

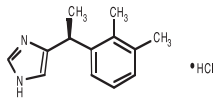
Dexmedetomidine®

(dexmedetomidine hydrochloride)
Sterile Injectable Solution-0.5 mg/mL

For Intramuscular and Intravenous Use in Dogs
and For Intramuscular Use in Cats
Sedative, Analgesic, Preanesthetic

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

DESCRIPTION: Dexmedetomidine (dexmedetomidine hydrochloride) is a synthetic alpha₂-adrenoceptor agonist with sedative and anesthetic properties. The chemical name is (+)-(+)-1-(2,3-dimethylphenyl)ethyl-1H-imidazole monohydrochloride. It is a white, or almost white, crystalline, water soluble substance having a molecular weight of 236.7. The molecular formula is C₁₃H₁₆N₂•HCl and the structural formula is:



Each mL of Dexmedetomidine contains 0.5 mg dexmedetomidine hydrochloride, 1.6 mg methylparaben (N₂), 0.2 mg propylparaben (N₂), 9.0 mg sodium chloride (NaCl), and water for injection (USP, q.s.).

INDICATIONS: Dexmedetomidine is indicated for use as a sedative and analgesic in dogs and cats to facilitate clinical procedures, clinical procedures, minor oral dental procedures, Dexmedetomidine is also indicated for use as a preanesthetic to general anesthesia in dogs and cats.

DOSE AND ADMINISTRATION:
Dogs: Sedation and Analgesia: 500 mcg/m² intramuscular (IM) or 375 mcg/m² intravenously (IV).
Preanesthesia: 125 or 375 mcg/m².
The choice of preanesthetic dose depends on the duration and severity of the procedure, as well as the anesthetic regime. The following two tables may be used to determine the correct dexmedetomidine hydrochloride dosage. **Note that the 375 mcg/m² dosage decreases body weight increases.** Dogs weighing 2 kg are dosed at 25.1 mcg/m² and dogs weighing 1 kg are dosed at 12.6 mcg/m². For intramuscular (IM) compared to dogs weighing 80 kg that are dosed at 8.7 mcg/kg. Due to the small volume of administration, accurate dosing is not possible in dogs weighing less than 2 kg (4.4 lb).

Table 1: CANINE SEDATION/ANALGESIA DOSE TABLE
Intramuscular (IM) and Intravenous (IV) dosing on the basis of body weight

