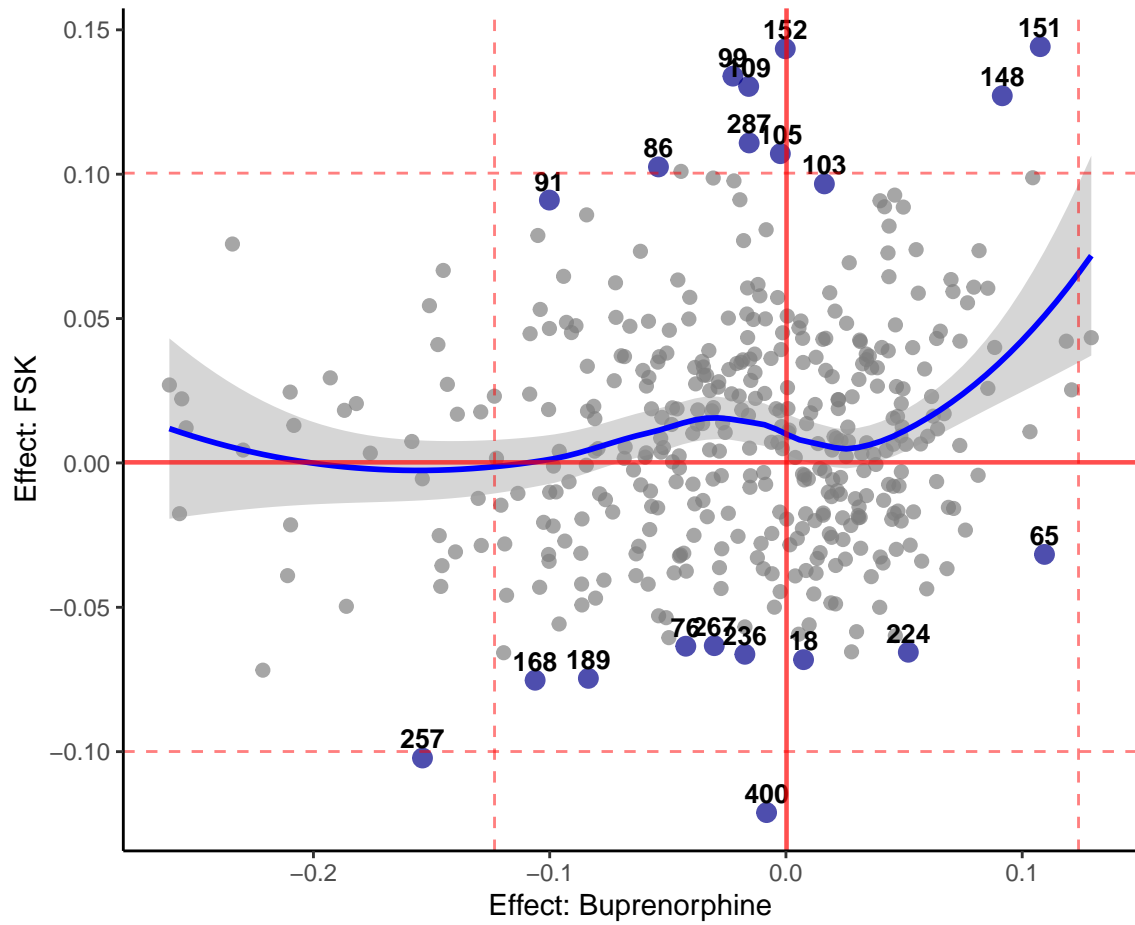
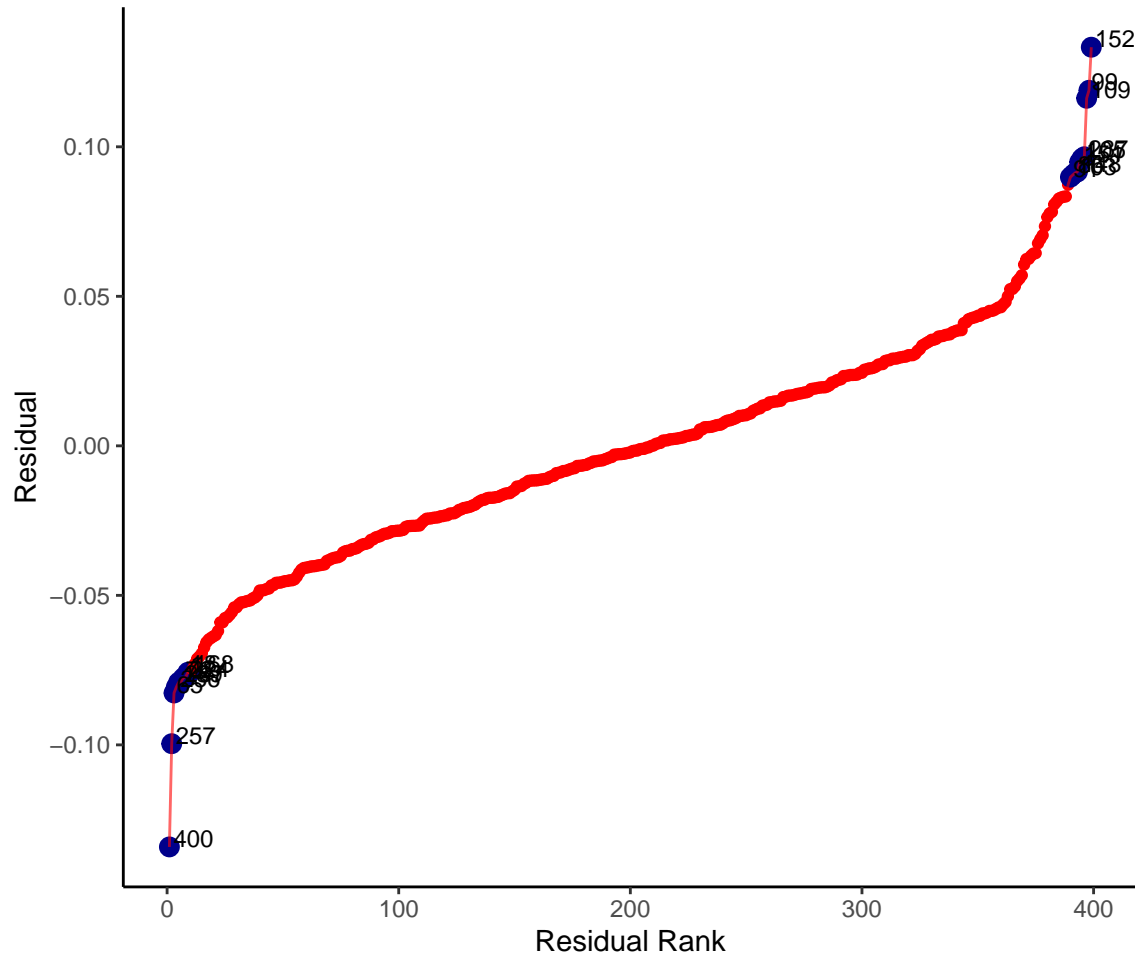


