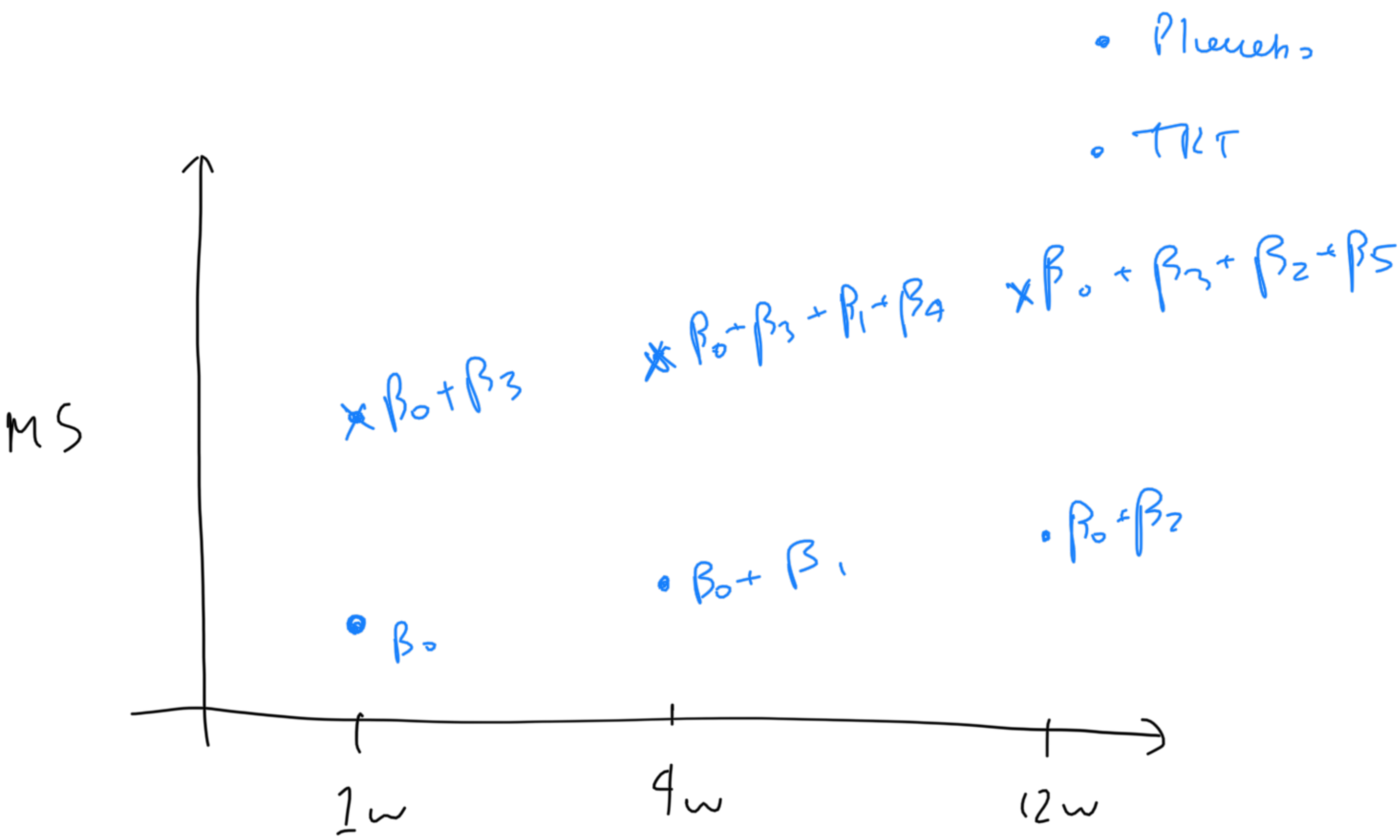
$$E = \beta_0 + \beta_1 * \text{Time } 4 + \beta_2 * \text{time } 12 +$$

$$\beta_3(\text{Trt} = \text{"Drug"}) + \beta_4$$

$$\beta_5$$



$$E[w=4, \text{TRT} = \text{Drug}] : \beta_0 + \beta_1 + \beta_3 + \beta_4$$

$$E[w=1, \text{TRT} = \text{DRUG}] : \beta_0 + \beta_3$$

$$\text{change for TRT} = \cancel{\beta_0} + \underline{\beta_1} + \cancel{\beta_3} + \underline{\beta_4} - \cancel{\beta_0} - \cancel{\beta_3}$$

$$E[w=4, TRT=C] = \beta_0 + \beta_1$$

$$E[w=1, TRT=C] = \beta_0$$

Change = β_1

Difference in change:

$|\beta_1 + \beta_4 - \beta_1 = \beta_4|$

$$E[w=12, TRT=D] = \beta_0 + \beta_3 + \beta_2 + \beta_5$$

Change $4 \to 12$: $\beta_0 + \beta_3 + \beta_2 + \beta_5 -$

$\beta_0 + \beta_1 + \beta_3 + \beta_4 =$

see if $\beta_3 = \beta_4 = 0$

Change from 4 to 12 weeks

$E[w=12 \mid \text{Trt} = \text{Drug}] - E[w=4 \mid \text{Trt} = \text{Drug}] =$

$(\cancel{\beta_0} + \beta_2 + \cancel{\beta_3} + \beta_5) - (\cancel{\beta_0} + \beta_1 + \cancel{\beta_3} + \beta_4) =$

$(\beta_2 + \beta_5) - (\beta_1 + \beta_4) = (\beta_2 - \beta_1) + (\beta_5 - \beta_4)$

$E[w=12 \mid \text{Trt} = \text{Control}] - E[w=4 \mid \text{Trt} = \text{Control}] =$

$(\beta_0 + \beta_2) - (\beta_0 + \beta_1) =$

$\beta_2 - \beta_1$

Test if $\beta_5 = \beta_4 = 0$.

$$\text{logit}\,[P(Y_{ij})] = 0.1676 - 0.3238 \times Post - \beta_1$$
$$- 0.1599 \times IC\,group + \beta_2$$
$$\underline{1.0073} \times Post \times IC\,group\ \beta$$

$Post = 1.$

$IC\ group = 1$ or $0.$

$$\log\left[\frac{P(Y_{ij}=1)}{1-P(Y_{ij}=1)} \,\middle|\, Post_{ij}=1,\ Trt_{ij}=1\right]:$$

$$= 0.1676 - 0.3238 - 0.1599 +$$
$$1.0073.$$

$$\log\left[\frac{P(Y_{ij}=1)}{1-P(Y_{ij}=1)} \,\middle|\, Post_{ij}=0,\ Trt_{ij}=1\right] =$$

$$= 0.1676 - 0.1599$$

$$\Rightarrow \log[\ ..\ \mid Post=1] - \log[\ ..\ \mid Post=0]$$

$$= -0.3238 + 1.0073$$

Need $Cov(\beta_1, \beta_3)$

$$\exp(\mathrm{logit}[p]) = \exp(\beta_0 + \beta_1 + \beta_2 + \beta_3)$$

$$\frac{p}{1-p} = \exp^{\beta_0 + \beta_1 + \beta_2 + \beta_3}$$

$$\frac{p}{1-p} = e^{\beta_0 + \beta_1 + \beta_2} \cdot \underbrace{e^{\beta_3}}_{}$$