Dexmedetomidine (0.5 mg/mL)				Preanesthesia (125 or 375 mcg/m ²)			
Dog Weight (kg)	Dexmedetomidine (mg)	Dexmedetomidine (mcg/kg)	Dog Weight (kg)	Dexmedetomidine (mg)	Dexmedetomidine (mcg/kg)	Dexmedetomidine (mcg/m ²)	Dexmedetomidine (mcg/m ²)
4.4	2.3	52	4.4	0.6	14	12.6	12.6
4.7	2.5	53	4.7	0.7	15	13.4	13.4
5.0	2.7	54	5.0	0.8	16	14.3	14.3
5.3	2.9	55	5.3	0.9	17	15.1	15.1
5.7	3.1	54	5.7	1.0	18	16.0	16.0
6.0	3.3	55	6.0	1.1	19	16.9	16.9
6.4	3.5	56	6.4	1.2	20	17.8	17.8
6.8	3.7	57	6.8	1.3	21	18.7	18.7
7.2	3.9	58	7.2	1.4	22	19.6	19.6
7.6	4.1	59	7.6	1.5	23	20.5	20.5
8.0	4.3	60	8.0	1.6	24	21.4	21.4
8.4	4.5	61	8.4	1.7	25	22.3	22.3
8.8	4.7	62	8.8	1.8	26	23.2	23.2
9.2	4.9	63	9.2	1.9	27	24.1	24.1
9.6	5.1	64	9.6	2.0	28	25.0	25.0
10.0	5.3	65	10.0	2.1	29	25.9	25.9
10.4	5.5	66	10.4	2.2	30	26.8	26.8
10.8	5.7	67	10.8	2.3	31	27.7	27.7
11.2	5.9	68	11.2	2.4	32	28.6	28.6
11.6	6.1	69	11.6	2.5	33	29.5	29.5
12.0	6.3	70	12.0	2.6	34	30.4	30.4
12.4	6.5	71	12.4	2.7	35	31.3	31.3
12.8	6.7	72	12.8	2.8	36	32.2	32.2
13.2	6.9	73	13.2	2.9	37	33.1	33.1
13.6	7.1	74	13.6	3.0	38	34.0	34.0
14.0	7.3	75	14.0	3.1	39	34.9	34.9
14.4	7.5	76	14.4	3.2	40	35.8	35.8
14.8	7.7	77	14.8	3.3	41	36.7	36.7
15.2	7.9	78	15.2	3.4	42	37.6	37.6
15.6	8.1	79	15.6	3.5	43	38.5	38.5
16.0	8.3	80	16.0	3.6	44	39.4	39.4
16.4	8.5	81	16.4	3.7	45	40.3	40.3
16.8	8.7	82	16.8	3.8	46	41.2	41.2
17.2	8.9	83	17.2	3.9	47	42.1	42.1
17.6	9.1	84	17.6	4.0	48	43.0	43.0
18.0	9.3	85	18.0	4.1	49	43.9	43.9
18.4	9.5	86	18.4	4.2	50	44.8	44.8
18.8	9.7	87	18.8	4.3	51	45.7	45.7
19.2	9.9	88	19.2	4.4	52	46.6	46.6
19.6	10.1	89	19.6	4.5	53	47.5	47.5
20.0	10.3	90	20.0	4.6	54	48.4	48.4
20.4	10.5	91	20.4	4.7	55	49.3	49.3
20.8	10.7	92	20.8	4.8	56	50.2	50.2
21.2	10.9	93	21.2	4.9	57	51.1	51.1
21.6	11.1	94	21.6	5.0	58	52.0	52.0
22.0	11.3	95	22.0	5.1	59	52.9	52.9
22.4	11.5	96	22.4	5.2	60	53.8	53.8
22.8	11.7	97	22.8	5.3	61	54.7	54.7
23.2	11.9	98	23.2	5.4	62	55.6	55.6
23.6	12.1	99	23.6	5.5	63	56.5	56.5
24.0	12.3	100	24.0	5.6	64	57.4	57.4
24.4	12.5	101	24.4	5.7	65	58.3	58.3
24.8	12.7	102	24.8	5.8	66	59.2	59.2
25.2	12.9	103	25.2	5.9	67	60.1	60.1
25.6	13.1	104	25.6	6.0	68	61.0	61.0
26.0	13.3	105	26.0	6.1	69	61.9	61.9
26.4	13.5	106	26.4	6.2	70	62.8	62.8
26.8	13.7	107	26.8	6.3	71	63.7	63.7
27.2	13.9	108	27.2	6.4	72	64.6	64.6
27.6	14.1	109	27.6	6.5	73	65.5	65.5
28.0	14.3	110	28.0	6.6	74	66.4	66.4
28.4	14.5	111	28.4	6.7	75	67.3	67.3
28.8	14.7	112	28.8	6.8	76	68.2	68.2
29.2	14.9	113	29.2	6.9	77	69.1	69.1
29.6	15.1	114	29.6	7.0	78	70.0	70.0
30.0	15.3	115	30.0	7.1	79	70.9	70.9
30.4	15.5	116	30.4	7.2	80	71.8	71.8
30.8	15.7	117	30.8	7.3	81	72.7	72.7
31.2	15.9	118	31.2	7.4	82	73.6	73.6
31.6	16.1	119	31.6	7.5	83	74.5	74.5
32.0	16.3	120	32.0	7.6	84	75.4	75.4
32.4	16.5	121	32.4	7.7	85	76.3	76.3
32.8	16.7	122	32.8	7.8	86	77.2	77.2
33.2	16.9	123	33.2	7.9	87	78.1	78.1
33.6	17.1	124	33.6	8.0	88	79.0	79.0
34.0	17.3	125	34.0	8.1	89	79.9	79.9
34.4	17.5	126	34.4	8.2	90	80.8	80.8
34.8	17.7	127	34.8	8.3	91	81.7	81.7