Buprenorphine vs FSK

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

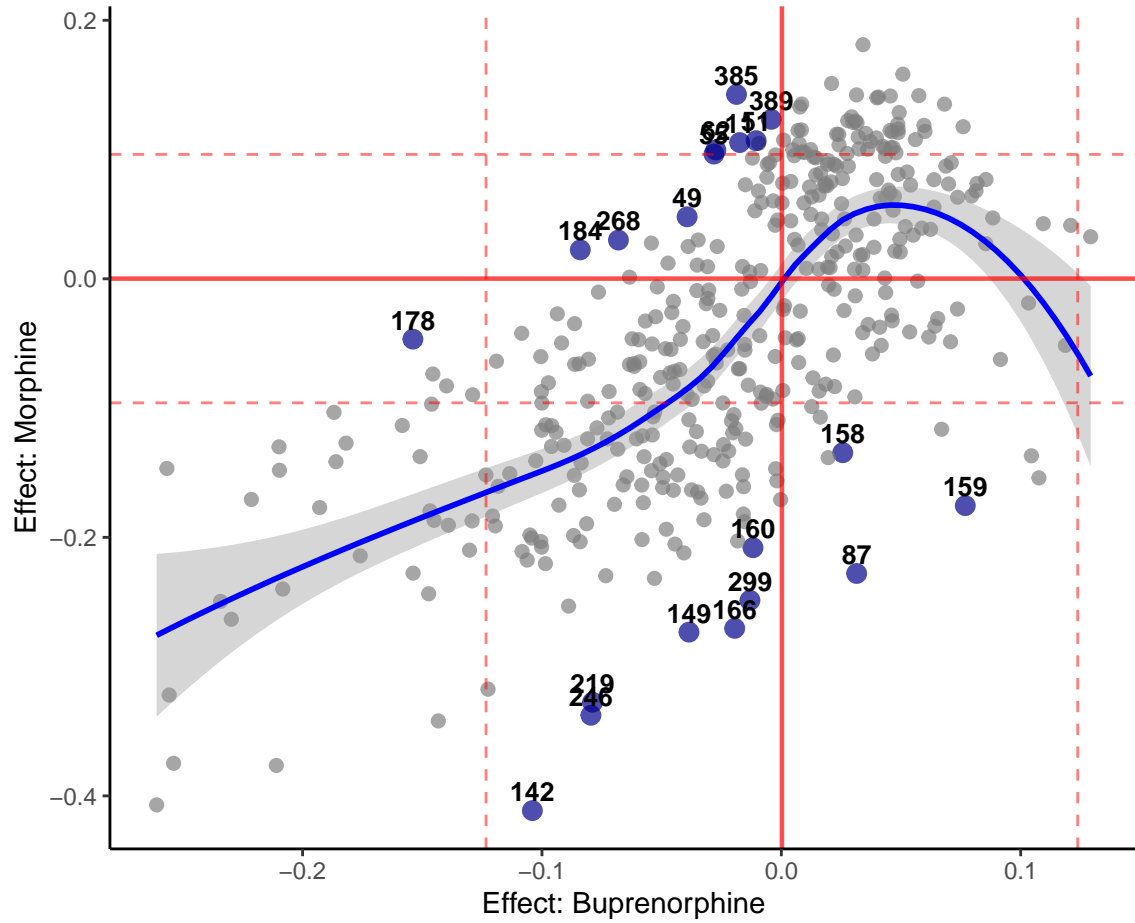


Residuals (loess): FSK ~ Buprenorphine

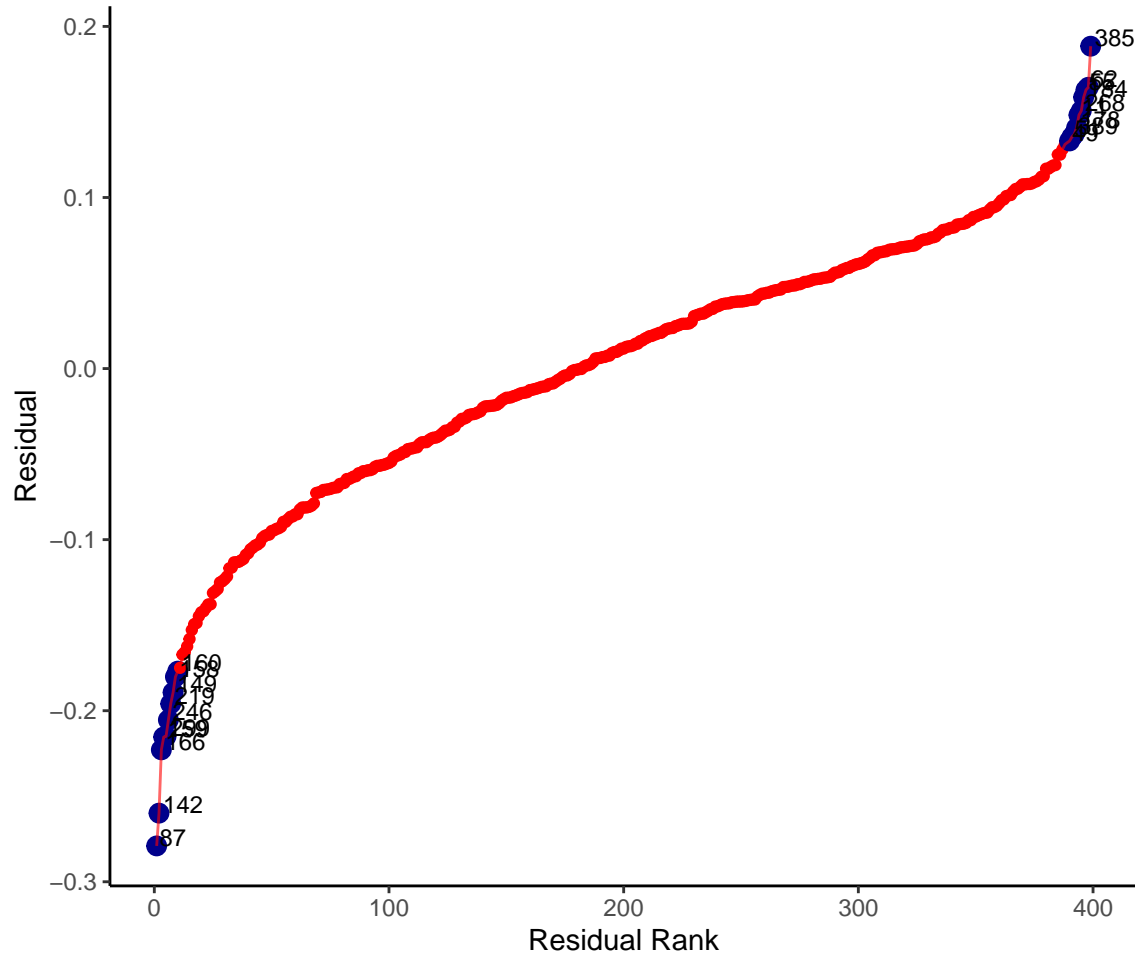


Buprenorphine vs Morphine

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

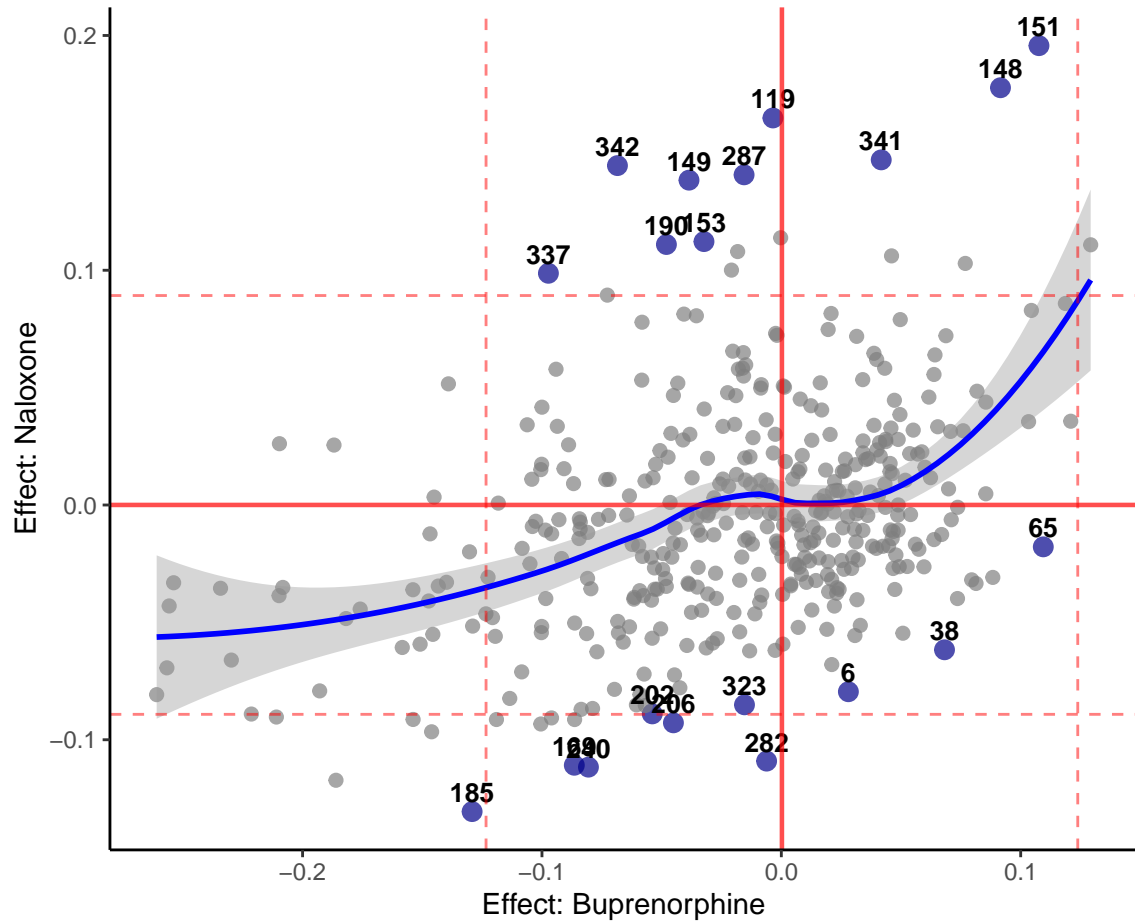


Residuals (loess): Morphine ~ Buprenorphine

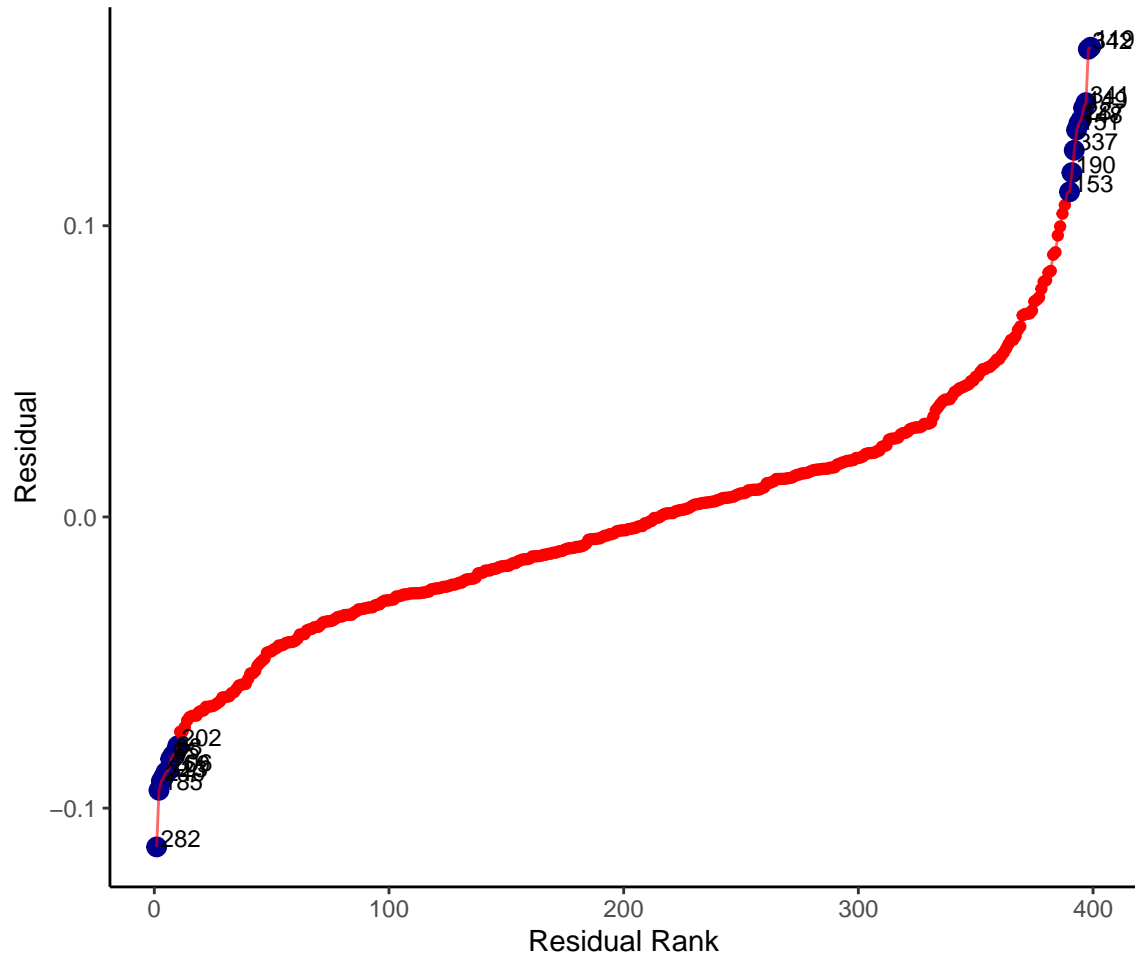


Buprenorphine vs Naloxone

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

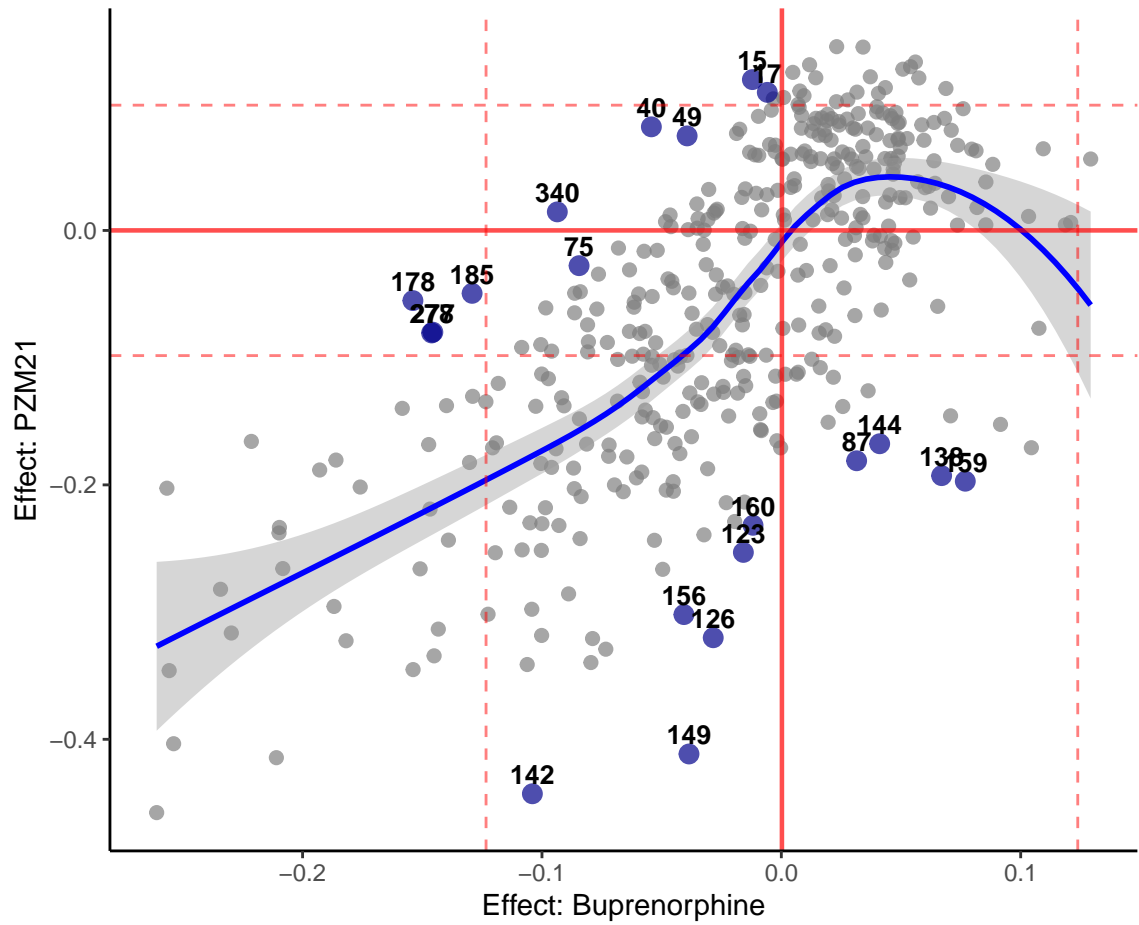


Residuals (loess): Naloxone ~ Buprenorphine

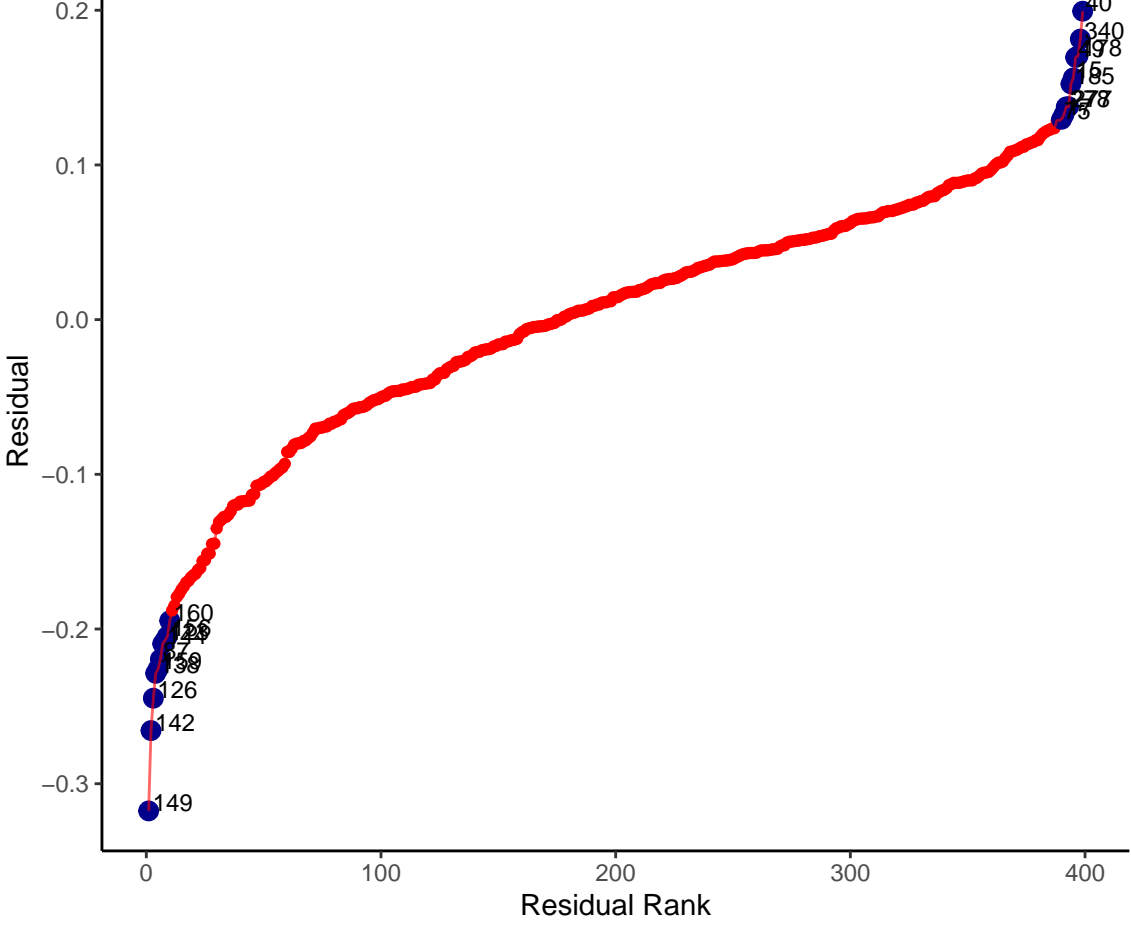


Buprenorphine vs PZM21

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

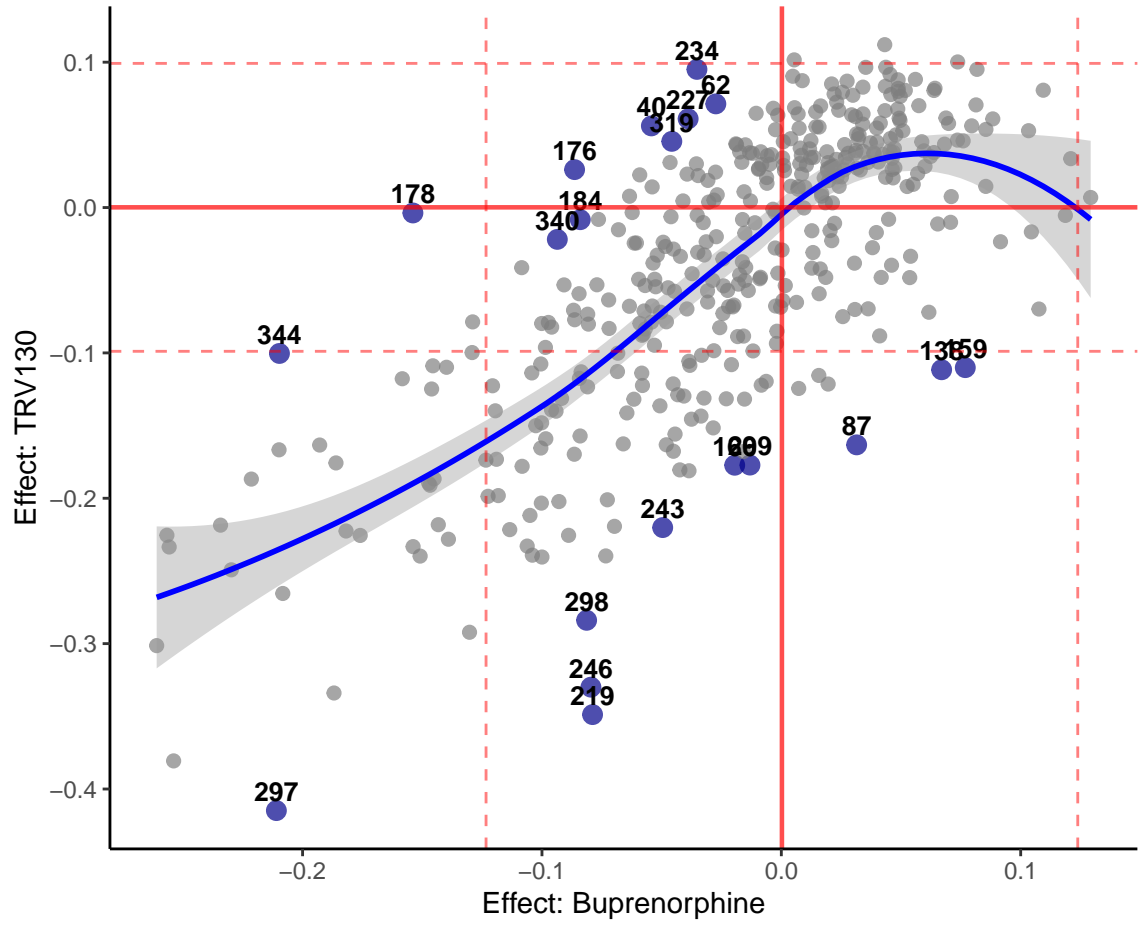


Residuals (loess): PZM21 ~ Buprenorphine

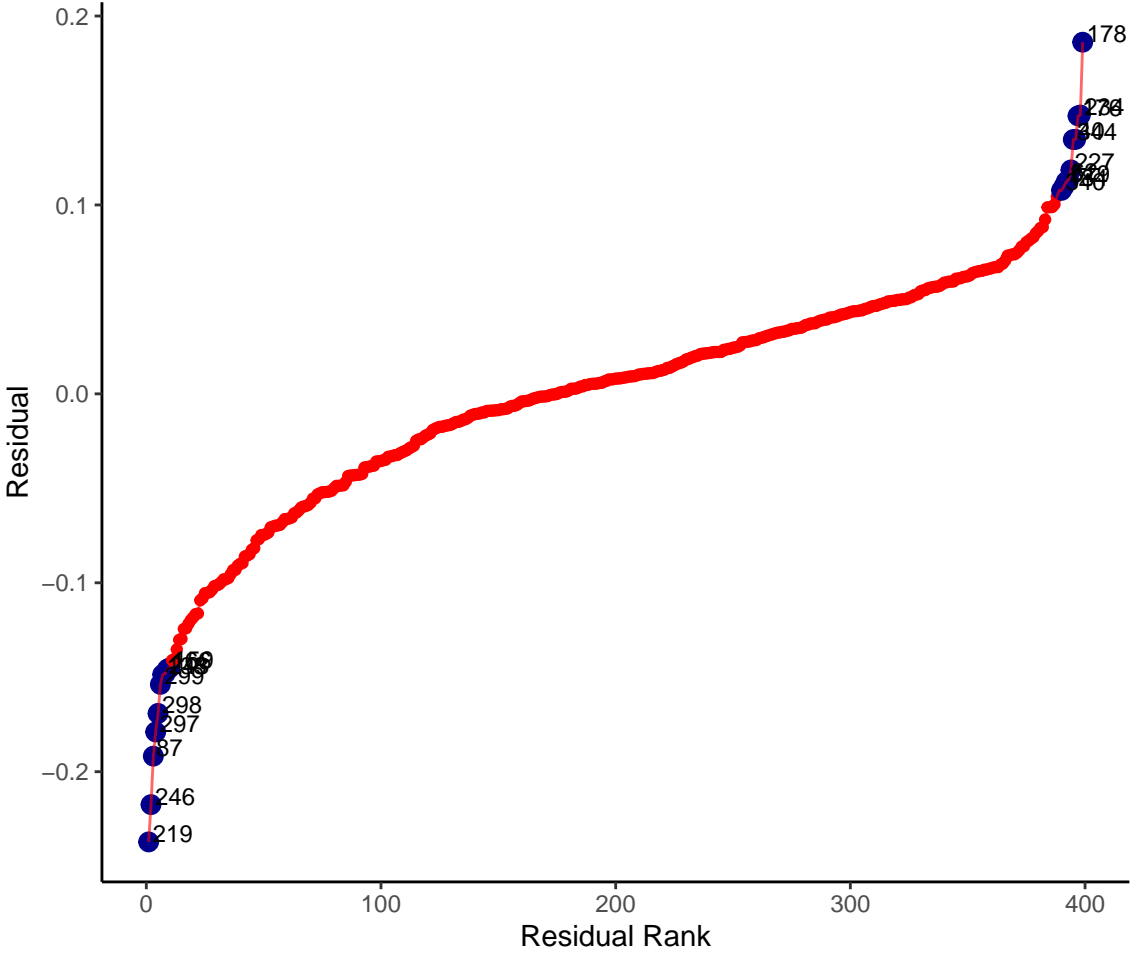


Buprenorphine vs TRV130

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

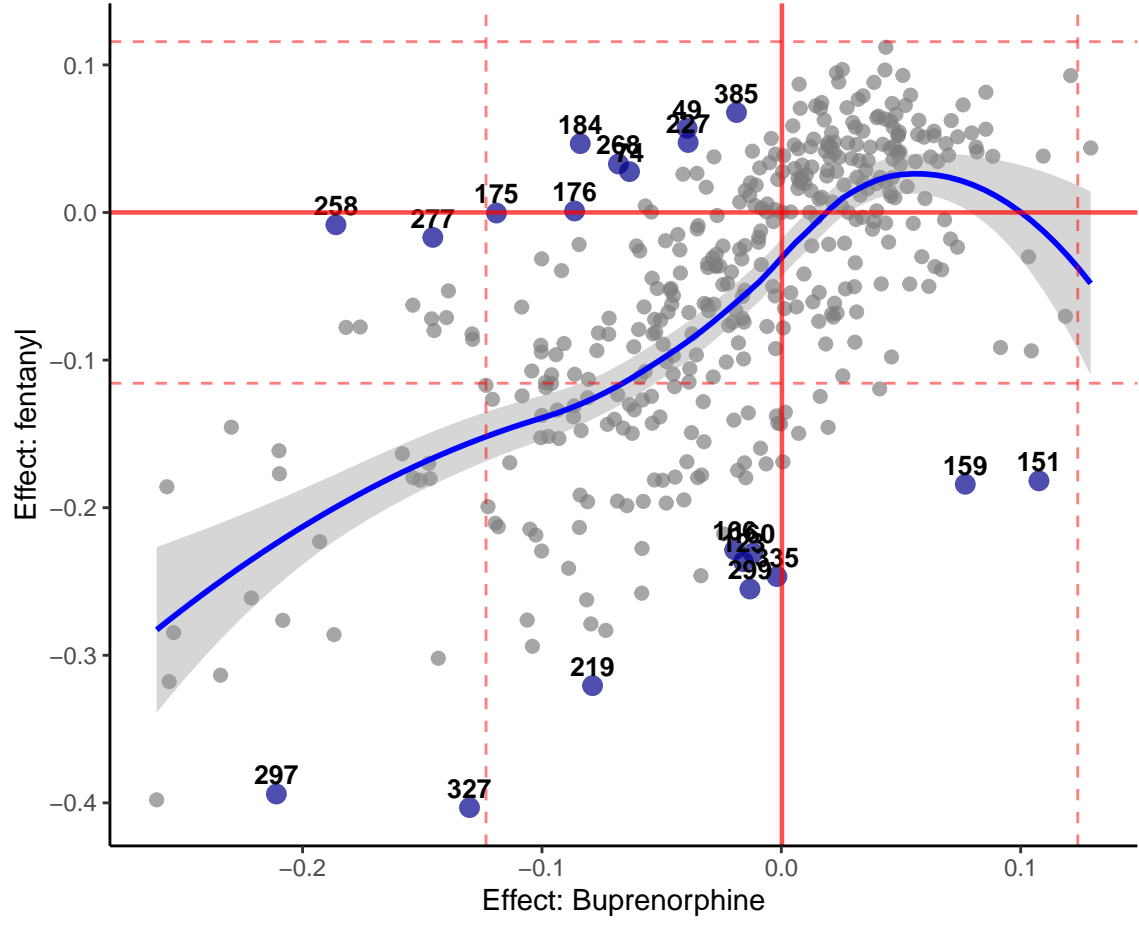


Residuals (loess): TRV130 ~ Buprenorphine

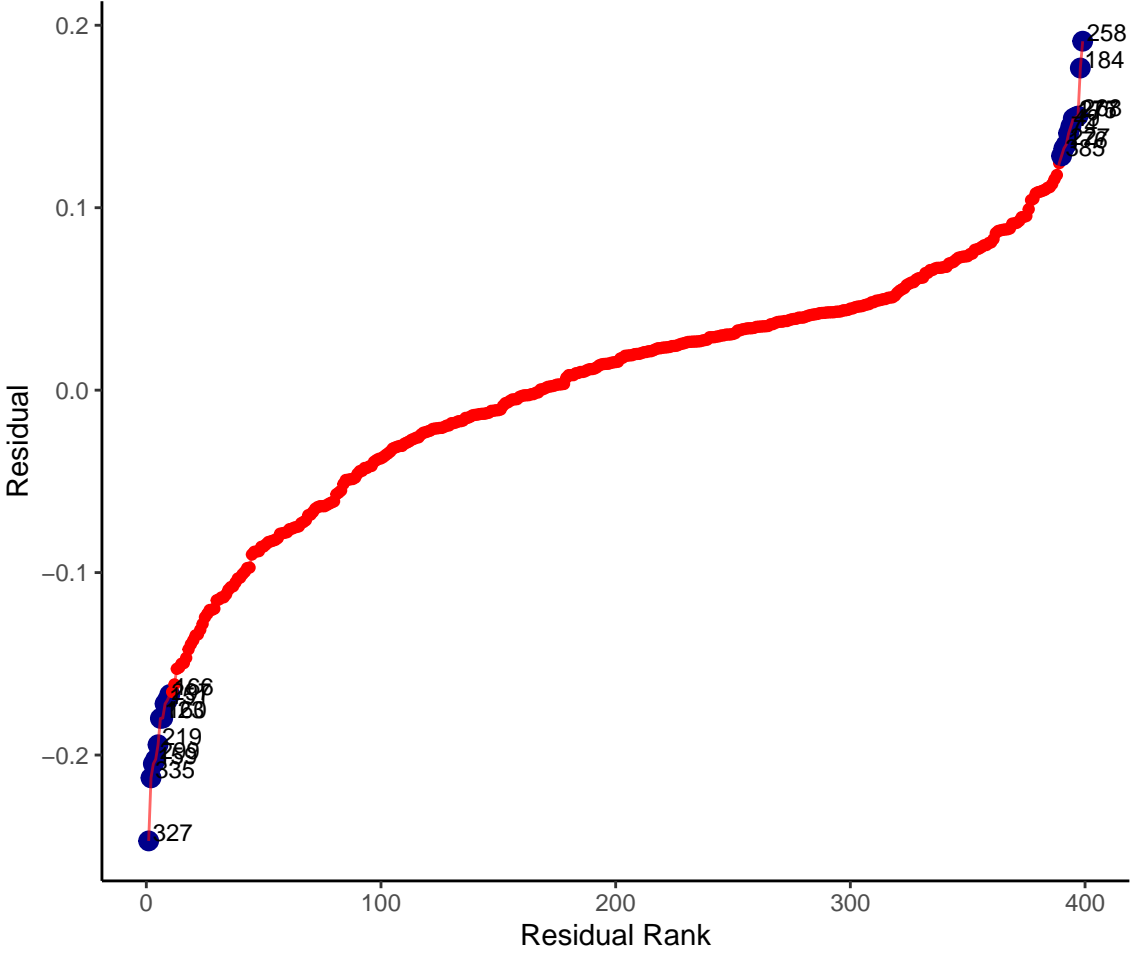


Buprenorphine vs fentanyl

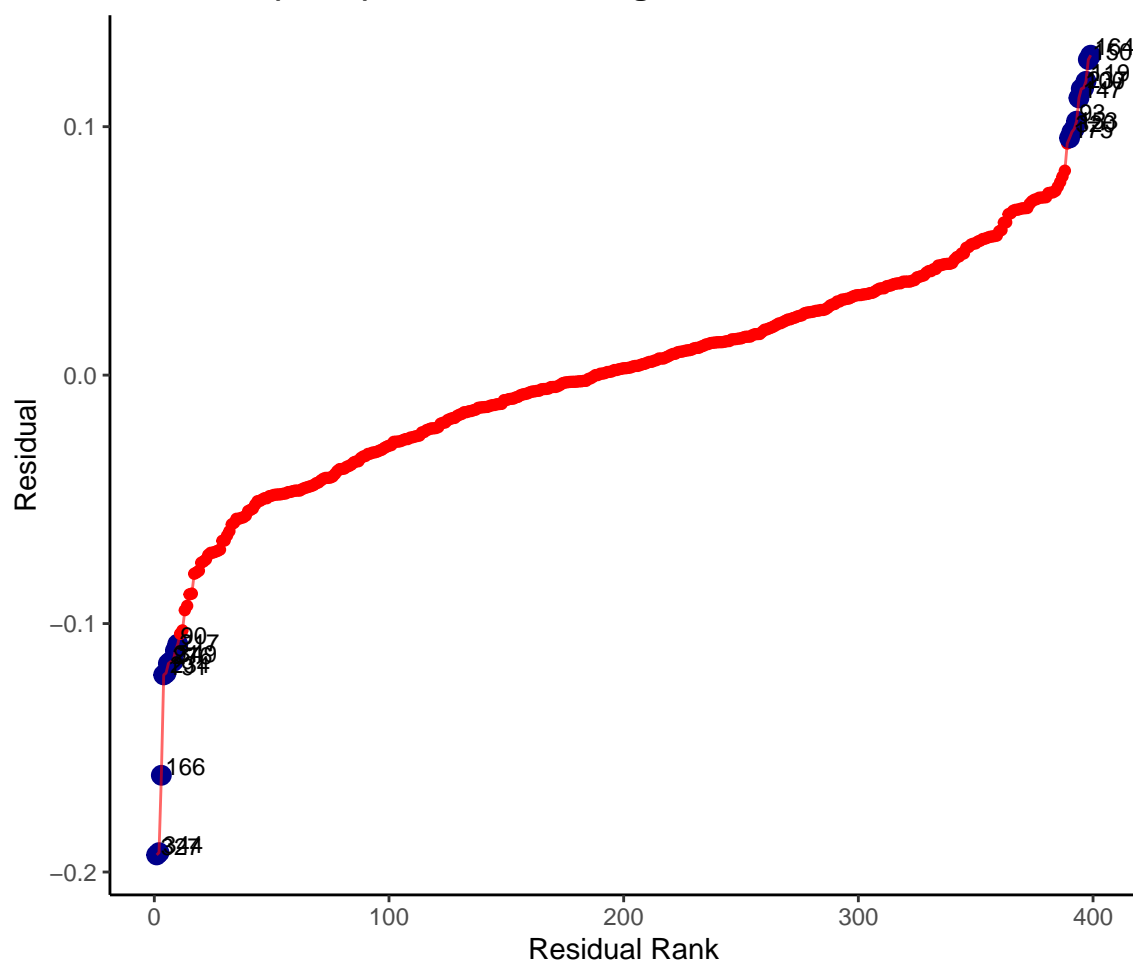
Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals



