Examination of the Impact of CYP3A4/5 on Drug–Drug Interaction between Schizandrol A/Schizandrol B and Tacrolimus (FK-506): A Physiologically Based Pharmacokinetic Modeling Approach

Qingfeng He [1,†], Fengjiao Bu [1,†], Qizhen Wang [1], Min Li [1], Jiaying Lin [1], Zhijia Tang [1], Wen Yao Mak [1,3], Xiaomei Zhuang [4], Xiao Zhu [1], Hai-Shu Lin [2,*] and Xiaoqiang Xiang [1,*]

[1] Department of Clinical Pharmacy and Pharmacy Administration, School of Pharmacy, Fudan University, Shanghai 201203, China; qf_he@fudan.edu.cn (Q.H.); fbu13@fudan.edu.cn (F.B.); wangqz16@fudan.edu.cn (Q.W.); 19211030067@fudan.edu.cn (M.L.); 21211030054@fudan.edu.cn (J.L.); zjtang@fudan.edu.cn (Z.T.); xiaozhu@fudan.edu.cn (X.Z.)
[2] College of Pharmacy, Shenzhen Technology University, Shenzhen 518118, China
[3] Clinical Research Centre, Institute for Clinical Research, National Institute of Health, Hospital Pulau Pinang, Pinang 10450, Malaysia; makwenyao@gmail.com
[4] State Key Laboratory of Toxicology and Medical Countermeasures, Beijing Institute of Pharmacology and Toxicology, Beijing 100850, China; xiaomeizhuang@163.com
* Correspondence: linhaishu@sztu.edu.cn (H.-S.L.); xiangxq@fudan.edu.cn (X.X.); Tel.: +86-21-51980024 (X.X.)
† Authors contributed equally to this manuscript.

Table S1. Summary of LC-MS/MS parameters

	Tacrolimus	Ascomycin (IS)	6β-Hydroxytestosterone	Prednisolone (IS)
MRM Transition m/z (Q1-Q3)	821.5>768.6	305.2>269.2	810.7>757.6	361.3>343.2
MS Ionization	Electrospray ionization (ESI) mode			

DP (V)	25.0	78.0	100.0	22.0
CE (V)	30.0	22.0	30.0	15.0
Column	Hypersil Gold reversed-phase C18 column (2.1 × 100 mm, 3 μm) protected by a 12.5-mm Agilent Eclipse XDB-C18 guard column			
Column Temperature	$35^{o}C$			
Run Time	4 min			
Mobile Phase	Phase A: acetonitrile Phase B: 10 mM ammonium acetate (containing 0.1% acetic acid) with isocratic elution of A:B = 95:5		Phase A: acetonitrile Phase B: 0.1% formic acid (A:B = 60:40)	
Flow	0.3 mL/min			
Injection volume	5 μL			
Retention Time	3.75 min	2.79 min	3.75 min	2.79 min