

MiXCR_batch_compare

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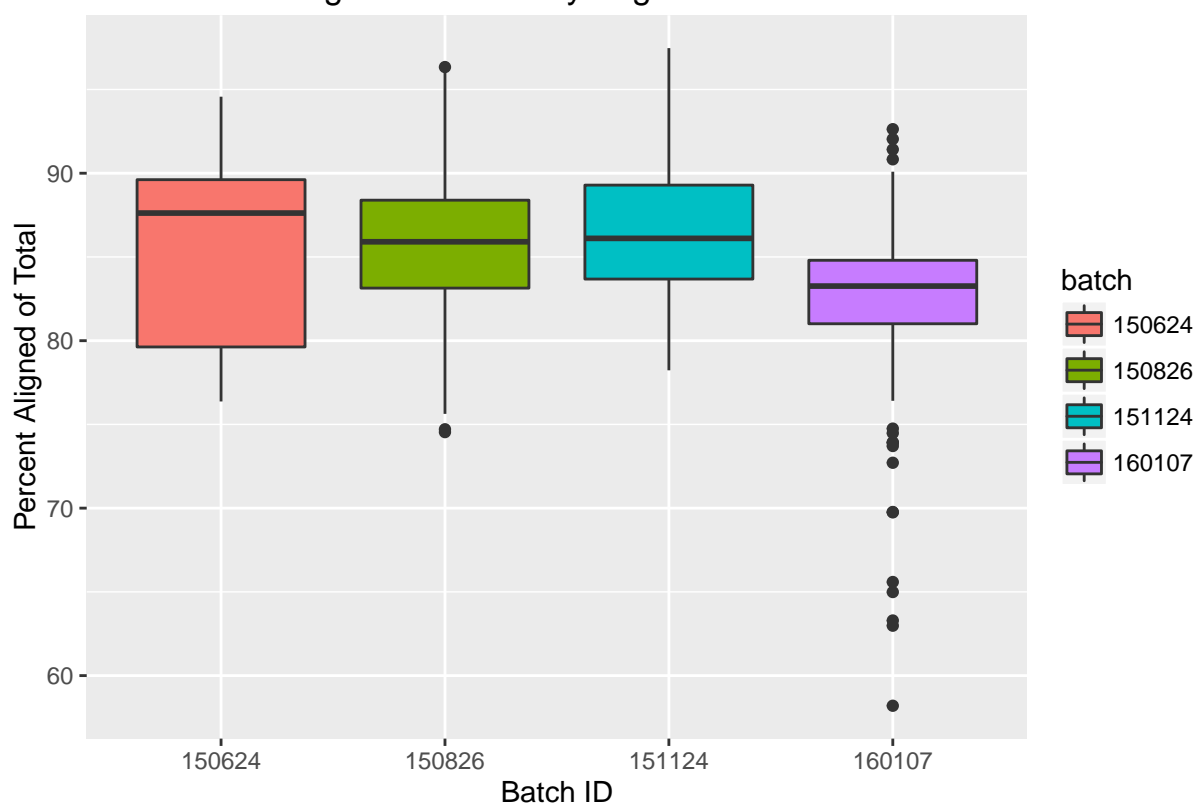
Objective

We're having issues with our MiXCR output. Different runs of the 160107 batch were compared in the MiXCR_QC_analysis.Rmd, but this will compare the different batches, all run using the same parameters.

Results

We've generally had pretty good alignment (based on observations from the 160107 batch), with most failed alignments due to bad J reads. Let's see how this looks for all of the batches:

Fig. 1 Successfully Aligned Reads



Alignment percentages are relatively consistent. Turns out the 160107 batch was the worst of them. Let's look at the reasons for failure:

