

Supplementary Table 1. Time table of the original study

Study day (time point)	Actions
1 (TP1)	Blood sample collection for 25(OH)D determination, 1 st MED testing
2 - 5	1 st Photoprovocation testing
8	1 st Photoprovocation reading, 1 st administration of vitamin D or placebo
22 (TP2)	Blood sample collection, 2 nd administration of vitamin D or placebo
36 (TP3)	Blood sample collection (TP3), 2 nd MED testing, start of 2 nd photoprovocation
43	2 nd Photoprovocation reading, handing out of questionnaire

Supplementary Table 2. Characteristics of PLE patients.

Characteristics	Patients with normal 25(OH)D serum levels	Patients with low 25(OH)D serum levels
Gender	f: 12; m: 4	f: 8; m: 2
Age in years (range)	45.2 (24-68)	47.2 (25-76)
Skin phototype*, n	I: 1; II: 8; III: 6; IV: 1	I: 1; II: 2; III: 7
Mean disease duration in years (range)	21.2 (1-42)	14.6 (1-29)
Establishment of diagnosis	**PGPH: 16; CE: 7; P: 4; H: 1	PGPH: 10; CE: 5; P: 3; H: 3
Results of photoprovocation (years before study start and at study start)	*** UVA+/UVB+: 1; UVA-/UVB+:1; UVA-/UVB-: 2; nd: 12	UVA+/UVB+: 1; UVA-/UVB+: 1; SSR+: 1; nd: 7
Pathology of PLE lesions	**** mp: 2; pap: 6; pv: 7; v: 1	mp: 4; pap: 3; pv: 2; v: 1
Predilection body site	face: 2; V-neck: 16; arm: 10; forearm: 8; trunk: 10; thigh: 6; leg: 1; foot: 1	face: 0; V-neck: 9; arm: 4; forearm: 5; trunk: 0; thigh: 2; leg: 0; foot:2
25(OH)D serum levels at TP1 (mean with range)	38.7 (30.4-56.8)	24.5 (18.3-28.8)

* According to Fitzpatrick classification; ** PGPH = Physician-guided patient history, as described in Patients and Methods; CE = Clinical examination at presentation of the disease; P = Photoprovocation; H = Histology; *** SSR = solar simulated radiation; +, positive or -, negative for the different wavebands as indicated with laboratory photoprovocation with near-erythemagenic daily exposure over up to 4 days; nd = not done; **** mp = maculopapular; pap = papular; pv = papulovesicular; v = vesicular; abd. = abdomen