Supplementary Table S1

Subgroup analysis of participants in the feasibility trial alone. The primary study outcome of proportion of participants achieving a urate target of ≤ 0.36mmol/l is an intention to treat analysis with missing participants assumed to have failed to reach target. Results are reported as total number (percentage) then Risk Difference (RD) or Relative Risk (RR) with 95 % confidence intervals. Significance determined by Fishers exact test. Continuous outcomes for participants continuing in the study are given as the mean (standard deviation) with the mean difference (95% confidence interval) and significance calculated using a two sample T test. Discrete outcomes are given as mean (standard deviation) with the rate difference (95% confidence interval) and significance calculated using a 2 sample Poisson rate test.

	12 months					24 months				
Categorical study outcomes	**2-monthly urate (n=30)**	**Annual urate (n=14)**	**RD**	**RR**	**p value**	**2-monthly urate (n=30)**	**Annual urate (n=11)**	**RD**	**RR**	**p value**
Urate ≤ 0.36 mmol/l	27/30 (90.00%)	12/15 (80.00%)	0.10 (0.10 to 0.36)	1.12 (0.85 to 1.49)	0.38	29/30 (96.66%)	9/15 (60.00%)	0.37 (0.12 to 0.61)	1.61 (1.06 to 2.45)	0.003
Tophaceous disease	6/30 (20.00%)	3/14 (21.43%)	0.014 (-0.21 to 0.30)	0.93 (0.27 to 3.20)	1.00	4/30 (13.33%)	2/11 (0.18%)	0.13 (-0.14 to 0.29)	0.73 (0.15 to 3.26)	0.65
Any flares in past 12 months	10/30 (33.33%)	4/14 (28.57%)	0.048 (-0.24 to 0. 29)	1.17 (0.44 to 3.08)	1.00	2/30 (6.67%)	3/11 (27.27%)	0.21 (-0.022 to 0.50)	0.24 (0.047 to 1.27)	0.11
Remission	17/30 (56.67%)	7/14 (50.00%)	0.067 (-0.22 to 0. 35)	1.13 (0.62 to 2.09)	0.75	24/30 (80.00%)	8/11 (72.73%)	0.073 (-0.17 to 0.38)	1.10 (0.73 to 1.65)	0.68
Continuous study outcomes	**2-monthly urate (n=30)**	**Annual Urate (n=14)**	**Mean difference (95% ci)**	**p value**		**2-monthly urate (n=30)**	**Annual Urate (n=11)**	**Mean difference (95% ci)**	**p value**	
Urate (mmol/l)	0.30 (0.071)	0.31 (0.078)	0.010 (-0.038 to 0.058)	0.68		0.28 (0.095)	0.28 (0.14)	0.00 (-0.072 to 0.077)	1.00	
Allopurinol dose (mg/day)	386.21 (170.55)	457.14 (145.25)	70.93 (-35.63 to 177.49)	0.19		350.00 (103.64)	445.45 (112.81)	95.45 (19.83 to 171.07)	0.015	
Discrete study outcomes	**2-monthly urate (n=30)**	**Annual Urate (n=14)**	**Rate difference (95% ci)**	**p value**		**2-monthly urate (n=30)**	**Annual Urate (n=11)**	**Rate difference (95% ci)**	**p value**	
Flares	15 flares in 30 participants	12 flares in14 participants	-0.89 (-1.91 to 0.12)	0.08		2 flares in 30 participants	5 flares in11 participants	-0.39 (-0.67 to -0.10)	0.008	
Doses missed in last week	10 doses in 30 participants	1 dose in 14 participants	7.86 (4.54 to 11.17)	<0.001		10 doses in 30 participants	12 doses in 11 participants	-0.76 (-1.26 to -0.25)	0.003	