

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: The standardised drug side effect frequency classes used in our study.

File Name: Supplementary Data 2

Description: The postmarketing drug side effect associations from SIDER and OFFSIDES.

File Name: Supplementary Data 3

Description: Manually curated frequencies of the side effects observed for Semagacestat in clinical trials I, II and III.

File Name: Supplementary Data 4

Description: Monotherapy Anatomical, Therapeutic and Chemical (ATC) code for each drug.

File Name: Supplementary Data 5

Description: Main or High-Level Term (HLT) Medical Dictionary for Regulatory Activities (MedDRA) terminology classification for each side effect term.

File Name: Supplementary Data 6

Description: High-Level Group Term Medical Dictionary for Regulatory Activities (MedDRA) terminology classification for each side effect term.

File Name: Supplementary Data 7

Description: Administration route for each drug.

File Name: Supplementary Data 8

Description: Predicted frequencies of drug side effects together with postmarketing observational evidence from SIDER and OFFSIDES databases. NA stands for no available evidence.

File Name: Supplementary Data 9

Description: Drug signatures that were analysed for biological interpretability.

File Name: Supplementary Data 10

Description: Side effect signatures that were analysed for biological interpretability.

File Name: Supplementary Data 11

Description: Statistically significant associations between the drug signature components and the anatomical level of the ATC hierarchy.

File Name: Supplementary Data 12

Description: Statistically significant associations between the drug signature components and the therapeutic level of the ATC hierarchy.

File Name: Supplementary Data 13

Description: Statistically significant associations between the drug signature components and the pharmacological level of the ATC hierarchy.

File Name: Supplementary Data 14

Description: Statistically significant associations between the side effect signature components and level 1 of the MedDRA hierarchy.

File Name: Supplementary Data 15

Description: Statistically significant associations between the side effect signature components and level 2 of the MedDRA hierarchy.

File Name: Supplementary Data 16

Description: Statistically significant associations between the drug signature components and routes of administration.