



**Supplementary Figure 3.** (**A**) Our in-house cohort confirmed that *Eggerthella. lenta* is significantly abundant in CRC patients (n = 185) compared to normal subjects (n = 204). (**B**) The smokers had higher abundance of *E. lenta* compared to nonsmokers in CRC patients (P < 0.05). The abundance of *E. lenta* was normalized by arcsine square root. (**C**) The abundance of genes encoding 3 $\beta$ -HSDH enzymes was measured in each group (**Supplementary Methods**), and we observed significantly higher abundance in smoking group compared to non-smoking group. The symbol "+" represent the mean abundance.