

Supplementary Data

Supplementary Figures 1-4.

Table S1, related to Figure 3. Clinicopathological features of retrospective CLM patient cohort.

Table S2, related to Figure 1 and S1. Proportions of scRNA-seq MP clusters for each sample; MP scRNA-seq cluster marker genes; CD45⁺ scRNA-seq cluster marker genes.

Table S3, related to Figures 1-2 and S1-2. MoMφ cluster marker genes; GSVA results; DEGs from trajectory branch analysis; DEGs between TAM and KC(1-2); PANTHER pathway enrichment analysis on TAM (c9).

Table S4, related to Figure 2 and S4.; significant cell-cell interactions from CellPhoneDB analysis; modulated gene regulatory networks from SCENIC analysis.

Table S5, related to Figure 3. Univariate analysis for DFS on retrospective CLM patient cohort.

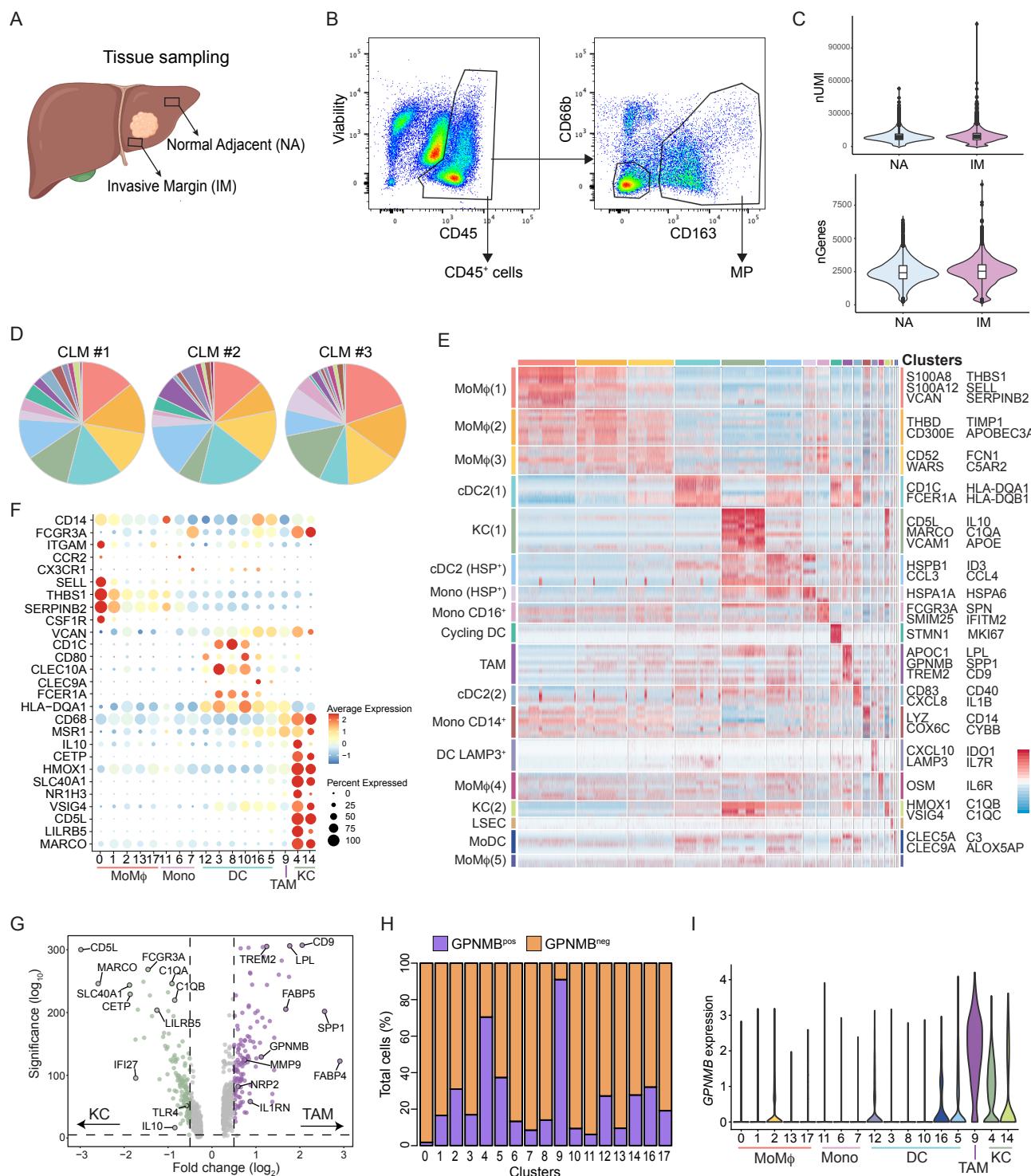


Figure S1

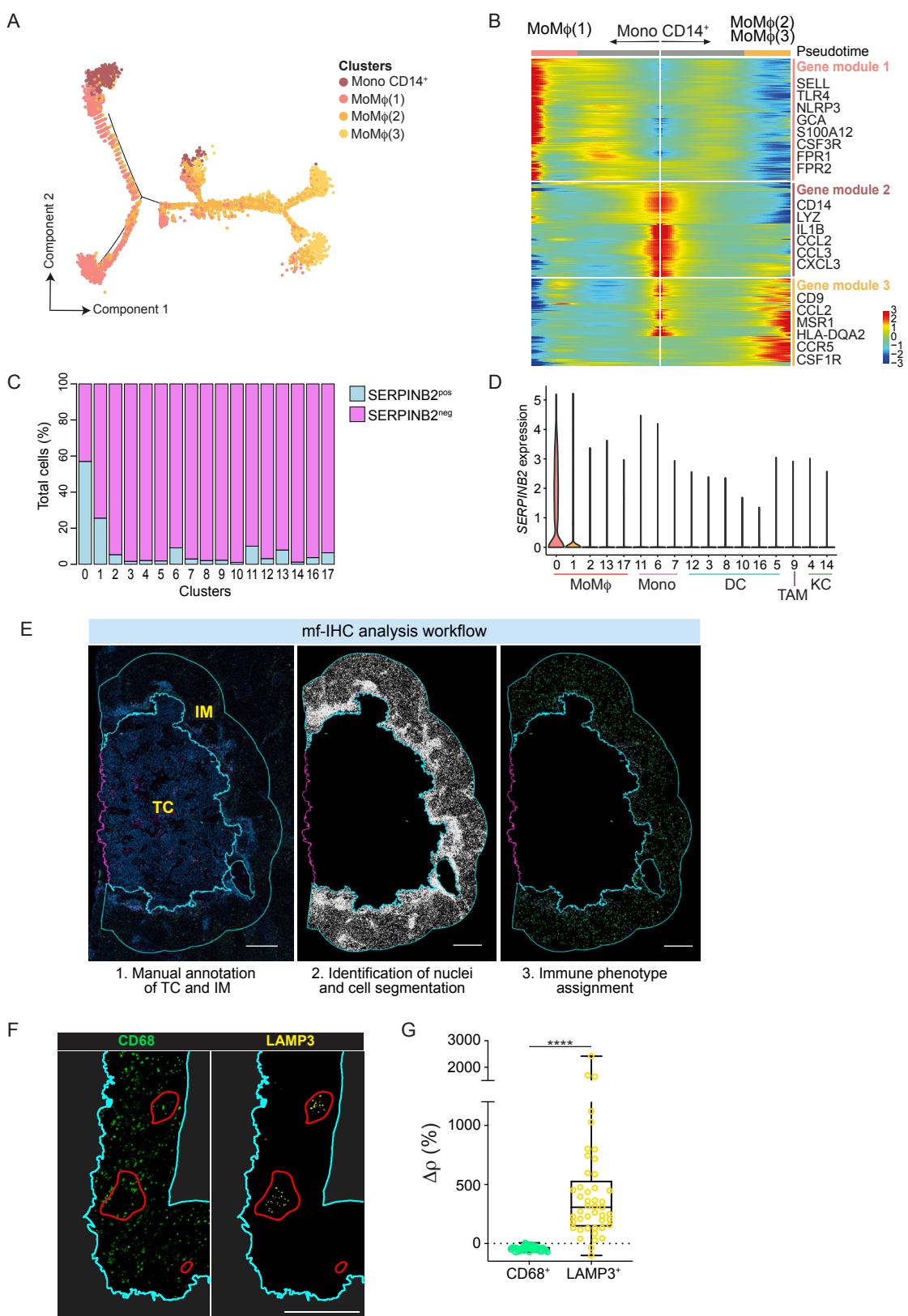


Figure S2

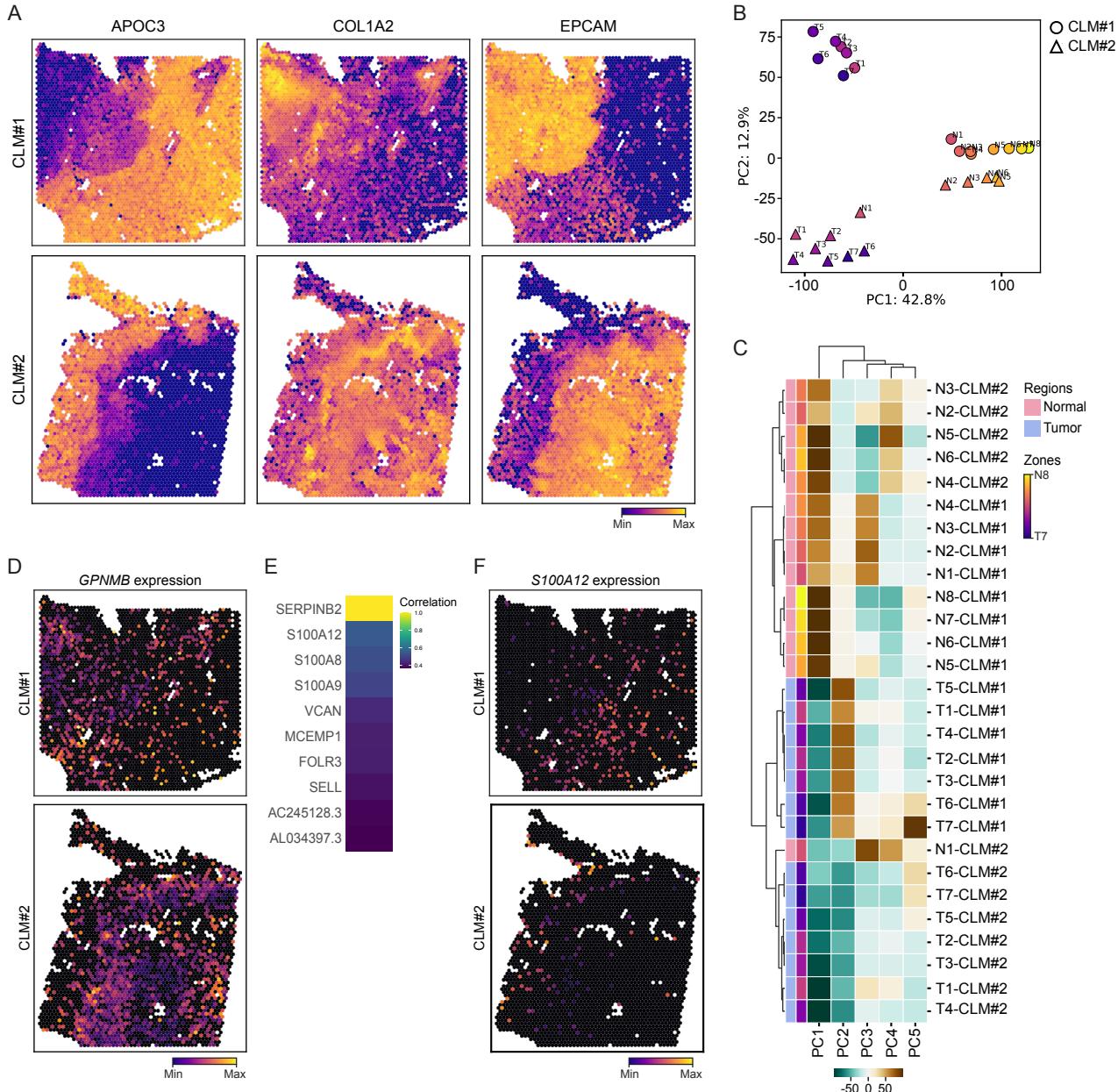


Figure S3