Residuals (loess): fentanyl ~ Buprenorphine

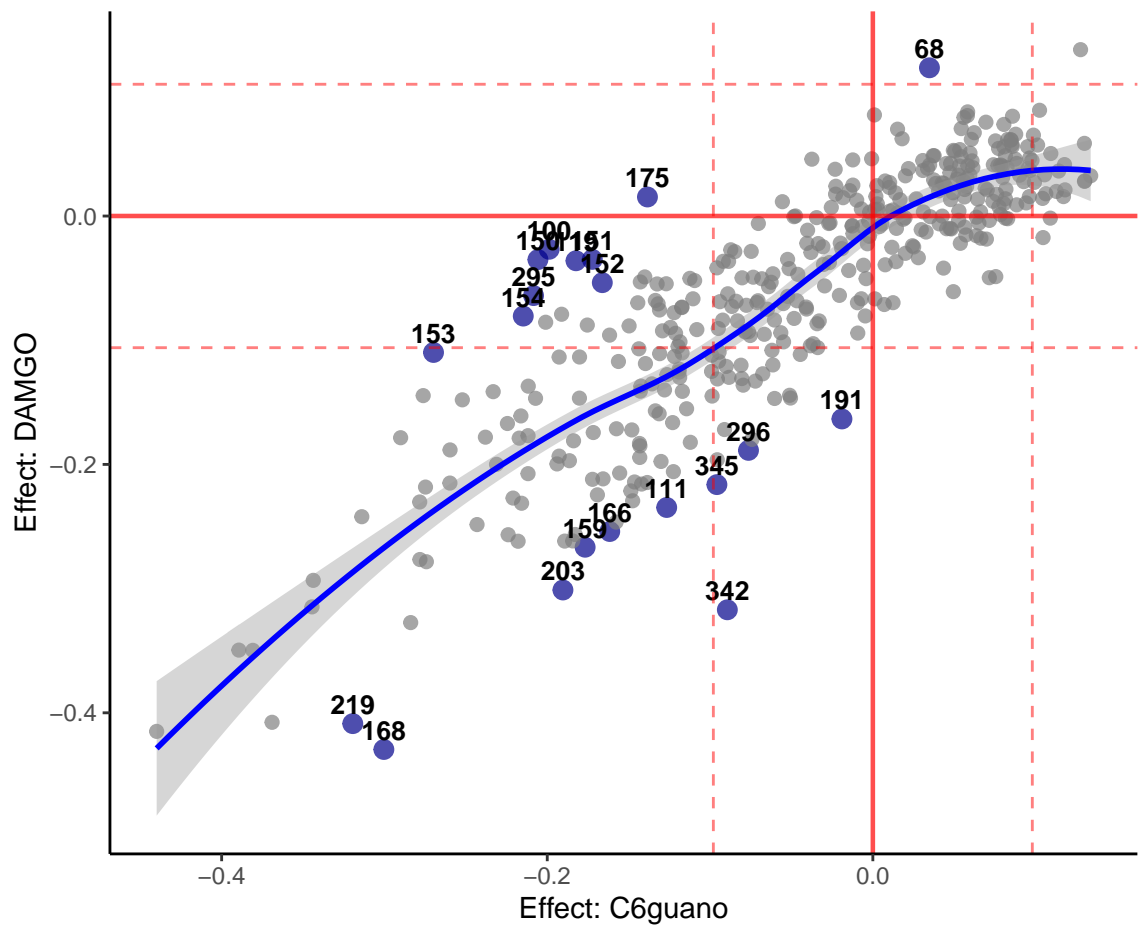


Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

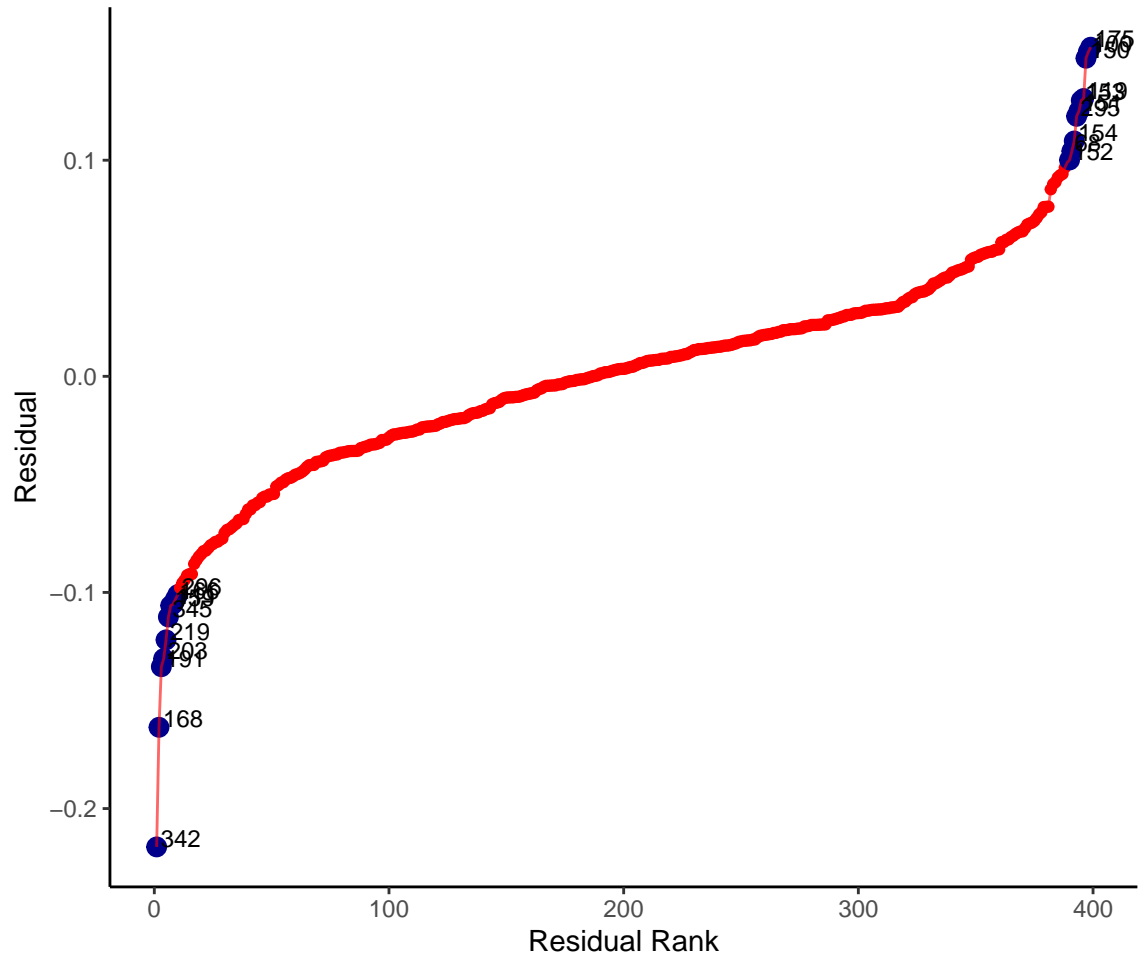


C6guano vs DAMGO

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

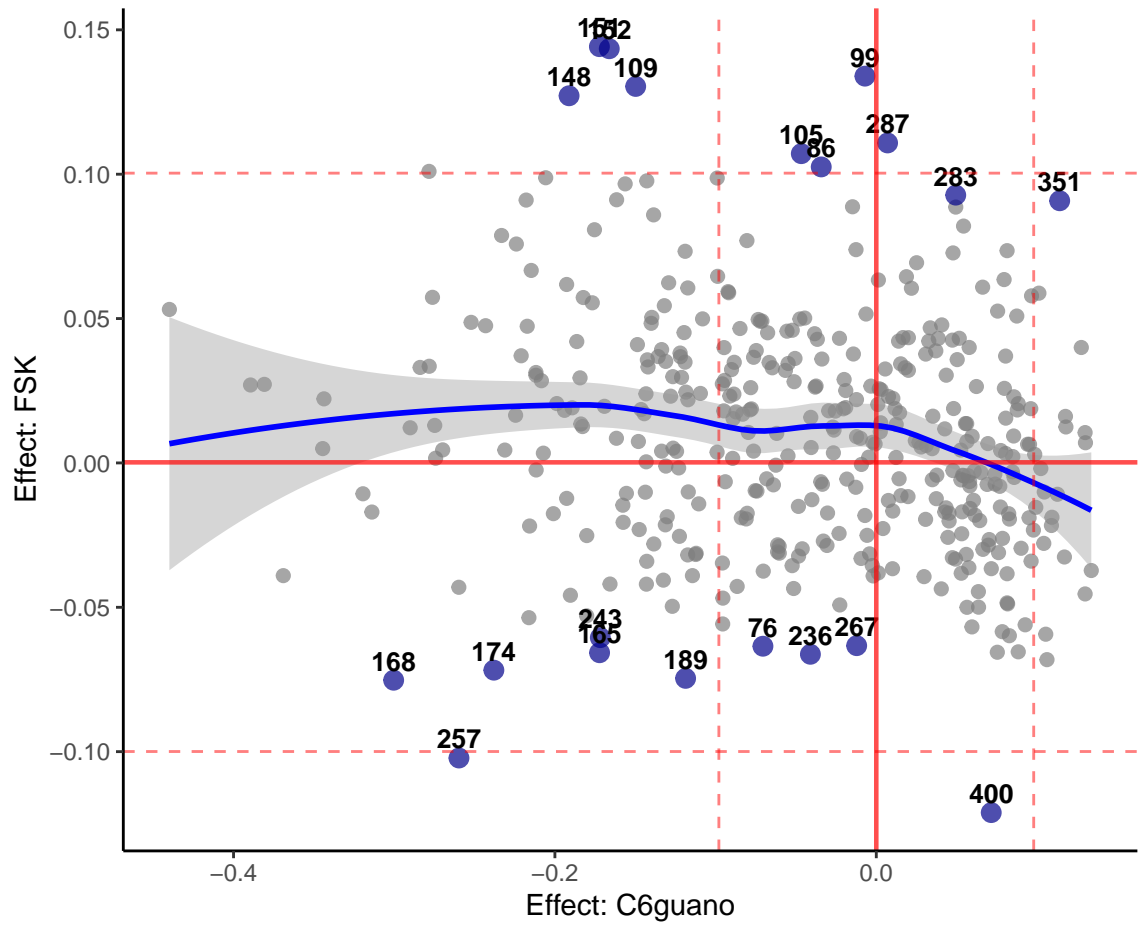


Residuals (loess): DAMGO ~ C6guano

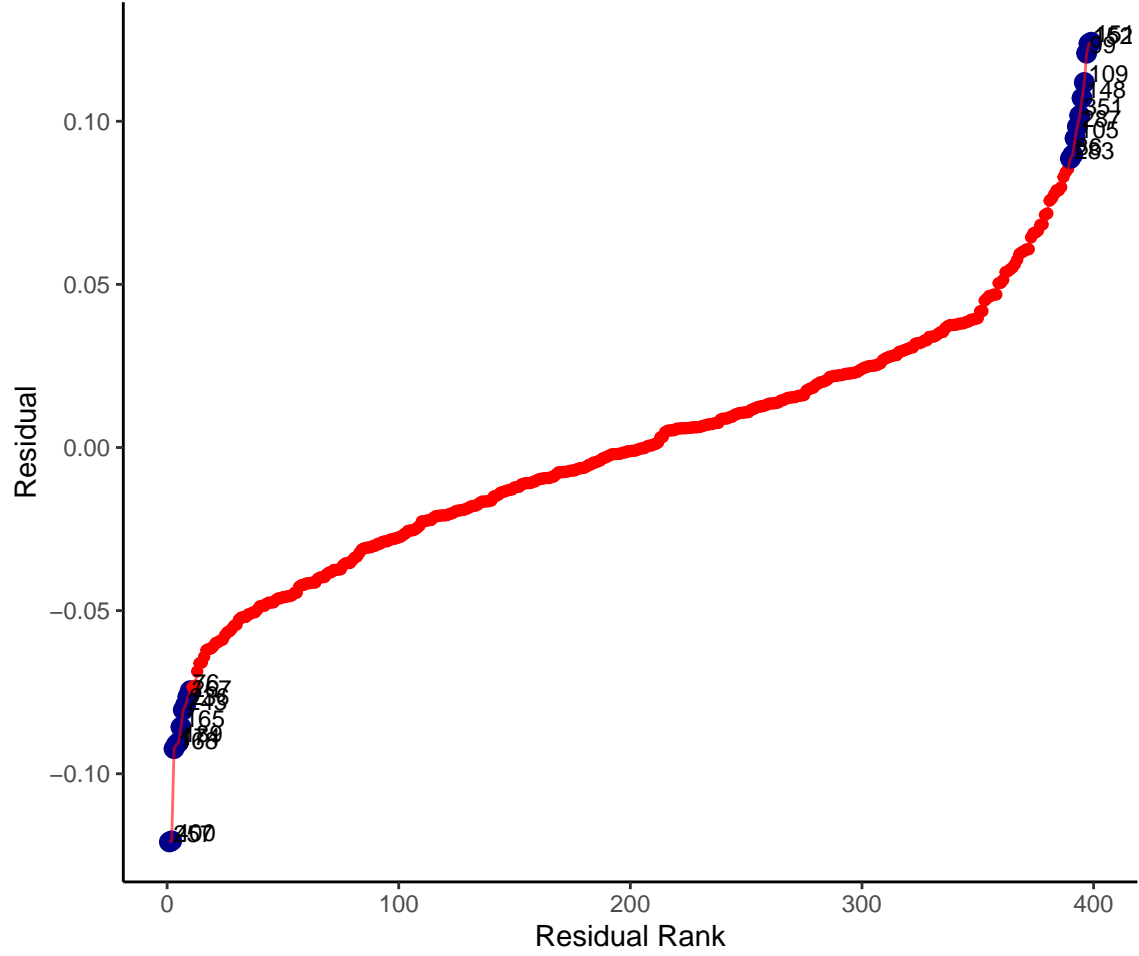


C6guano vs FSK

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

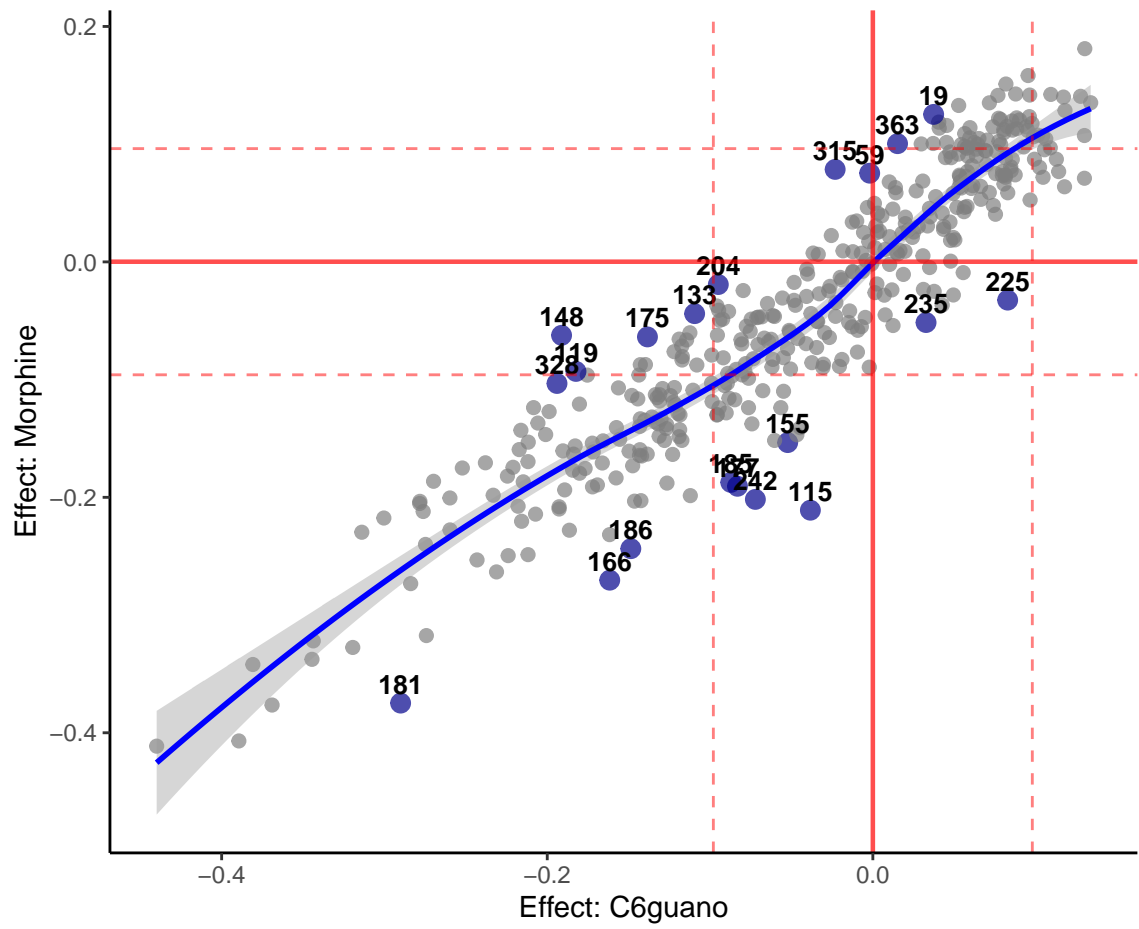


Residuals (loess): FSK ~ C6guano

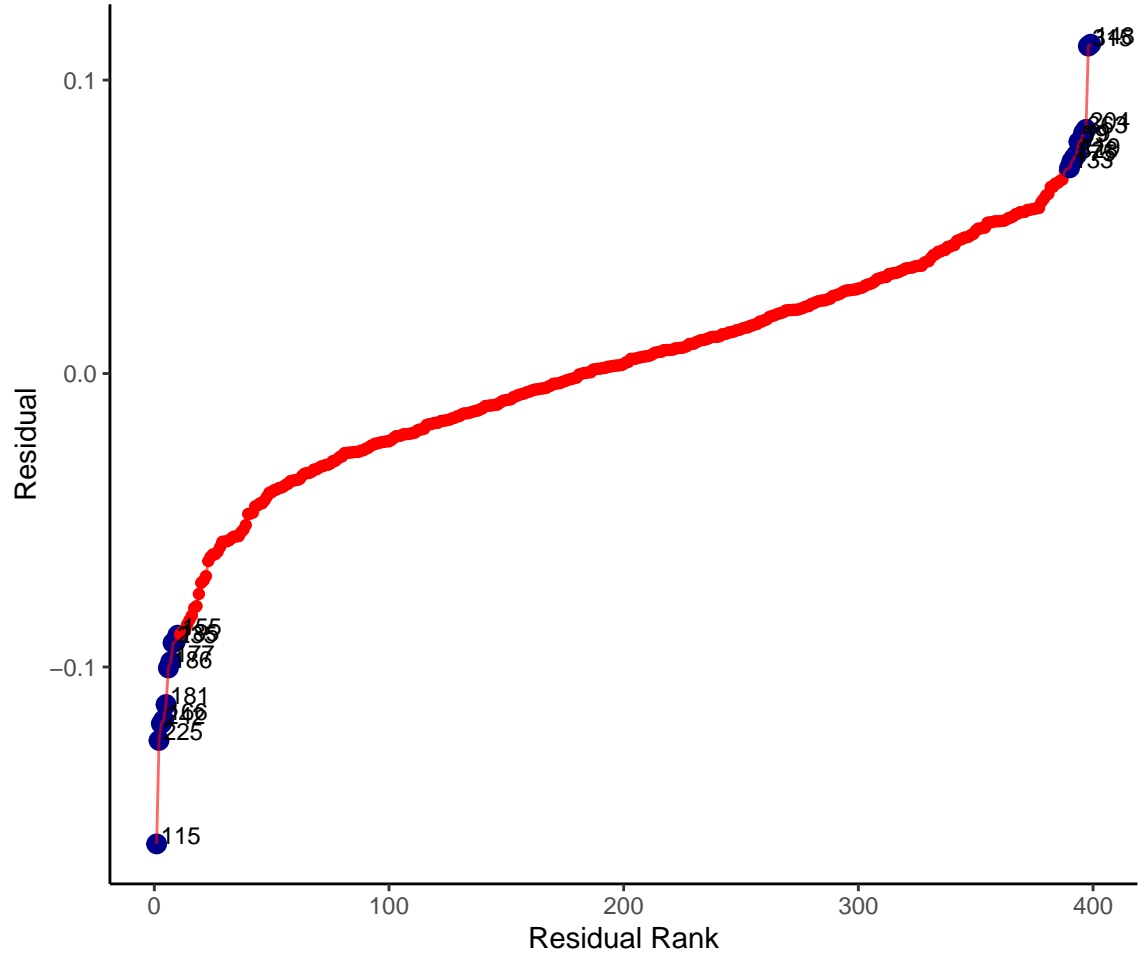


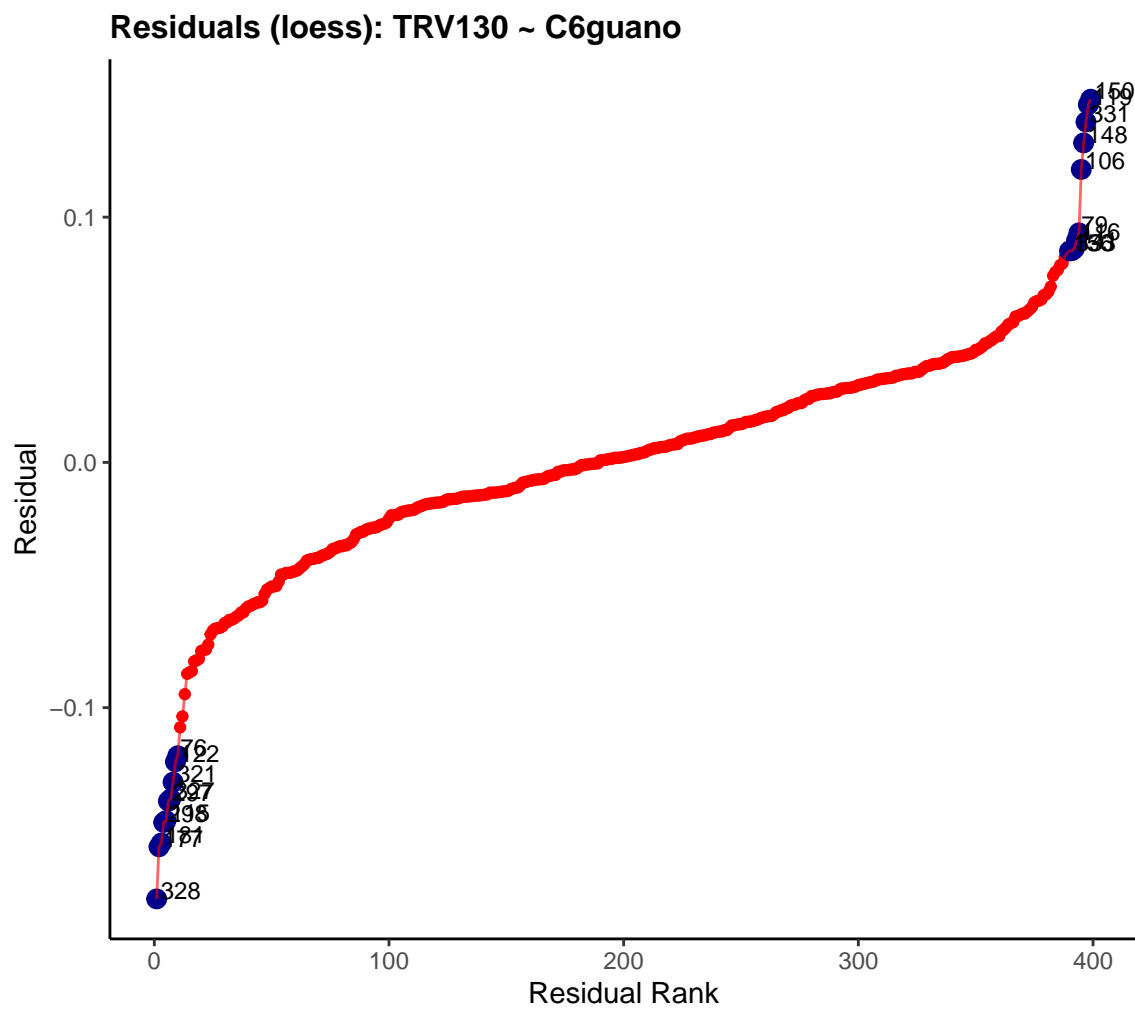
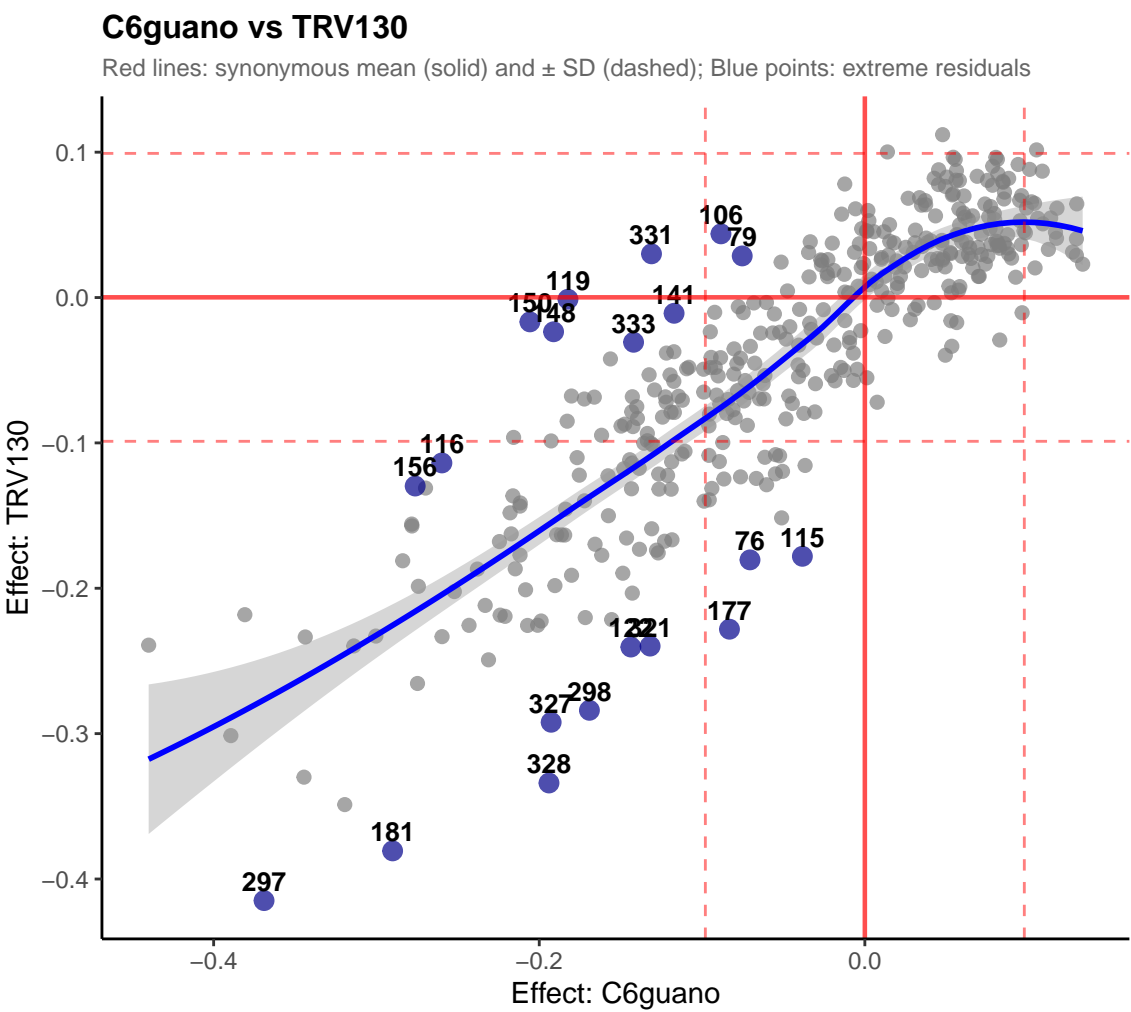
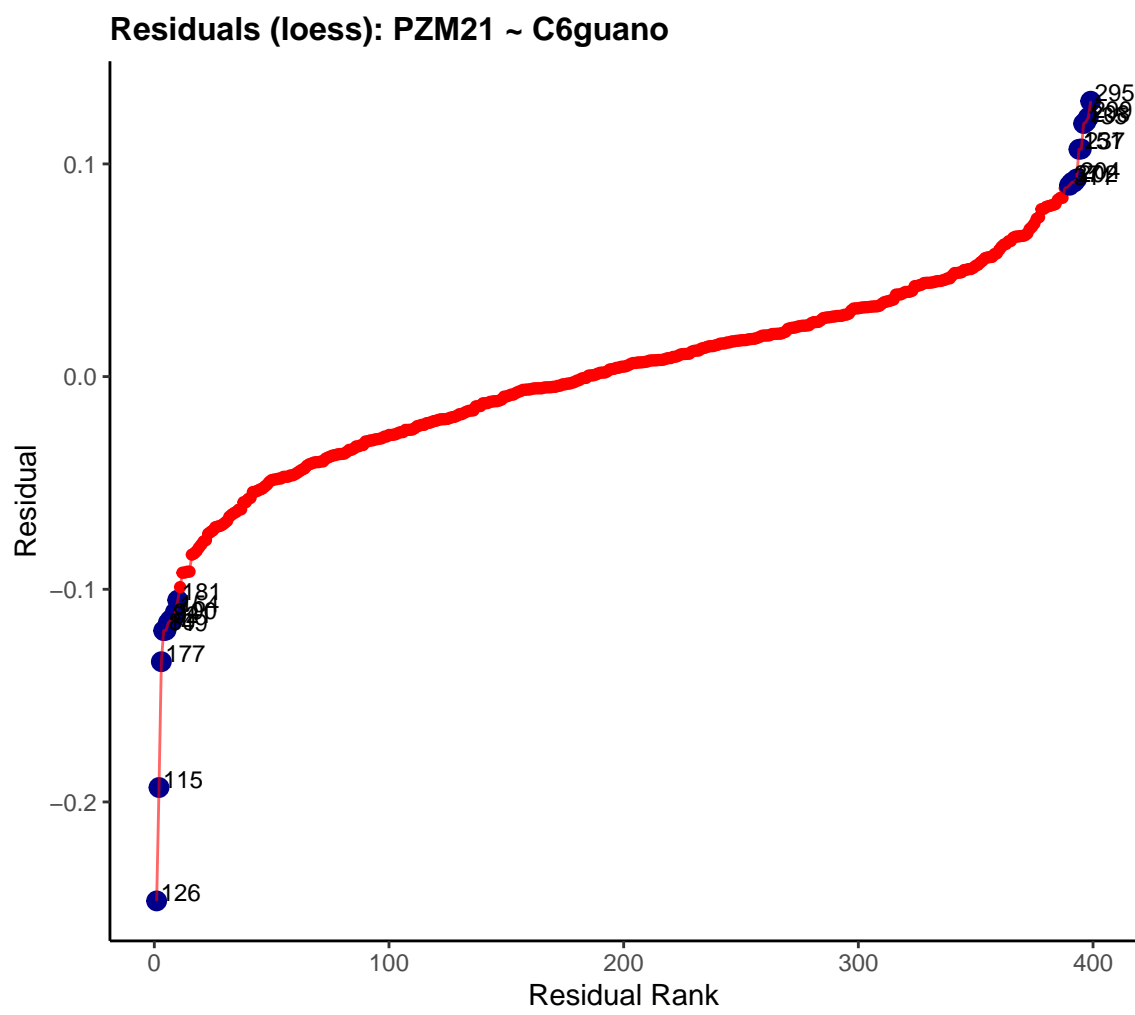
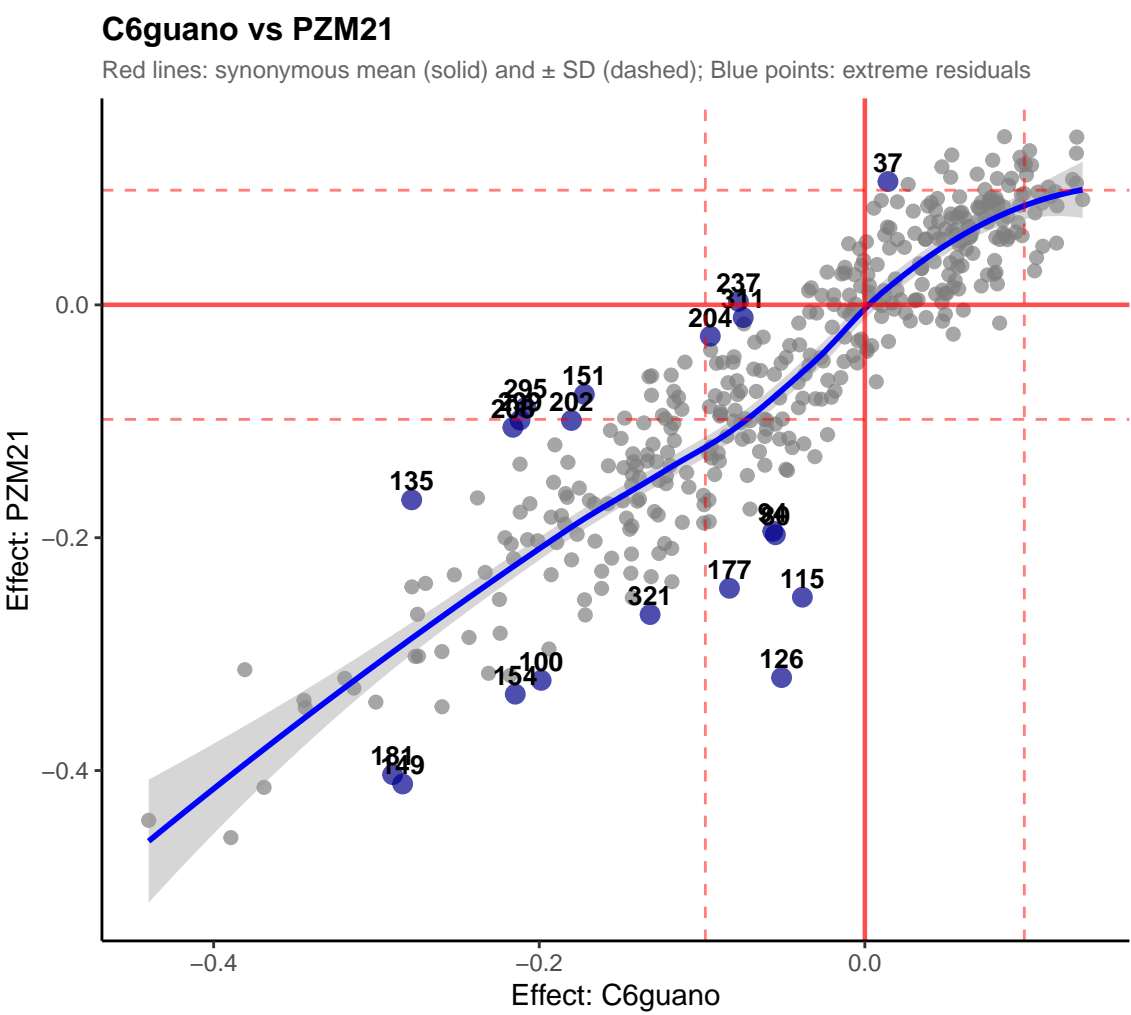
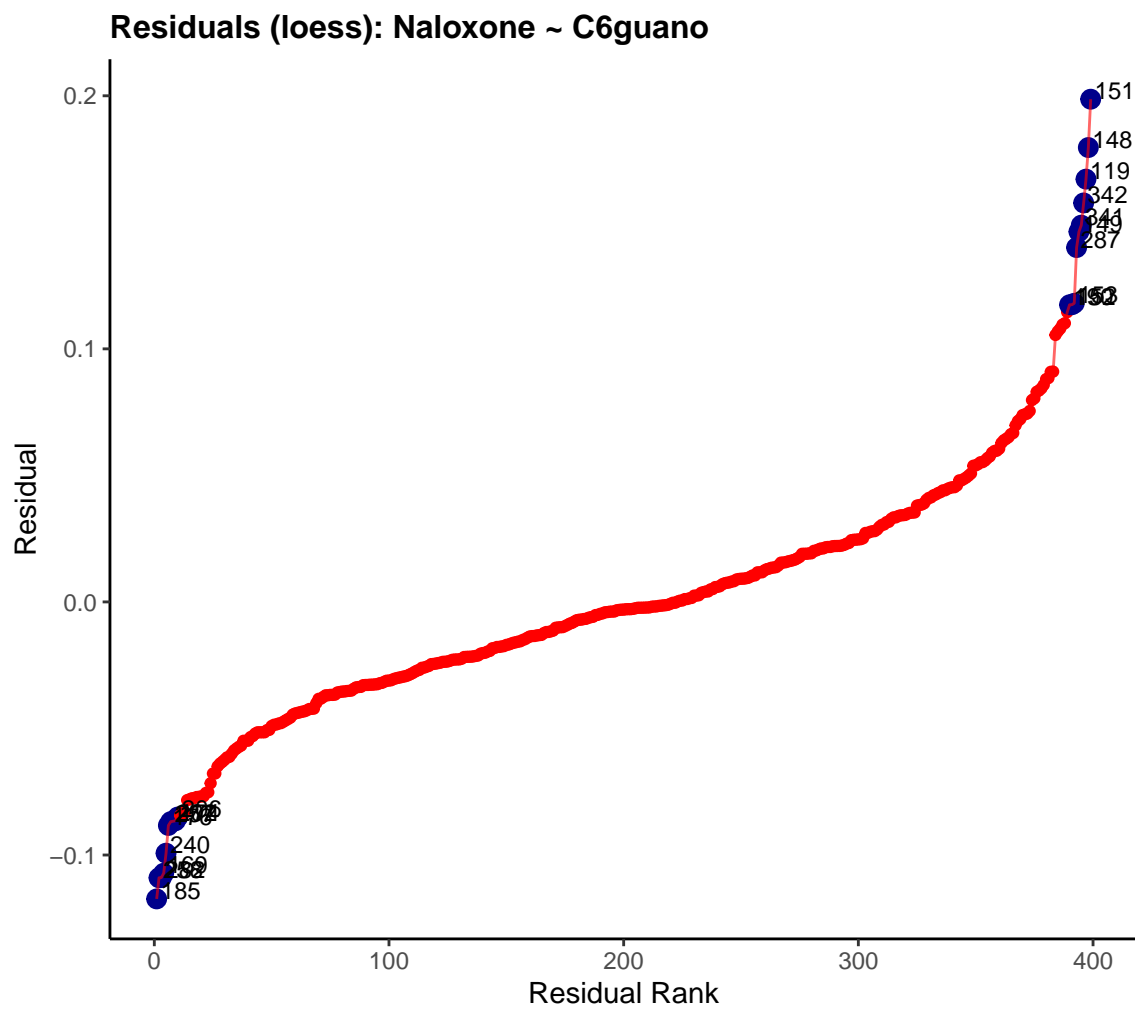
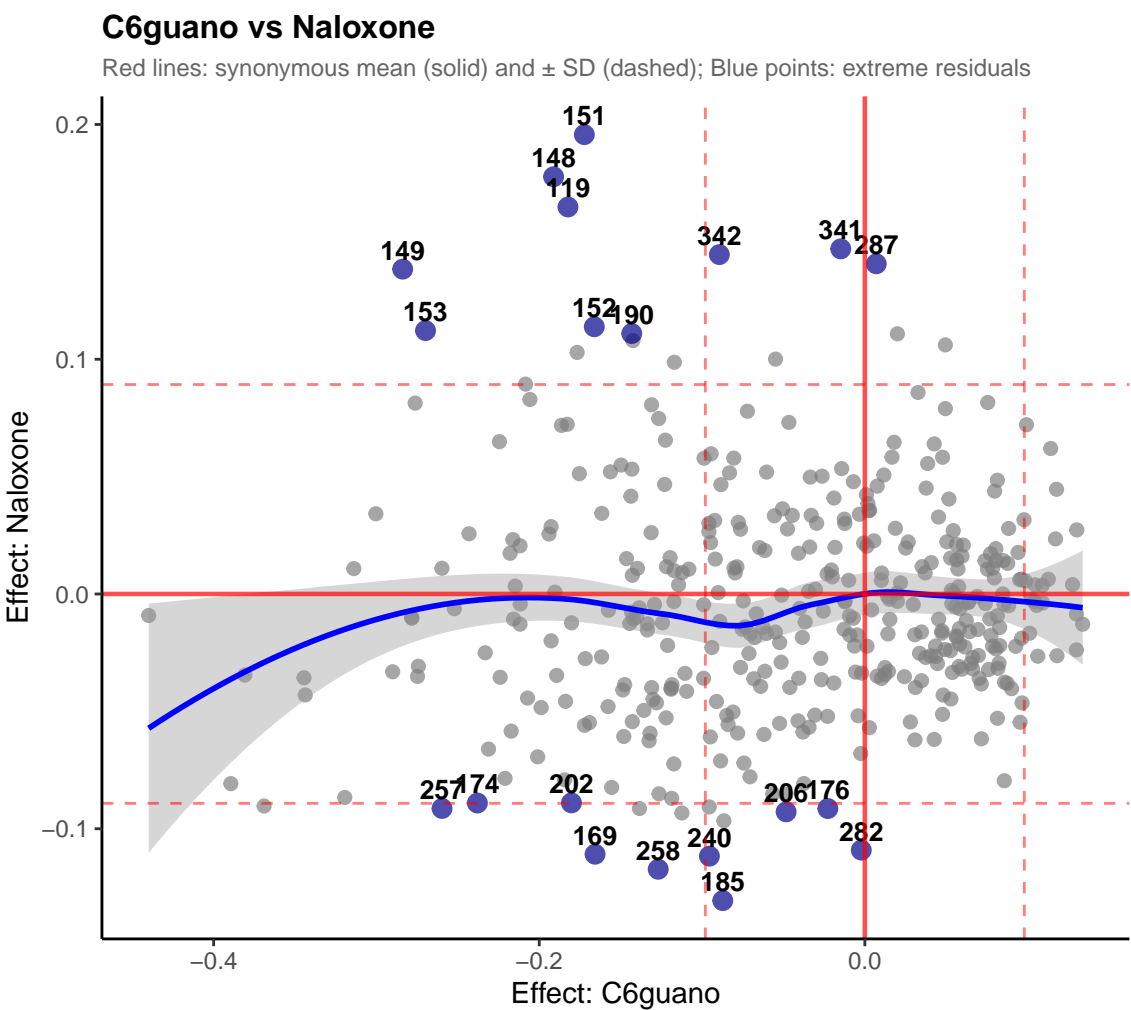
C6guano vs Morphine

