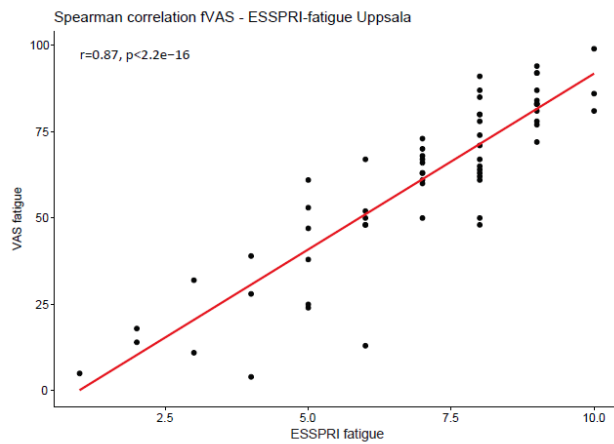


Supplementary Figure S1

Flowchart showing inclusion of patients from each of the six centers with fatigue data available.

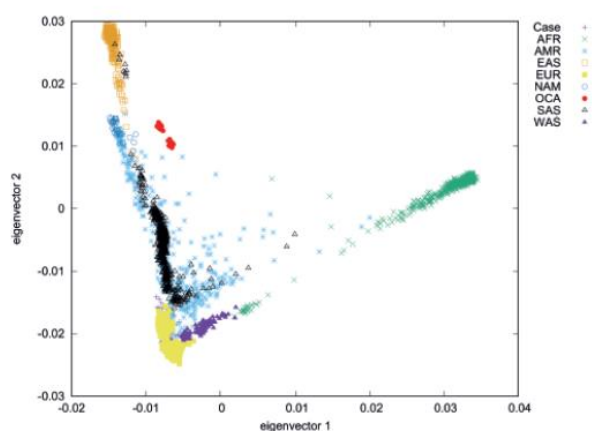
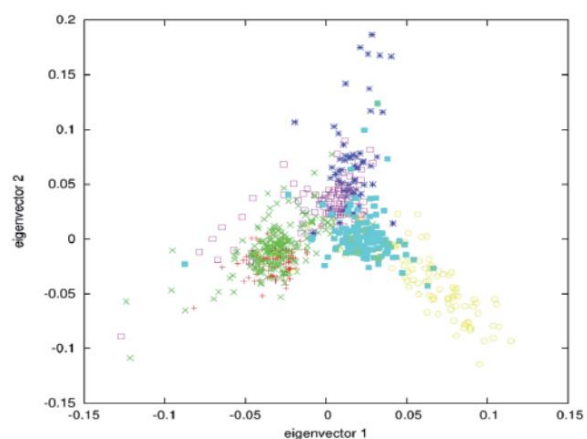
QC, quality control; f-VAS, fatigue Visual Analog Scale.



Supplementary Figure S2

Spearman's rank correlation coefficient (r_s) between fVAS and ESSPRI fatigue item values was tested in $n=58$ patients from Uppsala, Sweden with $p<0.05$ defining significance.

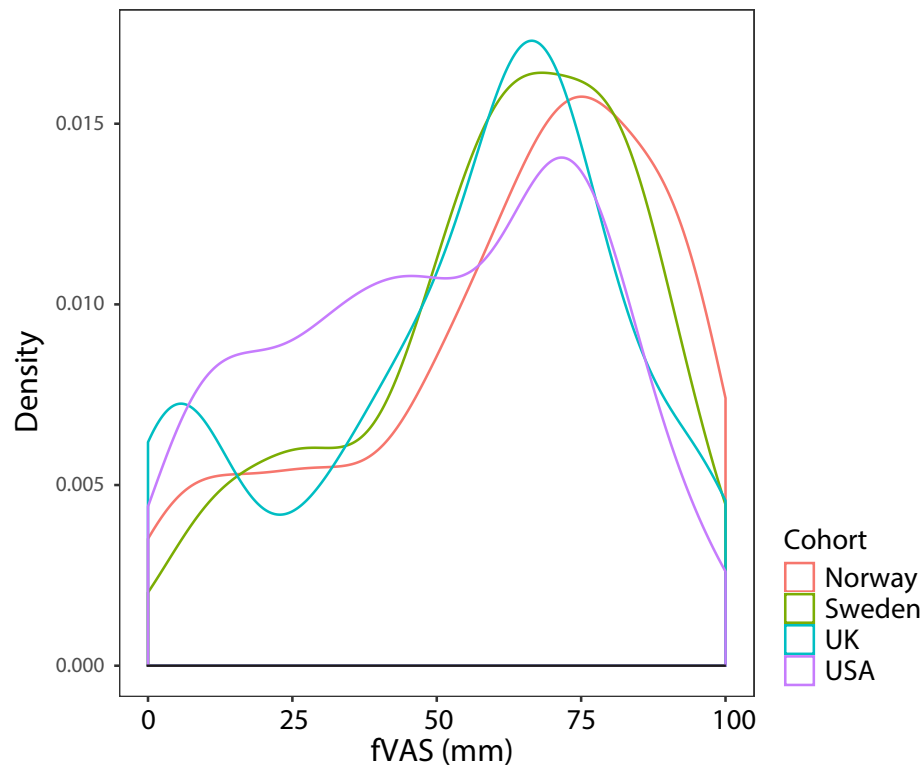
ESSPRI, European League Against Rheumatism Sjögren's Syndrome Patient Reported Index; fVAS, fatigue Visual Analog Scale.