Fig. 2 Failed Alignments Due to Low Score

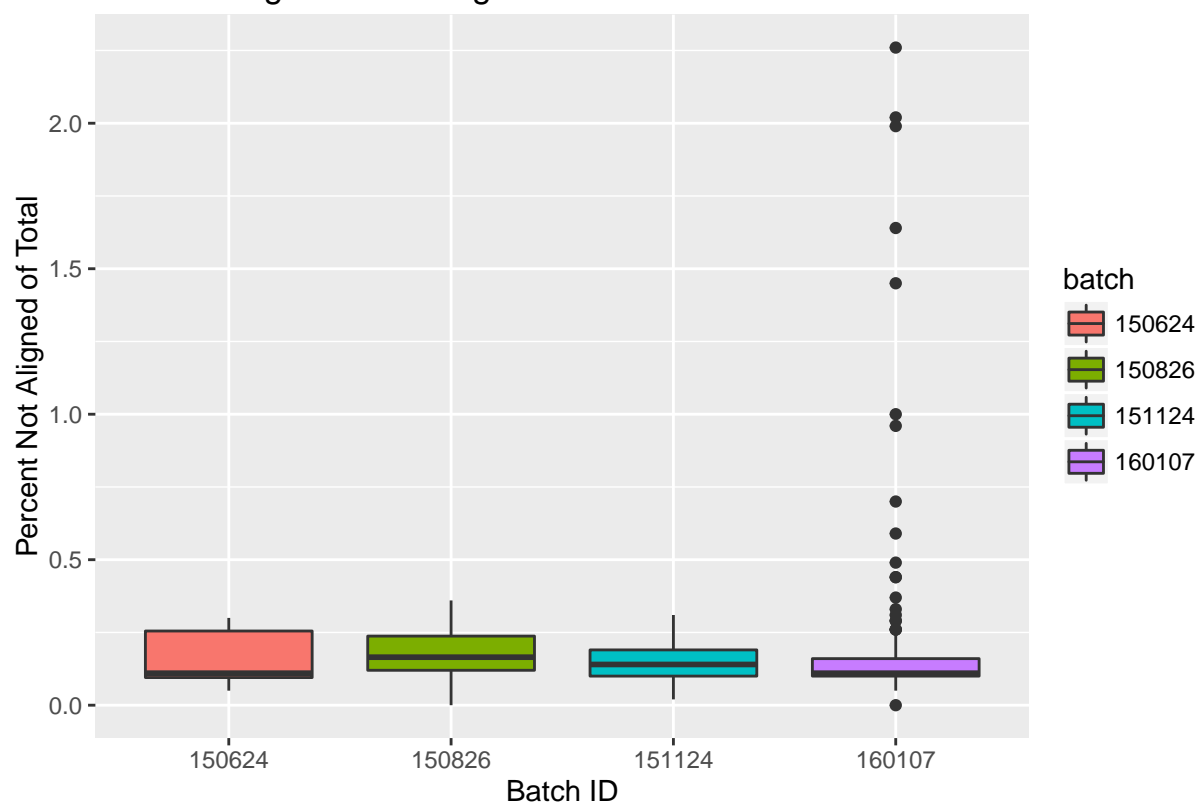
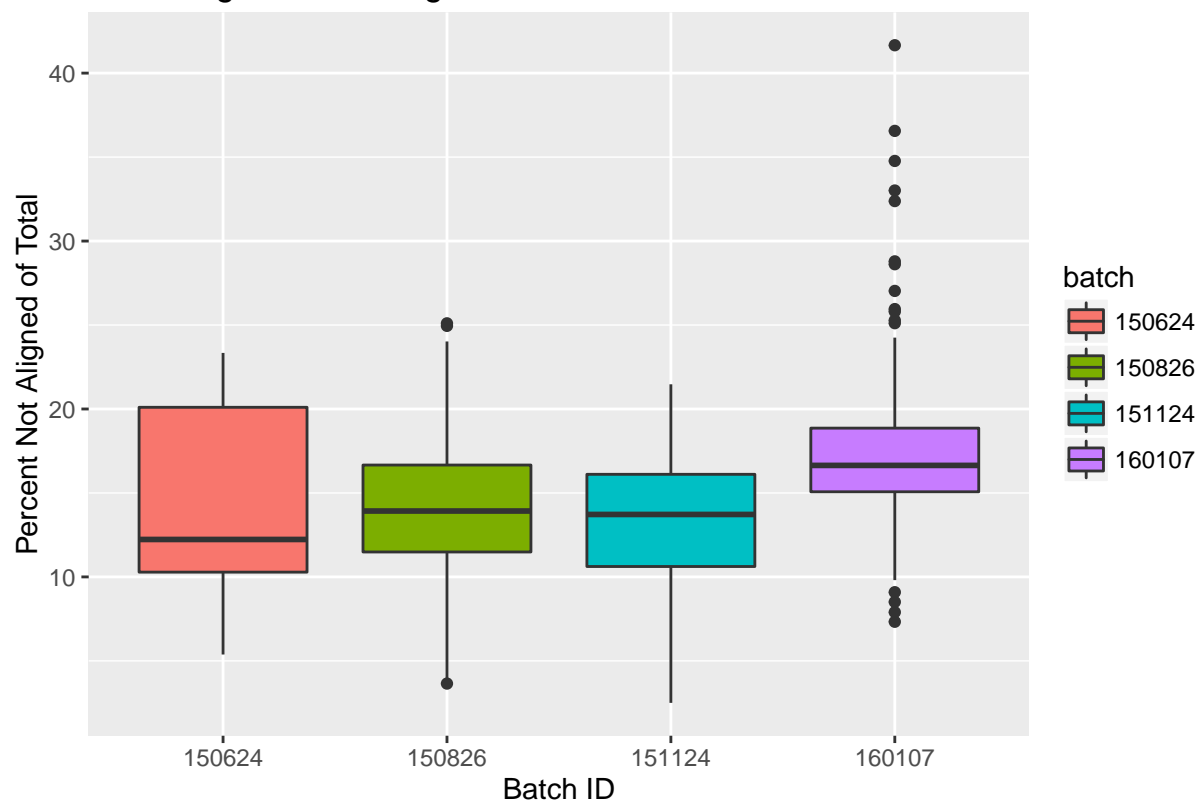


