

Reference CCCTACGCCTTGACCCGCTTTCCTGCGTCTCTCAGCCTACCTGACCTTGTCTTTAC

TCGTGCGT...

Read 2

Position 12345678

Read 1 = Read 2

Position 3

Consensus: G BQ<sub>cons:</sub> BQ<sub>r1</sub>+BQ<sub>r2</sub>

 $BQ_{r1} > BQ_{r2}$ 

Consensus: T BQ<sub>cons</sub>: BQ<sub>r1</sub>-(BQ<sub>r2</sub>/2) Read 1 ≠ Read 2

Position 6

 $BQ_{r1} < BQ_{r2}$ 

Consensus: C  $BQ_{cons}$ :  $BQ_{r2}$ - $(BQ_{r1}/2)$ 

 $BQ_{r1} = BQ_{r2}$ 

Consensus: C (ref) BQ<sub>cons</sub>: BQ<sub>r1</sub>-(BQ<sub>r2</sub>/2)