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals



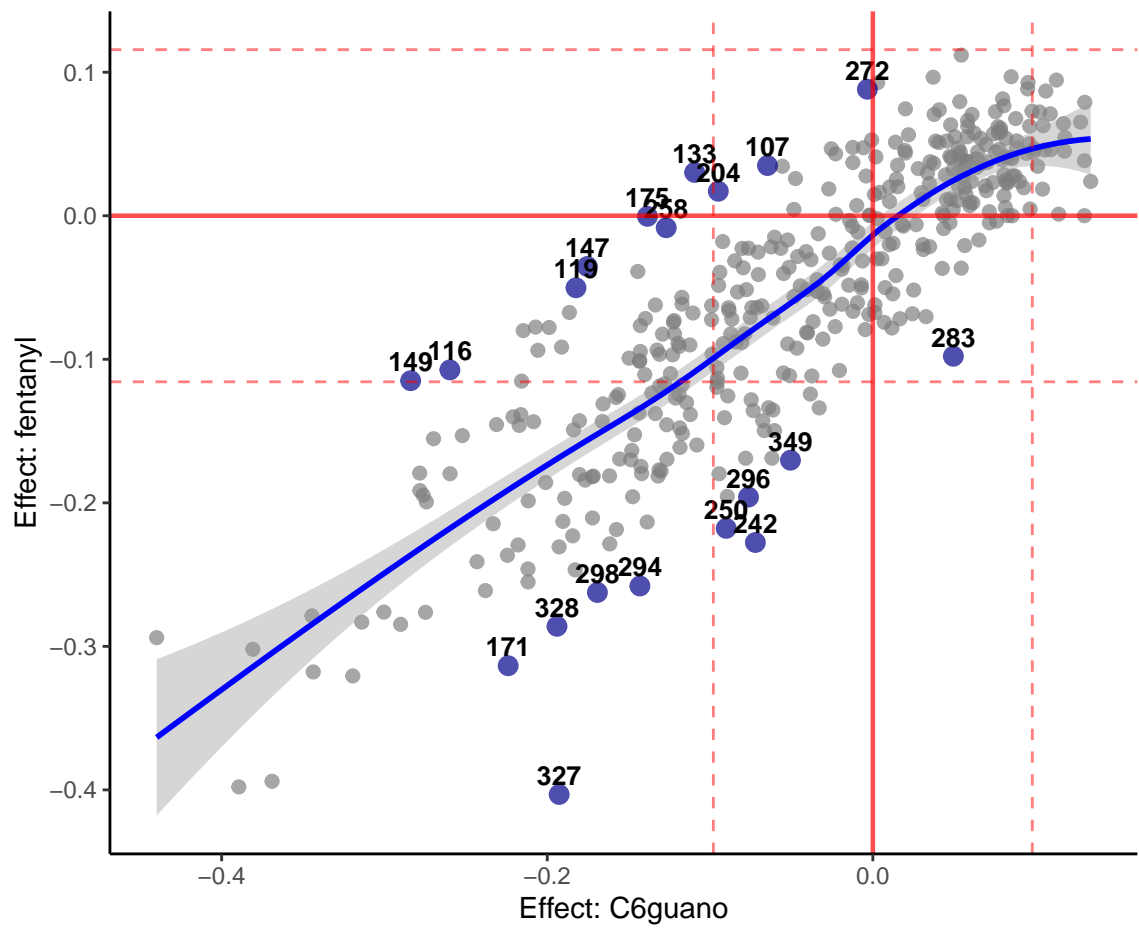
Residuals (loess): Morphine ~ C6guano



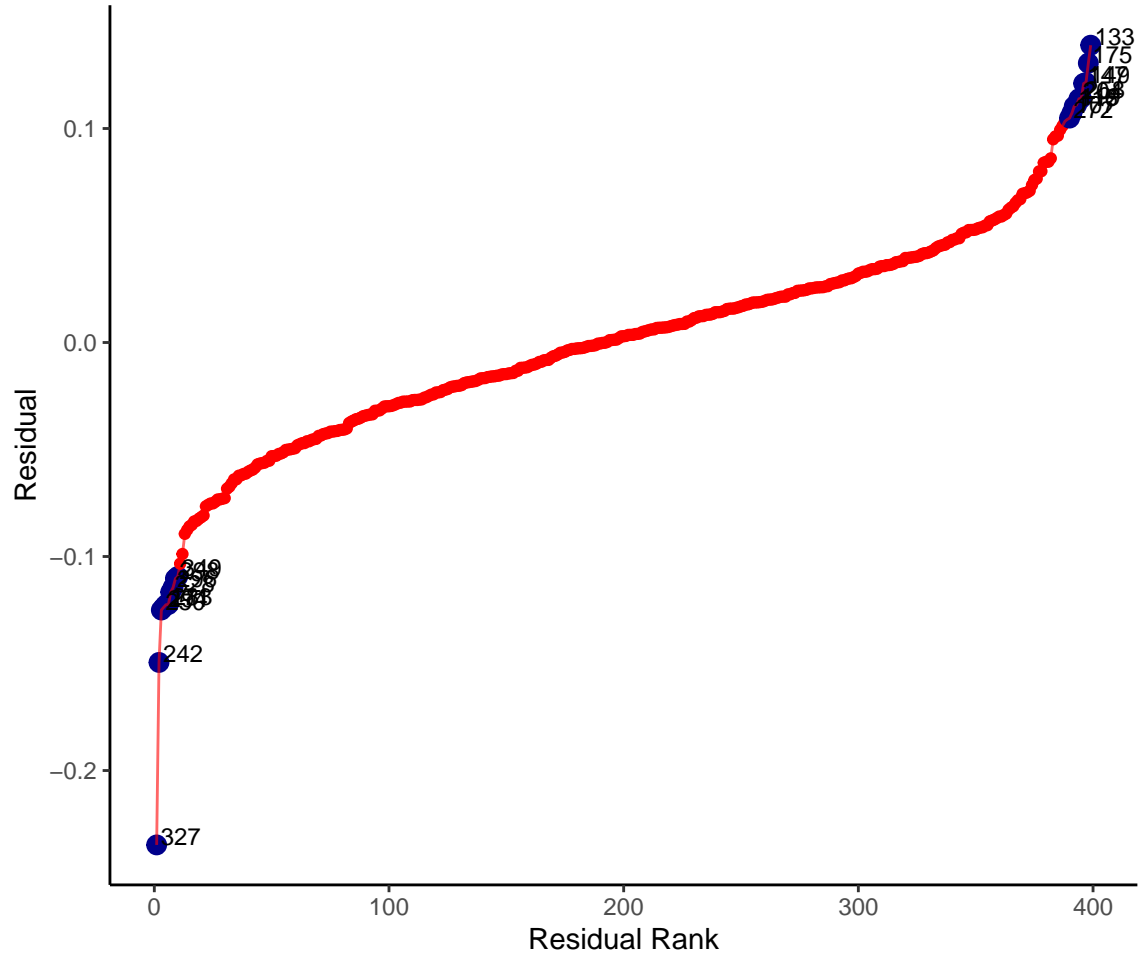


C6guano vs fentanyl

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

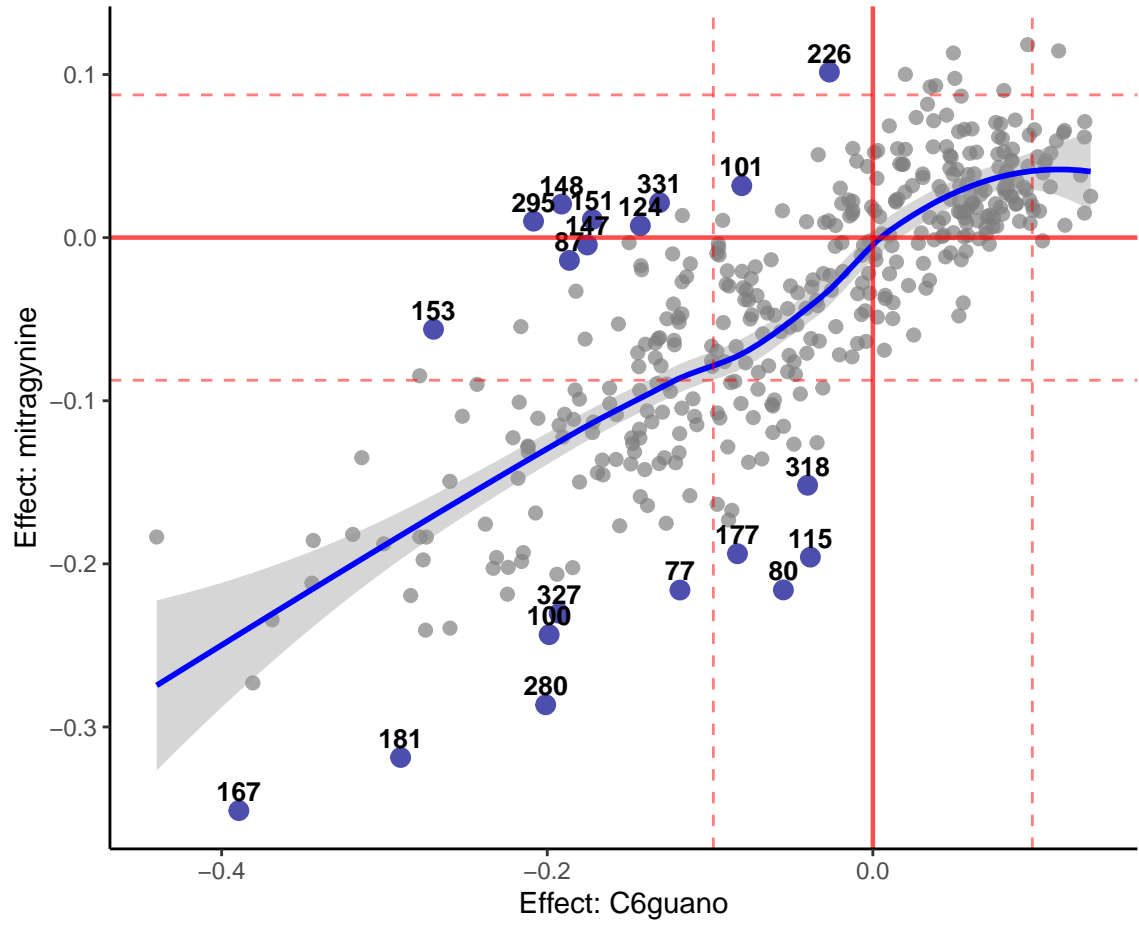


Residuals (loess): fentanyl ~ C6guano

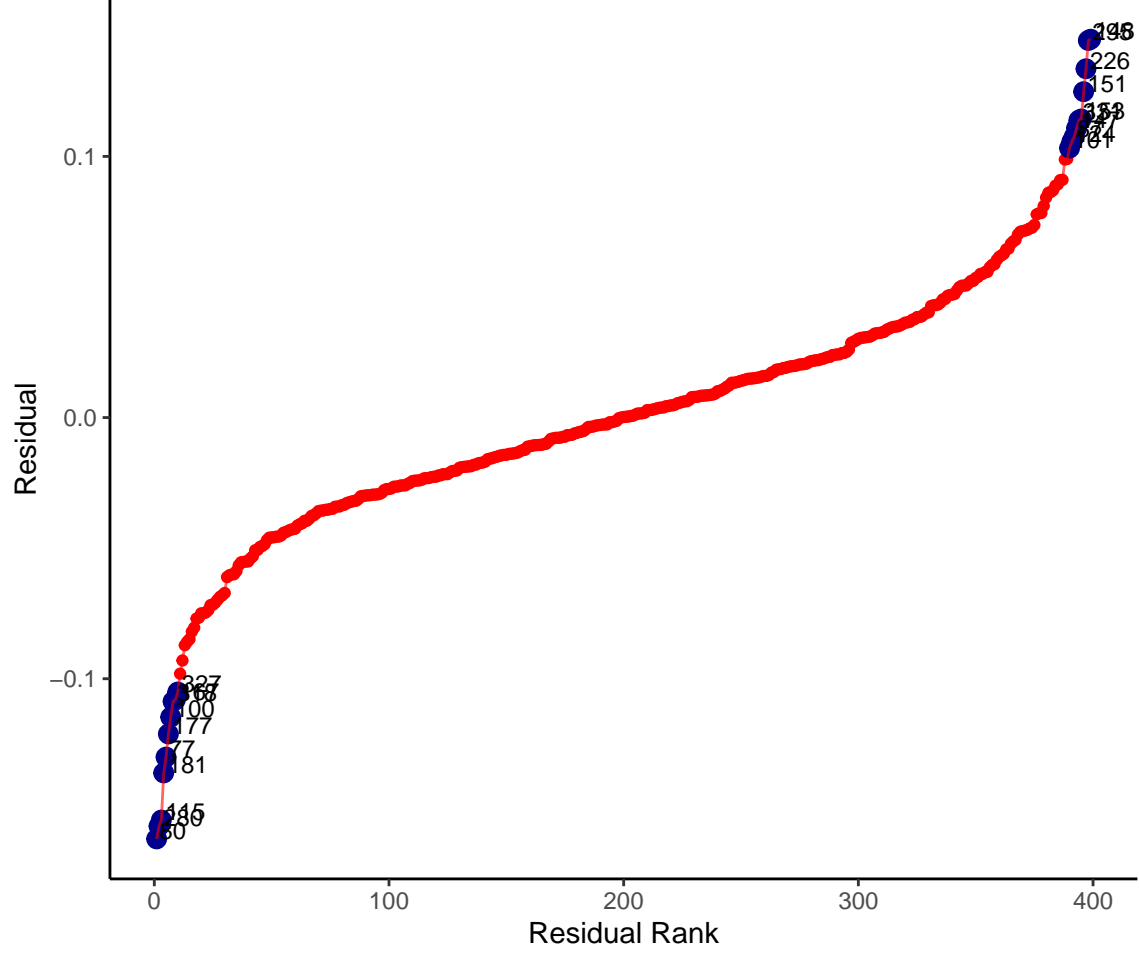


C6guano vs mitragynine

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

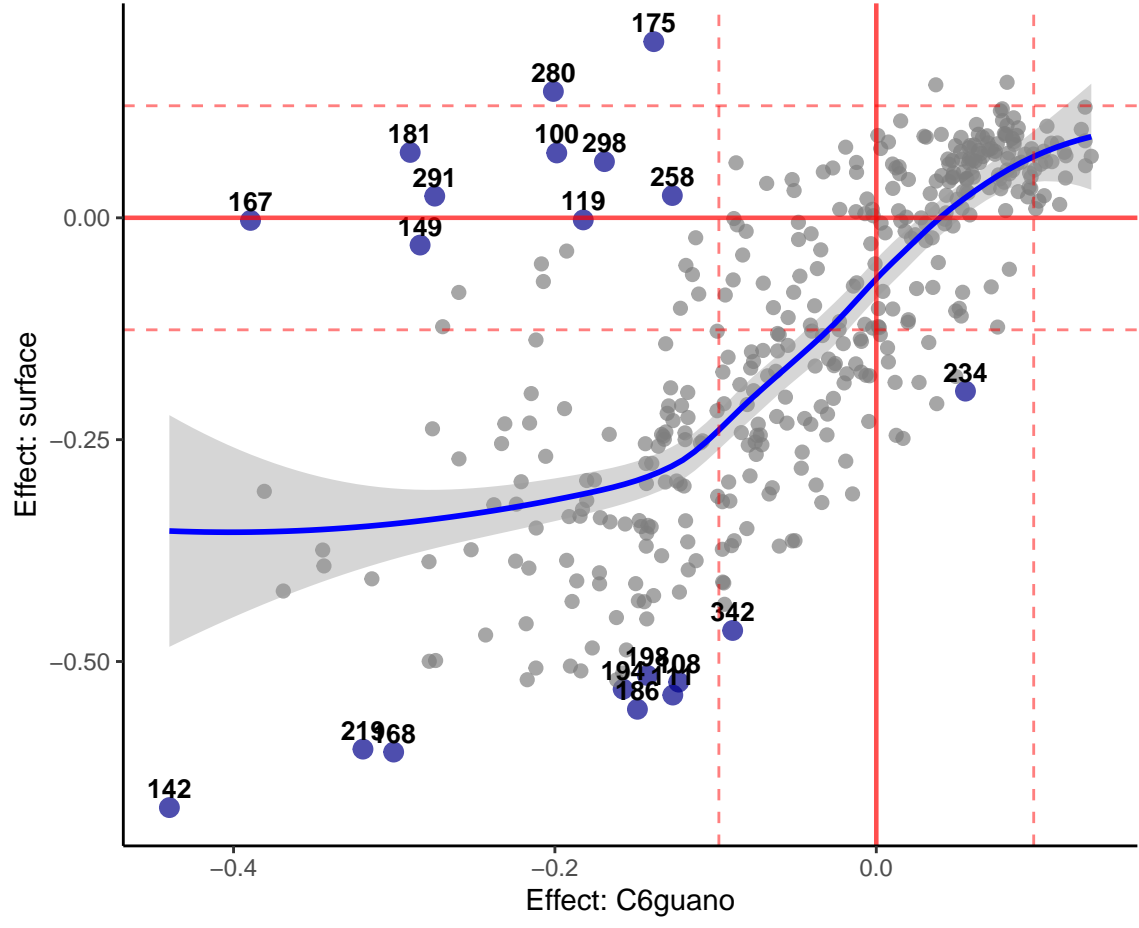


Residuals (loess): mitragynine ~ C6guano

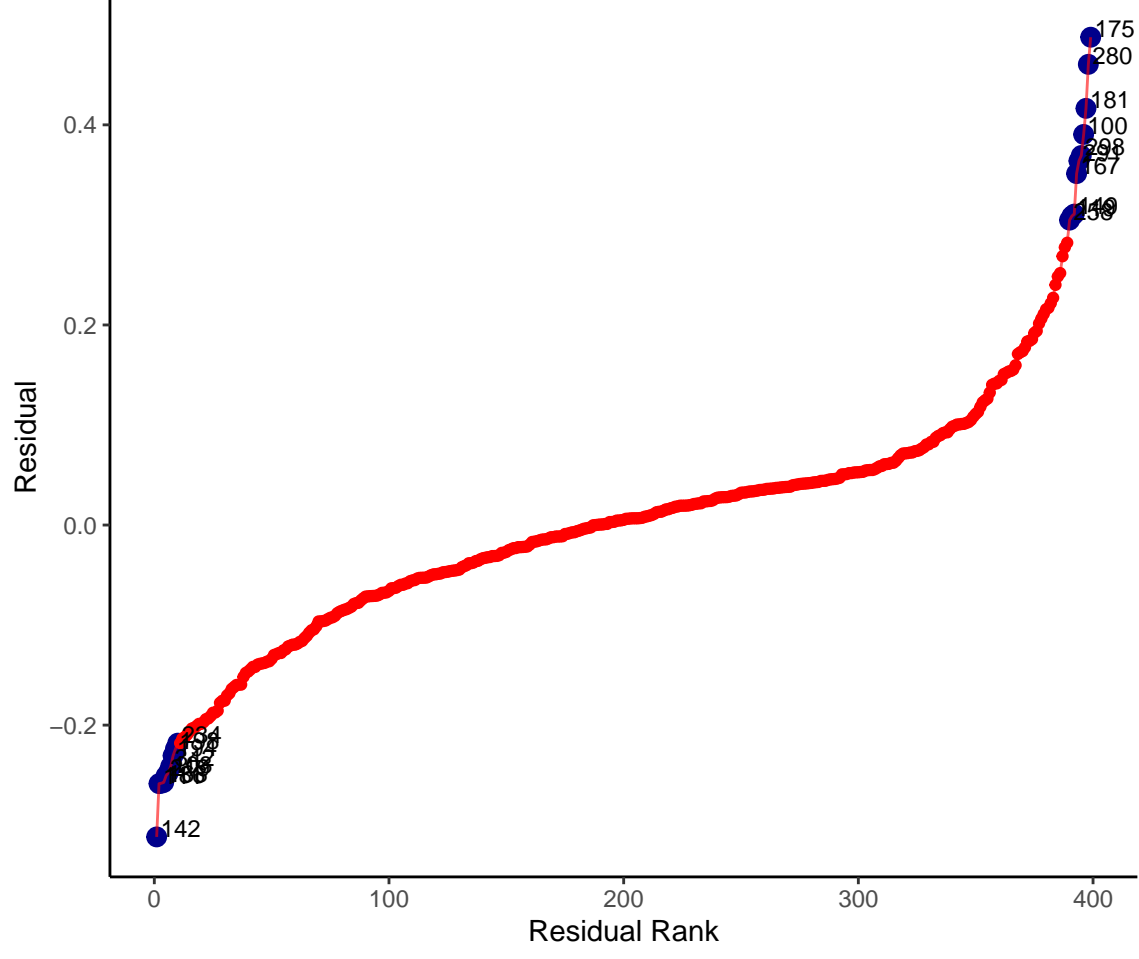


C6guano vs surface

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

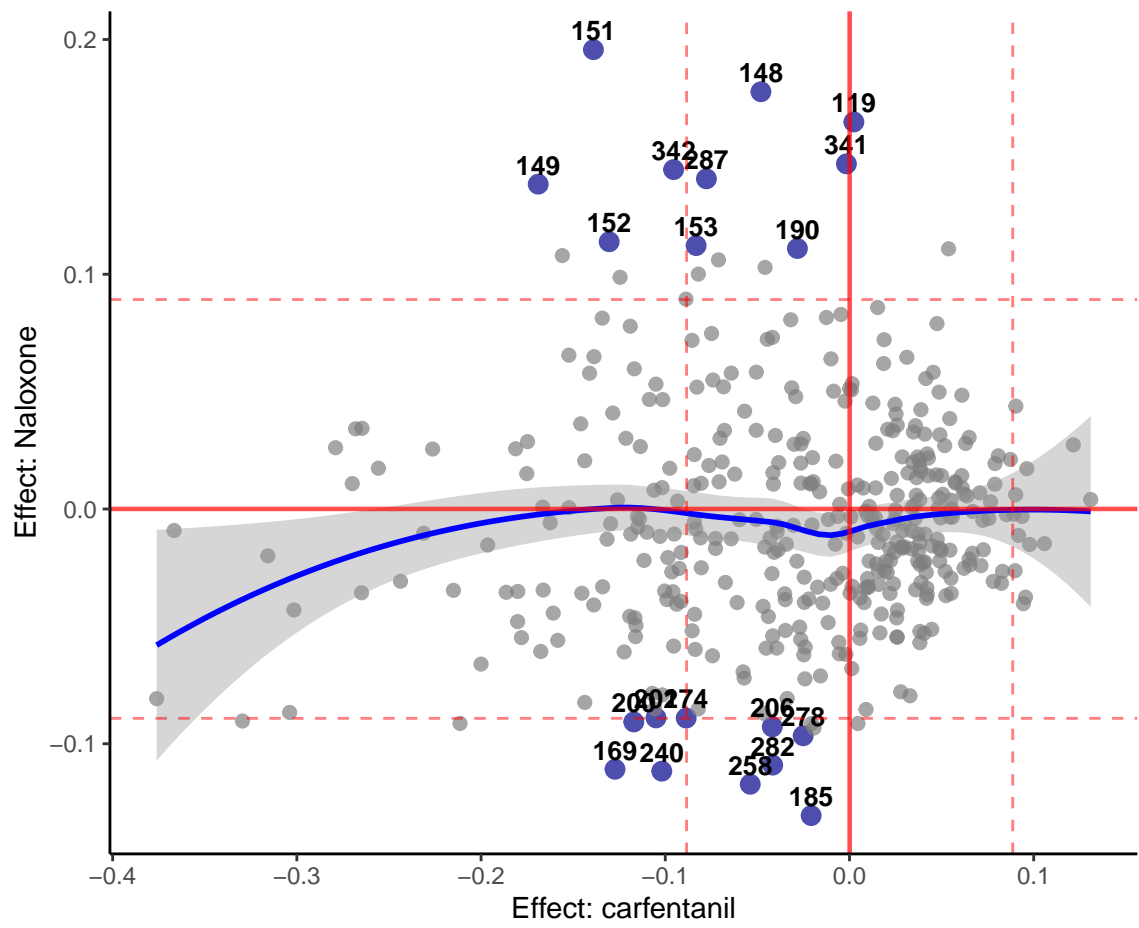


Residuals (loess): surface ~ C6guano

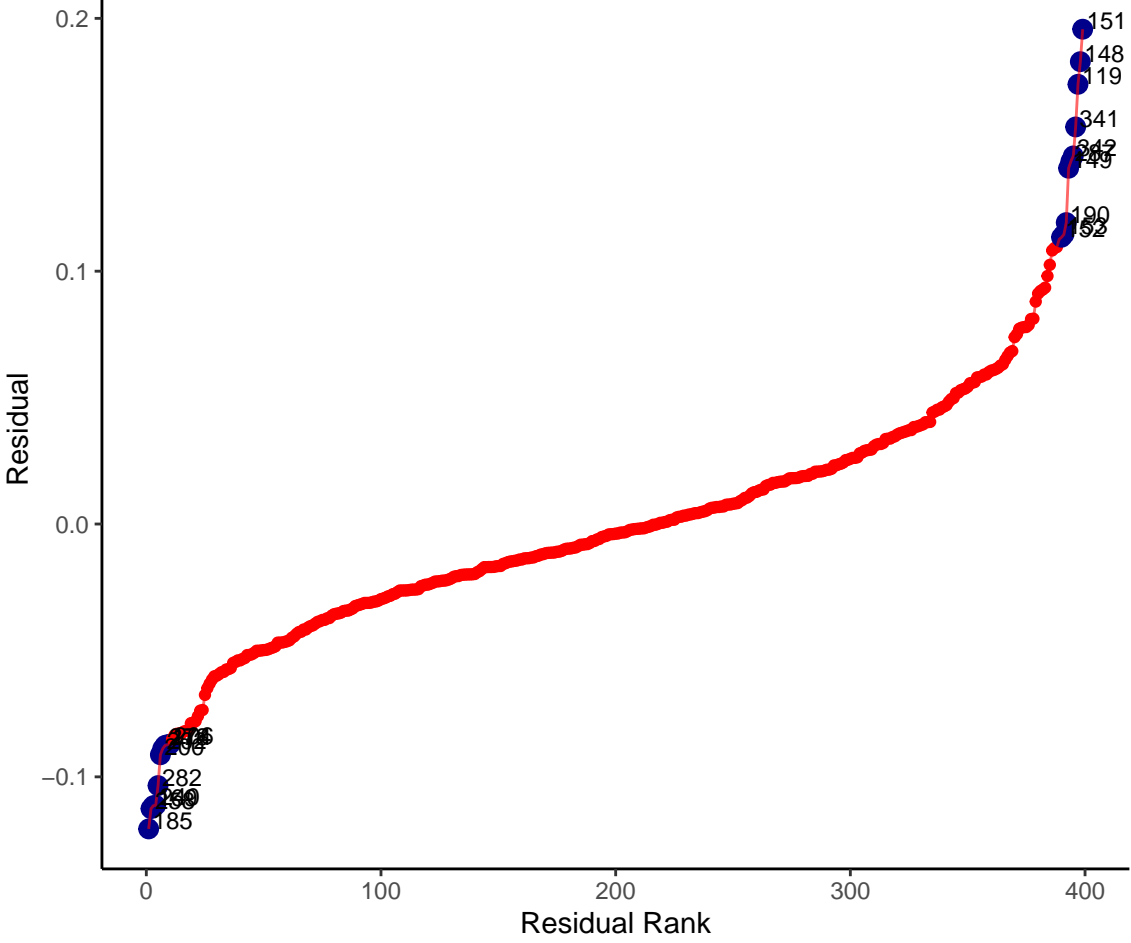


carfentanil vs Naloxone

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

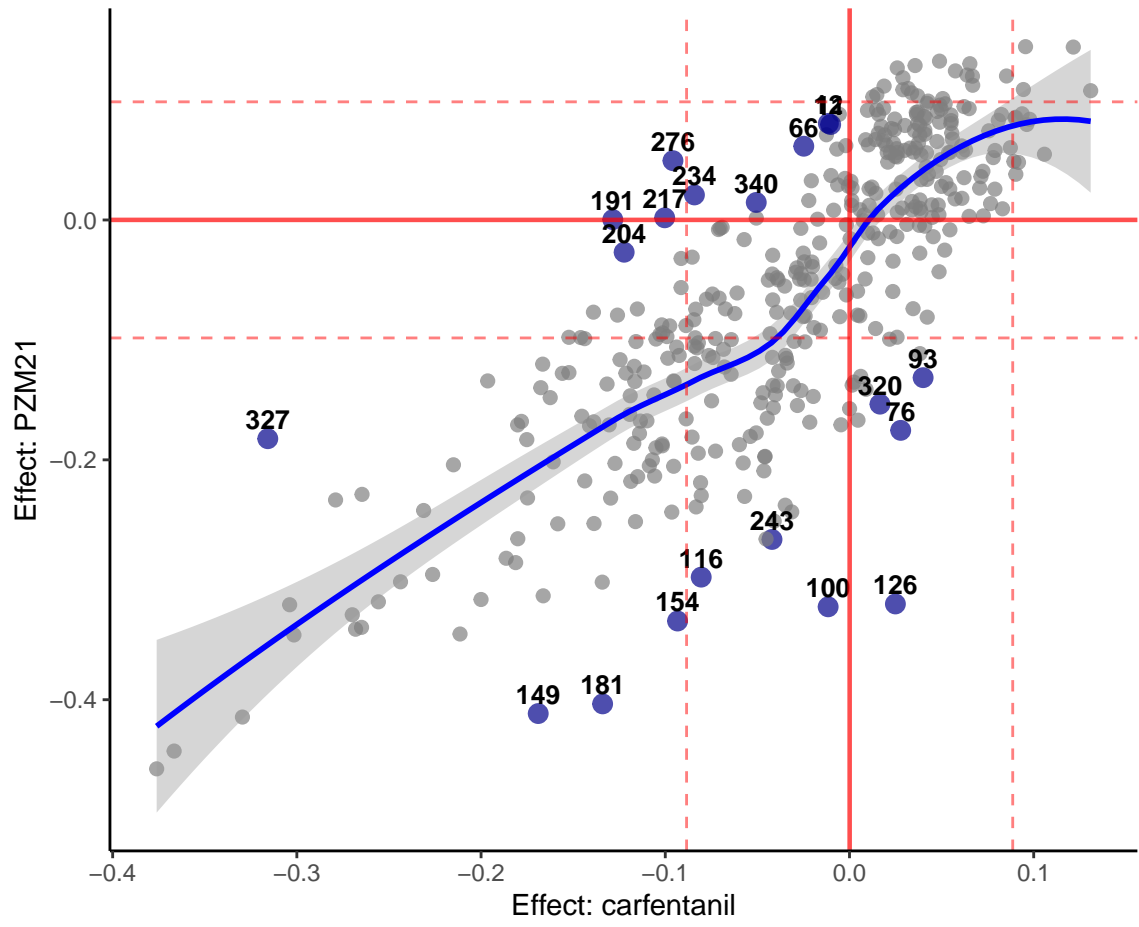


Residuals (loess): Naloxone ~ carfentanil

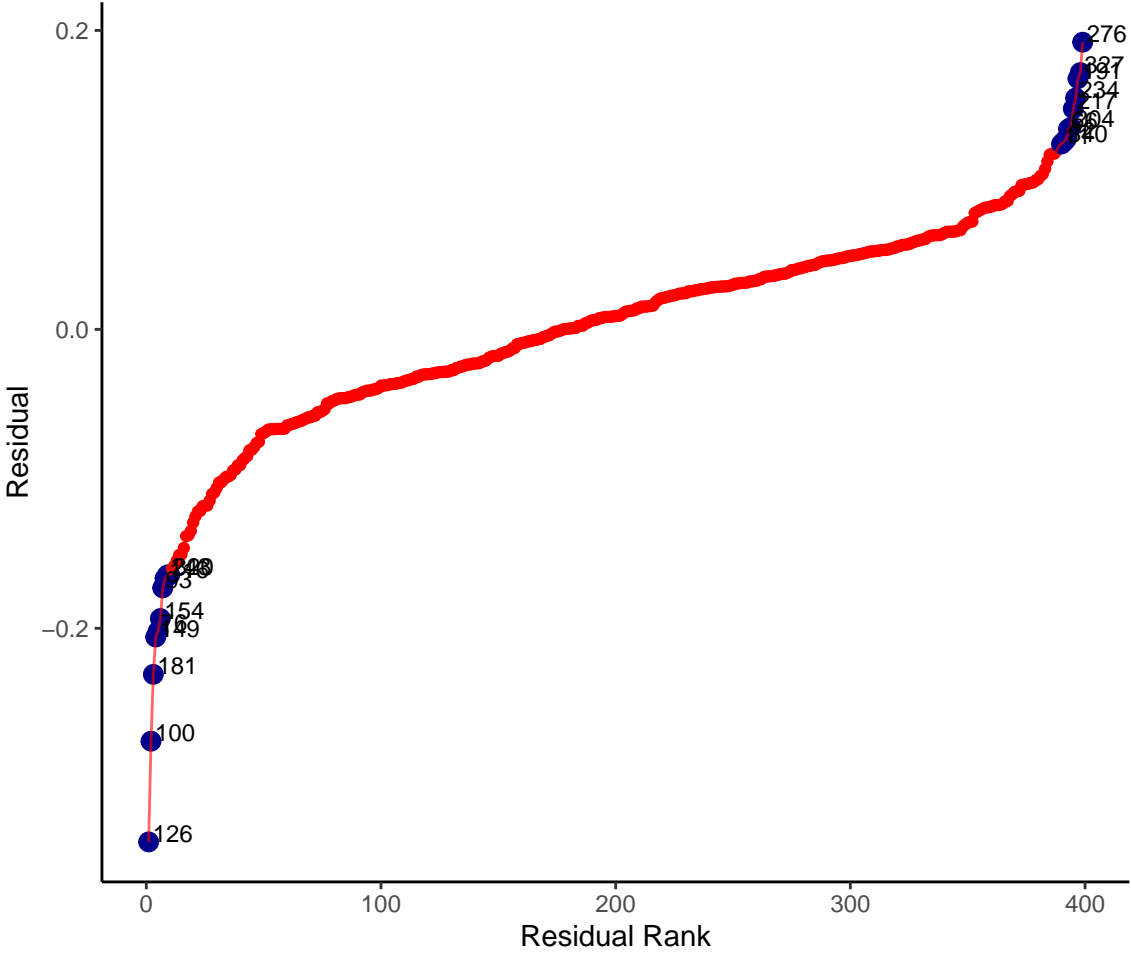


carfentanil vs PZM21

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

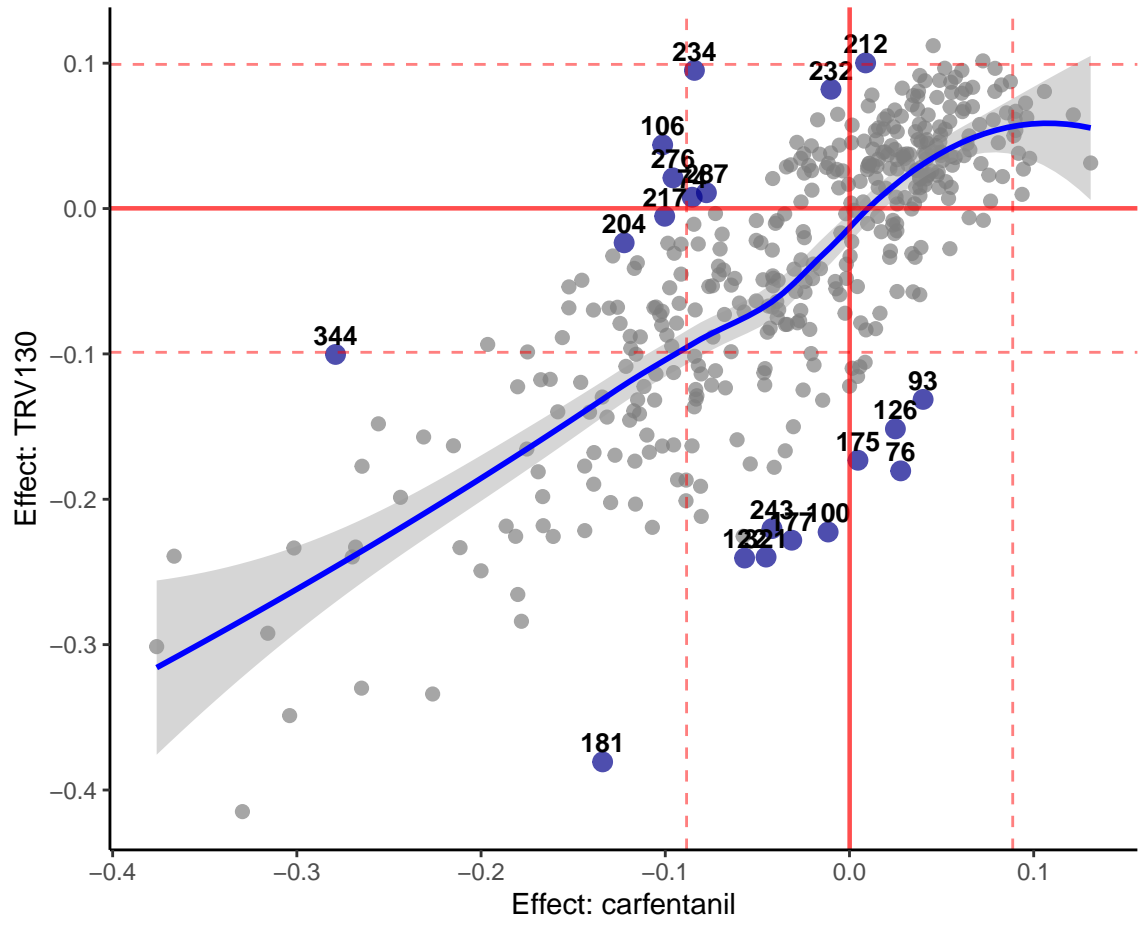


Residuals (loess): PZM21 ~ carfentanil

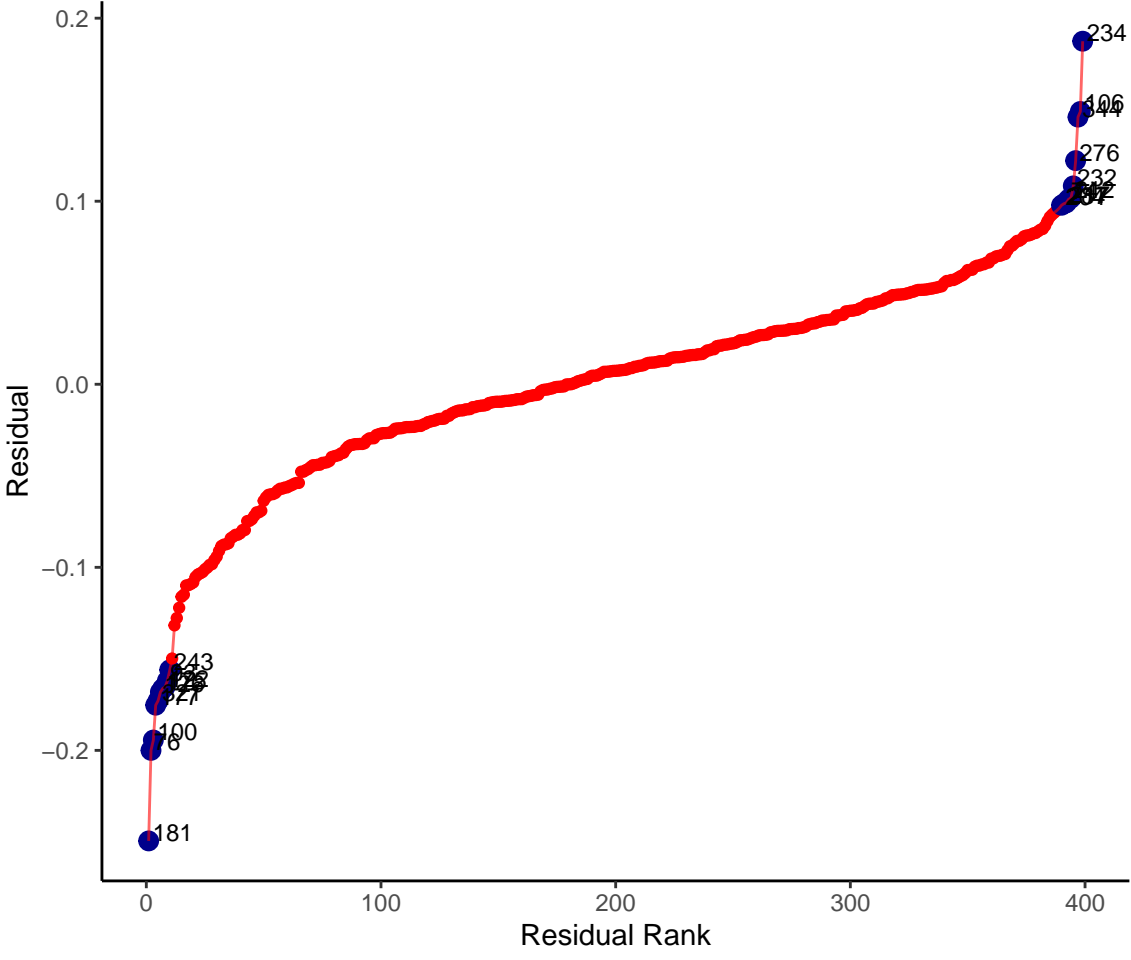


carfentanil vs TRV130

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals



Residuals (loess): TRV130 ~ carfentanil



Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

[illegible]

