SUPPLEMENTARY TABLES

Supplementary Table 1. Highly frequent SNPs associated with ischemic and hemorrhagic stroke are not differentially examined in the Pompe patients and their family members.

| Gene       | Lead-SNP | Chromosome | Position       | Allele | Pompe patients | Normal members |
|------------|----------|------------|----------------|--------|----------------|----------------|
| ABO        | rs505922 | 9          | 136149229      | T>C    | 2/2            | 5/6            |
| APOE       | rs429358 | 19         | 45411941       | T>C    | 0/2            | 0/6            |
| AQP9       | rs4471613| 15         | 58551694       | G>A    | 0/2            | 0/6            |
| CDC5L      | rs556621 | 6          | 44594159       | T>G    | 2/2            | 4/6            |
| FOXF2      | rs12204590| 6          | 1337393        | T>A    | 0/2            | 0/6            |
| HABP2      | rs11196288| 10         | 115057443      | A>G    | 2/2            | 6/6            |
| HDAC9      | rs2107595| 7          | 19049388       | G>A    | 2/2            | 5/6            |
| MMP12      | rs660599 | 11         | 102729757      | G>A    | 0/2            | 0/6            |
| NINJ2      | rs1183579| 12         | 775199         | G>A    | 1/2            | 5/6            |
| PITX2      | rs6843082| 4          | 111718067      | G>A    | 0/2            | 2/6            |
| PMF1       | rs2984613| 1          | 156197380      | A>T    | 2/2            | 5/6            |
| PRKCH      | rs2230500| 14         | 61924239       | G>A    | 0/2            | 1/6            |
| SH2B3/ALDH2| rs10744777| 12        | 112233018      | T>C    | 2/2            | 6/6            |
| TSPAN2     | rs12122341| 1         | 115655690      | C>G    | 0/2            | 0/6            |
| ZFHX3      | rs879324 | 16         | 73068678       | G>A    | 0/2            | 1/6            |

The frequency of these SNPs were identified from several independent big cohorts in the review article [20].

Supplementary Table 2. Common autophagy-related gene SNPs associated with cardiovascular diseases are not differentially examined in the Pompe patients and their family members.

| Gene       | Lead-SNP | chromosome | Position       | Allele | Pompe patients | Normal members |
|------------|----------|------------|----------------|--------|----------------|----------------|
| ATG7       | rs2447607| chr3       | 11552027       | C>T    | 2/2            | 6/6            |
| ATG4D      | rs7255312| chr19      | 10663165       | C>T    | 2/2            | 3/6            |
| ATG4C      | rs6587988| chr1       | 63252766       | C>T    | 0/2            | 0/6            |
| AMBRA1     | rs11038913| chr11     | 46559730       | T>C    | 0/2            | 0/6            |
| ATG13      | rs8914   | chr11      | 46699124       | G>A    | 0/2            | 0/6            |
| ATG16L1    | rs4944804| chr11      | 72520530       | C>A    | 0/2            | 0/6            |
| MAP1LC3A   | rs6088521| chr20      | 33133184       | A>C    | 0/2            | 1/6            |

The frequency of these SNPs were identified in the research article [21].