

**Supplementary Table 7.** Logistic regression analysis to assess independent associations of gene mutation status with the presence of *F nucleatum animalis* in colorectal cancer tissues.

<b>Mutation status</b> mutated vs non-mutated	<b>Univariate OR</b> <b>(95% CI)</b>	<b>FDR p-value*</b>	<b>Multivariable OR</b> <b>(95% CI)#</b>	<b>FDR p-value*</b>
<i>KRAS</i>	1.27 (0.77-2.09, p-val = 0.34)	0.38	1.32 (0.78-2.21, p-val = 0.30)	0.67
<i>TP53</i>	0.49 (0.33-0.72, p-val = 0.00029)	0.0013	0.71 (0.46-1.1, p-val = 0.089)	0.33
<i>POLE</i>	3.21 (1.1-7.93, p-val = 0.02)	0.042	4.03 (1.16-12.27, p-val = 0.011)	0.085
<i>ERBB2</i>	1.74 (0.51-4.55, p-val = 0.31)	0.38	1.063 (0.29-3.0, p-val = 0.916)	0.94
<i>ERBB3</i>	7.56 (3.16-16.77, p-val = 1.55e-6)	1.40e-5	3.76 (1.44-9.19, p-val = 0.0047)	0.043
<i>APC</i>	0.64 (0.43-0.94, p-val = 0.023)	0.042	0.90 (0.59-1.39, p-val = 0.64)	0.94
<i>BRAF</i>	2.34 (1.14-4.49, p-val = 0.014)	0.042	1.03 (0.45-2.23, p-val = 0.94)	0.94
<i>PIK3CA</i>	1.44 (0.87-2.29, p-val = 0.14)	0.21	1.19 (0.71-1.94, p-val = 0.49)	0.89
<i>SMAD4</i>	1.07 (0.55-1.91, p-val = 0.83)	0.83	1.09 (0.55-1.97, p-val = 0.79)	0.94

In the regression analysis, *F nucleatum* was used as a binary outcome variable (negative = 0 vs positive = 1) and gene mutation status as the predictor variable.

# logistic regression model adjusted for sex, age at diagnosis, tumour site, MSI and hypermutation status,

\*p-values were adjusted for multiple testing using the Benjamini-Hochberg method.

OR = Odds Ratio, CI = Confidence Interval, FDR = False Discovery Rate