A**B**

Supplementary Figure S3

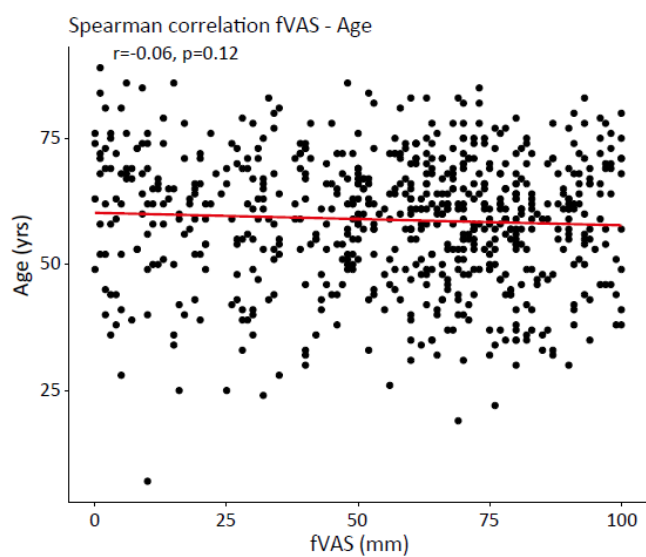
A Performing a supervised PCA, the genotype data of all patients included in the study ($n=690$) were projected on a combined reference panel from annotated populations (1000 Genomes and the Human Genome Diversity Project). Study samples that clustered together with the European reference population (i.e. <5 SD from the European reference mean in the first five components of variation) were kept for further analyses. **B** An unsupervised PCA was performed to increase intra-cohort homogeneity. Study samples within <5 SD from the corresponding cohort mean in the first three principal components of variation were kept, resulting in $n=682$ patients to be included in the GWAS analyses.

GWAS, genome-wide association study; PCA, Principal Component Analysis; SD, standard deviation.

**Supplementary Figure S4**

Density plot visualizing the distribution of fVAS values for patients with pSS in each of the four study cohorts.

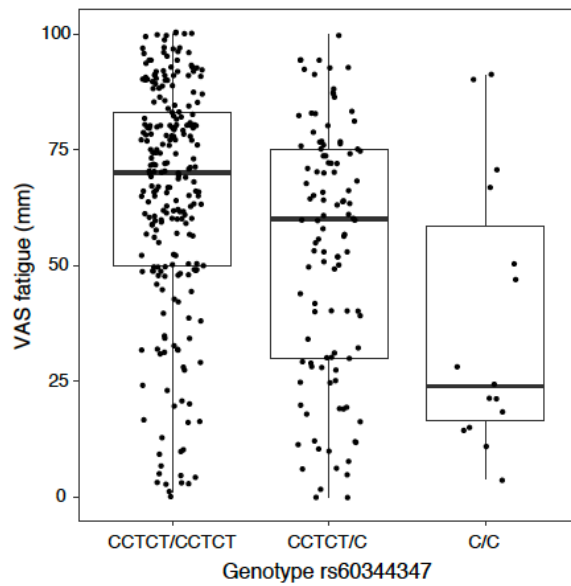
fVAS, fatigue Visual Analog Scale.



Supplementary Figure S5

Spearman's rank correlation coefficient (r_s) between fVAS and patient age was tested in all individuals included in the association analyses ($n=682$) with $p < 0.05$ defining significance.

fVAS, fatigue Visual Analog Scale.



Supplementary Figure S6

Association between genotype at *RTP4/MASP1* top variant rs60344347 with fVAS levels in patients with pSS included in the meta-analysis of the Norwegian and Swedish cohorts. Boxes represent median and interquartile range, whiskers indicate total range.

fVAS, fatigue Visual Analog Scale.