

Supplementary Table S1. Comparison of baseline and month 12 vitamin D levels according to season.

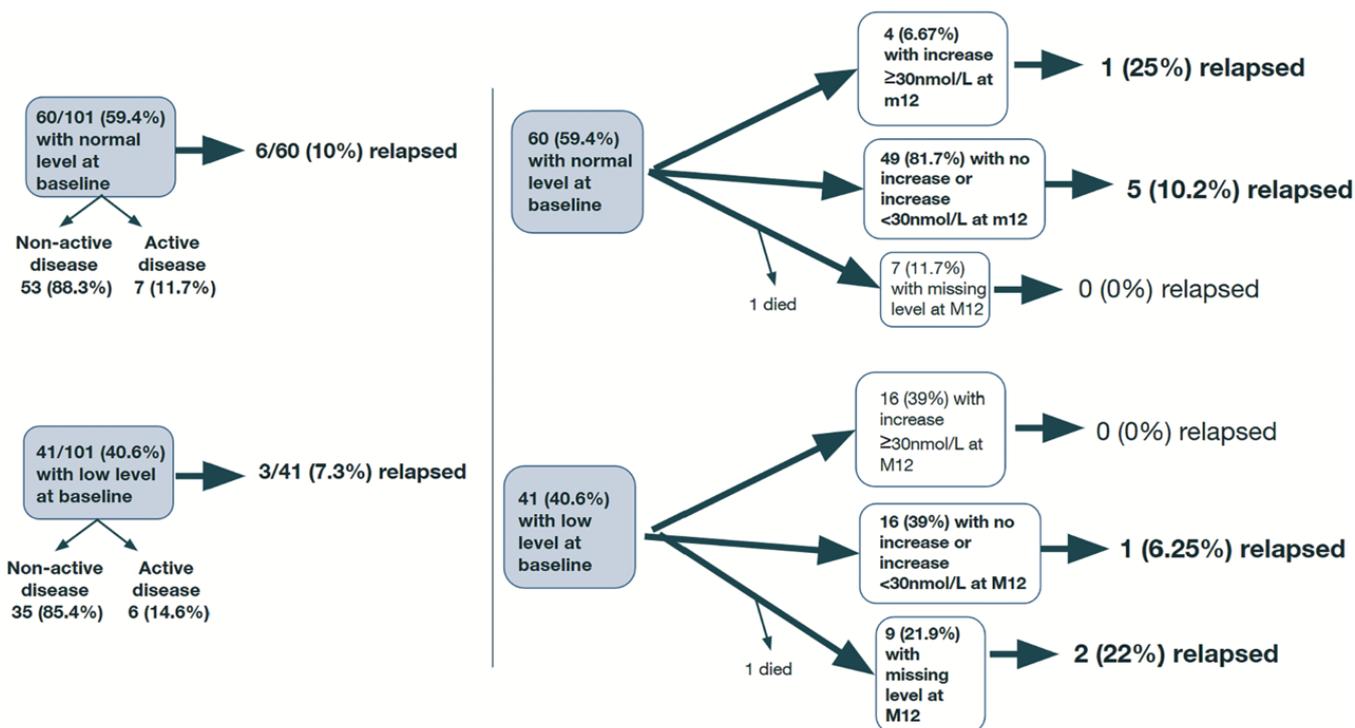
	Total	Baseline	Month 12	P value
April-June	104.3+36.97 (n=66)	97.26+39.6 (n=34)	111.72+32.4 (n=32)	0.109
July-September	105.4+47.19 (n=30)	90+43.95 (n=10)	113.135+46.87 (n=20)	0.203
October-December	94+45.25 (n=24)	91+48.6 (n=20)	109.15+14.3 (n=4)	0.19
January-March	87+40.87 (n=59)	80.78+41.94 (n=37)	98.086+36.5 (n=22)	0.103

Supplementary Table S2. Mean dose of prednisone (PDN) \pm standard deviation reported in mg/day at enrolment in addition to median dose and interquartile range (IQR). The numbers of patients using other immunosuppressants (IS) are also shown.

