

Title: Supplementary Data 1.

Description: A list of previously-published and our model-predicted heritability values.

Title: Supplementary Data 2.

Description: A list of previously-published and our model-predicted correlation values.

Title: Supplementary Data 3.

Description: Comparison of heritability estimates from an independent study and from our model prediction.

Title: Supplementary Data 4.

Description: Separate comparisons of heritability estimates for acute and chronic diseases, from an independent study and from our model prediction.

Title: Supplementary Data 5.

Description: Comparison of genetic correlation estimates from an independent study and from our model prediction.

Title: Supplementary Data 6.

Description: Multi-variable Regression Analysis between Shape-of-cure Dissimilarity (D_{soc}) and Correlation Estimates of r_g and r_e , as well as Their Interaction Term (related to Fig. 4d and Supplementary Fig. 5): $D_{soc} = A r_g + B r_e + C r_g \cdot r_e + D_0$

Title: Supplementary Data 7.

Description: A List of Disease Phenotypes, Grouped into Disease Categories (**Underlined Bold Texts**) and Sorted in Alphabetical Order