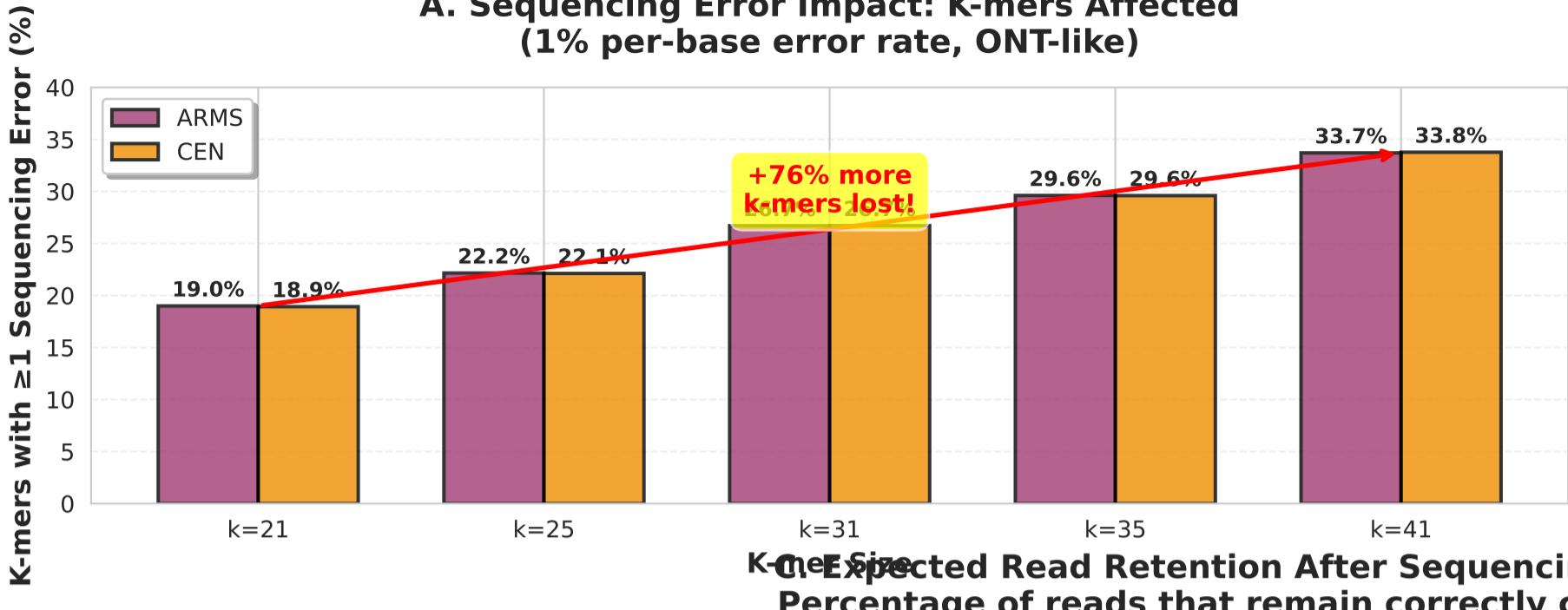


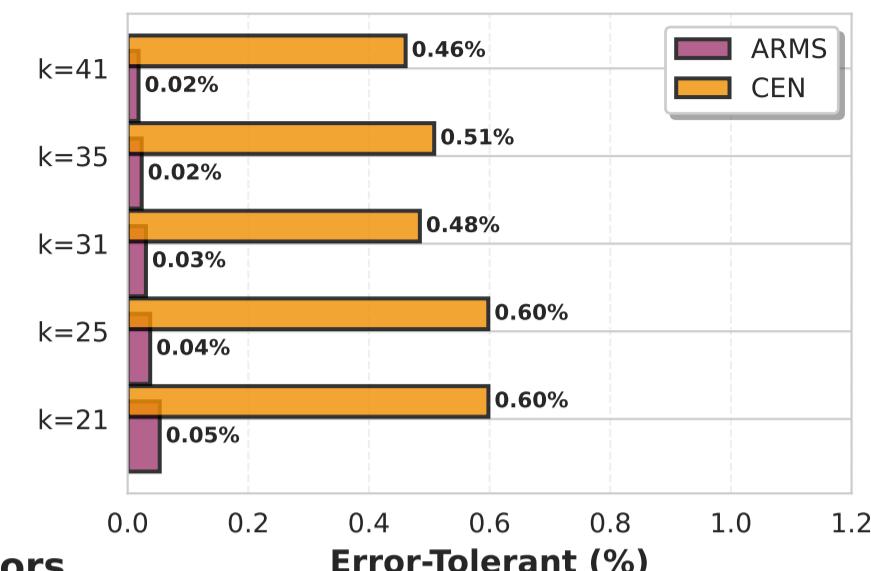
# Realistic Sequencing Error Resilience Analysis (1% per-base error rate)

