species	Duration	Pump Model	Route	Citation
T: 5 µg/day, MENT ¹ : 30 µg/day	Cyclodextrin	Mice (ORX ¹)	4 weeks	2004	SC	Shao, <i>et al.</i> Prostate (2006) 66[4]: 369-376.
7.5 mg/day	Cyclodextrin, Saline	Mice	17 days	2002	SC	Rojas-Ortiz, <i>et al.</i> Hormones and Behavior (2006) 49[1]: 123-128.
4, 12, 36 µg/day	Propandiol	Rat	16 weeks	2004	SC	Venken, <i>et al.</i> Bone (2005) 36[4]: 663-670.
50 µg/kg/day	Ethanol, Water	Rat	3, 7 days	2ML1	CNS (ICV)	Robichaud, <i>et al.</i> Journal of Neuroendocrinology (2005) 17[3]: 179-185.
0.5 mg/day	PEG 300, DMSO, Ethanol	Rat	2 weeks	2002	SC	Gao, <i>et al.</i> Endocrinology (2004) 145[12]: 5420-5428.
T and DHT ¹ : 100 µg/day	PEG 300	Rabbit (OVX ¹)	2 weeks	2002	SC	Kim, <i>et al.</i> International Journal of Impotence Research (2004) 16[1]: 43-50.
100 µg/day	PEG	Rabbit (OVX)	2 weeks	2002	SC	Traish, <i>et al.</i> Steroids (2004) 69[1]: 71-78.
75 mg/day	N/A	Dog (beagle)	28 days	2ML4	SC	Yokota, <i>et al.</i> Prostate (2004) 58[2]: 156-163.
4.3 µg/day	Saline	Fish (cod)	17 days	2MLx	IP	Comeau, <i>et al.</i> Transactions of the American Fisheries Society (2003) 132[5]: 1021-1026.
1 mg/kg/day	Cyclodextrin	Mice (nude)	4 weeks	2004	SC	Shao, <i>et al.</i> Prostate (2003) 57[1]: 1-7.
1 mg/kg/day	Propylene Glycol, Glycerol	Rat	7 days	2001	SC	Jalouli, <i>et al.</i> Endocrinology (2003) 144[1]: 101-109.
0.1, 0.3, 0.5, 0.75, 1.0 mg/day	PEG 300, DMSO, Ethanol	Rat	2 weeks	2002	SC	Yin, <i>et al.</i> Journal of Pharmacology and Experimental Therapeutics (2003) 304[3]: 1334-1340.
T: 60 µg/day, MENT: 180 µg/day	Cyclodextrin, Water	Rat	4 weeks	2004	SC	Shetty, <i>et al.</i> Endocrinology (2002) 143[9]: 3385-3396.

¹**Abbreviations:** MENT: nortestosterone, 7 alpha-methyl-19-, ORX: orchidectomized, DHT: dihydrotestosterone, OVX: ovariectomized

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Selected References on Estrogen Administration Using ALZET® Osmotic Pumps

Estradiol Dose	Vehicle	Species	Duration	Pump Model	Route	Citation
40 ng/hr	Propylene Glycol	Rat (pregnant, OVX ¹)	6 days	N/A	SC	Mark, <i>et al.</i> Placenta (2006) 27[2-3]: 208-214.
1.5 µg/day, 37.5 µg/day	PEG	Rat (OVX)	14 days	2002	N/A	Guan, <i>et al.</i> Journal of Steroid Biochemistry and Molecular Biology (2005) 97[3]: 241-250.
0.03 µg/day	N/A	Mice (ORX ¹)	4 weeks	N/A	SC	Wang, <i>et al.</i> Metabolism-Clinical and Experimental (2005) 54[11]: 1536-1541.
14.75 µg/hr	Saline	Dog (mongrel)	3 weeks	2ML4	SC	Batista, <i>et al.</i> American Journal of Physiology-Regulatory Integrative and Comparative Physiology (2005) 289[4]: R1064-R1073.
0.5 µg/kg/day	DMSO	Mice (pregnant)	10, 14 days	N/A	SC	Munoz-de-Toro, <i>et al.</i> Endocrinology (2005) 146[9]: 4138-4147.
10, 250 µg/day	Saline, Ethanol	Rat	10, 20 days	N/A	SC	Diel, <i>et al.</i> Molecular and Cellular Endocrinology (2005) 230[1-2]: 7-15.
50 µg/kg/day	Ethanol, Water	Rat	3, 7 days	2ML1	CNS (ICV)	Robichaud, <i>et al.</i> Journal of Neuroendocrinology (2005) 17[3]: 179-185.
3µg/day	N/A	Rat	4 weeks	2ML4	SC	Nawate, <i>et al.</i> British Journal of Pharmacology (2005) 144[2]: 178-189.
0.3 mg/kg/day Conjugated Estrogen	N/A	Rat	3 days	N/A	SC	Soustiel, <i>et al.</i> Journal of Neurotrauma (2005) 22[3]: 345-352.
0.03 µg/day	N/A	Mice (OVX)	6 weeks	N/A	SC	Wu, <i>et al.</i> Metabolism-Clinical and Experimental (2004) 53[7]: 942-948.
5 µg/day 15 µg/day	PEG 300	Rat (OVX)	14 days	2002	SC	Kim, <i>et al.</i> Journal of Urology (2004) 172[4]: 1538-1543.
0.1, 1, 10, 100 µg/day	Propylene Glycol	Rat (OVX)	8, 29 days	2001, 2004	SC	Hillisch, <i>et al.</i> Molecular Endocrinology (2004) 18[7]: 1599-1609.

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