

Table S1: Pairwise correlation between ratios estimated by each pair of methods (columns 1 and 2) for the interwoven design. The ratios correspond to the change in expression compared to the first time point. The last column corresponds to the mean correlation of the 5 estimations.

| Method1 | Method2 | T2/T1 | T3/T1 | T4/T1 | T5/T1 | T6/T1 | mean |
|-----------|-----------|--------|--------|--------|--------|--------|--------|
| lmer | lmer_dye | 0.9983 | 0.9963 | 0.9536 | 0.9694 | 0.9485 | 0.9732 |
| lmer | limmaQual | 0.9991 | 0.9997 | 0.9991 | 0.9962 | 0.9991 | 0.9986 |
| lmer | anovaFix | 0.9798 | 0.9871 | 0.9483 | 0.9645 | 0.9515 | 0.9662 |
| lmer | anovaMix | 0.9605 | 0.9805 | 0.9353 | 0.9509 | 0.9426 | 0.9540 |
| lmer_dye | limmaQual | 0.9976 | 0.9941 | 0.9451 | 0.9862 | 0.9352 | 0.9716 |
| lmer_dye | anovaFix | 0.9823 | 0.9893 | 0.9910 | 0.9745 | 0.9862 | 0.9847 |
| lmer_dye | anovaMix | 0.9621 | 0.9831 | 0.9834 | 0.9627 | 0.9800 | 0.9742 |
| limmaQual | anovaFix | 0.9774 | 0.9851 | 0.9391 | 0.9733 | 0.9402 | 0.9630 |
| limmaQual | anovaMix | 0.9568 | 0.9783 | 0.9256 | 0.9597 | 0.9311 | 0.9503 |
| anovaFix | anovaMix | 0.9779 | 0.9946 | 0.9930 | 0.9906 | 0.9943 | 0.9901 |