Supplementary material. *Model selection procedure.*

1. First step: finding the optimal structure of random component (Table A).

Table A. *Anova table: likelihood ratio test to find the best fixed structure.*

Model	Adjusted R^2	AIC	Loglik	Pr (> Chisq)*
Linear - semester and status interaction (single level model) as explanatory variable	0.41	690	- 340.12	
Random intercept - semester and disease status interaction as explanatory variable	0.86	431	- 209.84	< 2.2e-16***
Random slope - semester and disease status interaction as explanatory variable	0.88	420	- 202.11	0.0004415***

*P value of the likelihood ratio Chi-squared statistic. Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

2. Second step: finding the optimal fixed structure (Table B).

Table B. *Anova table: likelihood ratio test to find the best fixed structure.*

Random slope model	Adjusted R^2	AIC	Loglik	Pr (> Chisq)*
Null multilevel model	0.86	437	- 213.39	
Semester as explanatory variable	0.86	435	- 211.69	0.065077
Disease status as explanatory variable	0.87	428	- 208.20	< 2.2e-16***
Semester and disease status as explanatory variable	0.87	427	- 206.50	0.065052
Interaction of disease status and semester as explanatory variable	0.88	420	- 202.11	0.003066**

*P value of the likelihood ratio Chi-squared statistic. Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

3. Third step: the best model is presented (please see the results part in the manuscript).