

Supplementary Material

Supplemental Methods

Charts of terbinafine-treated adults with onychomycosis at our institution 2000-2021 were reviewed. Patients with chronic renal insufficiency (CRI) stages 1 (>90cc/min), 2 (60-<90cc/min), and 3 (30-<60cc/min) ≤3 months before terbinafine treatment were included. Creatinine clearance was calculated using Cockcroft-Gault equation. Aspartate

aminotransferase (AST), alanine aminotransferase (ALT), and complete blood count (CBC) tests ≤3 months prior to terbinafine treatment, during treatment, and ≤3 months post-treatment were collected. Propensity score-matched analysis was performed, with two patients with normal renal function (stage 1) matched to one patient with abnormal renal function (stage 2/3).

Table S1. Characteristics of patients treated with oral terbinafine.

Patient characteristics	Onychomycosis patients
Creatinine clearance stages (% , n)	
<i>Stage 1 Normal (>90mL/min)</i>	61.2% (449)
<i>Stage 2 Mild (60-<90mL/min)</i>	28.7% (211)
<i>Stage 3 Moderate (30-<60mL/min)</i>	10.1% (74)
Sex (% , n)	
<i>Male</i>	59.7% (438)
<i>Female</i>	40.3% (296)
Age (Mean years; min-max)	55.2; 18-100
Race (% , n)	
<i>White</i>	42.4% (311)
<i>Black</i>	16.8% (123)
<i>Asian</i>	3.1% (23)
<i>Race not reported</i>	37.7% (277)
Ethnicity (% , n)	
<i>Hispanic</i>	13.2% (97)
<i>Non-Hispanic</i>	25.3% (186)
<i>Ethnicity not reported</i>	61.4% (451)

Table S2. Percentage change for AST, ALT, and CBC baseline, during, and post-terbinafine treatment by CRI stage.

Groups	Tests	Abnormal baseline results		Abnormal results during treatment		Abnormal results post-treatment		Change baseline and during treatment	Change baseline and post-treatment
		No.	%	No.	%	No.	%	% (P-value)	% (P value)
Stage 1 (n=449)	AST	40	10.58	30	10.00	16	9.52	-0.58 (0.905)	-1.06 (0.823)
	ALT	36	9.45	23	7.67	18	10.71	-1.78 (0.495)	1.26 (0.763)
	CBC	73	25.35	48	23.76	42	32.81	-1.59 (0.767)	7.46 (0.147)
Stage 2 (n=211)	AST	10	5.62	14	9.40	7	9.21	3.78 (0.275)	3.59 (0.439)
	ALT	13	7.30	8	5.44	3	3.95	-1.86 (0.651)	-3.35 (0.469)
	CBC	37	27.61	34	34.69	20	33.90	7.08 (0.312)	6.29 (0.477)
Stage 3 (n=74)	AST	3	5.45	4	9.09	1	3.45	3.64 (0.758)	2.00 (>0.999)
	ALT	1	1.82	1	2.27	2	6.90	0.45 (>0.999)	5.08 (0.566)
	CBC	18	43.90	21	58.33	15	57.69	14.43 (0.301)	13.79 (0.396)

Table S3. Change in creatinine during and post-terbinafine treatment from baseline.*

Patient group	Mean (SD) creatinine (mg/dL) baseline	Mean (SD) creatinine (mg/dL) during treatment	Mean (SD) creatinine (mg/dL) post-treatment	Adjusted change (mg/dL) during treatment-baseline (95% CI, P value)	Adjusted change (mg/dL) post-treatment-baseline (95% CI, P value)
All patients (stages 1-3)	0.92 (0.21)	0.95 (0.24)	0.96 (0.29)	0.01 (-0.01—0.02; P=0.33)	0.03 (0.01—0.04, P=0.005)
Stage 1	0.88 (0.18)	0.91 (0.19)	0.90 (0.18)	0.02 (0.01—0.04; P=0.002)	0.02 (0.01—0.04, P=0.005)
Stage 2	0.97 (0.2)	0.97 (0.25)	0.98 (0.22)	-0.01 (-0.04—0.01, P=0.376)	0 (-0.03—0.03, P=0.843)
Stage 3	1.04 (0.3)	1.09 (0.36)	1.18 (0.56)	-0.01 (-0.1—0.08), P=0.768)	0.09 (0—0.18, P=0.065)

*Changes and P values calculated as estimated marginal means from multivariable mixed effect models, adjusting for age, sex, race, and preexisting liver disease.