

Supplementary Table S1. Comparison of demographics between patients with dermatomyositis and polymyositis.

| Demographic characteristics | | |
|-----------------------------|---------------|---------------|
| | DM (n = 6997) | PM (n = 9802) |
| Characteristic | | |
| Women (%) | 5092 (72.8) | 6468 (66.0) |
| Age, mean (SD), y | 55.4 (20.5) | 62.2 (16.1) |
| Race (%) | | |
| White | 4262 (60.9) | 5554 (56.7) |
| Black | 1286 (18.4) | 3011 (30.7) |
| Hispanic | 991 (14.2) | 802 (8.2) |
| Asian | 195 (2.8) | 165 (1.7) |
| Native American | 35 (0.5) | 46 (0.5) |

DM: dermatomyositis; PM: polymyositis; SD: standard deviation; y: years.

Supplementary Table S2. Frequency of comorbidity in the inclusion body myositis *versus* dermatomyositis and polymyositis. P-values which remained statistically significant after the false discovery analysis are highlighted in bold.

| Diagnosis | IBM (n = 2020) | IIM (n = 16799) | p-value | DM (n = 6997) | PM (n = 9802) | p-value |
|---|-------------------|--------------------|--------------------|------------------|------------------|--------------------|
| Acute respiratory failure | 0.058 | 0.053 | 0.34722 | 0.052 | 0.054 | 0.56868 |
| Aspiration pneumonia | 0.143 | 0.036 | <0.0001 | 0.035 | 0.037 | 0.4965 |
| Pneumonia organism unspecified | 0.092 | 0.103 | 0.12356 | 0.091 | 0.112 | <0.00001 |
| Pneumonia due to pseudomonas | 0.011 | 0.005 | 0.0007 | 0.004 | 0.005 | 0.34212 |
| Chronic obstructive pulmonary disease | 0.05 | 0.038 | 0.0088 | 0.026 | 0.046 | <0.00001 |
| Other pulmonary embolism and infarction | 0.02 | 0.018 | 0.52218 | 0.018 | 0.018 | 0.999 |
| Acute myocardial infarction of anterolateral wall episode of care unspecified | 0.0 | 0.0 | 0.999 | 0.0 | 0.0 | 0.999 |
| Acute venous embolism and thrombosis of unspecified deep vessels of lower extremity | 0.004 | 0.005 | 0.54186 | 0.006 | 0.004 | 0.06576 |
| Atrial fibrillation | 0.168 | 0.113 | <0.00001 | 0.093 | 0.126 | <0.00001 |
| Chronic ischaemic heart disease | 0.001 | 0.001 | 0.999 | 0.001 | 0.001 | 0.999 |
| Congestive heart failure | 0.104 | 0.12 | 0.03572 | 0.101 | 0.133 | <0.00001 |
| Subendocardial infarction | 0.048 | 0.026 | <0.00001 | 0.02 | 0.03 | <0.00001 |
| Stroke | 0.016 | 0.009 | <0.00001 | 0.008 | 0.009 | 0.4902 |
| Shock | 0.006 | 0.003 | 0.0271 | 0.002 | 0.004 | 0.0232 |
| Systemic inflammatory response syndrome (SIRS) | 0.003 | 0.006 | 0.08914 | 0.007 | 0.005 | 0.09296 |
| Unspecified septicaemia | 0.064 | 0.04 | <0.00001 | 0.029 | 0.048 | 0.00001 |
| Volume depletion, unspecified | 0.007 | 0.008 | 0.63122 | 0.006 | 0.008 | 0.13104 |
| Critical illness myopathy | 0.002 | 0.002 | 0.999 | 0.002 | 0.002 | 0.999 |
| Cellulitis of leg | 0.014 | 0.02 | 0.06432 | 0.023 | 0.017 | 0.0056 |
| Urinary tract infection | 0.124 | 0.12 | 0.60306 | 0.105 | 0.131 | <0.00001 |
| Falls | 0.107 | 0.041 | <0.00001 | 0.034 | 0.045 | 0.00036 |

IBM: inclusion body myositis; IIM: idiopathic inflammatory myopathy; DM: dermatomyositis; PM: polymyositis; SD: standard deviation; y: years.