

Polisher

HvPo

TP

406804

TN

366150176

FP

51

FN

4766

polished assembly

error

False negative (FN):

the polisher failed to

correct an error

no error

True positive (TP):

fixed an error

the polisher correctly

assembly bases in the case of insertion errors.

positions of the assembly). **D:** The only instance of false positives in Polypolish assemblies occurred in the NC 002967.9 genome. The unpolished assembly contained a 3-bp deletion in a 7-bp tandem repeat, and Polypolish erroneously changed this into a 5-bp deletion, which (on a per-reference-base basis) created two false positives and three false negatives.

B: Labelled sample sequence. A result (TP, TN, FP or FN) is given to each base in the reference, which can include multiple

C: TP, TN, FP and FN totals across all 100 simulated-read test genomes for each short-read polishing tool. These values compare unpolished sequences to the result of a single round of polishing. Polypolish performed best on TN and FP metrics (i.e. at error-free positions of the assembly) and NextPolish performed best on TP and FN metrics (i.e. at error-containing