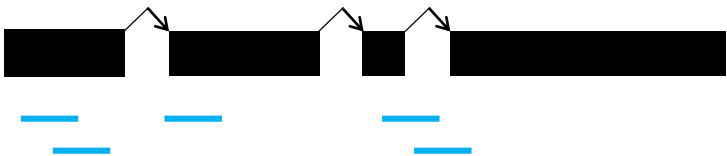
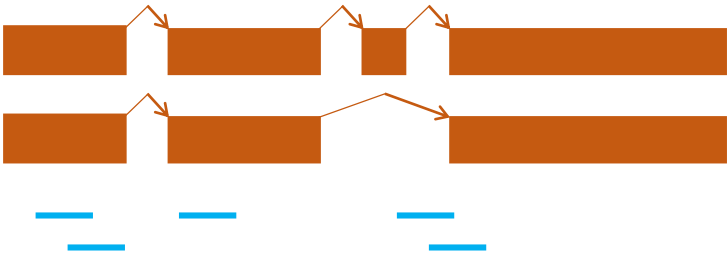
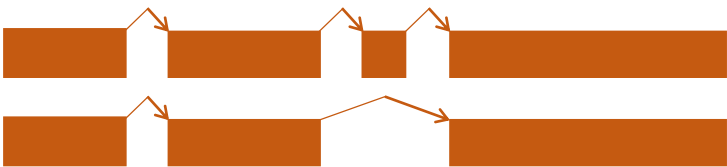
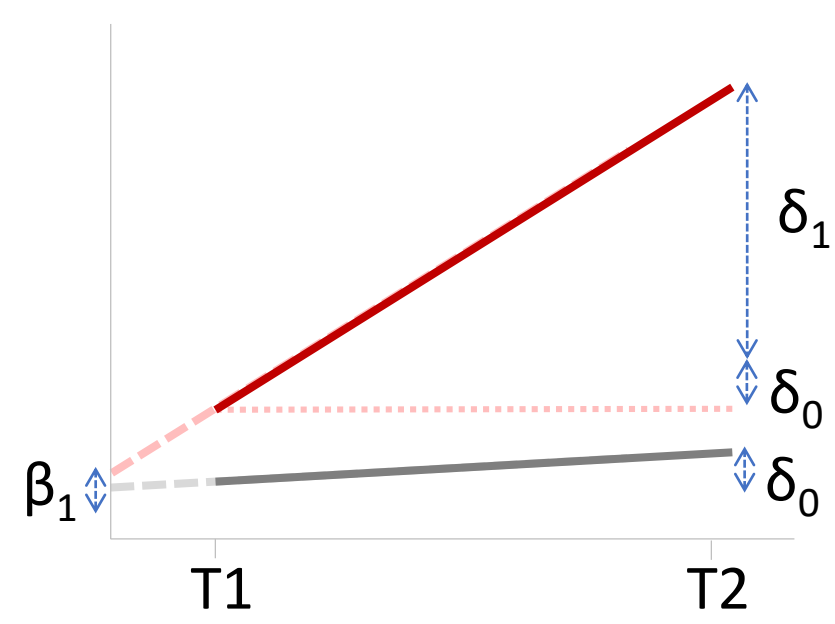


|    | Analysis   | Annotation                                | Expression                          |
|----|--|---|-------------------------------------|
| 1. |   | Reference genome                          | RNA-Seq reads<br>(WT = 29, TG = 30) |
| 2. |   | Iso-Seq defined transcriptome<br>(n = 12) | RNA-Seq reads<br>(WT = 29, TG = 30) |
| 3. |  | Iso-Seq defined transcriptome<br>(n = 12) | Iso-Seq reads<br>(WT = 6, TG = 6)   |



# Inference from regression coefficients

$\beta_1$  : WT vs TG at T1

$\delta_0$  : WT over time

$\delta_1$  : WT vs TG over time

| Model | $\beta_1$<br>CasevsControl | $\delta_0$<br>Time | $\delta_1$<br>TimexCase | Condition | Effects        |
|-------|----------------------------|--------------------|-------------------------|-----------|----------------|
| 1     | ✓                          | x                  | x                       |           | Genotype       |
| 2     | ✓                          | ✓                  | x                       |           | Genotype + Age |
| 3     | x                          | ✓                  | x                       |           | Age            |
| 4     | x                          | ✓                  | ✓                       |           | Interaction    |
| 5     | x                          | x                  | ✓                       |           | Interaction    |
| 6     | ✓                          | x                  | ✓                       |           | Interaction    |
| 7     | ✓                          | ✓                  | ✓                       |           | Interaction    |