

Supplementary Table S1. *DRB1* allele carrier frequency in MCTD patients and controls.

|                   | MCTD<br>(n=116) | Control<br>(n=413) | <i>P</i>              | OR    | <i>P<sub>c</sub></i> | 95%CI         |
|-------------------|-----------------|--------------------|-----------------------|-------|----------------------|---------------|
| <i>DRB1*01:01</i> | 10 (8.6)        | 41 (9.9)           | 0.8587                | 0.86  | >1                   | (0.41–1.77)   |
| <i>DRB1*03:01</i> | 0 (0.0)         | 2 (0.5)            | 1.0000                | 0.71  | >1                   | (0.03–14.82)  |
| <i>DRB1*04:01</i> | 14 (12.1)       | 7 (1.7)            | 8.66X10 <sup>-6</sup> | 7.96  | 0.0003               | (3.13–20.24)  |
| <i>DRB1*04:03</i> | 7 (6.0)         | 19 (4.6)           | 0.4766                | 1.33  | >1                   | (0.55–3.25)   |
| <i>DRB1*04:04</i> | 2 (1.7)         | 0 (0.0)            | 0.0478                | 18.06 | >1                   | (0.86–378.79) |
| <i>DRB1*04:05</i> | 27 (23.3)       | 87 (21.1)          | 0.6107                | 1.14  | >1                   | (0.70–1.86)   |
| <i>DRB1*04:06</i> | 5 (4.3)         | 34 (8.2)           | 0.2257                | 0.50  | >1                   | (0.19–1.31)   |
| <i>DRB1*04:07</i> | 0 (0.0)         | 3 (0.7)            | 1.0000                | 0.50  | >1                   | (0.03–9.82)   |
| <i>DRB1*04:10</i> | 2 (1.7)         | 14 (3.4)           | 0.5415                | 0.50  | >1                   | (0.11–2.23)   |
| <i>DRB1*07:01</i> | 0 (0.0)         | 3 (0.7)            | 1.0000                | 0.50  | >1                   | (0.03–9.82)   |
| <i>DRB1*08:02</i> | 11 (9.5)        | 38 (9.2)           | 1.0000                | 1.03  | >1                   | (0.51–2.09)   |
| <i>DRB1*08:03</i> | 22 (19.0)       | 61 (14.8)          | 0.3114                | 1.35  | >1                   | (0.79–2.31)   |
| <i>DRB1*08:09</i> | 0 (0.0)         | 1 (0.2)            | 1.0000                | 1.18  | >1                   | (0.05–29.17)  |
| <i>DRB1*09:01</i> | 43 (37.1)       | 105 (25.4)         | 0.0189                | 1.73  | 0.5468               | (1.12–2.67)   |
| <i>DRB1*10:01</i> | 0 (0.0)         | 2 (0.5)            | 1.0000                | 0.71  | >1                   | (0.03–14.82)  |
| <i>DRB1*11:01</i> | 3 (2.6)         | 21 (5.1)           | 0.3201                | 0.50  | >1                   | (0.15–1.69)   |
| <i>DRB1*12:01</i> | 4 (3.4)         | 29 (7.0)           | 0.1955                | 0.47  | >1                   | (0.16–1.37)   |
| <i>DRB1*12:02</i> | 1 (0.9)         | 10 (2.4)           | 0.4700                | 0.35  | >1                   | (0.04–2.77)   |
| <i>DRB1*13:01</i> | 0 (0.0)         | 5 (1.2)            | 0.5909                | 0.32  | >1                   | (0.02–5.81)   |
| <i>DRB1*13:02</i> | 5 (4.3)         | 57 (13.8)          | 0.0032                | 0.28  | 0.0929               | (0.11–0.72)   |
| <i>DRB1*14:03</i> | 3 (2.6)         | 21 (5.1)           | 0.3201                | 0.50  | >1                   | (0.15–1.69)   |
| <i>DRB1*14:04</i> | 0 (0.0)         | 1 (0.2)            | 1.0000                | 1.18  | >1                   | (0.05–29.17)  |
| <i>DRB1*14:05</i> | 2 (1.7)         | 14 (3.4)           | 0.5415                | 0.50  | >1                   | (0.11–2.23)   |
| <i>DRB1*14:06</i> | 1 (0.9)         | 16 (3.9)           | 0.1383                | 0.22  | >1                   | (0.03–1.64)   |
| <i>DRB1*14:07</i> | 0 (0.0)         | 1 (0.2)            | 1.0000                | 1.18  | >1                   | (0.05–29.17)  |
| <i>DRB1*14:54</i> | 5 (4.3)         | 28 (6.8)           | 0.3923                | 0.62  | >1                   | (0.23–1.64)   |
| <i>DRB1*15:01</i> | 27 (23.3)       | 68 (16.5)          | 0.1008                | 1.54  | >1                   | (0.93–2.55)   |
| <i>DRB1*15:02</i> | 20 (17.2)       | 89 (21.5)          | 0.3637                | 0.76  | >1                   | (0.44–1.30)   |
| <i>DRB1*16:02</i> | 2 (1.7)         | 5 (1.2)            | 0.6512                | 1.43  | >1                   | (0.27–7.48)   |

Allele carrier frequencies are shown in parentheses (%). Association was tested by Fisher's exact test using 2X2 contingency tables. MCTD: mixed connective tissue disease, OR: odds ratio, CI: confidence interval, *P<sub>c</sub>*: corrected *P* (*P<sub>c</sub>* values more than 1 were shown as ">1").