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals



Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

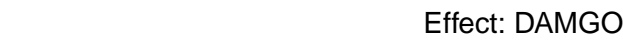
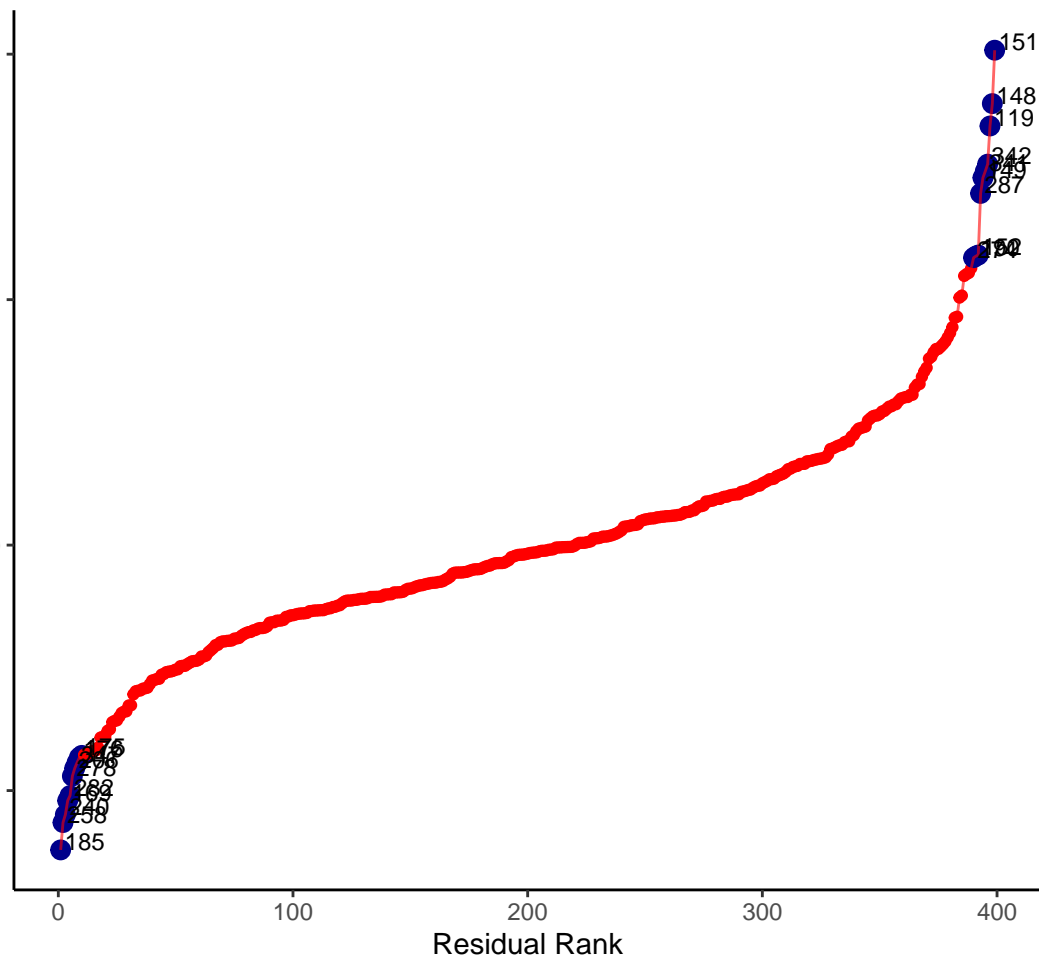
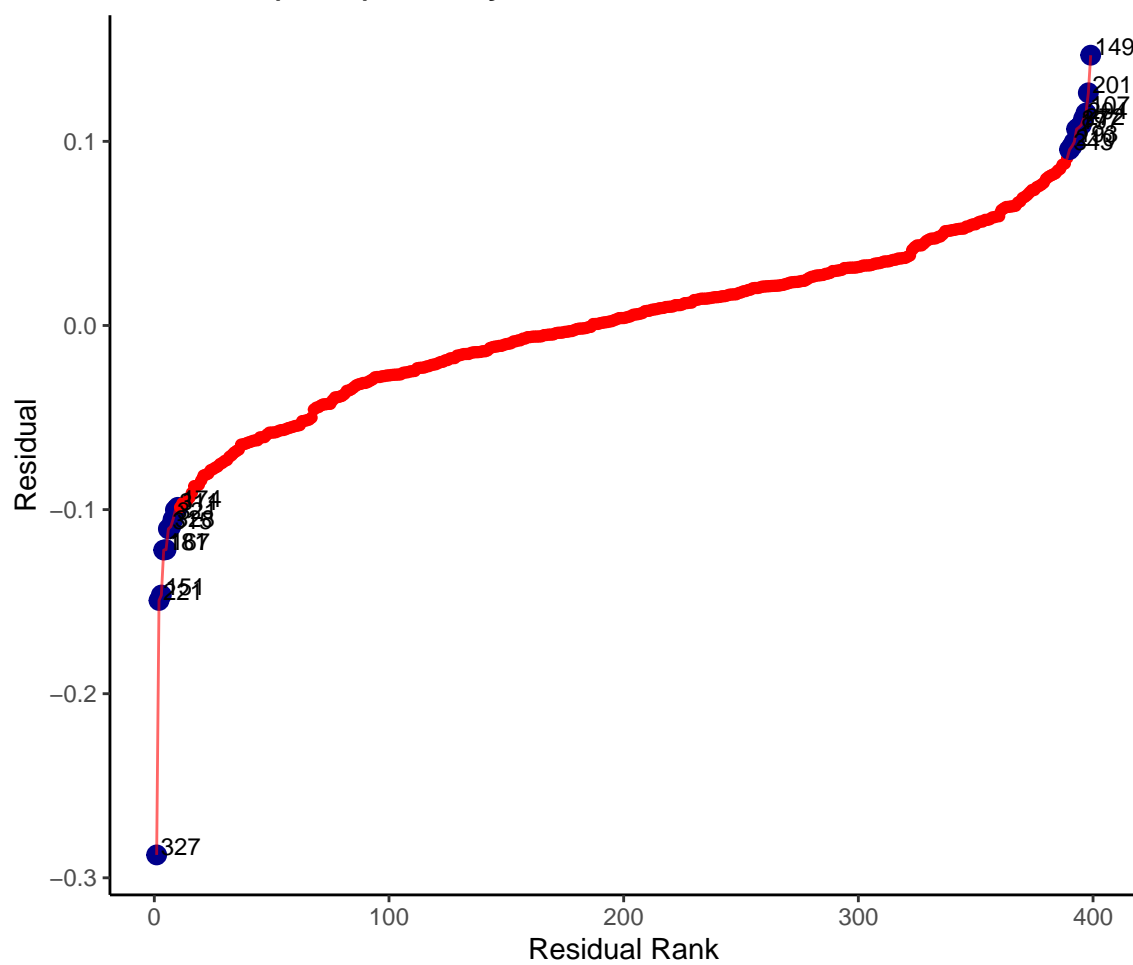
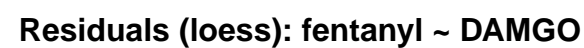
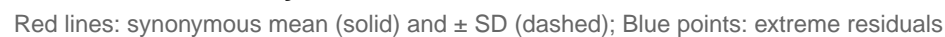
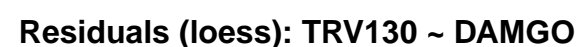
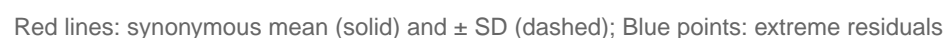
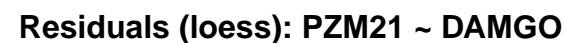


Figure 1 is a plot showing the number of non-zero entries in the residual matrix versus the residual rank. The x-axis is labeled 'Residual Rank' and ranges from 0 to 400. The y-axis represents the number of non-zero entries. A red line indicates the cumulative count of non-zero entries as the residual rank increases. The curve starts at (0,0) and rises steeply, then gradually levels off as the rank increases. Blue dots mark specific ranks, with labels indicating the number of non-zero entries at those ranks: 185, 258, 262, 263, 278, 285, 342, 343, 344, 387, 119, 148, and 151.