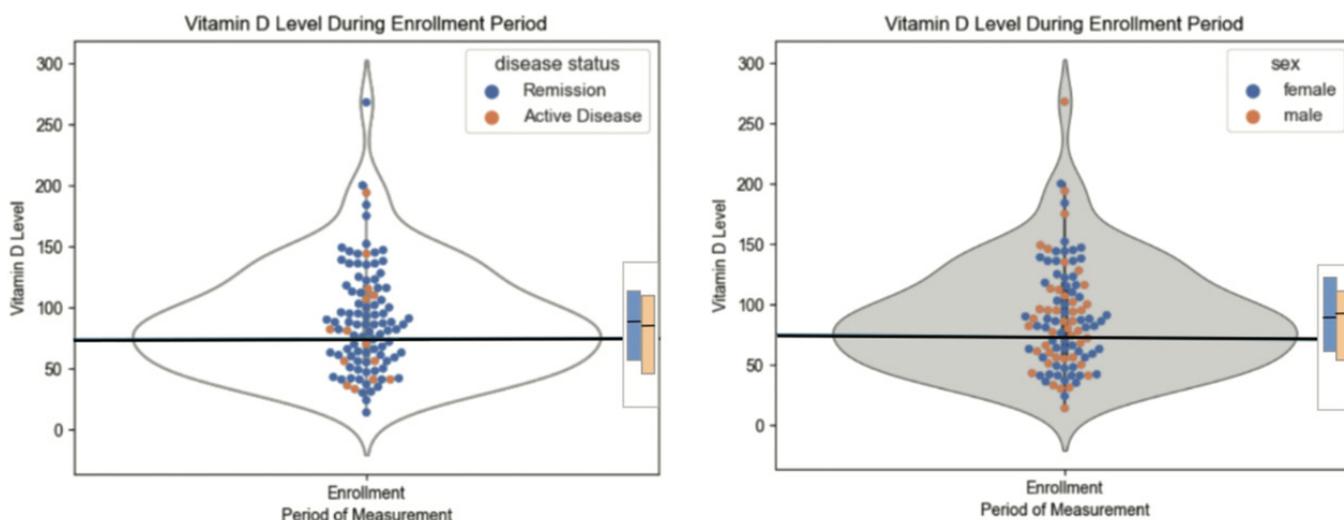
	Relapsers n=9	Non-relapsers n= 92	P-value
Mean daily dose of PDN \pm SD, mg	5.667 \pm 7.17	6.89 \pm 14.2	0.332
Median daily dose of PDN [IQR], mg	5.0 [0-10]	1.0 [0-5]	
Use of other IS during study period, n(%)	4 (44.4)	68 (73.9)	0.031

Supplementary Table S3. Univariate comparison between clinical manifestations of relapsers (n=9) and non relapsers (n=92). Ever present manifestations collected from patients are listed.

	Relapsers n=9	%	Non-replasers n=92	%	P-value
Smokers	3	33.3	18	19.6	0.166
MSK (arthralgias)	5	55.6	46	50.0	0.374
Skin	4	44.4	23	25.0	0.104
Purpura	2	22.2	13	14.1	0.258
Ulcers	0	0.0	0	0.0	
Infarcts	0	0.0	0	0.0	
Hives/Urticaria	1	11.1	6	6.5	0.301
Eyes	1	11.1	24	26.1	0.159
Uveitis	0	0.0	0	0.0	
Scleritis	0	0.0	0	0.0	
Keratitis	0	0.0	0	0.0	
ENT	8	88.9	62	67.4	0.092
Ulcers (ENT)	2	22.2	25	27.2	0.375
Sinusitis	7	77.8	55	59.8	0.145
Subglottic stenosis	2	22.2	4	4.3	0.015
Hearing Loss	1	11.1	14	15.2	0.371
Lung	9	100.0	70	76.1	0.048
Asthma	3	33.3	17	18.5	0.145
Effusion	2	22.2	6	6.5	0.046
Alv. Hemorrhage	2	22.2	25	27.2	0.374
Nodules	2	22.2	23	25.0	0.425
Lung fibrosis	1	11.1	7	7.6	0.356
GGO/Infiltrate	6	66.7	25	27.2	0.007
Cardio	2	22.2	11	12.0	0.192
Cardiomyopathy	2	22.2	7	7.6	0.071
Pericarditis	1	11.1	2	2.2	0.067
GI	1	11.1	16	17.4	0.316
Ischemic Bowel	0	0.0	0	0.0	
Neuro	4	44.4	21	22.8	0.076
Mononeuritis multiplex	4	44.4	14	15.2	0.014
Sensory neuroplex	2	22.2	8	8.7	0.098
Stroke	0	0.0	1	1.1	0.374
Renal	6	66.7	57	62.0	0.376
Hypertension	1	11.1	2	2.2	0.066
Proteinuria	6	66.7	42	45.7	0.116
Hematuria	5	55.6	57	62.0	0.352
AKI	2	22.2	37	40.2	0.144
ESRD/Dialysis	0	0.0	4	4.3	0.264
Hematology	1	11.1	6	6.5	0.301
VTE	0	0.0	4	4.3	0.264



Supplementary Fig. S1. Study flowchart based on vitamin D levels and primary outcome (relapse). This diagram shows the relationship between an increase by ≥ 30 nmol/L at month 12 (from baseline) and relapse.



Supplementary Fig. S2. Violin plots of vitamin D levels at enrolment by disease status (white) and sex (grey). The black horizontal lines overlaying the plots indicate the threshold for low vitamin D status < 75 nmol/L. The vertical boxes (blue and orange) represent the corresponding interquartile ranges (IQR) with the median indicated by the central line for each corresponding subgroup.