

Supplementary Table 1: Adjusted Association between LNR Status and Outcomes in Untreated T3N0 Colon Cancer Undergoing Molecular Staging

Final study Cohort (n=344**)					
LNR Risk Group	Study Endpoint	Overall No of Events	Overall No of Patients	Multivariate * HR (95% CI)	p value
LNR per 0.1 units	TTR	38	344	1.22 (1.04 - 1.43)	0.018
	OS	77	344	1.14 (1.01 - 1.28)	0.029
	DFS	88	344	1.16 (1.04 - 1.30)	0.007
GCC LNR, 2-level Risk group					
High Risk (LNR > 0.1)	TTR	20	138	1.82 (0.94 - 3.51)	0.07
Low Risk (LNR ≤ 0.1)		18	206	ref	-
High Risk (LNR > 0.1)	OS	38	138	1.48 (0.93 - 2.34)	0.10
Low Risk (LNR ≤ 0.1)		39	206	ref	-
High Risk (LNR > 0.1)	DFS	45	138	1.61 (1.05 - 2.47)	0.030
Low Risk (LNR ≤ 0.1)		43	206	ref	-
GCC LNR, 3-level Risk group					
High Risk (LNR > .2)	TTR	15	77	2.53 (1.24 - 5.17)	0.011
Intermediate (.1<LNR≤.2)		5	61	1.02 (0.38 - 2.77)	0.97
Low Risk (LNR ≤ 0.1)		18	206	ref	-
High Risk (LNR > .2)	OS	26	77	1.78 (1.06 - 2.98)	0.030
Intermediate (.1<LNR≤.2)		12	61	1.11 (0.58 - 2.12)	0.76
Low Risk (LNR ≤ 0.1)		39	206	ref	-
High Risk (LNR > .2)	DFS	30	77	1.91 (1.17 - 3.10)	0.009
Intermediate (.1<LNR≤.2)		15	61	1.25 (0.69 - 2.26)	0.46
Low Risk (LNR ≤ 0.1)		43	206	ref	-

*Adjusting for age, gender, grade, number of LNs examined, MMR Status, and presence of lymphovascular invasion. **344 of 366 patients had complete data on all covariates included.

Supplementary Table 2: Unadjusted and adjusted association between LNR status and TTR, OS, and DFS within pMMR subgroup (N = 262)

Study Endpoint	LNR Risk Group (No. Event/No. Cases)	Univariate Analysis (n=257)		Multivariate Analysis(n=245)*		
		HR (95% CI)	p value	LNR Risk Group (No. Event/No. Cases)	HR (95% CI)	p value
TTR	> 0.1 (17/111)	1.97 (0.94 - 4.12)	0.07	> 0.1 (17/108)	1.91 (0.90 - 4.05)	0.09
	≤ 0.1 (12/146)	ref		≤ 0.1 (12/137)	ref	
OS	> 0.1 (29/111)	1.44 (0.86 - 2.43)	0.17	> 0.1 (29/108)	1.37 (0.80 - 2.34)	0.25
	≤ 0.1 (28/146)	ref		≤ 0.1 (26/137)	ref	
DFS	> 0.1 (35/111)	1.60 (0.98 - 2.59)	0.06	> 0.1 (35/108)	1.51 (0.92 - 2.48)	0.11
	≤ 0.1 (31/146)	ref		≤ 0.1 (29/137)	ref	

*Adjusting for age, gender, grade, number of LNs examined, and presence of lymphovascular invasion