

Supplement Data

for

A pilot study on clinical pharmacokinetics and preclinical pharmacodynamics of (+)-epicatechin on cardiometabolic endpoints

Aldo Moreno-Ulloa^{a,d}, Nayelli Nájera-García^c, Marcela Hernández^c, Israel
Ramírez-Sánchez^{a,c}, Pam R. Taub^a, Yongxuan Su^e, Ernesto Beltrán-Partida^g,
Guillermo Ceballos^c, Sundeep Dugar^f, George Schreiner^f, Theodore P.
Ciaraldi^{a,b}, Robert R. Henry^{a,b} and Francisco Villarreal^a

^aUniversity of California, San Diego, School of Medicine, ^bSan Diego VA Health
Care System ^cEscuela Superior de Medicina del Instituto Politécnico Nacional,
Sección de Posgrado, México City, México, ^dDepartamento de Innovación
Biomédica, Centro de Investigación Científica y de Educación Superior de
Ensenada (CICESE), Baja California, México, ^eUniversity of California, San
Diego, Chemistry and Biochemistry and ^fCardero Therapeutics, Inc. ^gUniversidad
Autónoma de Baja California, Facultad de Odontología, Mexicali, BC, México

Abbreviated Title: (+)-Epicatechin pharmacokinetics

Corresponding author/reprint requests:

Francisco Villarreal MD, PhD
Professor of Medicine
UCSD School of Medicine
9500 Gilman Dr. BSB4028
La Jolla, CA 92093-0613J
Tel (858) 534-3630
Lab (858) 534-1317
Fax (858) 534-0522
fvillarr@ucsd.edu

Supplemental Table S1. Mass accuracy measurements of (+)-epicatechin ((+)-Epi) and metabolites by HPLC-HR-MS

Compound	Composition [M-H] ⁻	Theoretical mass [M-H] ⁻	Measured mass [M-H] ⁻	Mass error (ppm)
(+)-Epi	C ₁₅ H ₁₃ O ₆	289.0717	289.0718	0.3
M1a	C ₁₅ H ₁₃ O ₉ S	369.0286	369.0277	-2.4
M1b	C ₁₅ H ₁₃ O ₉ S	369.0286	369.0281	-1.4
M2a	C ₁₆ H ₁₅ O ₉ S	383.0442	383.0440	-0.5
M2b	C ₁₆ H ₁₅ O ₉ S	383.0442	383.0440	-0.5
M2c	C ₁₆ H ₁₅ O ₉ S	383.0442	383.0438	-1.0
M3a	C ₂₁ H ₂₁ O ₁₂	465.1038	465.1034	-0.9
M3b	C ₂₁ H ₂₁ O ₁₂	465.1038	465.1032	-1.3
Taxifolin (IS)	C ₁₅ H ₁₁ O ₇	303.05103	303.0510	-0.1

M1 are sulfate metabolites; M2 are methyl sulfate metabolites; M3 are glucuronide metabolites.