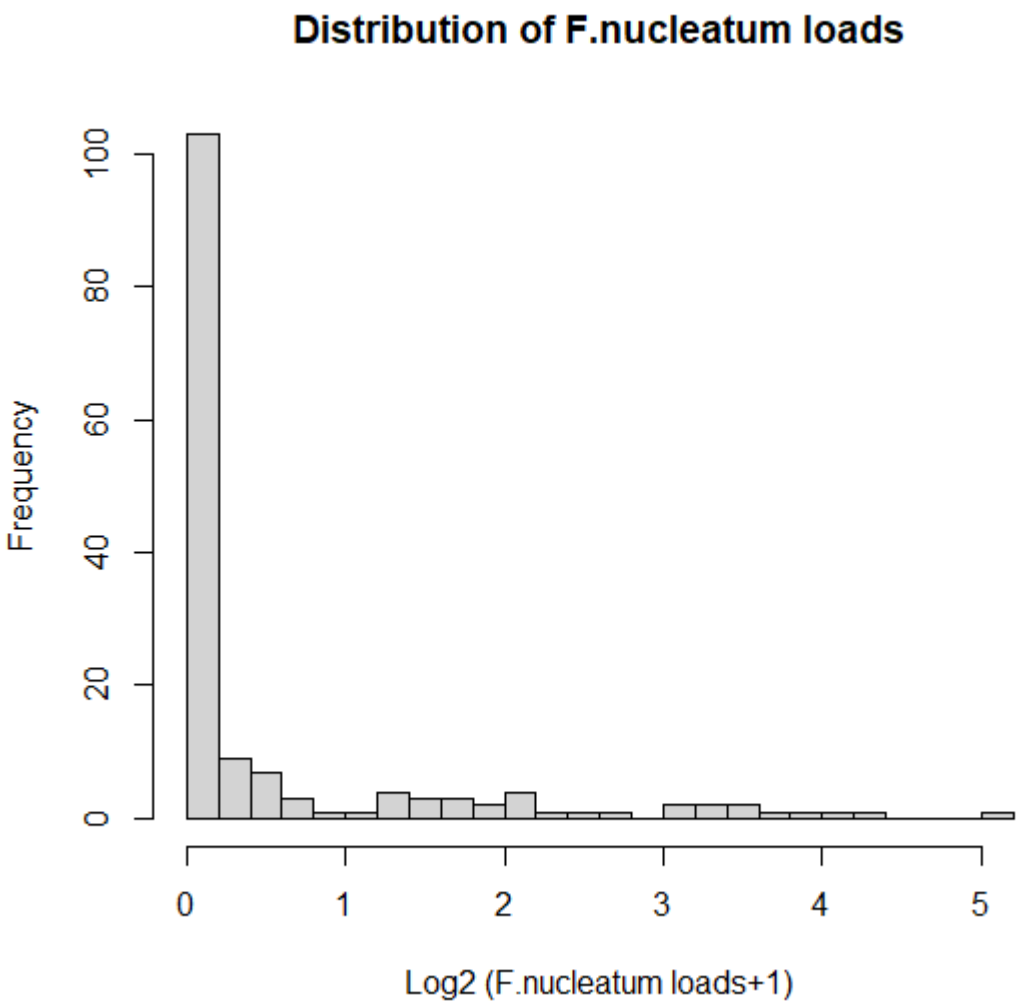

Figure S1. Distribution of normalized and logged Fusobacterium loads in the patient population.

