

## Attachment 17c: Effect of outliers in the controls on data quality

### 1. Example of the impact of higher background variability on the quality of the dose-response curves

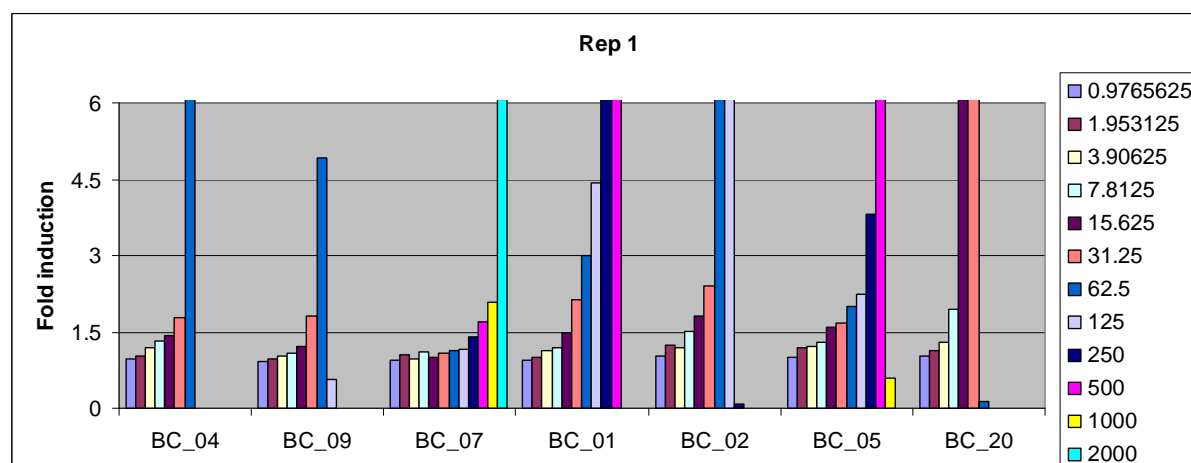


Figure 17a: Repetition 1, Lab2. Variability of control values = **8.4%**

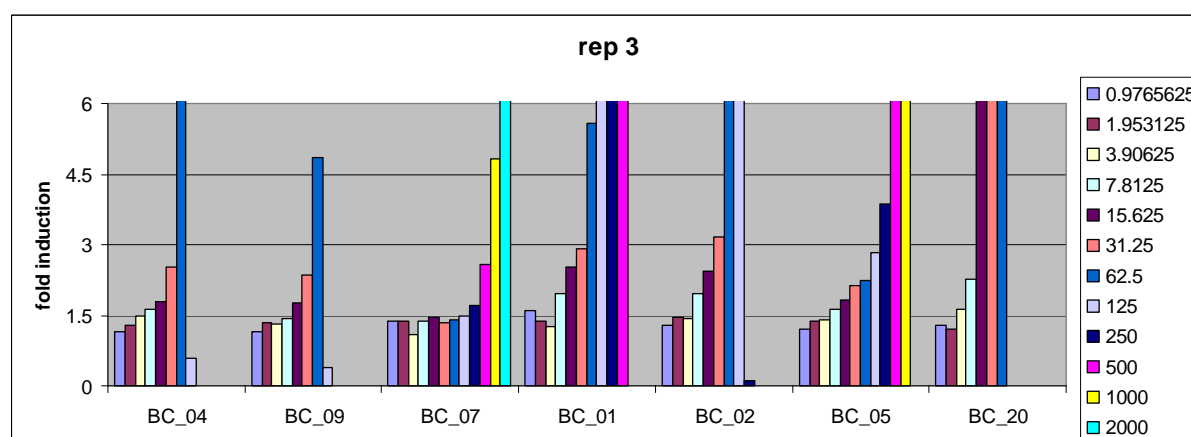


Figure 17b Repetition 3, Lab 2. Variability of control values = **26.8%**

These data show the case with the biggest difference in control value variability observed in two repetitions on the same chemicals in the same lab. 26.8% was the highest control value variability reported in all of the 60 runs.

