The iPRECIO® infusion pump is an advanced infusion device for programmable drug delivery applications in mice, rats and larger animals. This implantable infusion pump enables full control over dosing studies and empowers researchers to execute even the most complex dosing protocols, such as intermittent bolus dosing, variable/constant delivery, escalating drug administration and more.

The infusion protocol is programmed using the iPRECIO management software and downloaded to the pump’s memory chip. Once implanted, the pump delivers automatically according to the pre-programmed infusion protocol. The iPRECIO refillable reservoir can be accessed percutaneously via a re-sealable septum, enabling researchers to change solutions or refill the pump during the course of the study.

The following is a list of research studies describing the use of iPRECIO pumps in various research areas. Contact ALZET technical services at 800-692-2990 or alzet@durect.com for additional information.

**iPRECIO Bibliography**

**SMP-300**

1. Sabharwal *et al.* **Angiotensin-(1-7) delays onset of dilated cardiomyopathy in mice with muscular dystrophy.** Poster B321 754.7, Experimental Biology 2016, San Diego, CA

2. Chavan *et al.* **Liver-derived ketone bodies are necessary for food anticipation.** Nature Communications 2016;7:10580 [Link to Publication]

**SMP-200**

3. Gey *et al.* **Continuous bilateral infusion of vigabatrin into the subthalamic nucleus: Effects of seizure threshold and GABA metabolism in tworat models.** Neurobiology of Disewase 2016;91:194-208 [Link to Abstract]

4. Tan *et al.* **Toxoplasma gondii infection and testosterone congruently increase tolerance of male rats for risk of reward forfeiture.** Hormones and Behavior 2016;79:37-44 [Link to Abstract]


7. Lundt et al. EEG radiotelemetry in small laboratory rodents - a powerful state-of-the-art approach in neuropsychiatric, neurodegenerative and epilepsy research. Neural Plasticity 2016;Article ID 8213878 [Link to Publication]


24. Yamato et al. Brain Interleukin-1β and the Intrinsic Receptor Antagonist Control Peripheral Toll-Like Receptor 3-Mediated Suppression of Spontaneous Activity in Rats. PLOS ONE 2014;9(3) [Link to Article]


35. Yoshinori et al. Extracellular phosphorylation is a novel target for regenerative medicine against spinal cord injury. The FASEB Journal 2012;26:921.4. [Link to Abstract]


37. Perron et al. Validation and use of the iPRECIO® Micro Infusion Pump on GLP studies. Society of Toxicology Annual Meeting, March 11-14, 2012. [Link to Publication]


51. Yamato et al. Endogenous IL-1β and IL-1 receptor antagonist in the brain are involved in poly I:C-induced immunological fatigue. The 33rd Annual Meeting of the Japan Neuroscience Society, September 2-4, 2010.


54. Davis et al. Serotonin infusion via the iPrecio® micro infusion pump results in repeated reductions in blood pressure in the normotensive Sprague Dawley rat. FASEB J. 2010;24 (meeting abstract supplement) lb551. [Link to Abstract]
Research Studies Using iPRECIO® Infusion Pumps


58. Tan and Tsuru. Infusion Pumps for Small Laboratory Animals. ALN Magazine May/June 2009. [Link to Publication]