## Impact of ONT-like Sequencing Errors on Cenhapmer Marker Performance

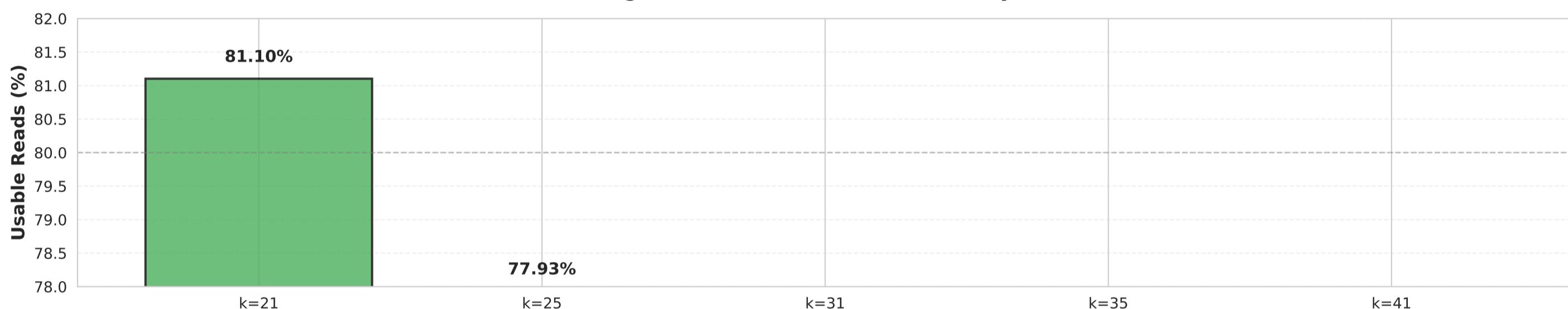
**A. Sequencing Error Impact: K-mers Affected  
(1% per-base error rate, ONT-like)**



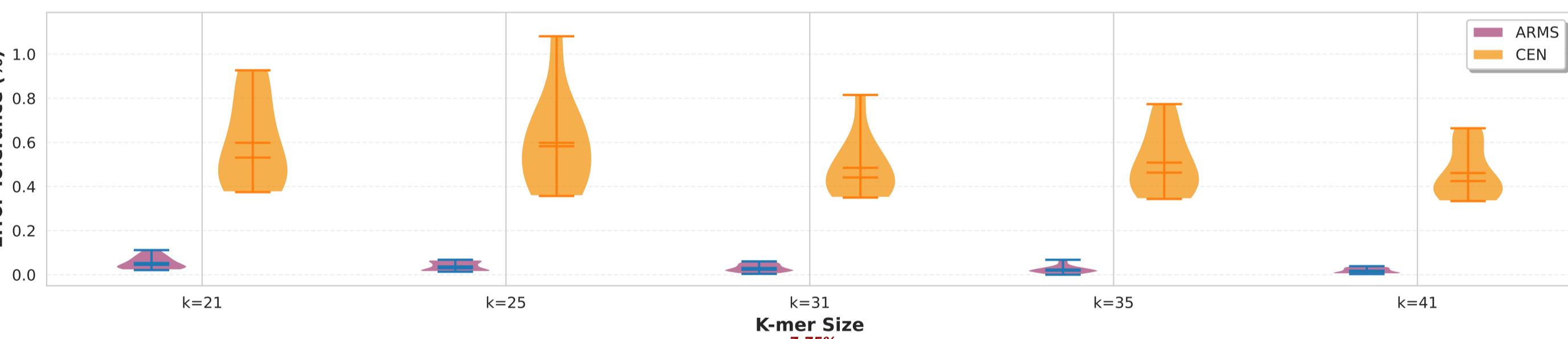
**B. Error Tolerance  
(of k-mers WITH errors)**



**C. Expected Read Retention After Sequencing Errors  
Percentage of reads that remain correctly classified**



**D. Error Tolerance Distribution by Region  
(Only k-mers with sequencing errors are counted)**



**K-mer Size**  
**-7.75%**

**70.47%**

**-10.63%**

**66.34%**

**-14.76%**