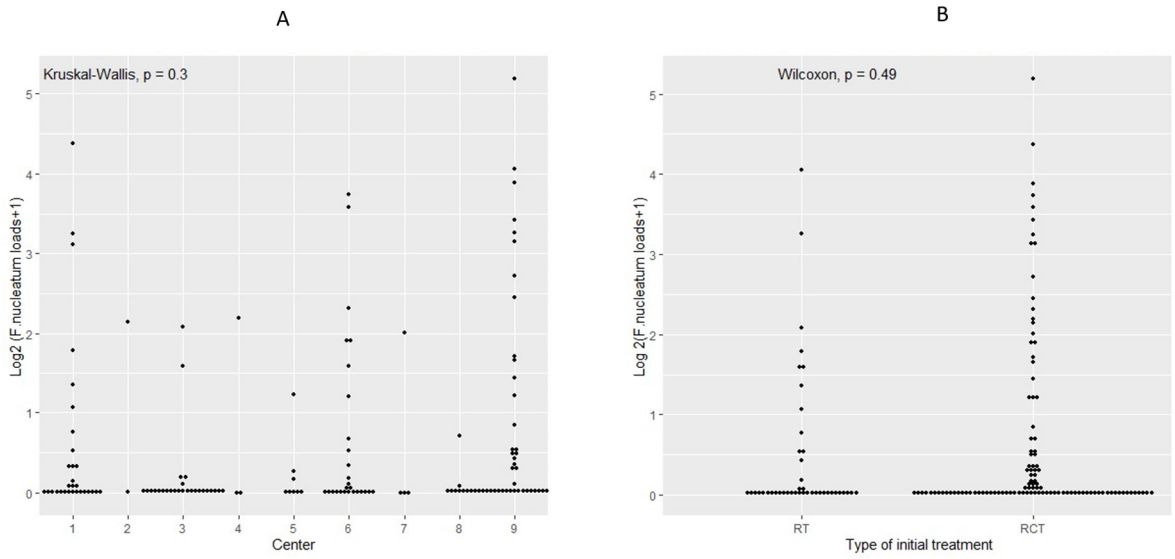

Figure S2. Distribution of normalized Fusobacterium loads. Distribution of logged Fusobacterium loads according to individual centers (**A**) and the type of initial treatment (**B**).

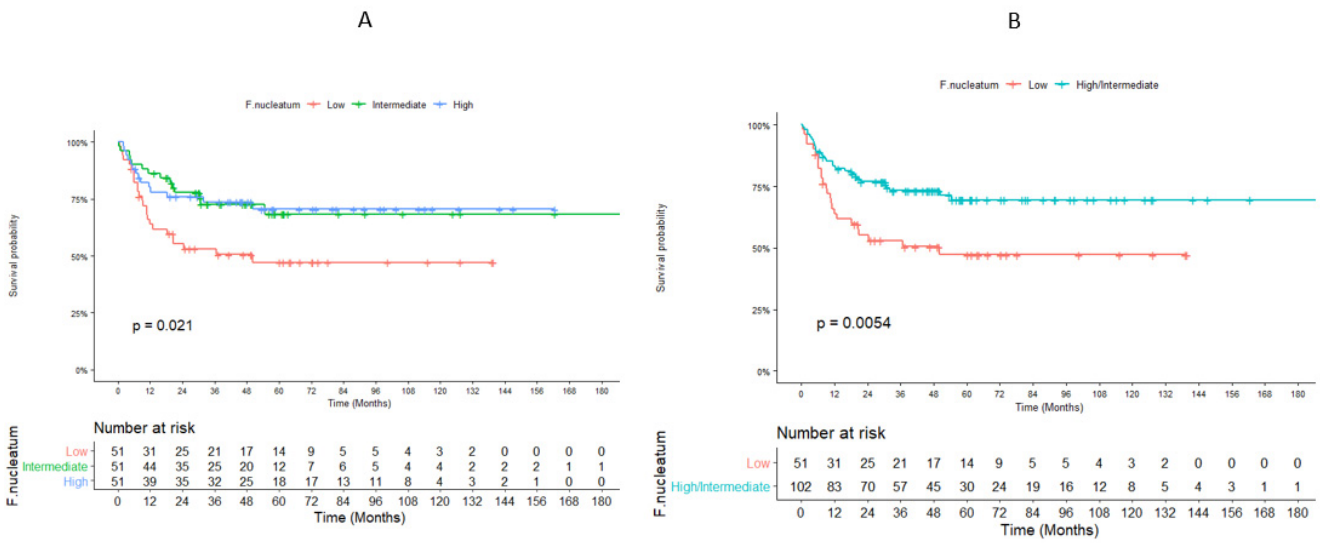

Figure S3. Association between metastasis-free survival and *Fusobacterium nucleatum*. Metastasis-free survival curves for the *Fusobacterium nucleatum* divided in 3 categories according to terciles (**A**) and 2 categories according to terciles (**B**), n = 153 patients.

