

**Supplemental Table S8.**

The ratios of complementary mutation rates on the leading strand in regions belonging to the most extreme replication direction bin in MSI and MSS cancers for regions of early and late replication timing (rt). The values in brackets are 95% confidence intervals.

Mutation type	Late RT regions	Early RT regions
A→C	1.37 (1.11-1.69)	1.26 (1.1-1.45)
<b>A→G</b>	<b>1.42 (1.27-1.6)</b>	<b>1.66 (1.57-1.76)</b>
A→T	1.05 (0.84-1.31)	0.94 (0.84-1.06)
C→G	1.13 (0.76-1.67)	1.24 (0.99-1.56)
Dp <u>C</u> →Dp <u>A</u>	0.86 (0.68-1.09)	0.92 (0.79-1.06)
<b>Cp<u>C</u>→Cp<u>A</u></b>	<b>0.71 (0.54-0.94)</b>	<b>0.53 (0.47-0.6)</b>
Hp <u>C</u> →Hp <u>T</u>	0.95 (0.78-1.17)	1.03 (0.95-1.13)
<b>Gp<u>C</u>→Gp<u>T</u></b>	<b>1.17 (0.97-1.41)</b>	<b>1.34 (1.25-1.44)</b>