35.2	17.9	128	35.2	8.4	92	82.6	82.6
35.6	18.1	129	35.6	8.5	93	83.5	83.5
36.0	18.3	130	36.0	8.6	94	84.4	84.4
36.4	18.5	131	36.4	8.7	95	85.3	85.3
36.8	18.7	132	36.8	8.8	96	86.2	86.2
37.2	18.9	133	37.2	8.9	97	87.1	87.1
37.6	19.1	134	37.6	9.0	98	88.0	88.0
38.0	19.3	135	38.0	9.1	99	88.9	88.9
38.4	19.5	136	38.4	9.2	100	89.8	89.8
38.8	19.7	137	38.8	9.3	101	90.7	90.7
39.2	19.9	138	39.2	9.4	102	91.6	91.6
39.6	20.1	139	39.6	9.5	103	92.5	92.5
40.0	20.3	140	40.0	9.6	104	93.4	93.4
40.4	20.5	141	40.4	9.7	105	94.3	94.3
40.8	20.7	142	40.8	9.8	106	95.2	95.2
41.2	20.9	143	41.2	9.9	107	96.1	96.1
41.6	21.1	144	41.6	10.0	108	97.0	97.0
42.0	21.3	145	42.0	10.1	109	97.9	97.9
42.4	21.5	146	42.4	10.2	110	98.8	98.8
42.8	21.7	147	42.8	10.3	111	99.7	99.7
43.2	21.9	148	43.2	10.4	112	100.6	100.6
43.6	22.1	149	43.6	10.5	113	101.5	101.5
44.0	22.3	150	44.0	10.6	114	102.4	102.4
44.4	22.5	151	44.4	10.7	115	103.3	103.3
44.8	22.7	152	44.8	10.8	116	104.2	104.2
45.2	22.9	153	45.2	10.9	117	105.1	105.1
45.6	23.1	154	45.6	11.0	118	106.0	106.0
46.0	23.3	155	46.0	11.1	119	106.9	106.9
46.4	23.5	156	46.4	11.2	120	107.8	107.8
46.8	23.7	157	46.8	11.3	121	108.7	108.7
47.2	23.9	158	47.2	11.4	122	109.6	109.6
47.6	24.1	159	47.6	11.5	123	110.5	110.5
48.0	24.3	160	48.0	11.6	124	111.4	111.4
48.4	24.5	161	48.4	11.7	125	112.3	112.3
48.8	24.7	162	48.8	11.8	126	113.2	113.2
49.2	24.9	163	49.2	11.9	127	114.1	114.1
49.6	25.1	164	49.6	12.0	128	115.0	115.0
50.0	25.3	165	50.0	12.1	129	115.9	115.9
50.4	25.5	166	50.4	12.2	130	116.8	116.8
50.8	25.7	167	50.8	12.3	131	117.7	117.7
51.2	25.9	168	51.2	12.4	132	118.6	118.6
51.6	26.1	169	51.6	12.5	133	119.5	119.5
52.0	26.3	170	52.0	12.6	134	120.4	120.4
52.4	26.5	171	52.4	12.7	135	121.3	121.3
52.8	26.7	172	52.8	12.8	136	122.2	122.2
53.2	26.9	173	53.2	12.9	137	123.1	123.1
53.6	27.1	174	53.6	13.0	138	124.0	124.0
54.0	27.3	175	54.0	13.1	139	124.9	124.9
54.4	27.5	176	54.4	13.2	140	125.8	125.8
54.8	27.7	177	54.8	13.3	141	126.7	126.7
55.2	27.9	178	55.2	13.4	142	127.6	127.6
55.6	28.1	179	55.6	13.5	143	128.5	128.5
56.0	28.3	180	56.0	13.6	144	129.4	129.4
56.4	28.5	181	56.4	13.7	145	130.3	130.3
56.8	28.7	182	56.8	13.8	146	131.2	131.2
57.2	28.9	183	57.2	13.9	147	132.1	132.1
57.6	29.1	184	57.6	14.0	148	133.0	133.0
58.0	29.3	185	58.0	14.1	149	133.9	133.9
58.4	29.5	186	58.4	14.2	150	134.8	134.8
58.8	29.7	187	58.8	14.3	151	135.7	135.7
59.2	29.9	188	59.2	14.4	152	136.6	136.6
59.6	30.1	189	59.6	14.5	153	137.5	137.5
60.0	30.3	190	60.0	14.6	154	138.4	138.4
60.4	30.5	191	60.4	14.7	155	139.3	139.3
60.8	30.7	192	60.8	14.8	156	140.2	140.2
61.2	30.9	193	61.2	14.9	157	141.1	141.1
61.6	31.1	194	61.6	15.0	158	142.0	142.0
62.0	31.3	195	62.0	15.1	159	142.9	142.9
62.4	31.5	196	62.4	15.2	160	143.8	143.8
62.8	31.7	197	62.8	15.3	161	144.7	144.7
63.2	31.9	198	63.2	15.4	162	145.6	145.6
63.6	32.1	199	63.6	15.5	163	146.5	146.5
64.0	32.3	200	64.0	15.6	164	147.4	147.4
64.4	32.5	201	64.4	15.7	165	148.3	148.3
64.8	32.7	202	64.8	15.8	166	149.2	149.2