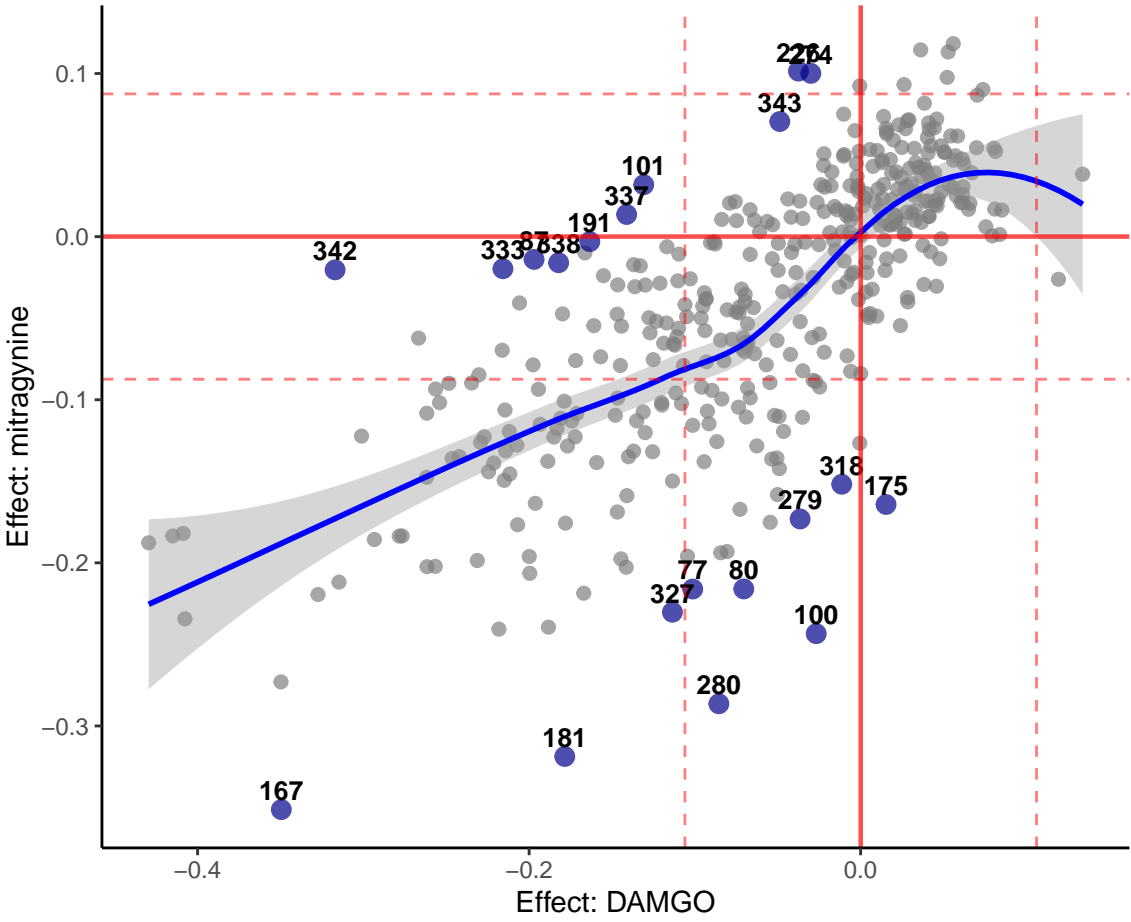


Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

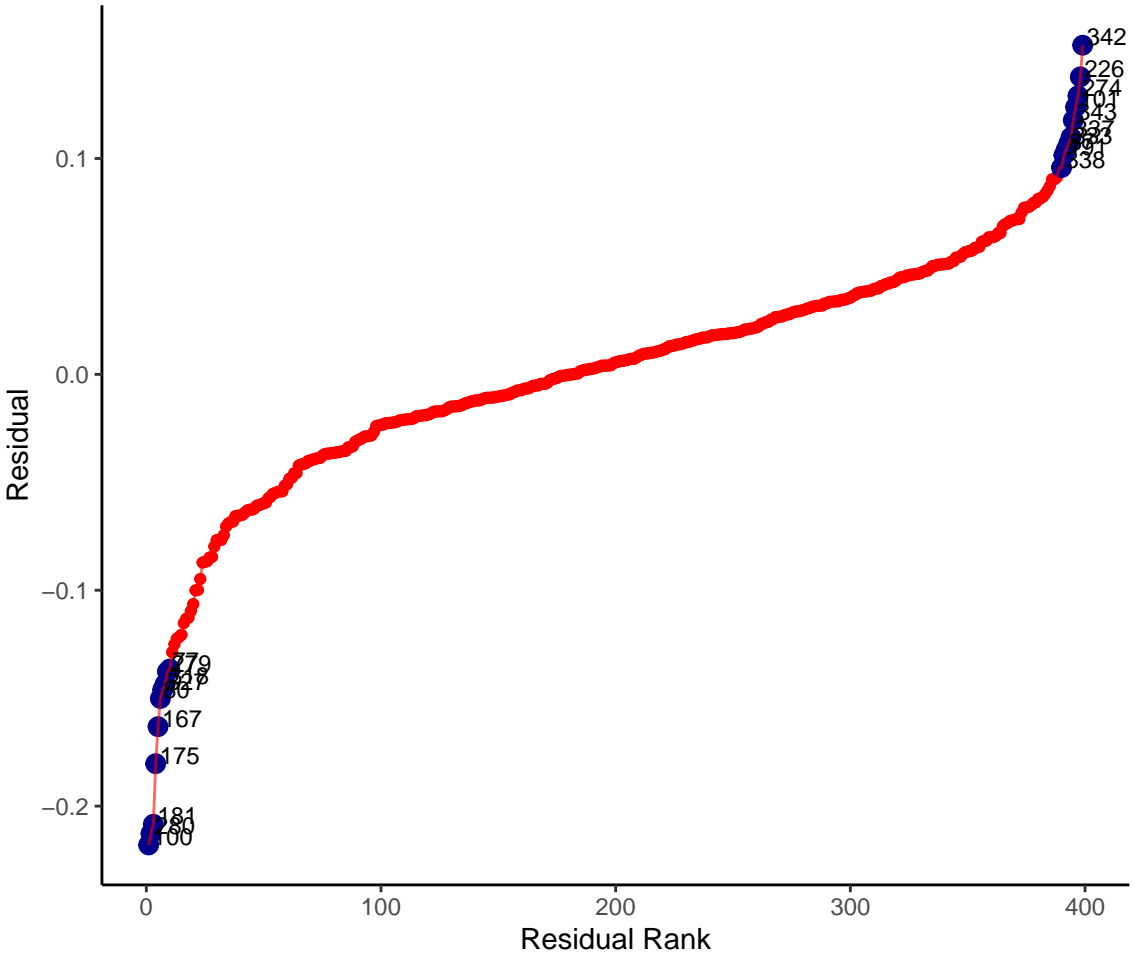


DAMGO vs mitragynine

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

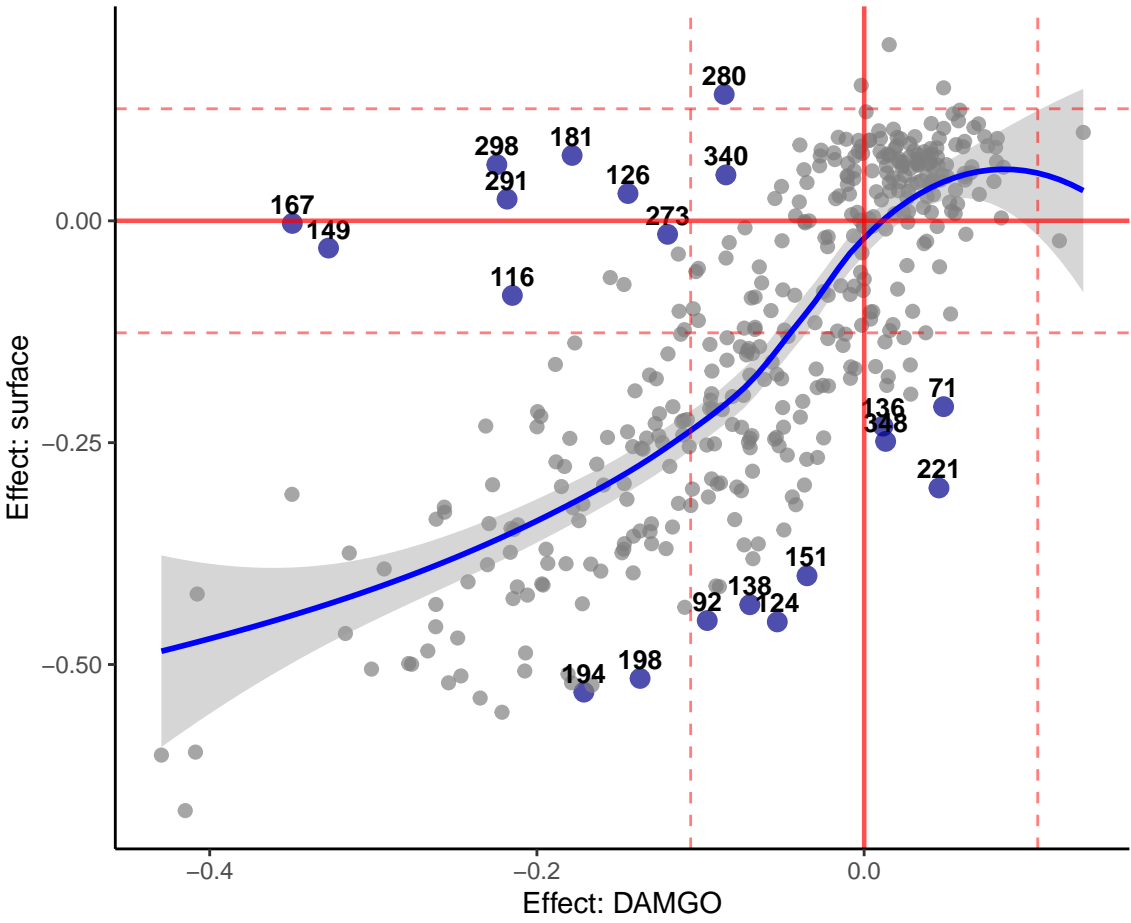


Residuals (loess): mitragynine ~ DAMGO

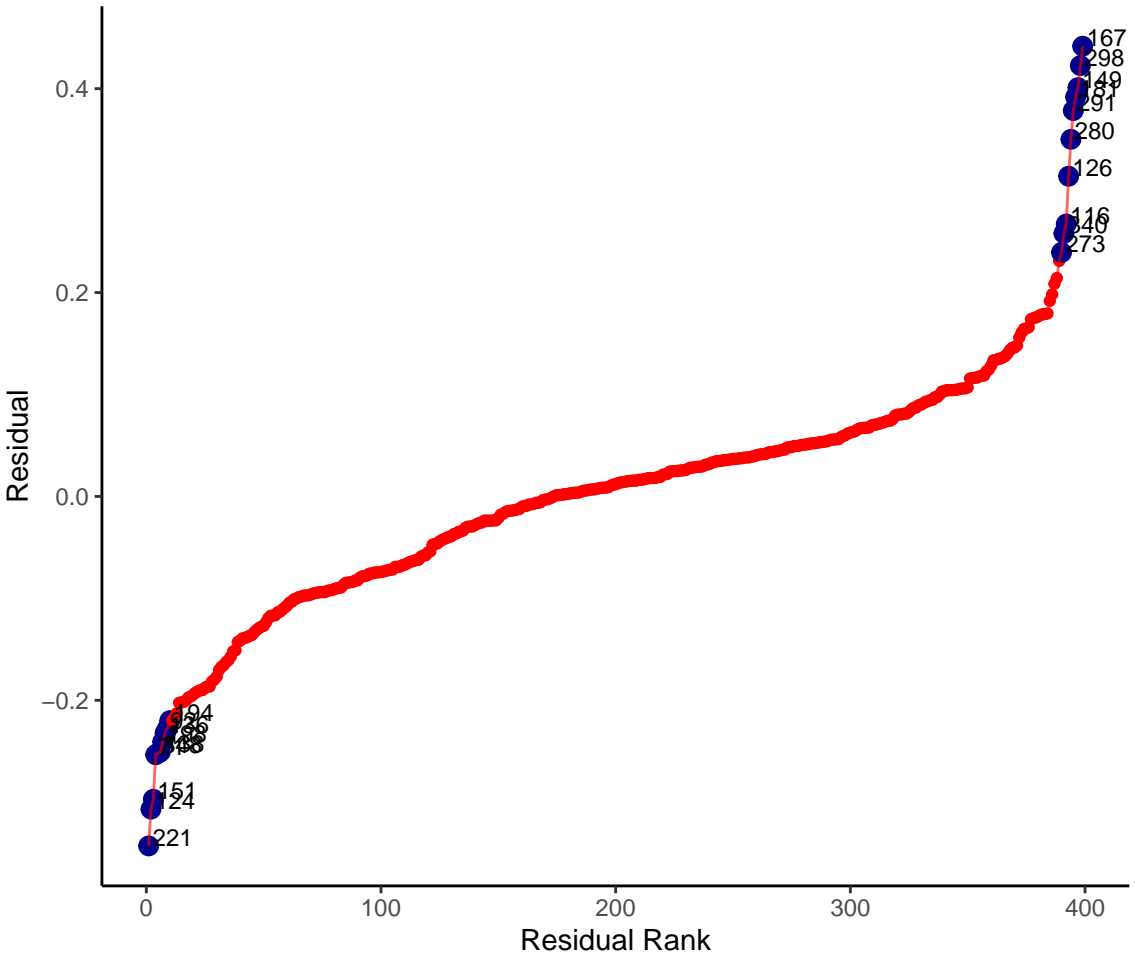


DAMGO vs surface

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

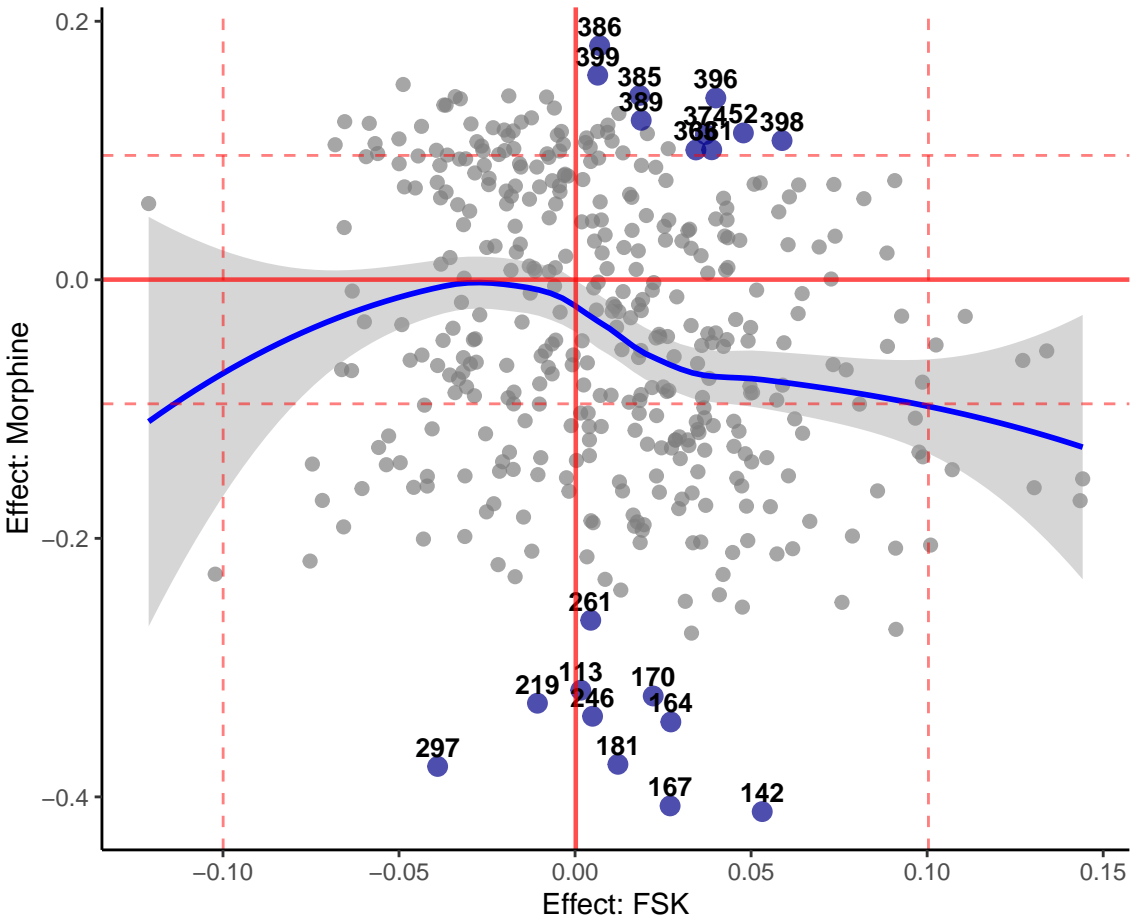


Residuals (loess): surface ~ DAMGO

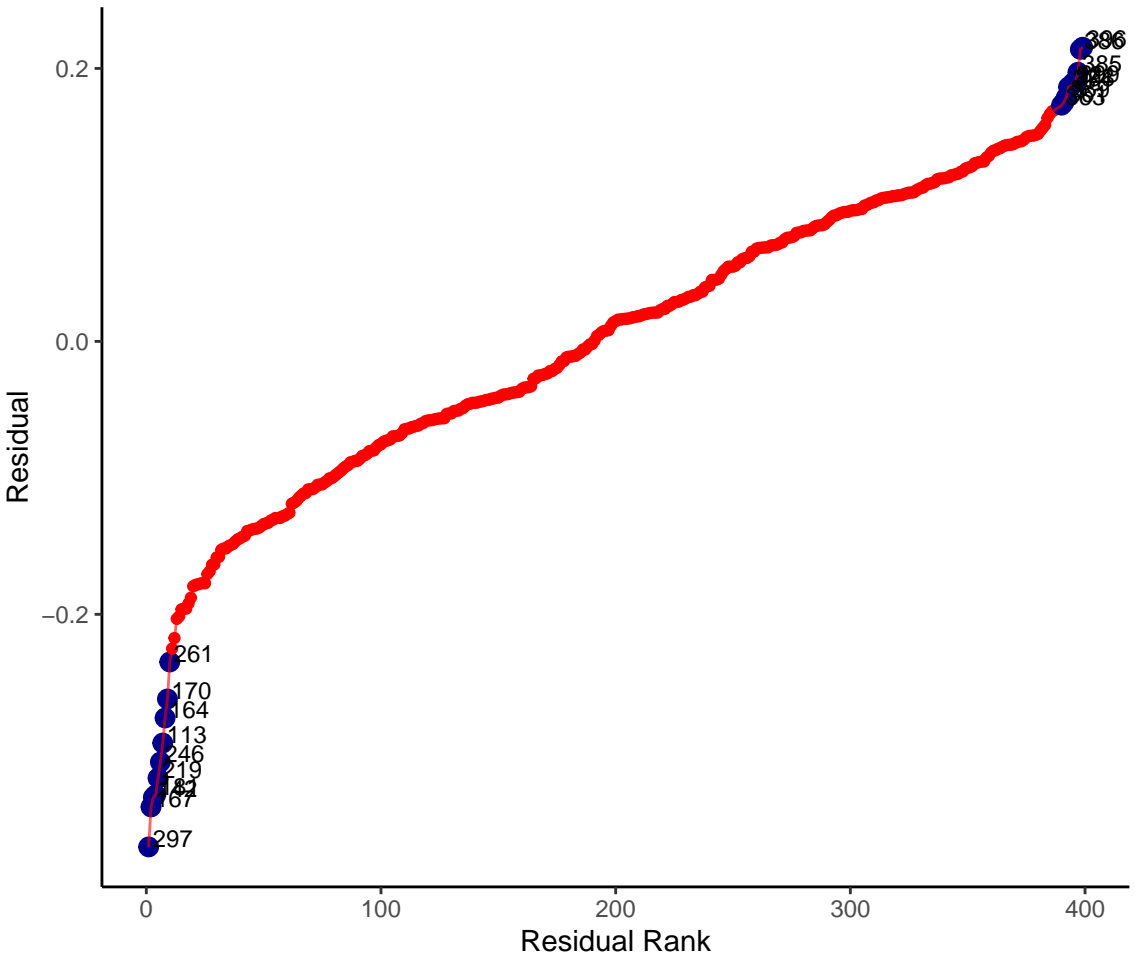


FSK vs Morphine

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

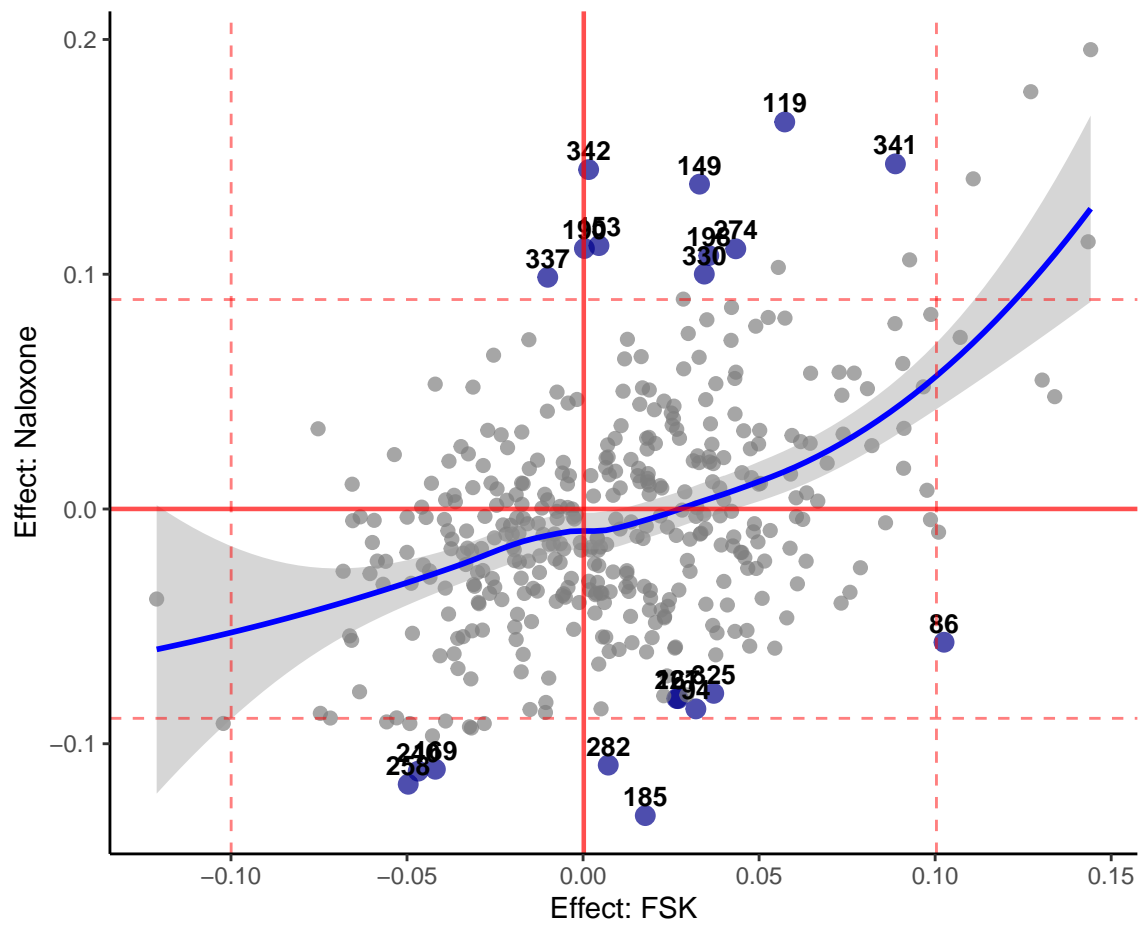


Residuals (loess): Morphine ~ FSK