Fig. 3 Failed Alignments Due to Absence of J Hit



Everything looks pretty standard between the different batches. Let's look at the assembly statistics:

Fig. 4 Percent Assembled Reads

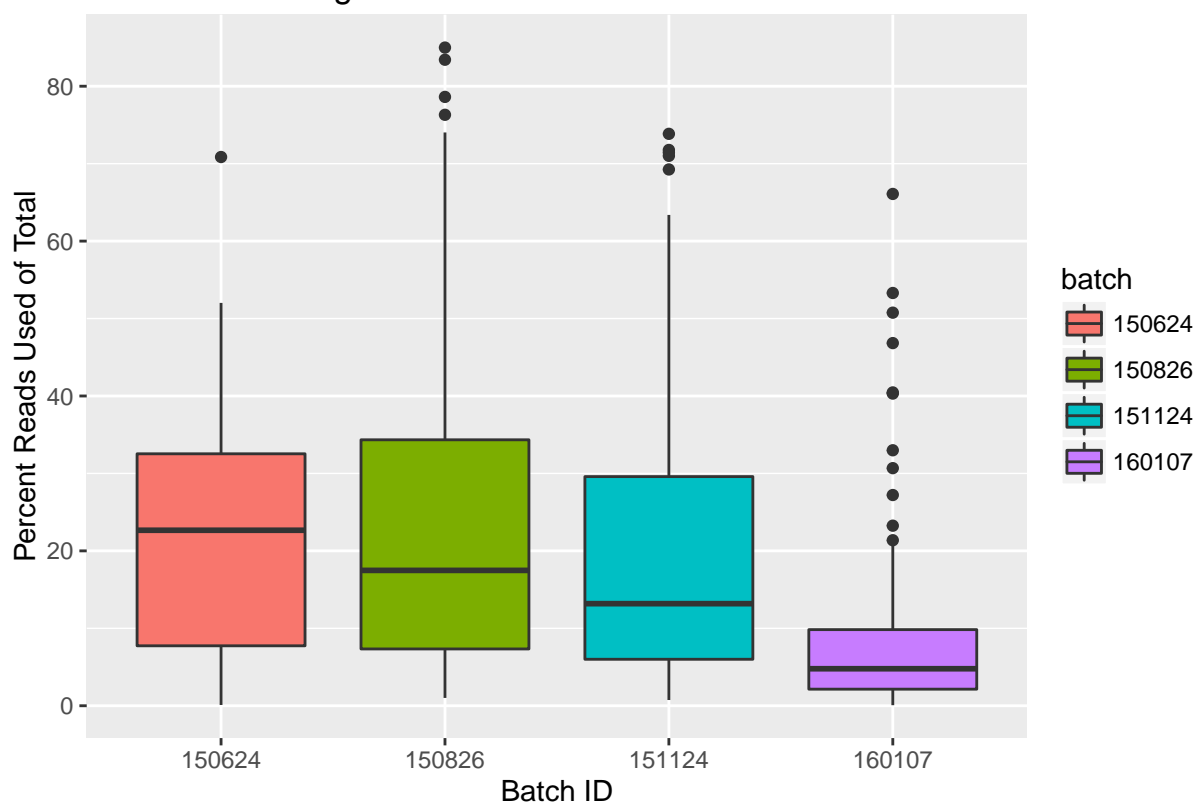


Fig. 5 Assembled Reads Used as Core Clones

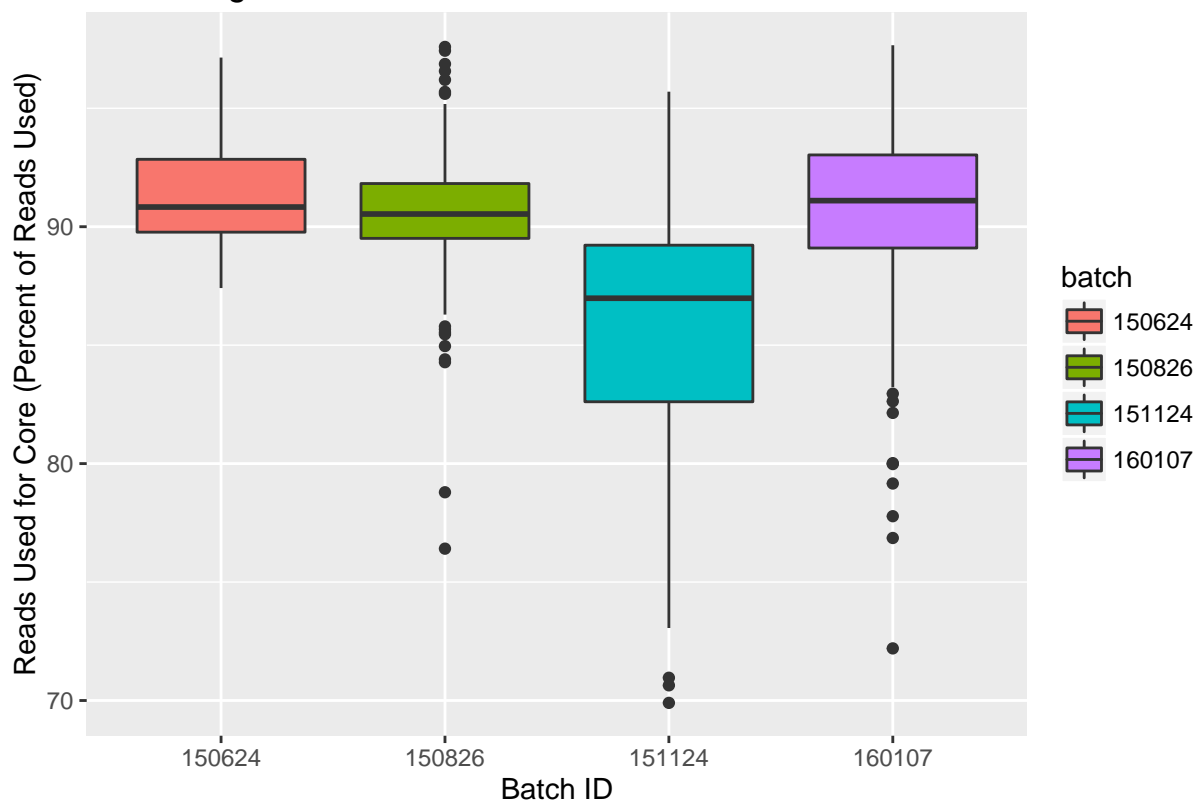


Fig. 6 Low Quality Reads Mapped to Core Clones

