

Supplementary Information

**Oral pharmacokinetics in beagle dogs of the mitragynine metabolite, 7-hydroxymitragynine**

Elizabeth A. Maxwell<sup>1</sup>, Tamara I. King<sup>2</sup>, Shyam H. Kamble<sup>2,3</sup>, Kanumuri Siva Rama Raju<sup>2,3</sup>, Erin C. Berthold<sup>2</sup>, Francisco León<sup>4</sup>, Aidan Hampson<sup>5</sup>, Lance R. McMahon<sup>6</sup>, Christopher R. McCurdy<sup>2,3,4\*</sup>, and Abhisheak Sharma<sup>2,3\*</sup>

**Affiliation**

<sup>1</sup>Department of Small Animal Clinical Sciences, College of Veterinary Medicine, University of Florida, Gainesville, FL, USA

<sup>2</sup>Department of Pharmaceutics, College of Pharmacy, University of Florida, Gainesville, FL, USA

<sup>3</sup>Translational Drug Development Core, Clinical and Translational Science Institute, University of Florida, Gainesville, FL, USA

<sup>4</sup>Department of Medicinal Chemistry, College of Pharmacy, University of Florida, Gainesville, FL, USA

<sup>5</sup>Division of Therapeutics and Medical Consequences, National Institute on Drug Abuse, National Institutes of Health, Bethesda, MD, USA

<sup>6</sup>Department of Pharmacodynamics, College of Pharmacy, University of Florida, Gainesville, FL, USA

Supplementary Table 1. Bench-top stability of 7-hydroxymitragynine in pooled dog plasma with or without protease inhibitor cocktail (N = 5 at each concentration).

Stability Condition	Concentration (ng/ml)	Variation (%Deviation)	
		Pooled dog plasma	Pooled dog plasma spiked with protease cocktail inhibitor
Bench top stability (room temperature, 1 h)	3	-11.8	-7.8
	180	-11.0	-7.4