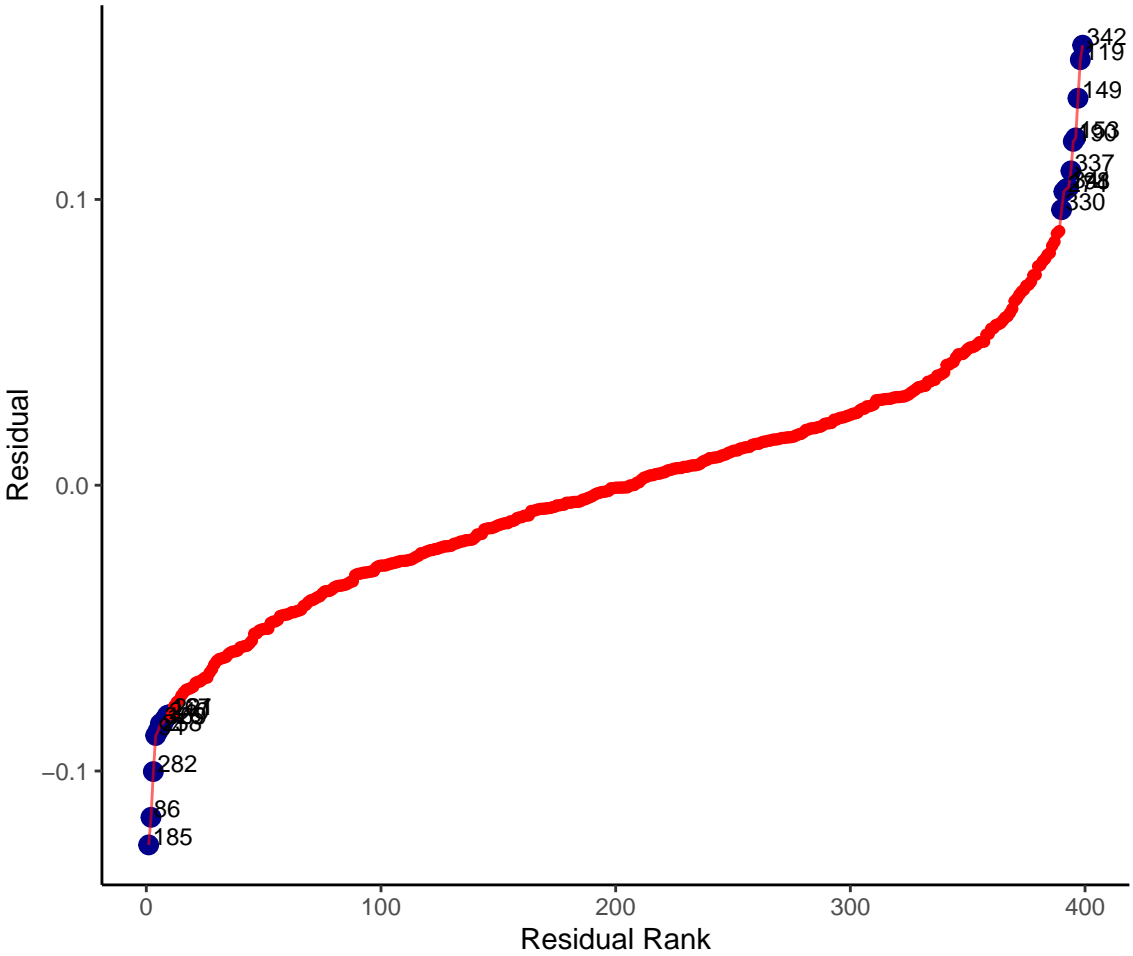


FSK vs Naloxone

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

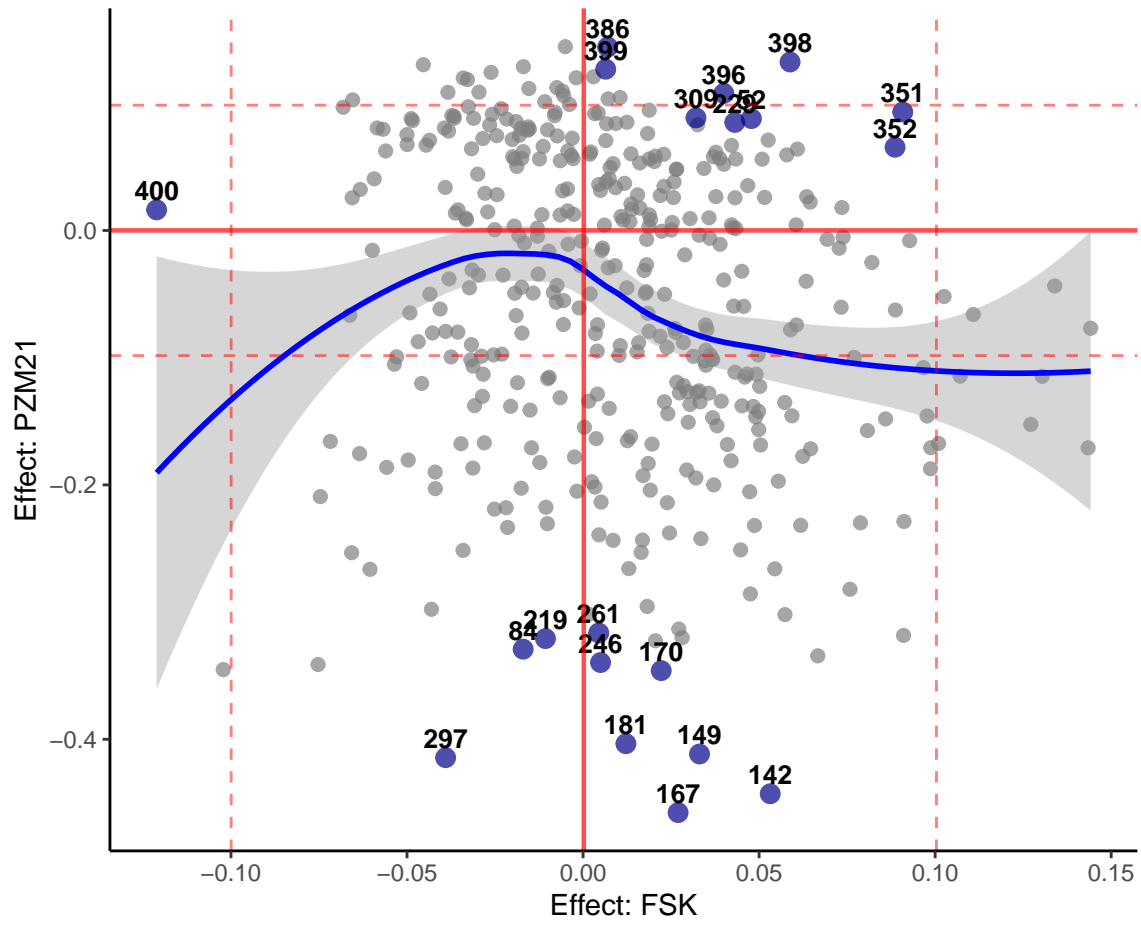


Residuals (loess): Naloxone ~ FSK

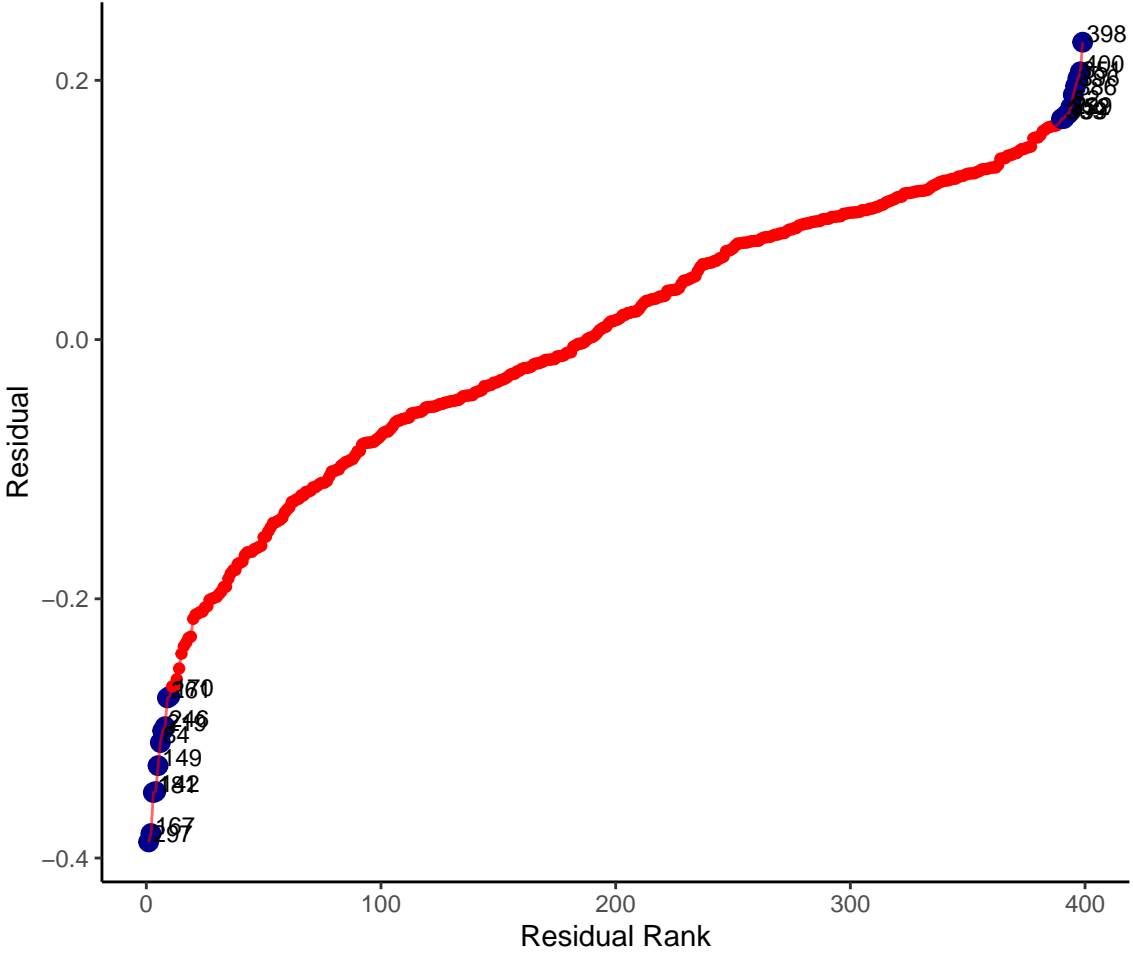


FSK vs PZM21

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

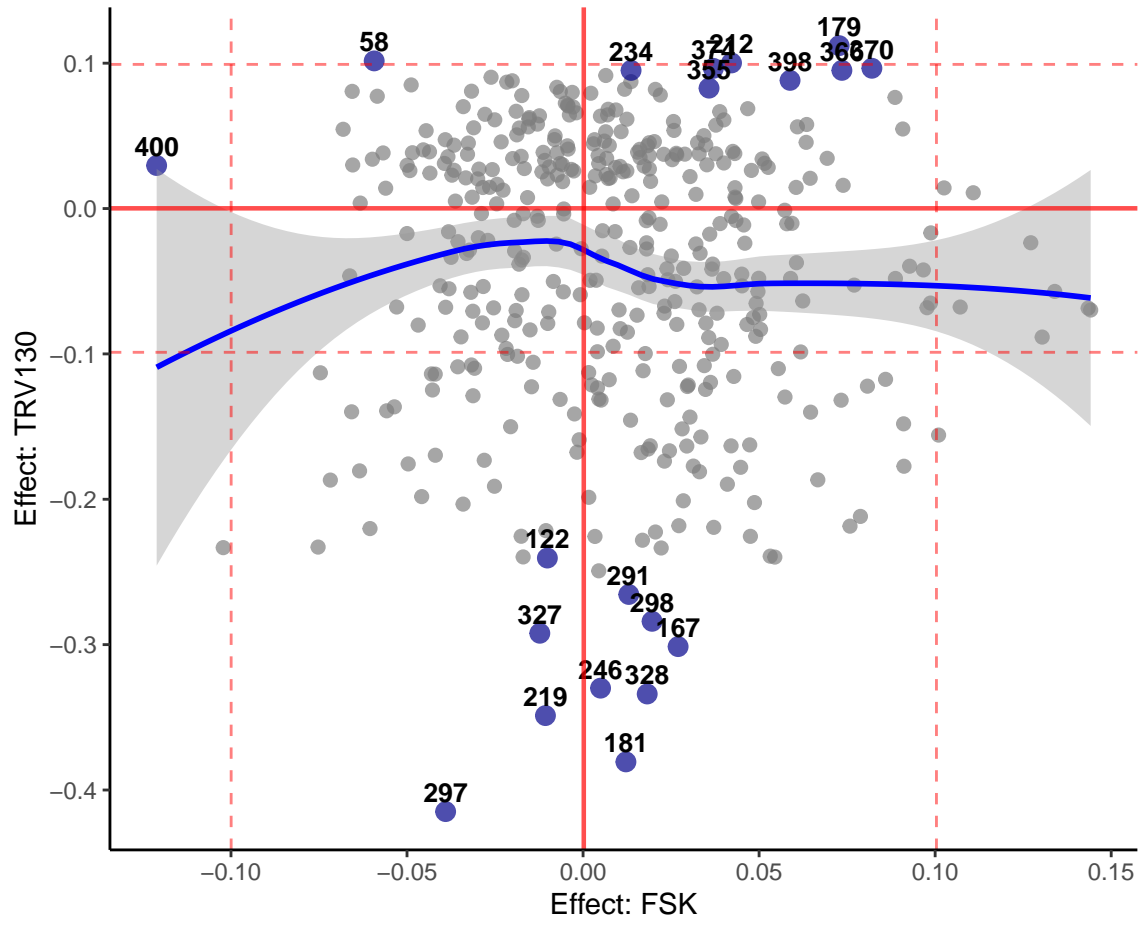


Residuals (loess): PZM21 ~ FSK

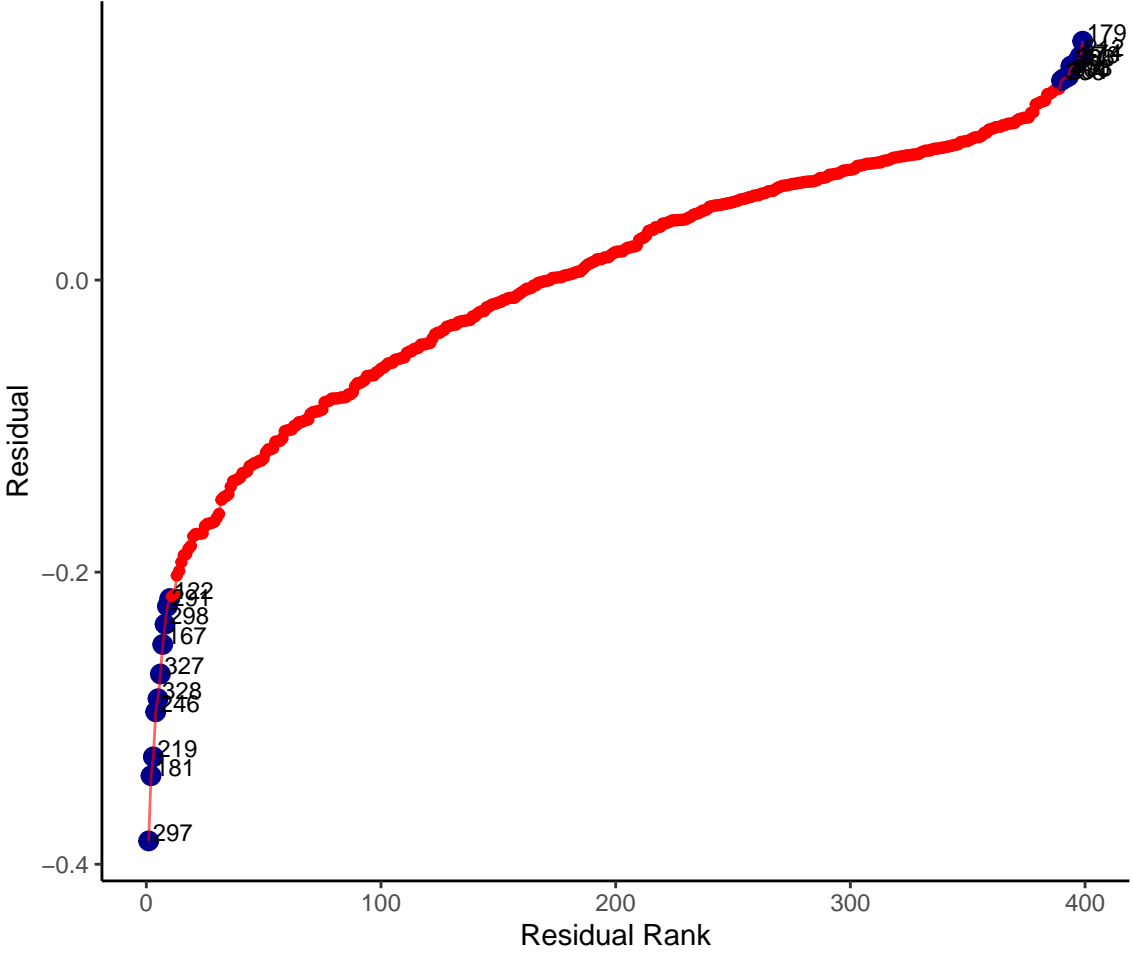


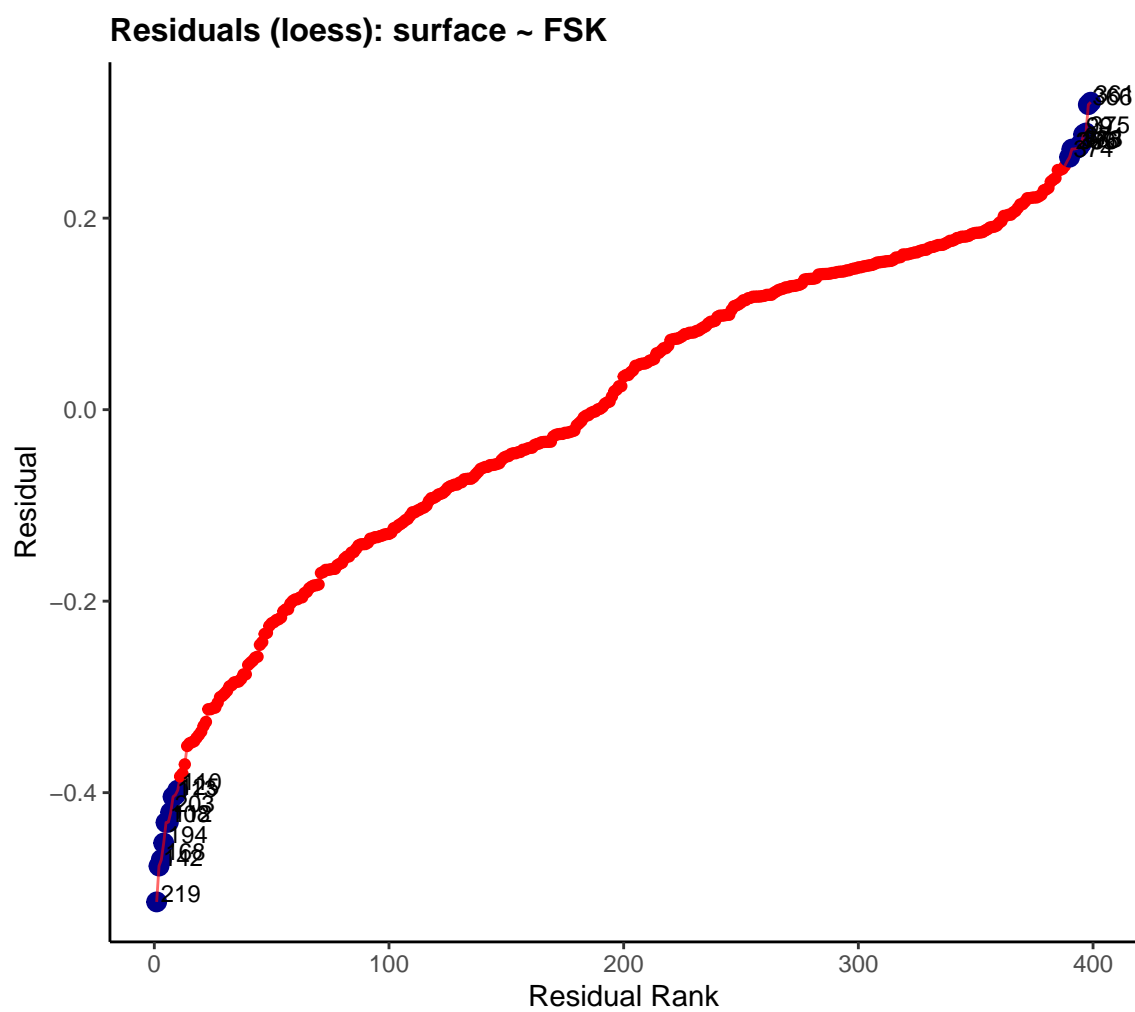
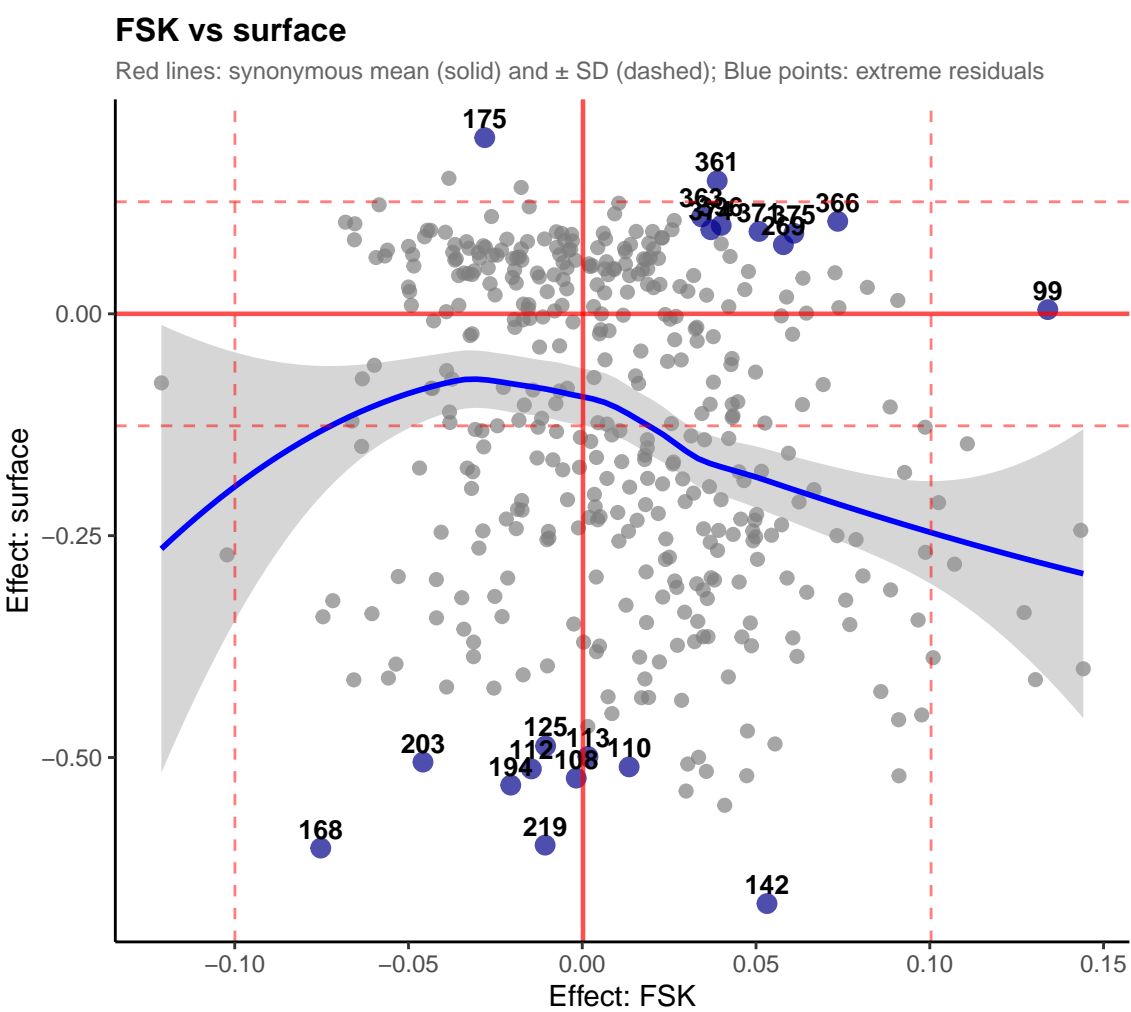
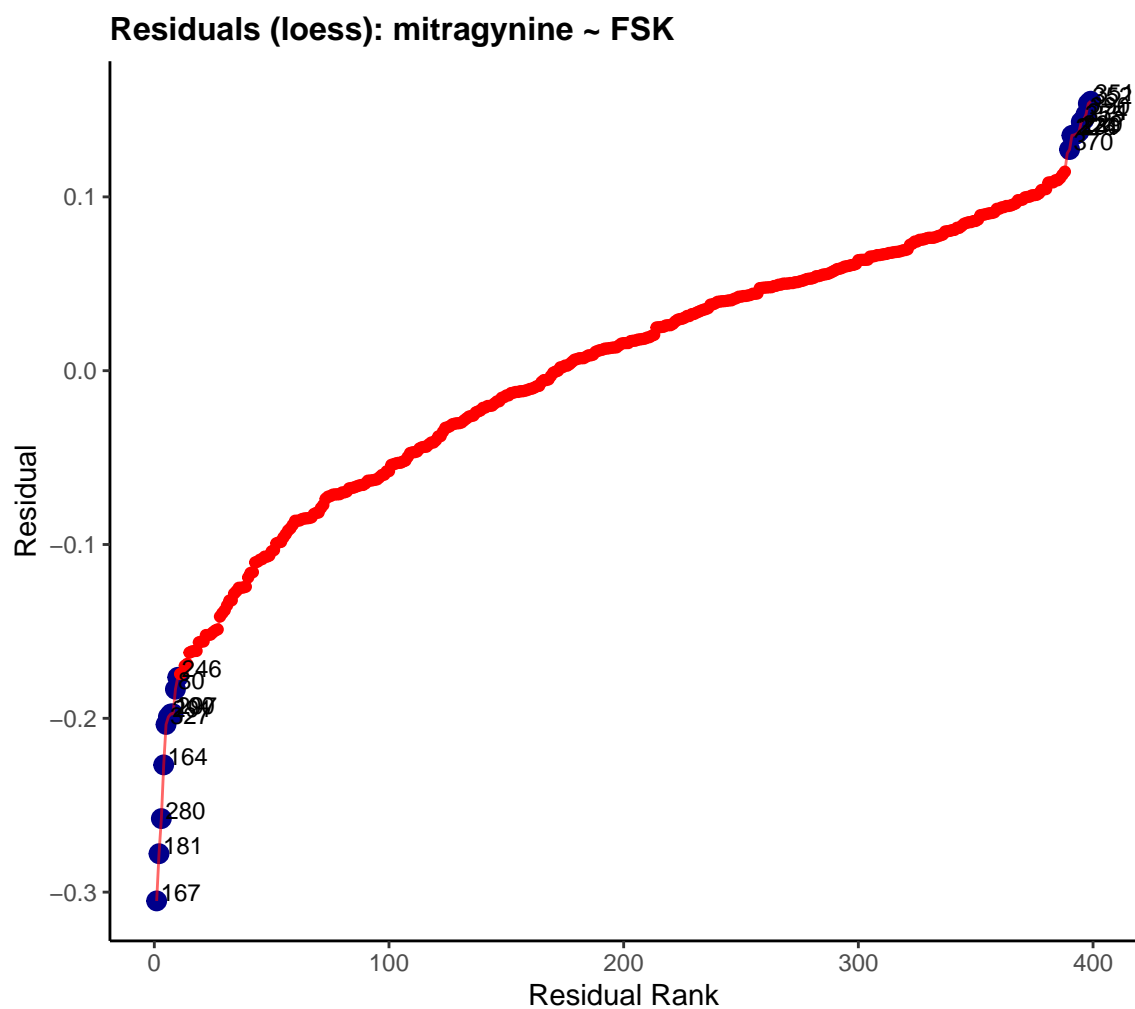
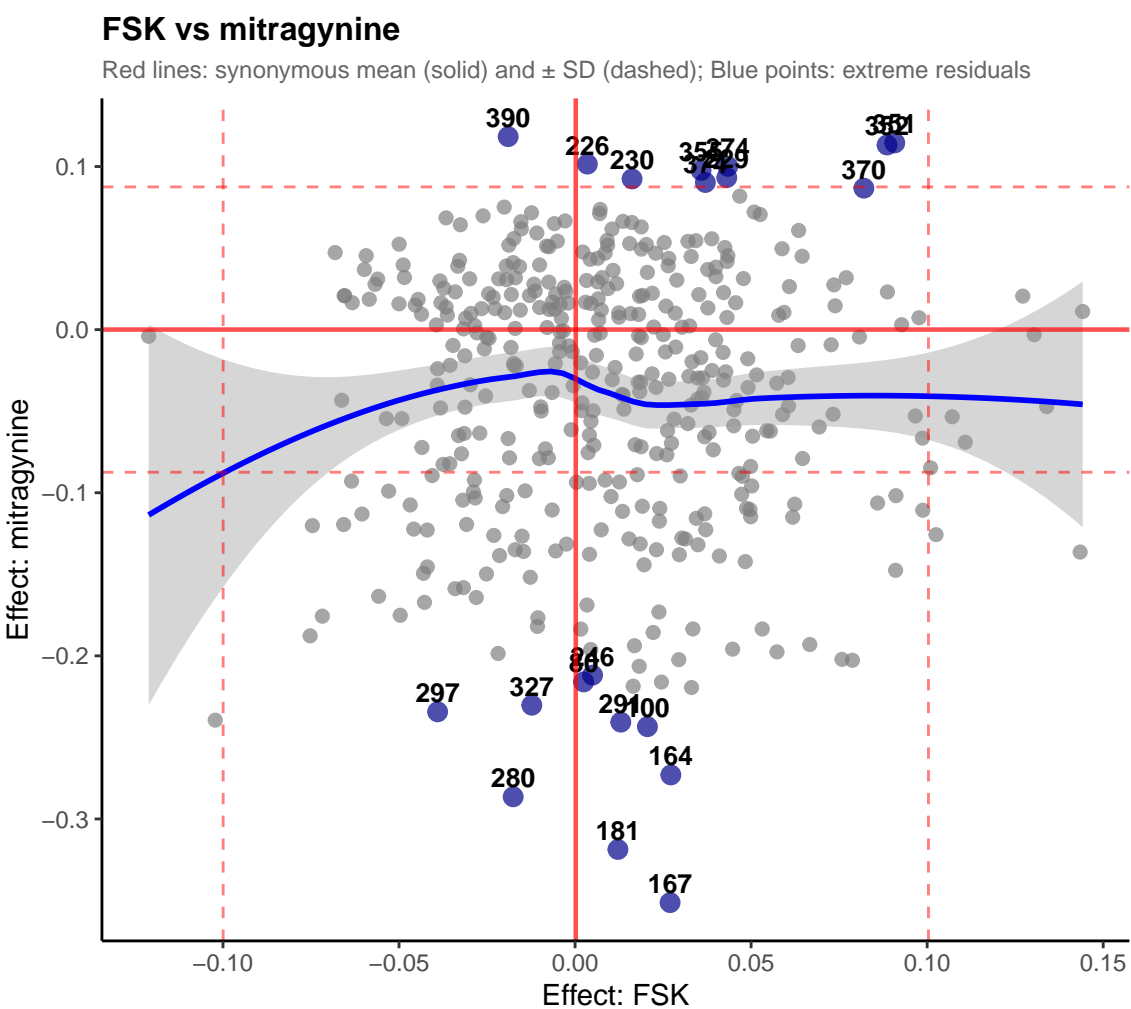
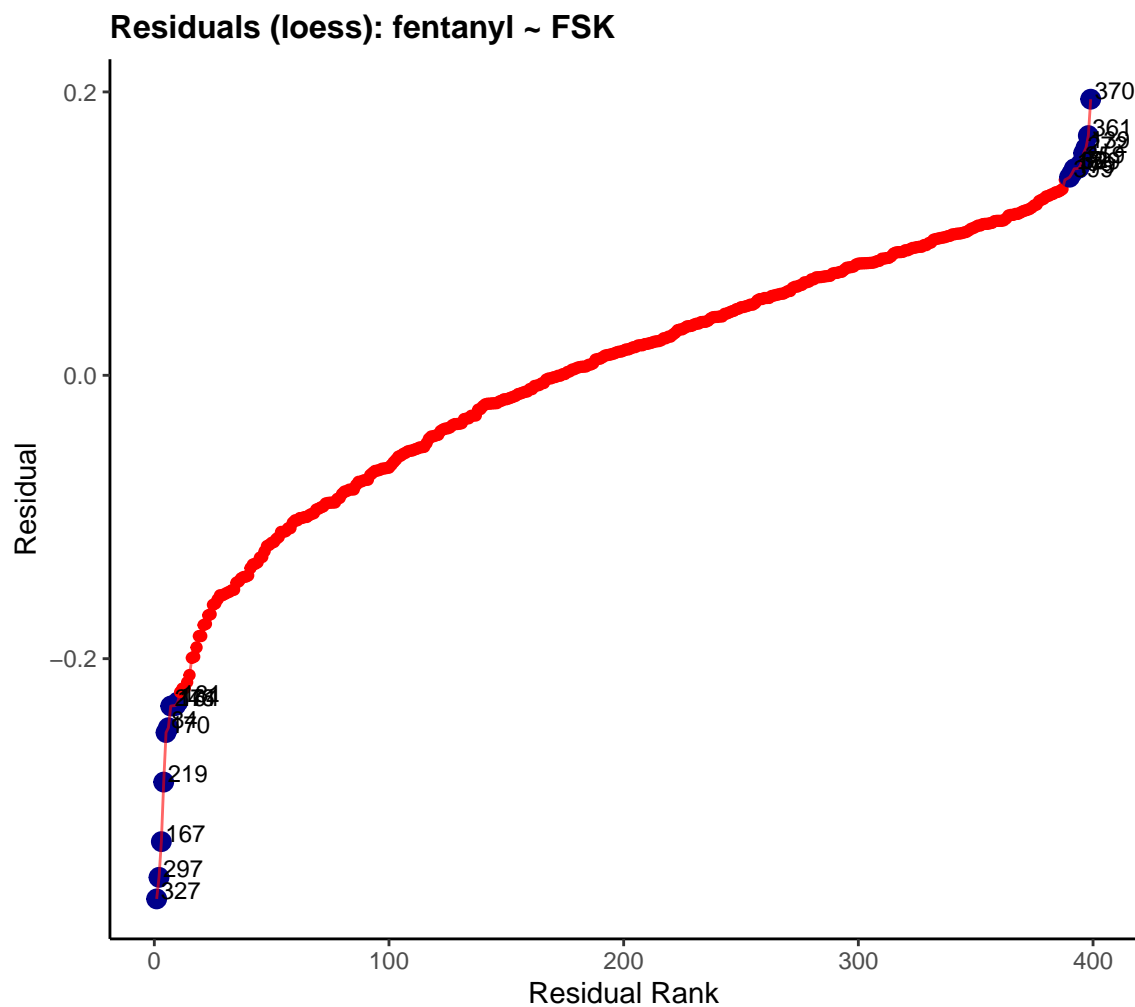
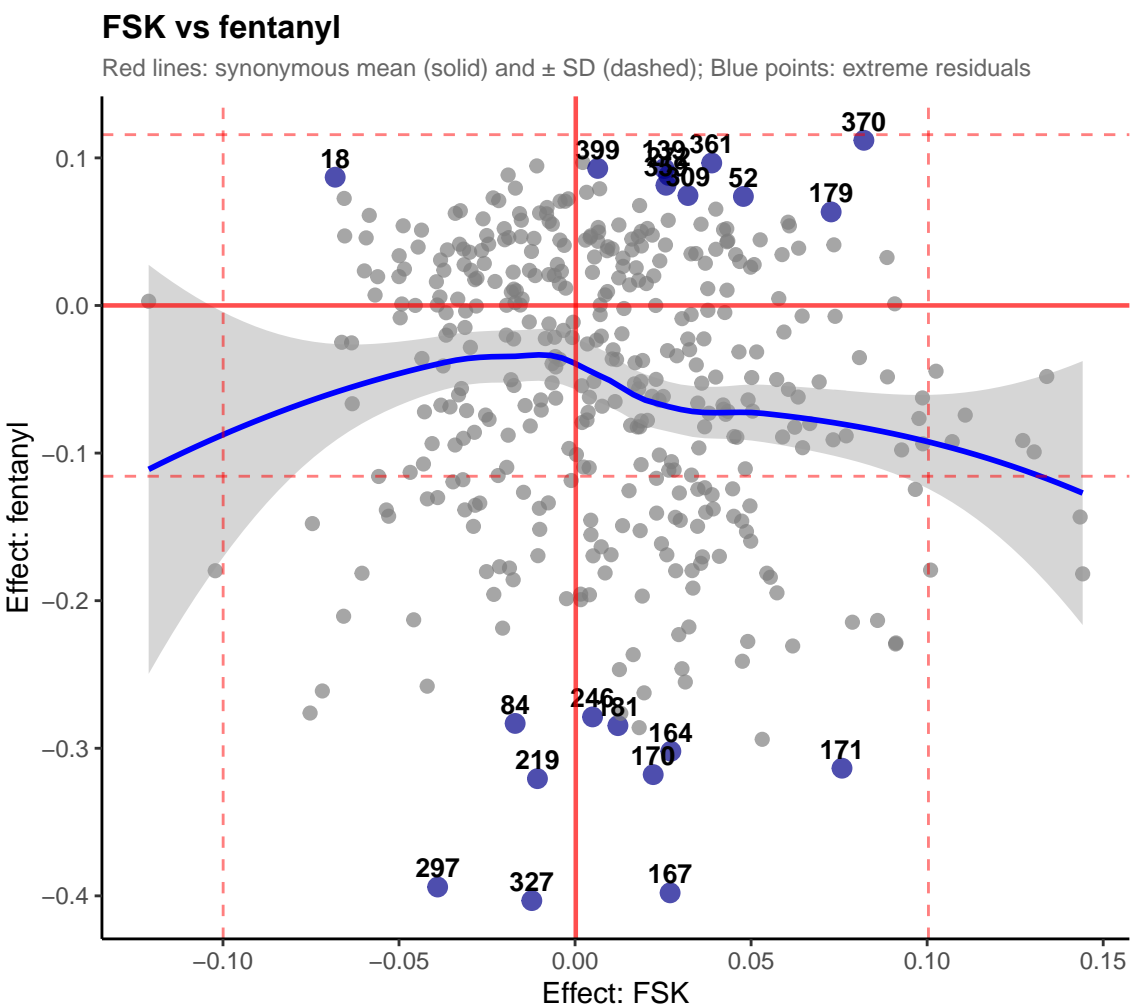
FSK vs TRV130