Note the very smooth dose-response in Fig. Supp7a, and the somewhat more noisy data around the 1.5-fold induction in Figure Supp 7b. For accurate EC1.5 calculations the dose response curves above in Figure Supp7a are clearly preferable.

This indicates that strict adherence to the variability <20% criterium is mandatory for future studies.

## 2. Example of the impact of an EC1.5 value for cinnamic aldehyde outside of the set range on the quality of the dose-response curves

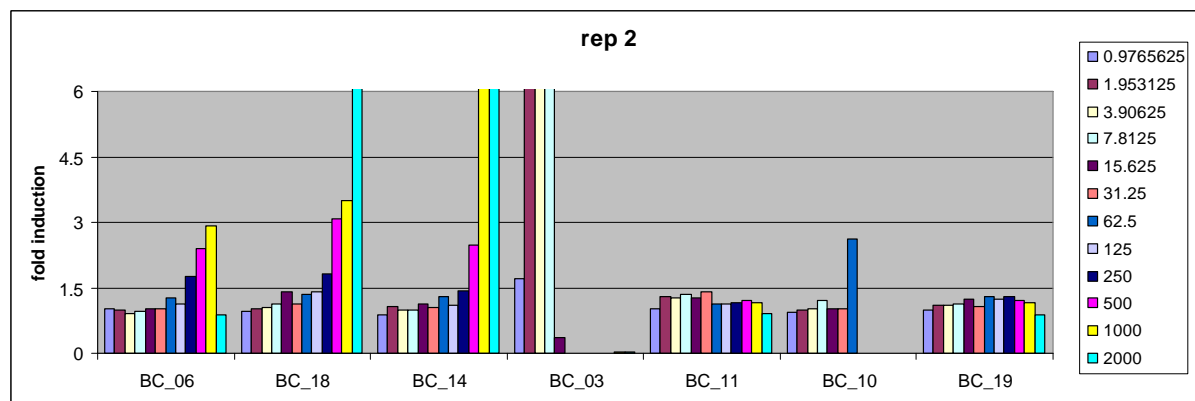


Figure 17c .Repetition 2, Lab3. EC1.5 for cinnamic aldehyde control = **12.8  $\mu$ M**

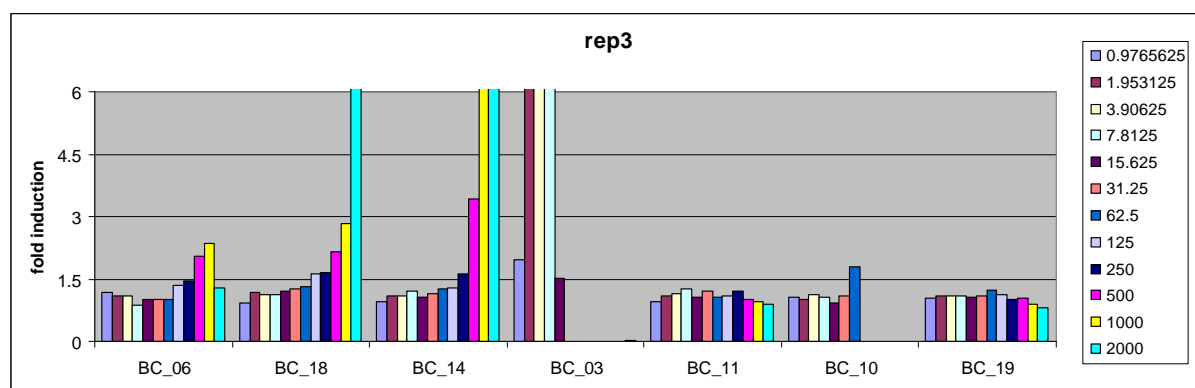


Figure 17d. Repetition 3, Lab3. EC1.5 for cinnamic aldehyde control = **35.0  $\mu$ M**

These data show the biggest difference in control EC1.5 values observed in two repetitions on the same chemicals.

Note the very similar dose-response in Fig. Supp7c and Figure Supp 7d, despite significantly differing EC1.5 control values. The fact that in the run generating the data in Figure Supp 7d the EC1.5 for cinnamic aldehyde was clearly outside of the target range did obviously not affect data quality indicating that this quality criterium is less important.