

# Supplementary Materials: Pharmacokinetics of DA-6886, A New 5-HT<sub>4</sub> Receptor Agonist, in Rats

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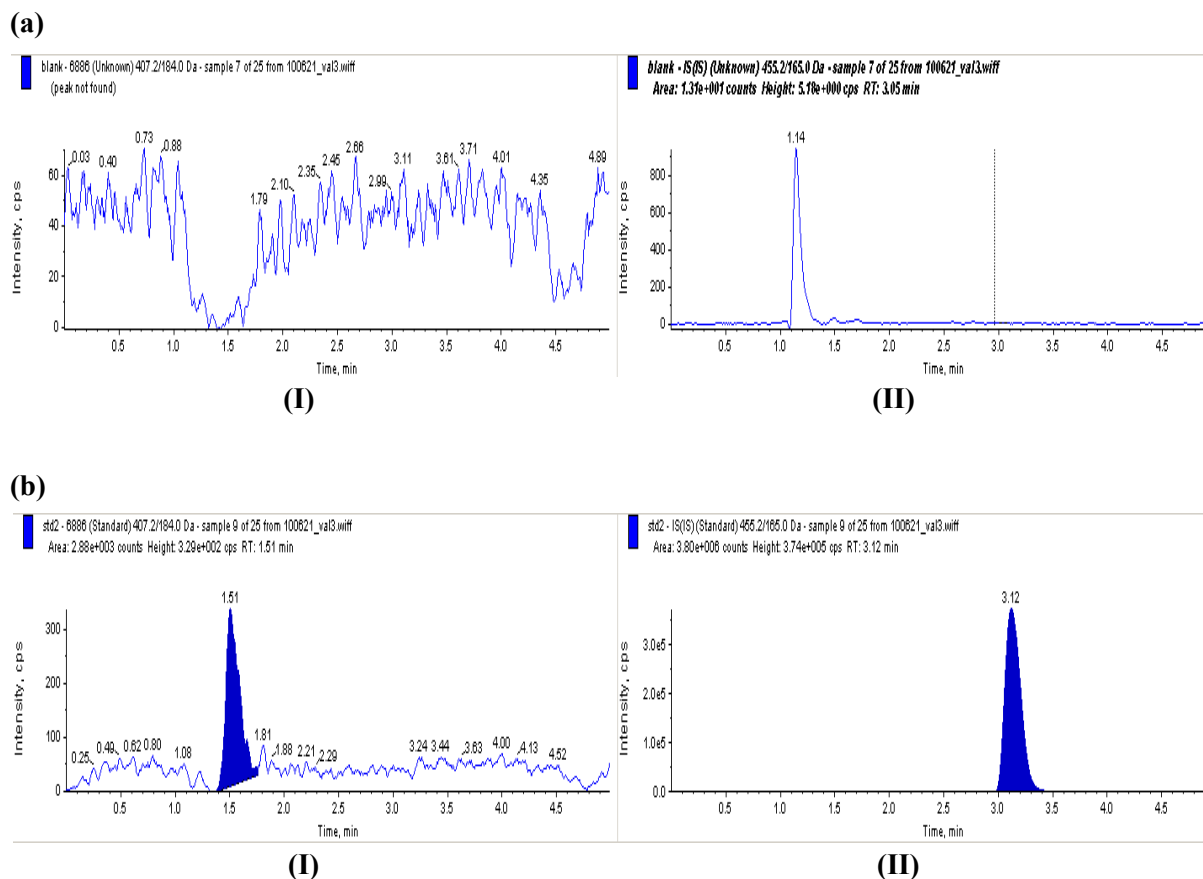
**Table S1.** Preparation of calibration standards for tissue homogenates.

**Table S1(a).** Grouping rat tissues based on blood perfusion, muscle mass and other properties.

Group	Tissues	Properties
1	Brain	Contains a large amount of phospholipids.
2	Heart, lungs, liver, kidneys	High blood flow and red tissue.
3	Stomach, small intestine, large intestine, muscle	Digestive system, lots of muscles.
4	Fat	Lots of fat.

**Table S1(b).** Calibration standards for each group of tissues.

Group	Tissue standards (ng/g tissue)
1, 4	10, 30, 100, 300, 1000, 3000
2, 3	100, 300, 1000, 3000, 10000, 30000



**Figure S1.** Representative MRM chromatograms of DA-6886 (I) and the IS verapamil (II) in rat plasma sample: (a) blank plasma; (b) blank plasma spiked with LLOQ level of DA-6886 (2 ng/mL) or mixed with the IS at working concentrations (50 ng/mL).

**Table S2.** Stability of DA-6886 in rat plasma at different storage conditions ( $n = 3$ ).

Storage conditions	QC concentration (ng/mL)	Initially measured concentration (ng/mL)		Finally measured concentration (ng/mL)		
		Mean $\pm$ S.D.	CV (%)	Mean $\pm$ S.D.	CV (%)	Relative Concentration (%)
Short term <sup>1</sup>	6 (LQC)	6.12 $\pm$ 0.400	6.54	6.38 $\pm$ 0.403	6.31	104
	1600 (HQC)	1563 $\pm$ 20.8	1.33	1733 $\pm$ 40.4	2.33	111
Post-preparative <sup>2</sup>	6 (LQC)	6.12 $\pm$ 0.400	6.54	6.05 $\pm$ 0.574	9.48	99.0
	1600 (HQC)	1563 $\pm$ 20.8	1.33	1523 $\pm$ 60.3	3.96	97.4
Long term storage & Freeze-thaw <sup>3</sup>	6 (LQC)	6.12 $\pm$ 0.400	6.54	5.97 $\pm$ 0.166	2.78	97.5
	1600 (HQC)	1563 $\pm$ 20.8	1.33	1767 $\pm$ 15.3	0.865	113

<sup>1</sup>Storage at room temperature for 4 h; <sup>2</sup>Storage of processed samples at 4°C for 24 h; <sup>3</sup>Storage at –20°C over 14 days and three cycles of –20°C to room temperature.