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals



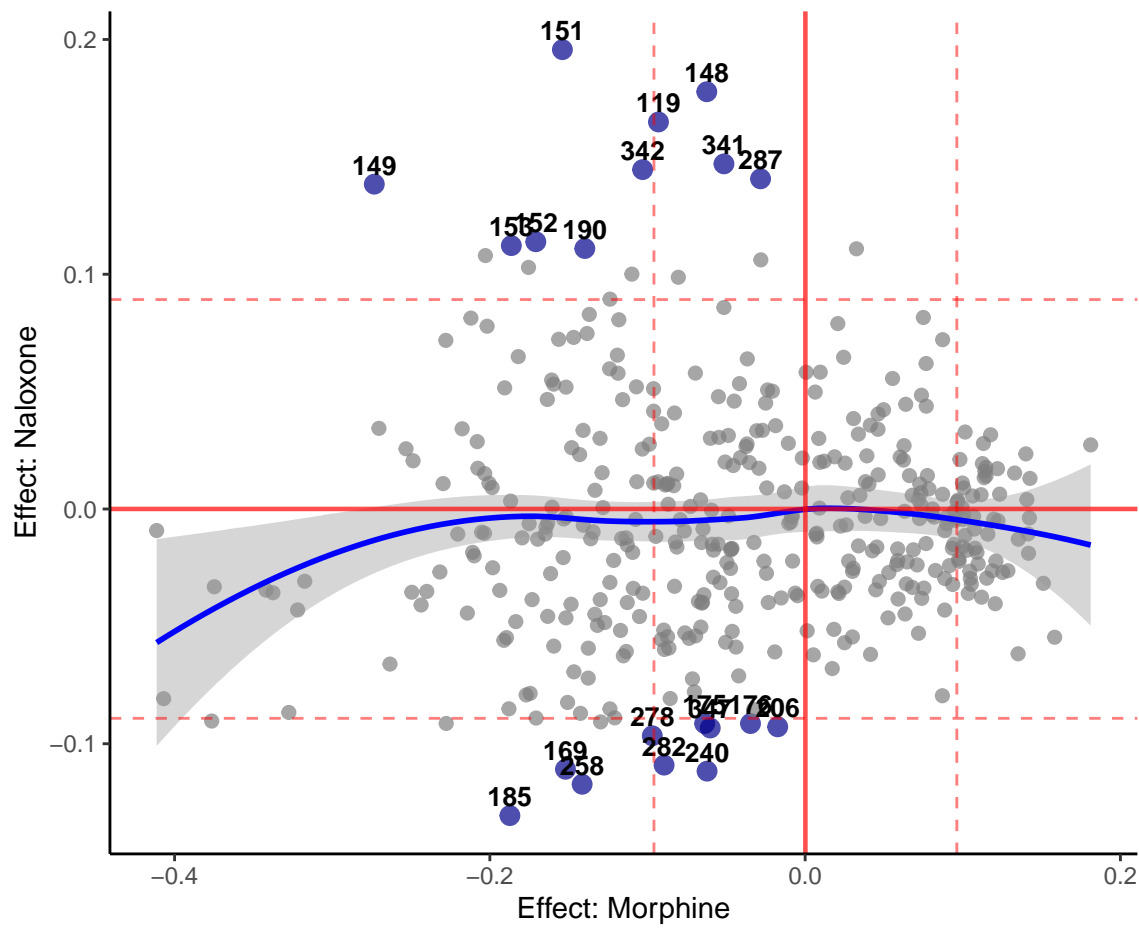
Residuals (loess): TRV130 ~ FSK



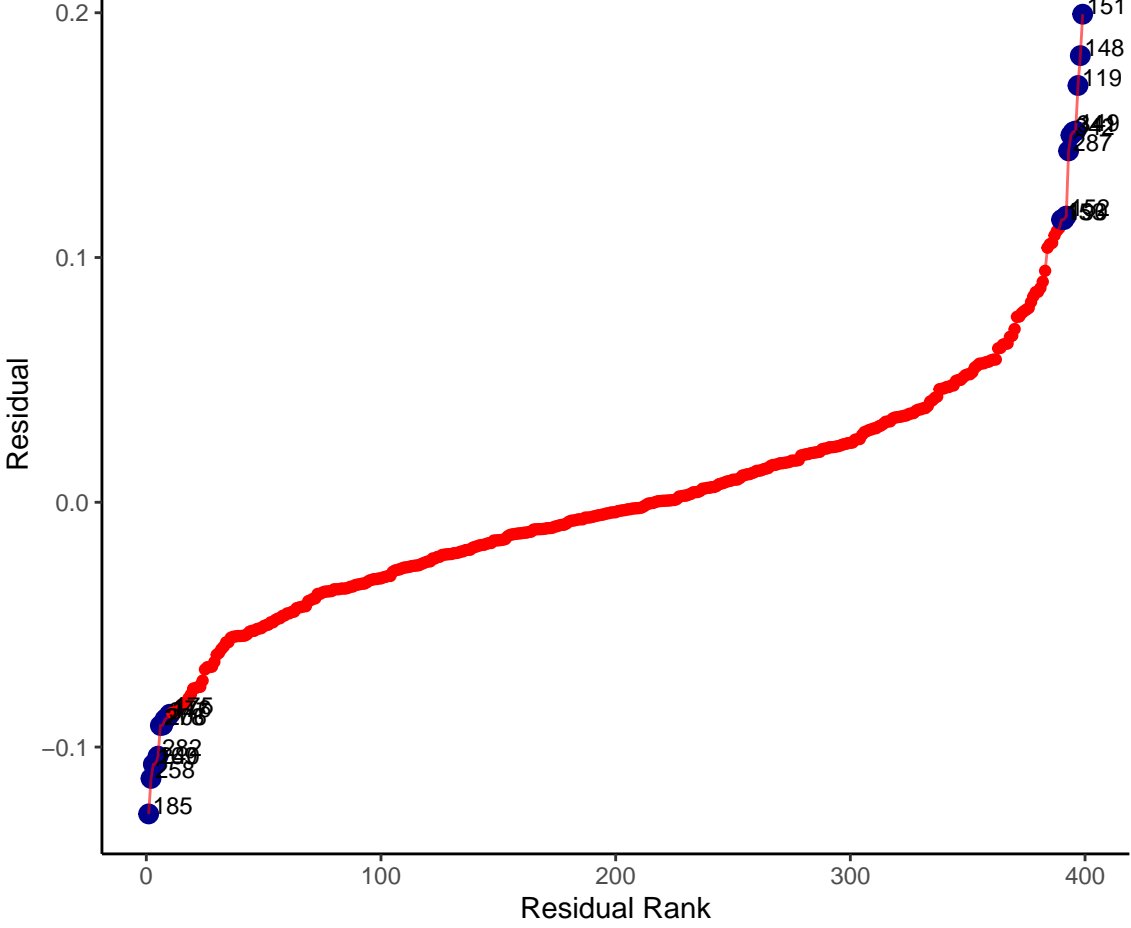


Morphine vs Naloxone

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

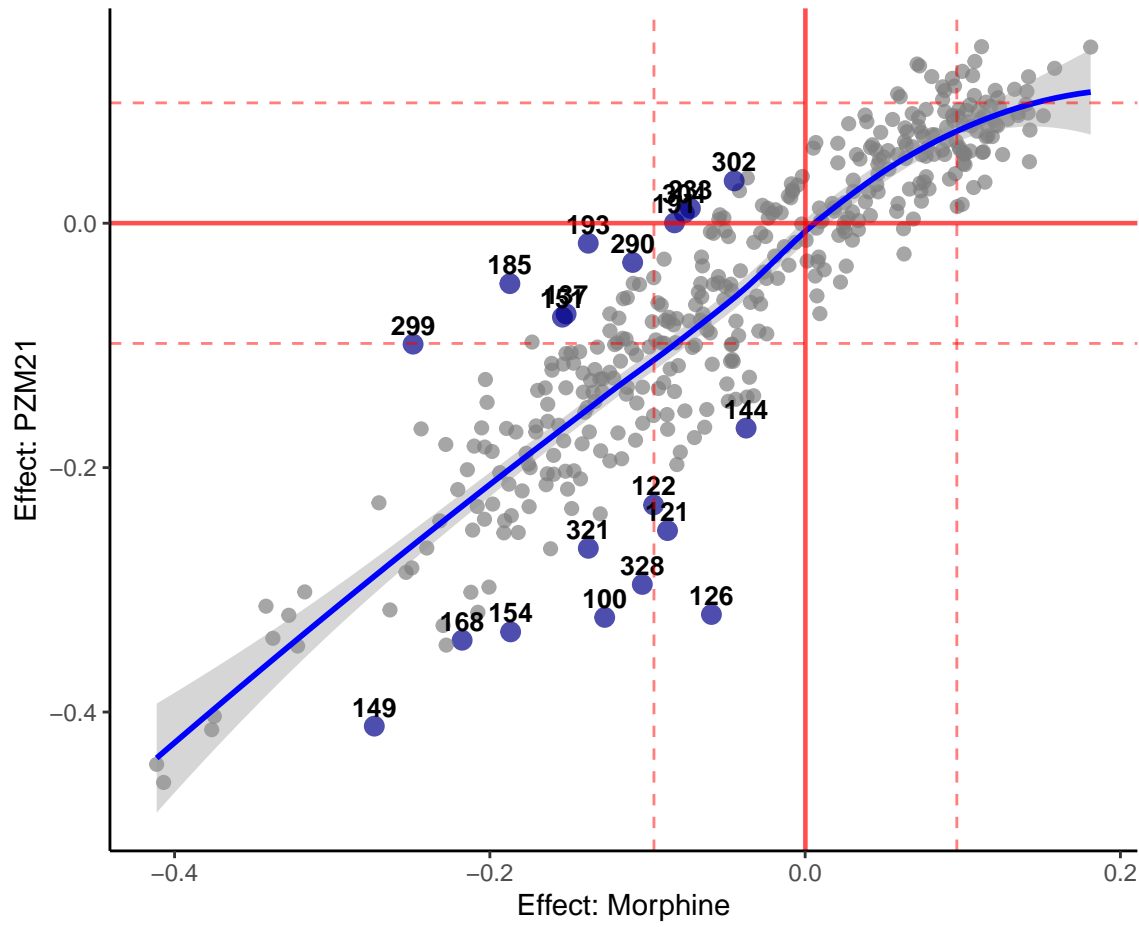


Residuals (loess): Naloxone ~ Morphine

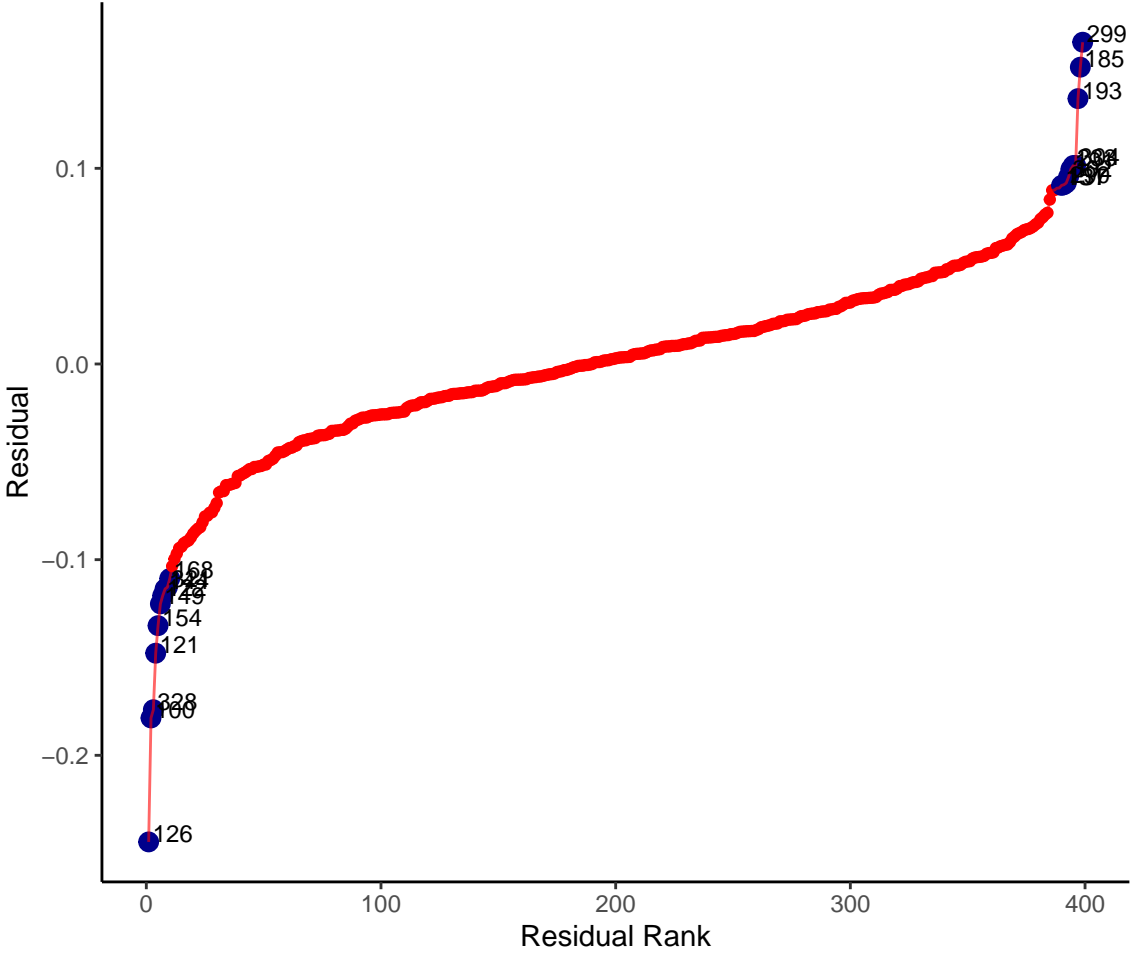


Morphine vs PZM21

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

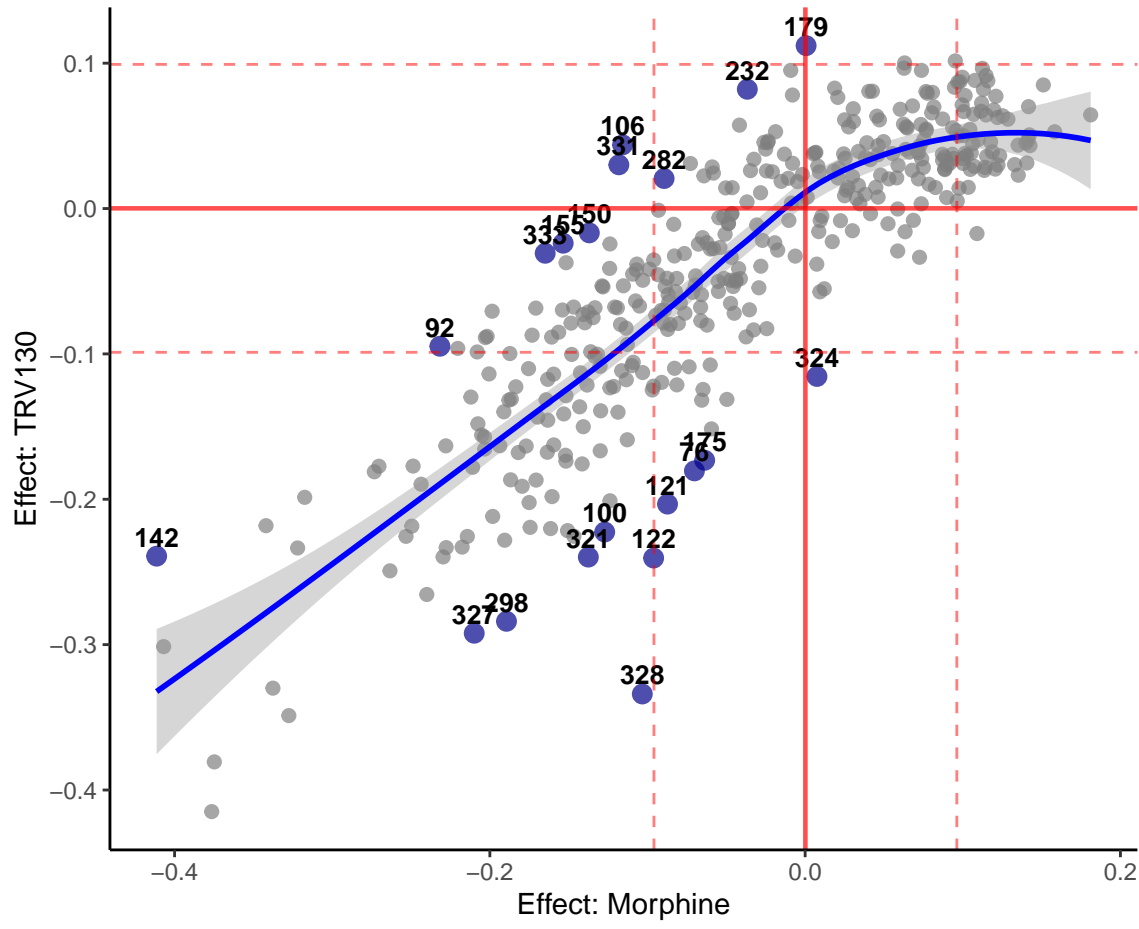


Residuals (loess): PZM21 ~ Morphine

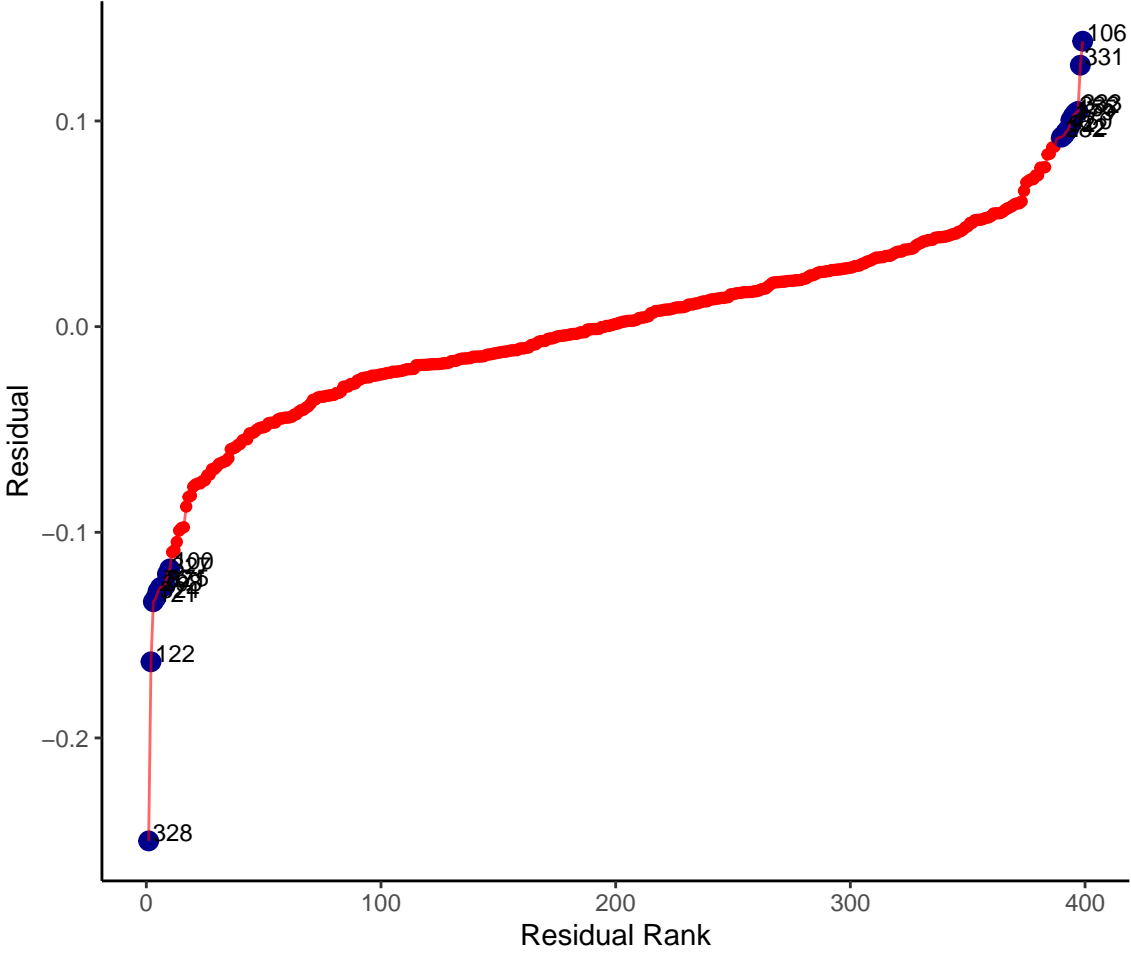


Morphine vs TRV130

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

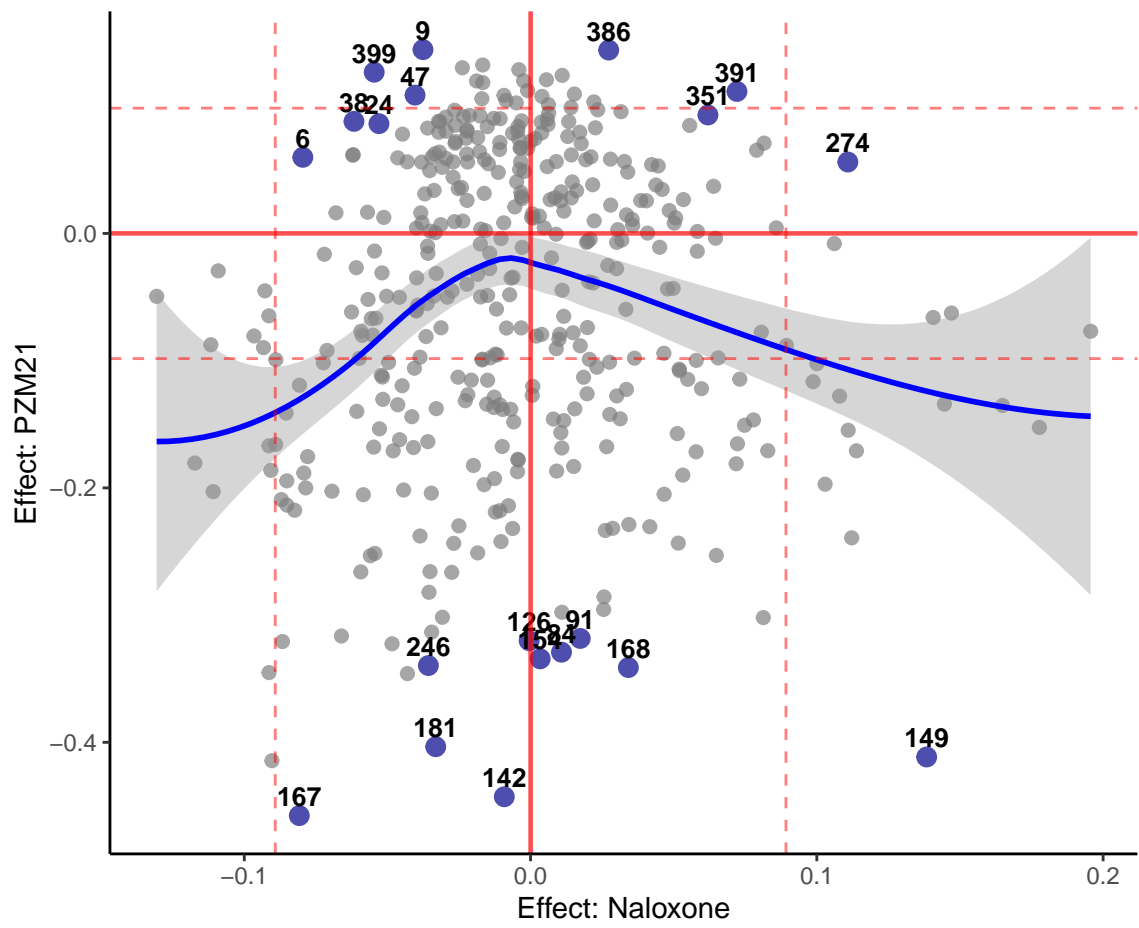


Residuals (loess): TRV130 ~ Morphine

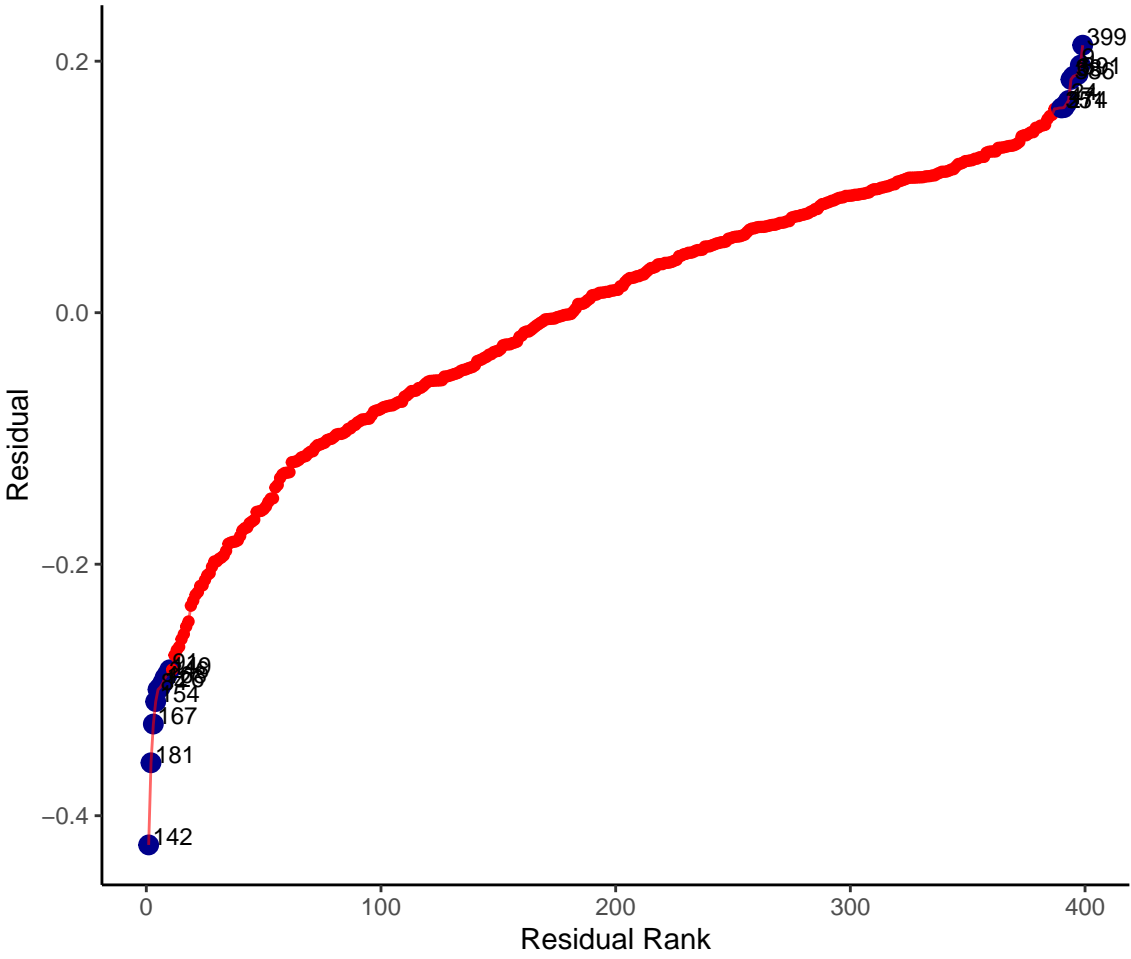


Naloxone vs PZM21

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

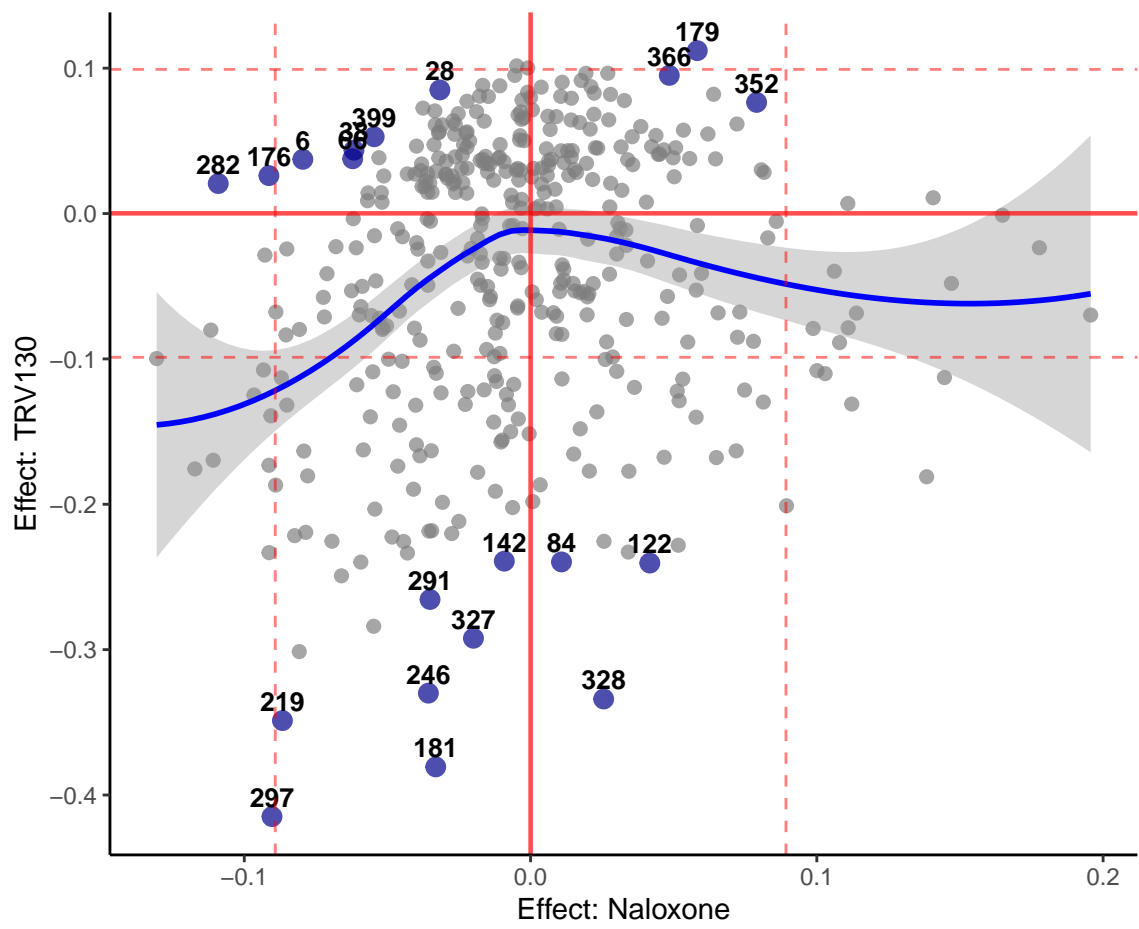


Residuals (loess): PZM21 ~ Naloxone

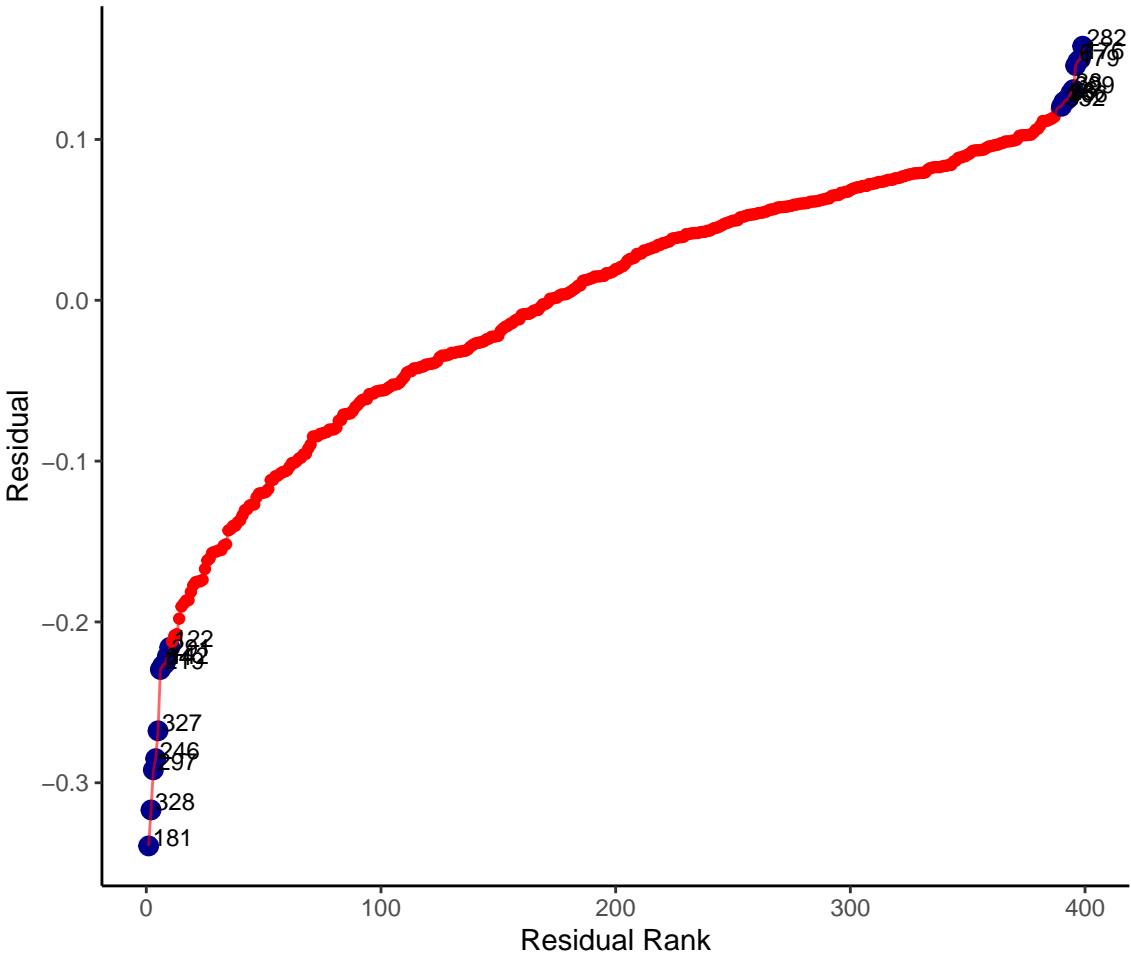


Naloxone vs TRV130

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

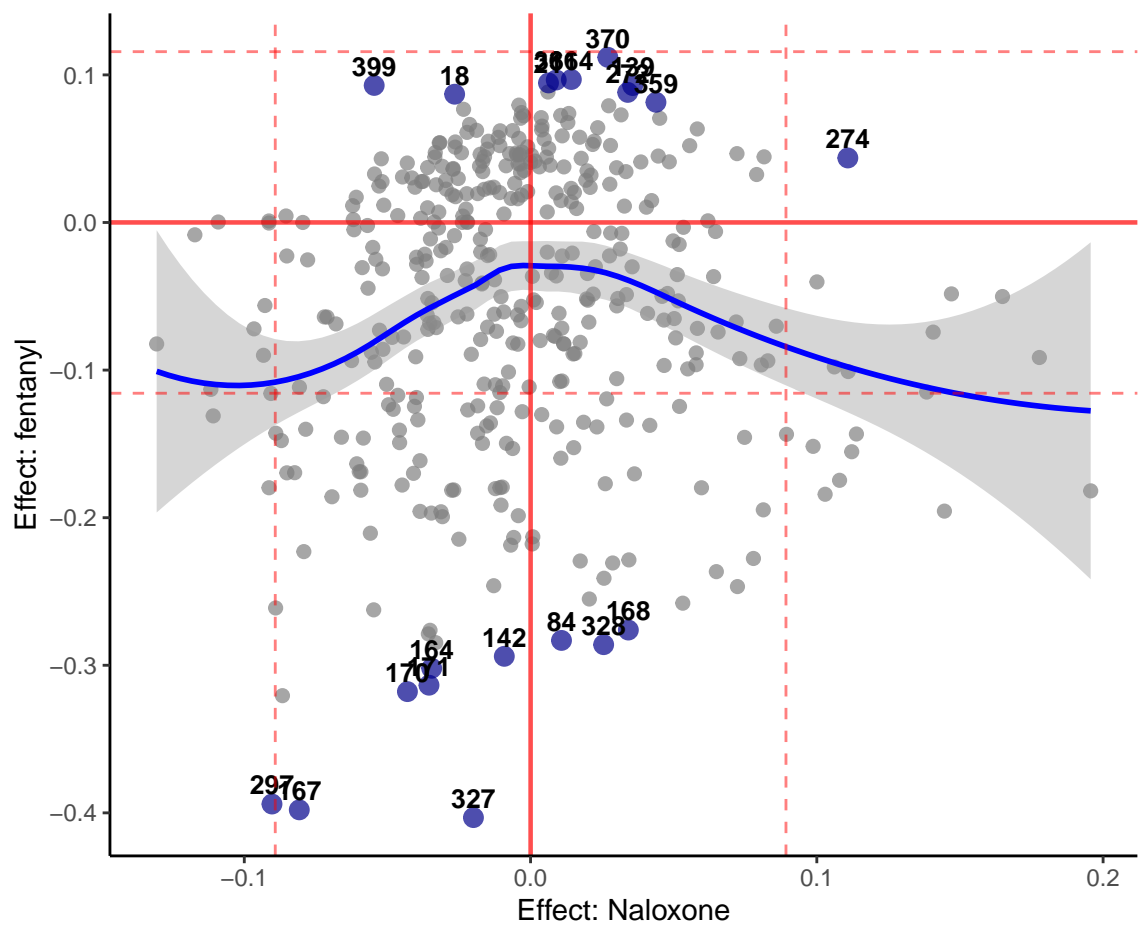


Residuals (loess): TRV130 ~ Naloxone

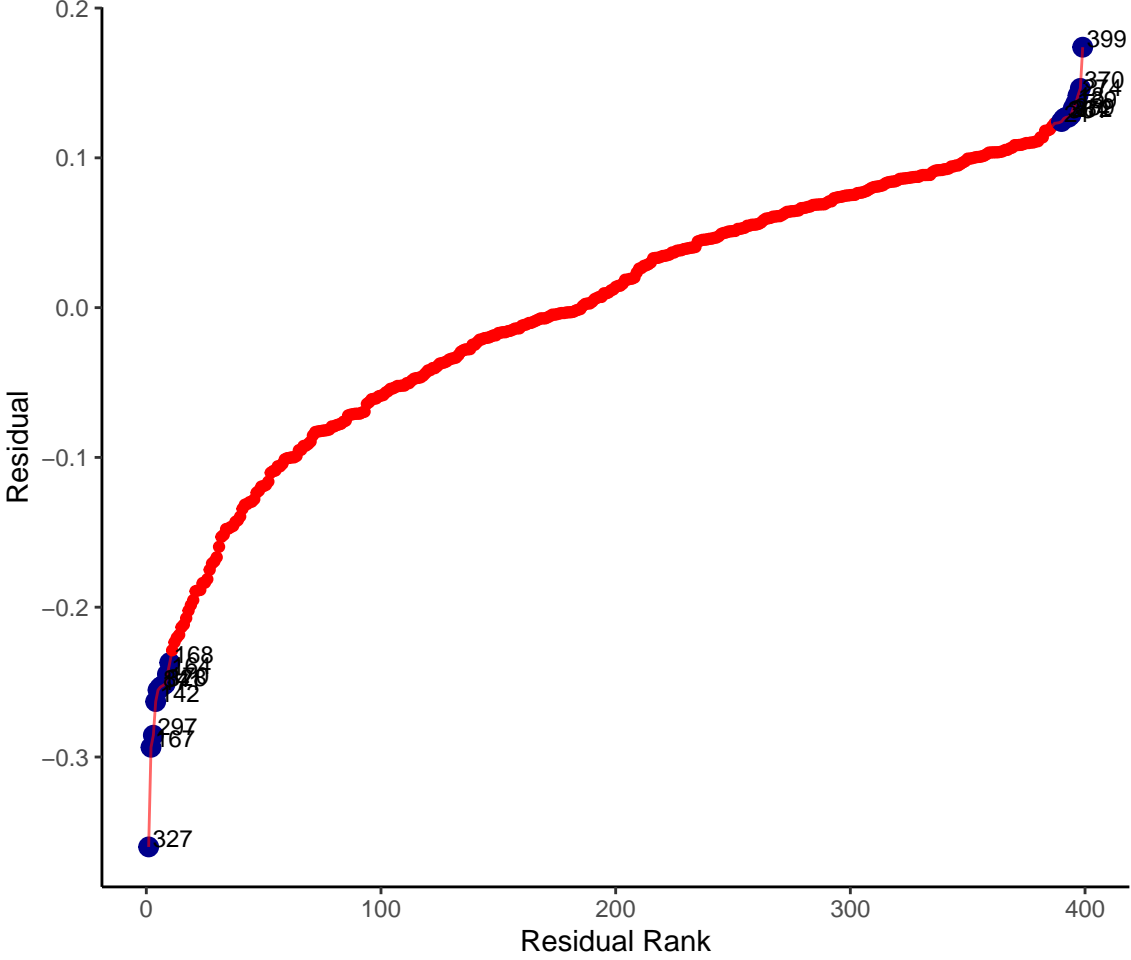


Naloxone vs fentanyl

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

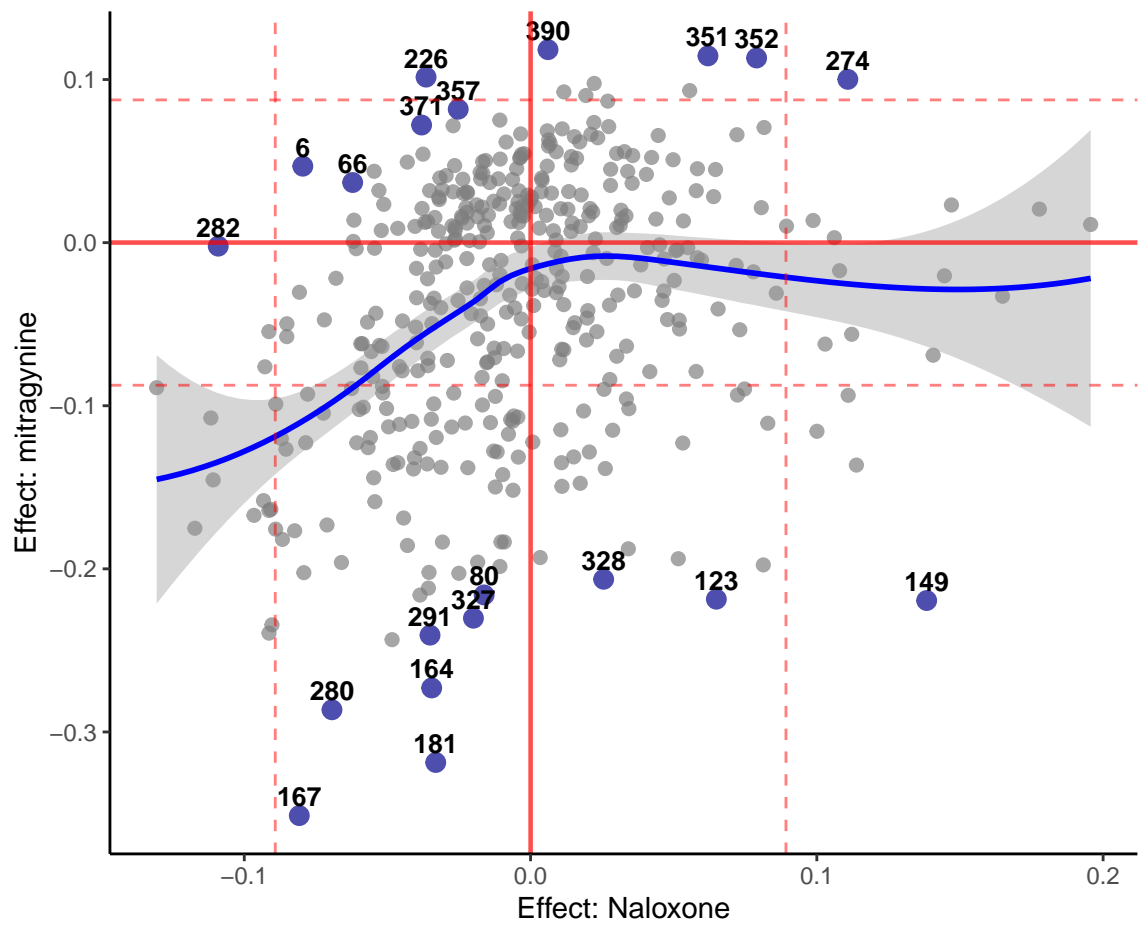


Residuals (loess): fentanyl ~ Naloxone

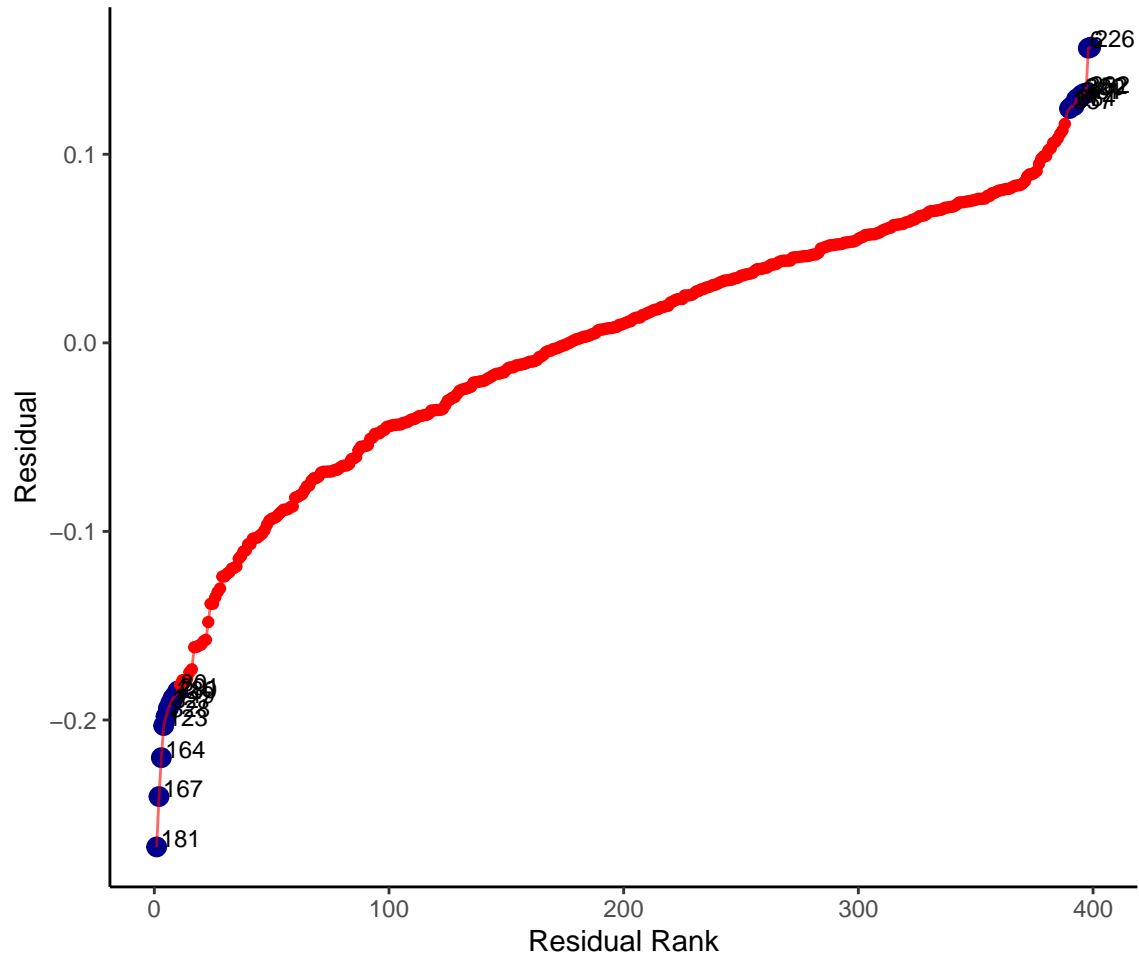


Naloxone vs mitragynine

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

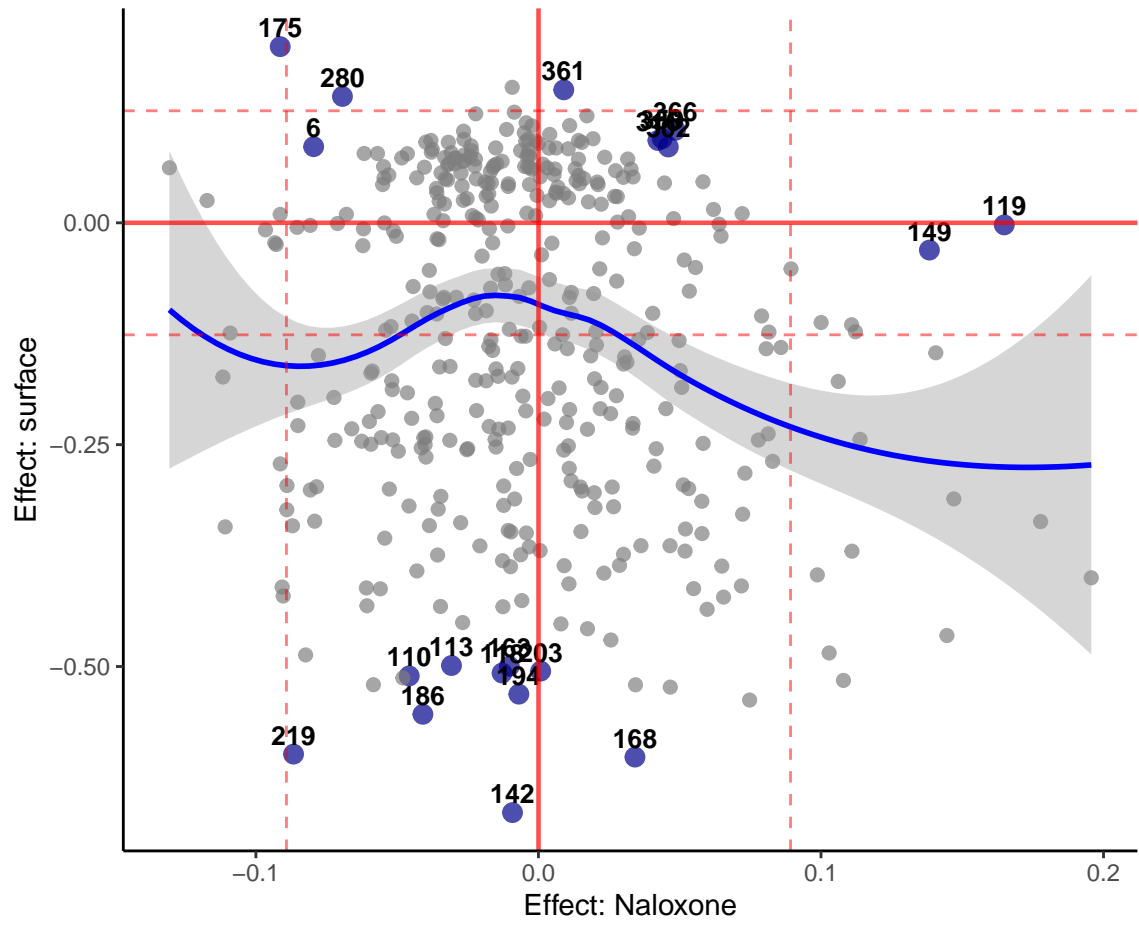


Residuals (loess): mitragynine ~ Naloxone

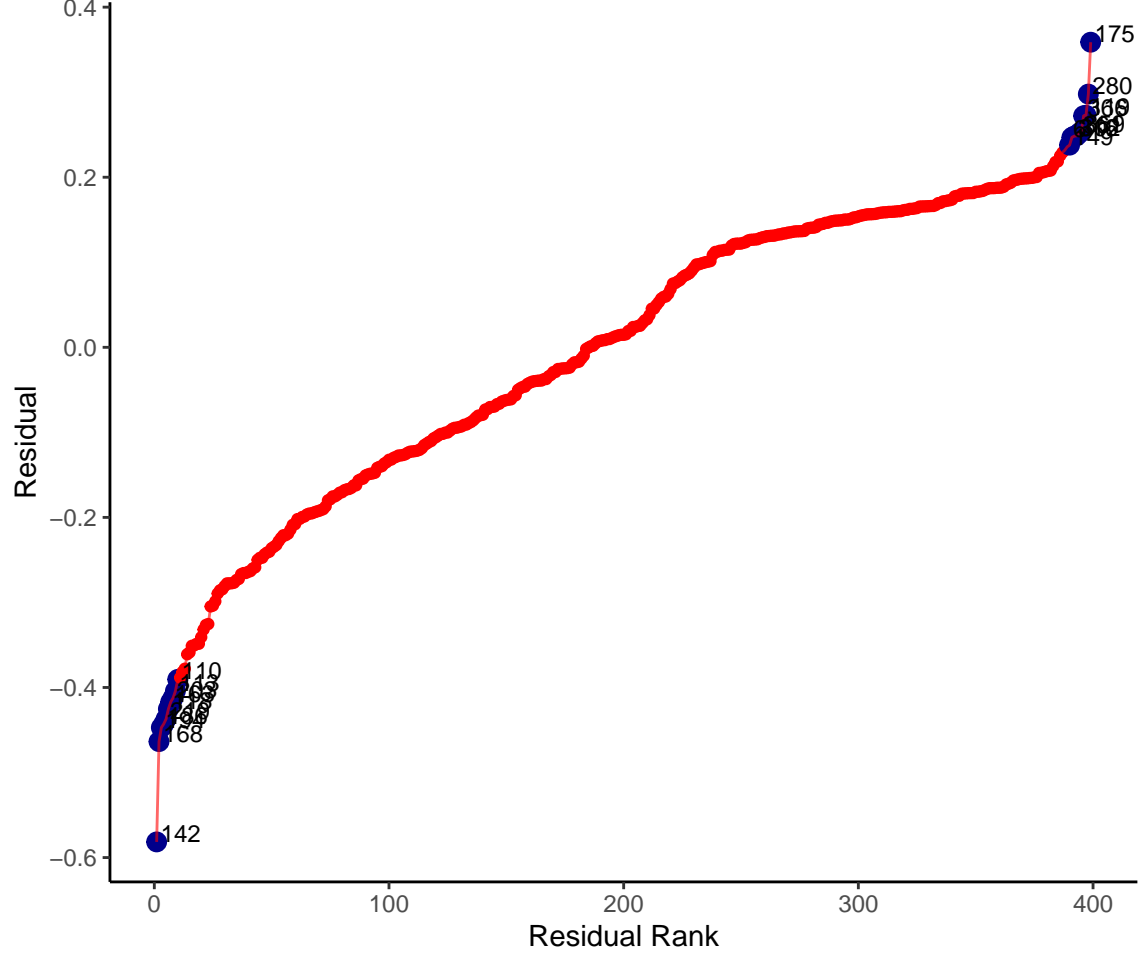


Naloxone vs surface

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

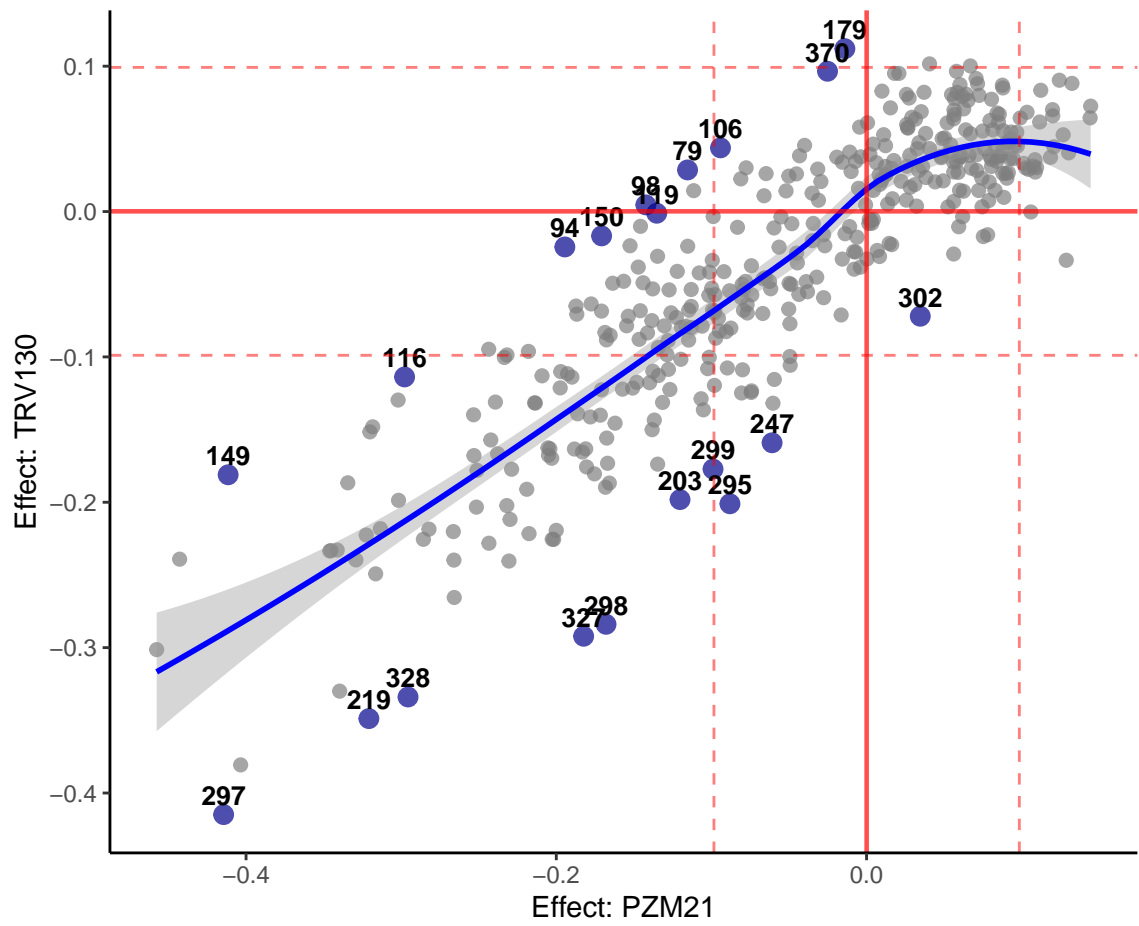


Residuals (loess): surface ~ Naloxone

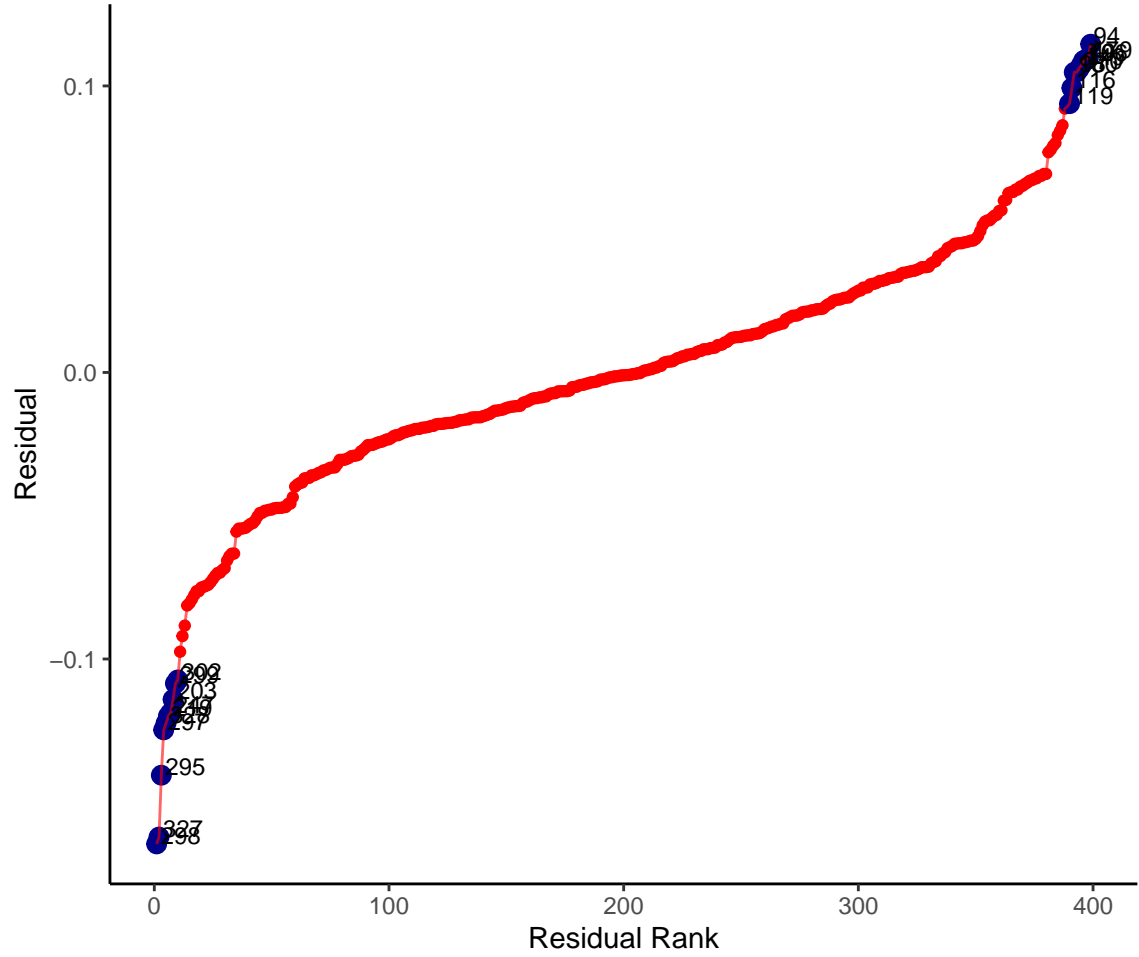


PZM21 vs TRV130

Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals



Residuals (loess): TRV130 ~ PZM21

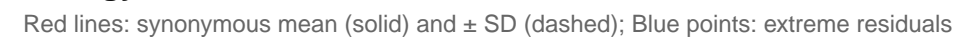


Red lines: synonymous mean (solid) and \pm SD (dashed); Blue points: extreme residuals

Residuals (loess): mitragynine ~ fentanyl



Residuals (loess): surface ~ fentanyl



Residuals (loess): surface ~ mitragynine