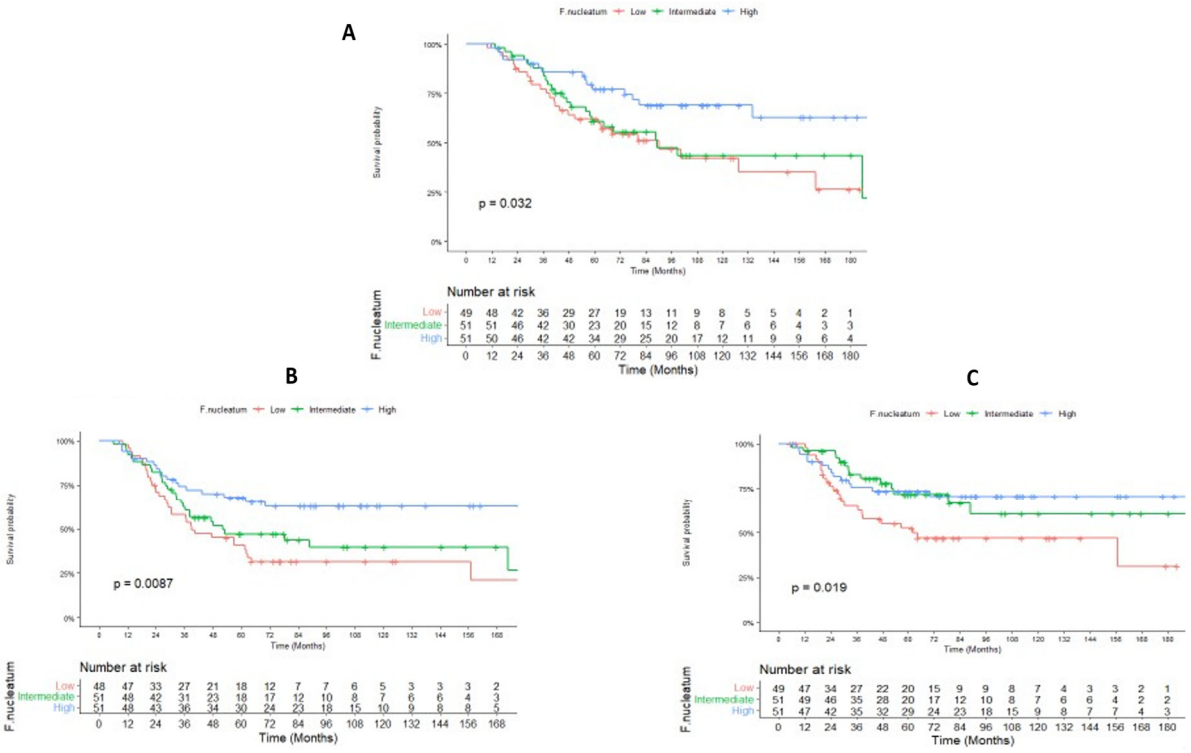

Figure S4. Association between survival with the diagnosis taken as starting point and *Fusobacterium nucleatum*. Overall-free survival (**A**), disease-free survival (**B**) and metastasis-free survival (**C**) curves for the *Fusobacterium nucleatum* divided in 3 categories according to terciles.

A

Variable		N	Hazard ratio	p
Age < 65 years		140	2.02 (1.04, 3.92)	**0.04**
Perineural invasion		140	1.98 (1.12, 3.52)	**0.02**
TNM stage	I	13	Reference	
	II	66	1.02 (0.33, 3.16)	0.97
	III/IV	61	0.76 (0.23, 2.47)	0.65
Initial treatment	RT	38	Reference	
	RCT	102	1.06 (0.51, 2.24)	0.87
Gender (female vs male)		140	1.47 (0.78, 2.76)	0.23
Fusobacterium nucleatum (highest tercile)		140	0.70 (0.36, 1.36)	0.29

B

Variable		N	Hazard ratio	p
Age < 65 years		140	2.05 (1.05, 4.01)	**0.035**
Perineural invasion		140	2.13 (1.20, 3.77)	**0.010**
TNM stage	I	13	Reference	
	II	66	1.20 (0.38, 3.73)	0.758
	III/IV	61	0.87 (0.27, 2.86)	0.824
Initial treatment	RT	38	Reference	
	RCT	102	1.01 (0.48, 2.15)	0.973
Gender (female vs male)		140	1.42 (0.75, 2.68)	0.279
Fusobacterium nucleatum (lowest tercile)		140	2.25 (1.26, 4.01)	**0.006**

Figure S5. Prognostic value of clinicopathological factors and Fusobacterium nucleatum. Multivariate analysis for the clinicopathological factors regarding metastasis-free-survival (n = 150 patients), with the highest tercile (**A**) or lowest tercile (**B**) as a reference for Fusobacterium loads.