

**Table S1** Clinical outcomes in response to 6 months of mepolizumab therapy

Parameter	Baseline	6 months	P value
CRS patient reported outcome measures			
SNOT-22	45.1±19.9	30.6±22.5	0.007*
Overall nasal function	-2.5±3.4	1.5±3.3	<0.001*
Nasal symptom score	14.5±5.2	9.5±5.9	0.002*
SNOT-22 nasal obstruction score	3.1±1.4	2.0±1.6	0.01*
SNOT-22 Rhinologic subdomain	16.0±5.9	10.7±6.6	0.006*
SNOT-22 Extra-nasal rhinologic subdomain	7.5±3.4	4.1±3.7	0.005*
SNOT-22 Ear/facial subdomain	7.4±5.1	5.1±5.2	0.051
SNOT-22 Psychological subdomain	12.9±8.0	8.5±7.9	0.006*
SNOT-22 Sleep subdomain	11.4±6.8	8.5±7.4	0.06
Asthma patient reported outcome measures			
ACQ-5 total	1.97±1.1	1.0±1.0	0.001*
Woken at night asthma	1.4±1.5	0.6±0.8	0.02*
Symptoms in morning	2.0±1.5	1.0±1.1	0.01*
Limitation in activities	1.8±1.6	0.8±1.1	0.03*
Shortness of breath	2.3±1.1	1.5±1.2	0.004*
Wheeze	2.4±1.5	1.4±1.4	0.003*
Nitric oxide outcomes			
FeNO (ppb)	53±33	29±14	0.002*
nNO (ppb)	404±269	377±327	0.65
Endoscopic outcomes			
Lund-Mackay score	42.9±11.2	33.6±22.2	0.09
Total purulence	2.3±5.9	0.5±1.5	0.22
Total discharge	8.9±6.6	5.7±5.5	0.07
Total oedema	33.9±8.8	27.4±18.2	0.17

\*, indicates significant results. Results expressed as mean ± standard deviation. SNOT-22, Sino-Nasal Outcome Test 22-Item; ACQ-5, Asthma Control Questionnaire 5-item; FeNO, fractional exhaled nitric oxide; nNO, nasal nitric oxide; ppb, parts per billion

**Table S2** Comparison of baseline patient reported outcome measures and endoscopic findings between responders and non-responders

XXX	Responder (n=14)	Non-Responder (n=6)	P value
SNOT-22	51.3±17.3	30.7±19.1	0.03*
Nasal symptom score	16.1±4.1	11.3±5.9	0.05
SNOT-22 nasal obstruction score	3.5±1.1	2.0±1.5	0.02*
Rhinologic subdomain	17.8±4.9	12.5±6.4	0.06
Extra-nasal rhinologic subdomain	8.4±3.1	5.3 x± 3.1	0.06
Ear/facial subdomain	8.6±5.0	5.2±4.5	0.17
Psychological subdomain	15.2±7.4	6.2±5.8	0.02*
Sleep subdomain	12.5±6.5	7.5±7.0	0.14
ACQ-5	2.3±1.2	1.2±0.5	0.03*
Woken at night	1.7±1.5	0.7±0.8	0.14
Morning symptoms	2.5±1.3	0.7±1.0	0.008*
Activities	2.2±1.7	0.7±0.5	0.007*
Shortness of breath	2.6±1.2	1.7±0.5	0.09
Wheeze	2.6±1.6	2.0±0.9	0.43
Lund-Mackay score	40.8±8.5	43.7±12.4	0.61
Total purulence	1.3±1.6	2.6±7.1	0.66
Total discharge	6.8±3.2	9.7±7.6	0.39
Total oedema	32.7±10.2	34.4±8.6	0.71

\*, indicates significant results. SNOT-22, Sino-Nasal Outcome Test 22-Item; ACQ-5, Asthma Control Questionnaire 5-item.

**Table S3** Post treatment outcomes following mepolizumab treatment (n=18)

Parameter	End of treatment	Post treatment	P value
SNOT-22	30.6±22.5	35.3±25.3	0.11
Overall nasal function	1.5±3.3	0.4±4.0	0.18
Nasal symptom score	9.5±5.9	11.1±7.4	0.45
SNOT-22 nasal obstruction score	1.9±1.6	2.1±1.7	0.51
SNOT-22 Rhinologic subdomain	10.7±6.6	12.5±7.8	0.43
SNOT-22 Extra-nasal rhinologic subdomain	4.1±3.7	5.3±4.9	0.33
SNOT-22 Ear/facial subdomain	5.1±5.2	7.8±5.2	0.09
SNOT-22 Psychological subdomain	8.5±7.9	9.1±9.0	0.11
SNOT-22 Sleep subdomain	8.5±7.4	8.9±7.0	0.10
ACQ-5 total	1.0±1.0	1.4±1.3	0.08
Woken at night asthma	0.7±0.8	0.8±1.1	0.61
Symptoms in morning	0.9±1.0	1.6±1.8	0.09
Limitation in activities	0.8±1.1	1.3±1.5	0.11
Shortness of breath	1.3±1.1	1.6±1.5	0.36
Wheeze	1.2±1.4	1.5±1.6	0.39
Modified Lund-Mackay Post-Operative Endoscopic Score (MLMES)	35.4±23.0	36.2±18.4	0.82
Total purulence	0.6±1.5	1.5±2.3	0.20
Total discharge	6.1±5.7	7.4±5.7	0.45
Total oedema	27.9±19.1	28.0±14.3	0.96

\*, indicates significant results. SNOT-22, Sino-Nasal Outcome Test 22-Item; ACQ-5, Asthma Control Questionnaire 5-item.