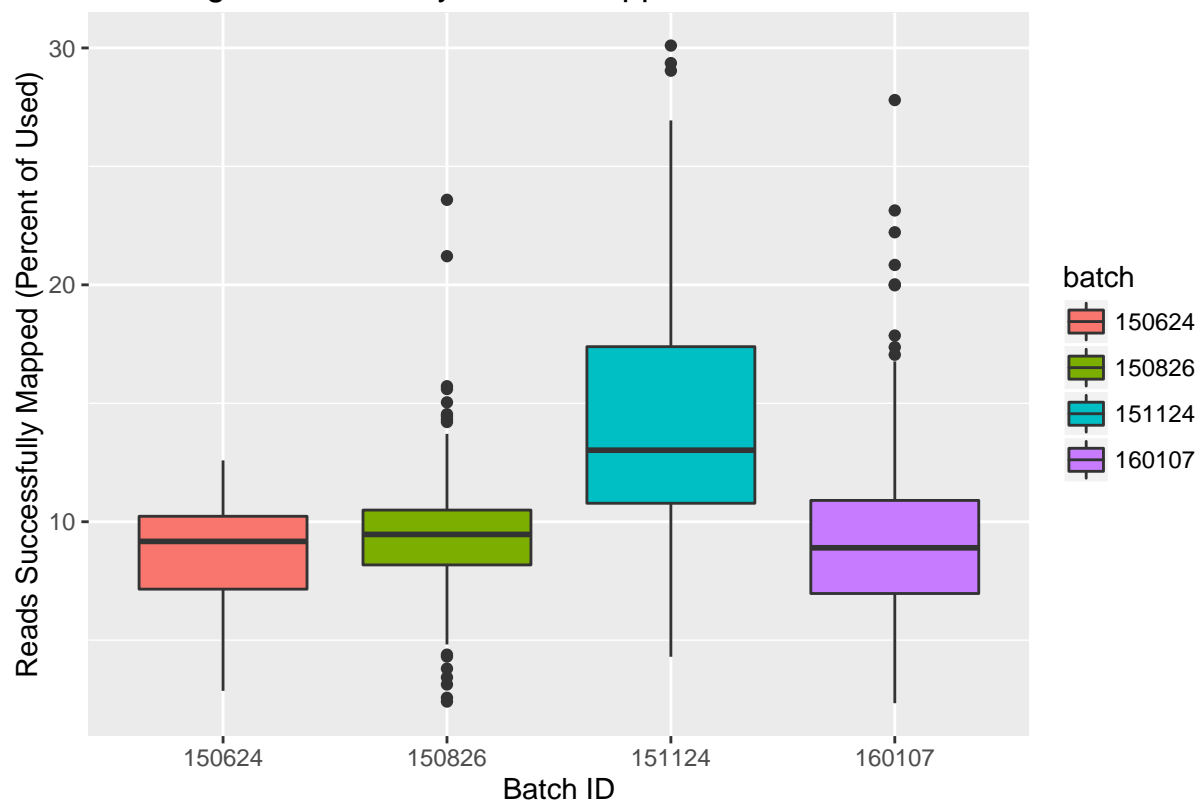


Fig. 7 Low Quality Reads Failing to Map

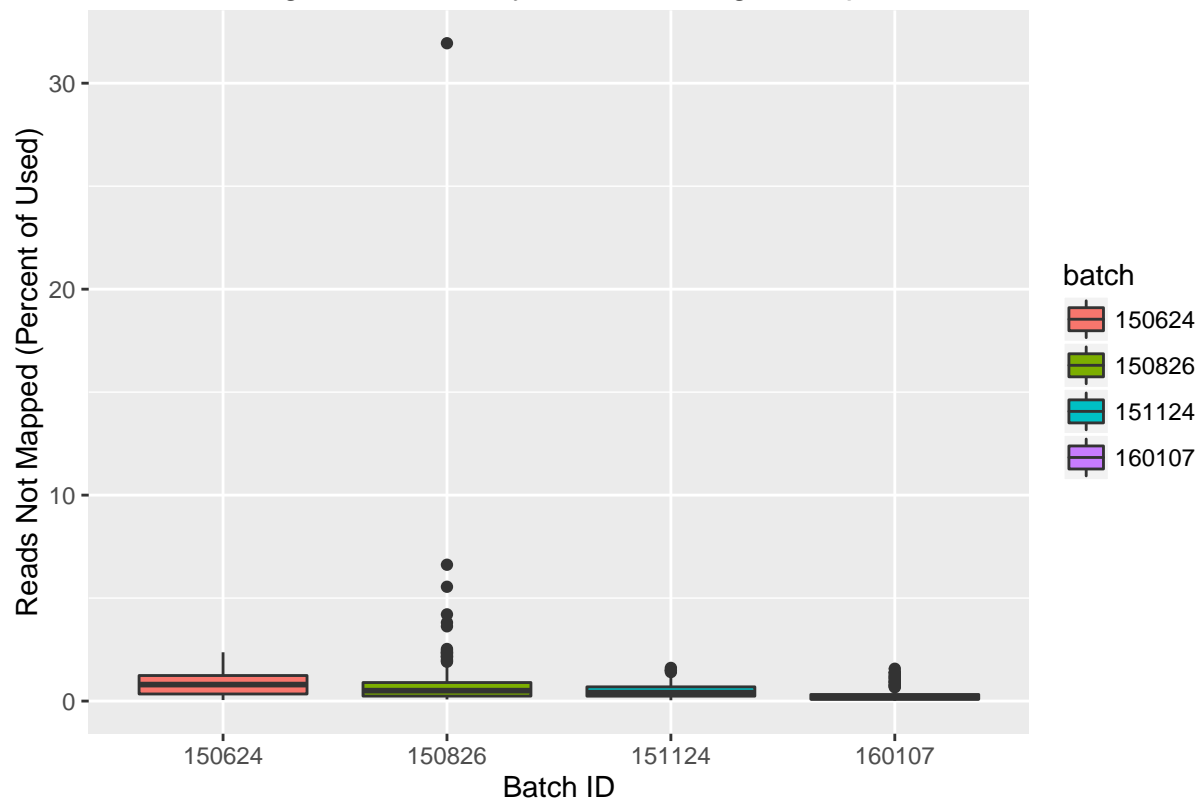
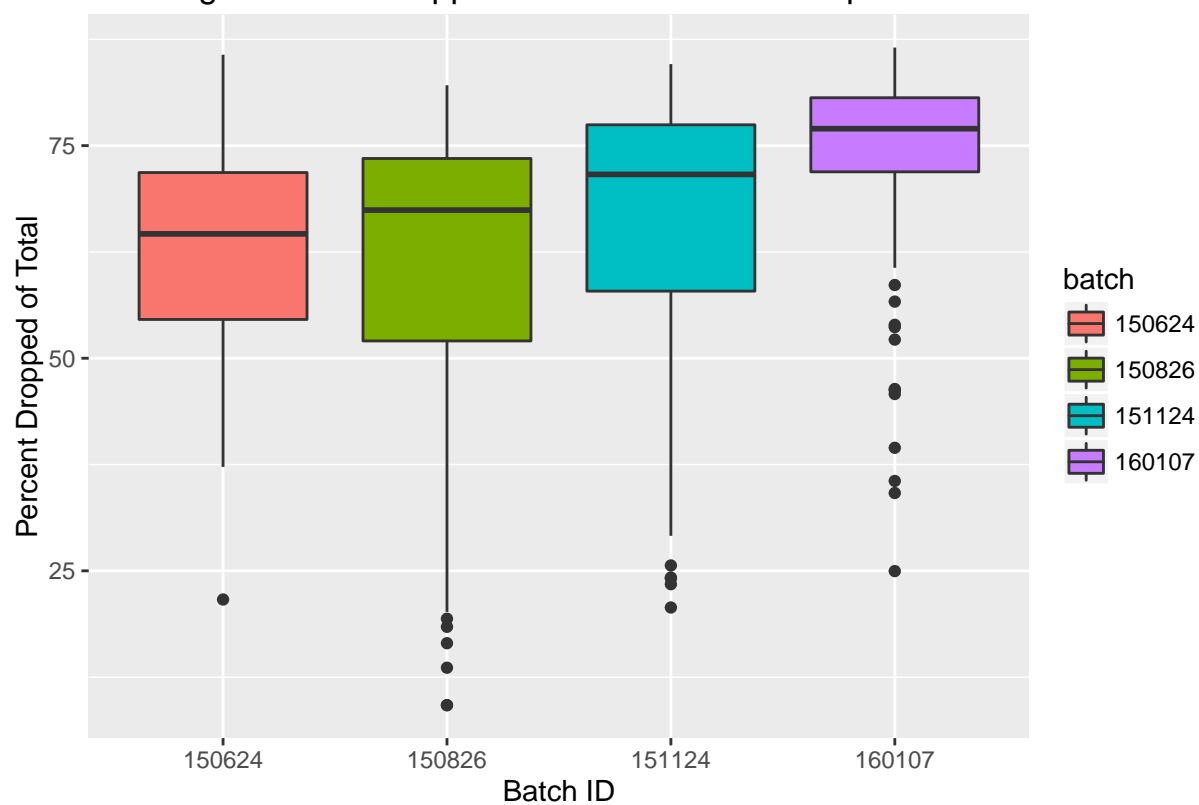


Fig. 8 Reads Dropped Due to No Clonal Sequence



```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

Fig. 9 Clonotypes eliminated by PCR Error Correction

