

Table SI. Metabolite levels before and after the addition of allopurinol to treatment with azathioprine (AZA)

Pat. No.	Sex	AD or HE	Before the addition of allopurinol					Reason for addition of allopurinol	After the addition of allopurinol				
			AZA dose (mg/day)	6-MMP pmol/ 8×10 ⁸ RBC	6-TGN pmol/ 8×10 ⁸ RBC	6-MMP/6-TGN ratio	Clinical effect (IGA)		AZA dose (mg/day)	6-MMP pmol/ 8×10 ⁸ RBC	6-TGN pmol/ 8×10 ⁸ RBC	6-MMP/6-TGN ratio	Clinical effect (IGA)
1	F	HE	100	2,242	74	30.3	2 (R)	Skewed metabolism	50	335	123	2.7	1 (R)
2	F	HE	150	26,027	99	262.9	2 (R)	Skewed metabolism	50	316	173	1.8	2 (R)
3	F	HE	150	10,526	141	74.7	1 (R)	Subjective side-effects, skewed metabolism	50	865	211	4.1	1 (R)
4	F	AD	100	6,233	207	30.1	2 (R)	Skewed metabolism	25	195	261	0.7	2 (R)
5	M	AD	100	439	76	5.8	3 (N)	Ineffectiveness	50	146	139	1.1	2 (R)
6	F	AD	150	7,919	232	34.1	3 (N)	Ineffectiveness, skewed metabolism	50	721	478	1.5	1 (R)
7	F	AD	150	3,712	245	15.2	3 (N)	Ineffectiveness, skewed metabolism, subjective side-effects	50	178	543	0.3	2 (R)
8	M	HE	100 ^d	547	227	2.4	4 (N)	Ineffectiveness, subjective side-effects	50 ^a	95	616	0.2	3 (N)
9	M	HE	150 ^d	1,735	127	13.7	3 (N)	Ineffectiveness, skewed metabolism	50	198	190	1.0	3 (N)
10	M	AD	200 ^b	2,762	357	7.7	3 (N)	Ineffectiveness, skewed metabolism	75 ^b	127	525	0.2	3 (N)
11	F	AD	200 ^c	13,758	340	40.5	2 (N)	Skewed metabolism	100 ^b	2,192	1,083	2.0	2 (N)
12	F	HE	150	8,231	285	28.9	5 (N)	Ineffectiveness, skewed metabolism	50 ^e	676	466	1.5	2 (N)
13	M	AD	150	10,028	406	24.7	3 (N)	Ineffectiveness, skewed metabolism	50	234	593	0.4	3 (N)
14	F	AD	150	3,916	172	22.8	3 (N)	Ineffectiveness, skewed metabolism	50	148	418	0.4	3 (N)
15	F	AD	150	1,240	163	7.6	3 (N)	Ineffectiveness, subjective side-effects	50	396	429	0.9	3 (N)

Concomitant use of prednisone ^a5 mg/day; ^b10 mg/day; ^c12.5 mg/day; ^d20 mg/day; ^e30 mg/day.

AD: atopic dermatitis; AZA: azathioprine, HE: chronic hand/foot eczema; IGA: investigator global assessment; (N): non-responder; (R): responder; 6-MMP: methylated 6-methylmercaptapurine; 6-TGN: 6-thioguanine nucleotide; RBC: red blood cells.