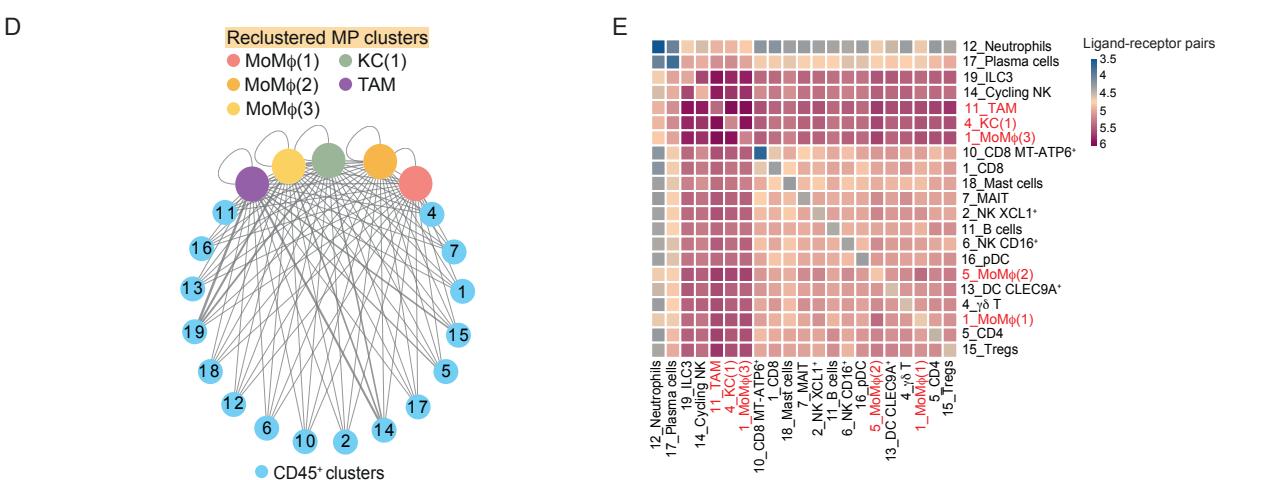
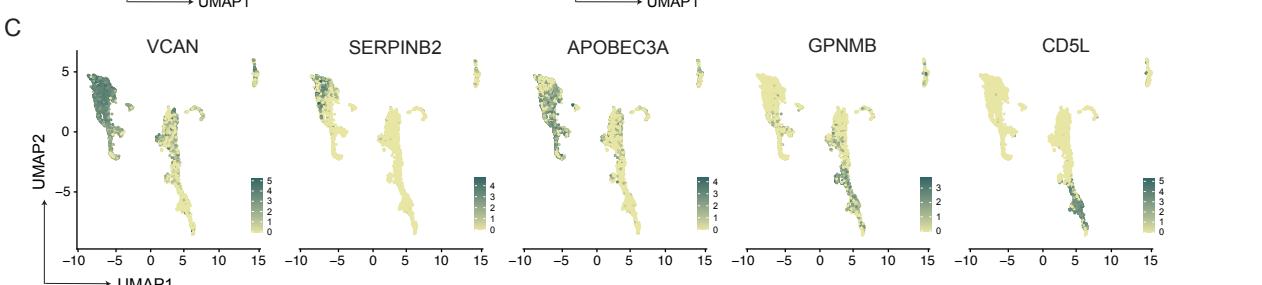
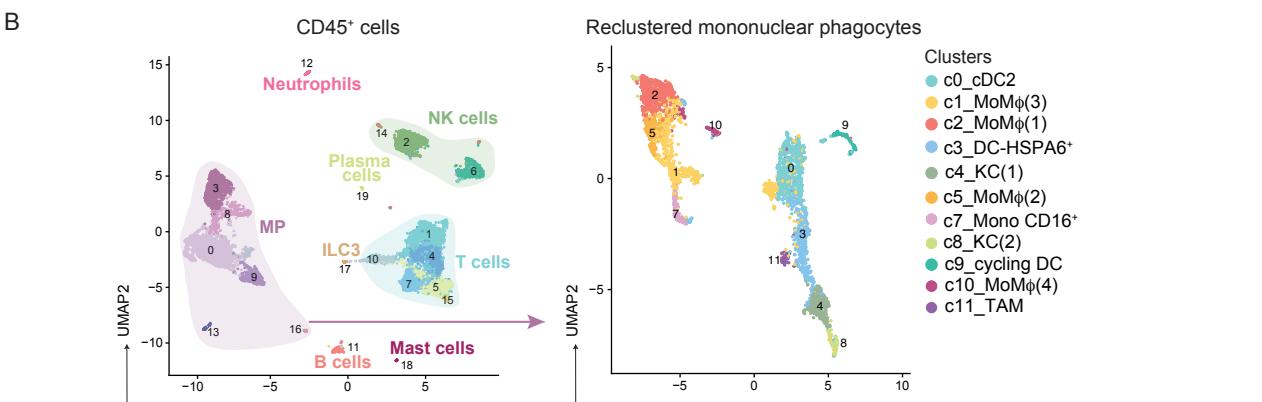
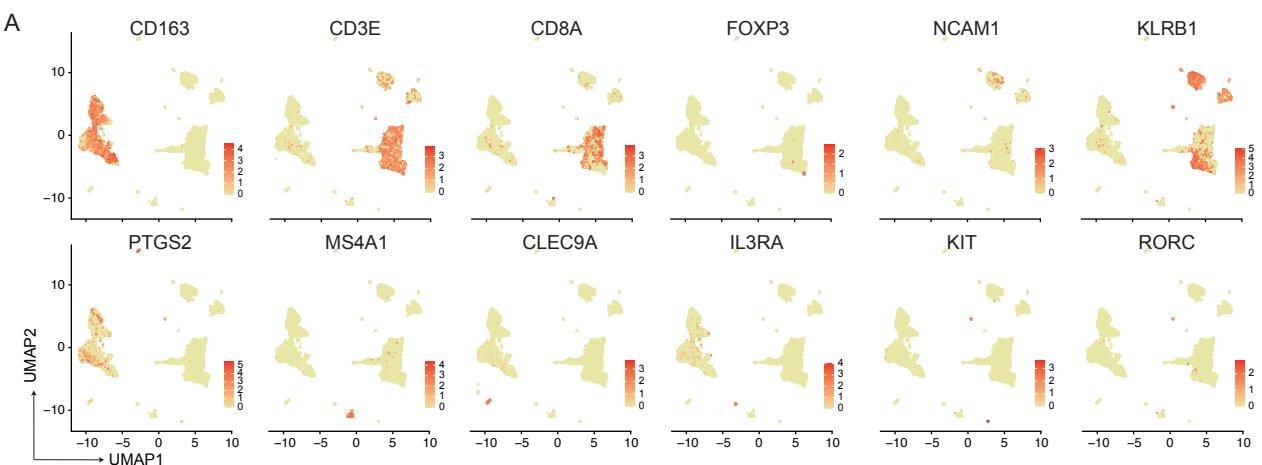


Figure S4

Table S1. Clinicopathological characteristics of retrospective CLM cohort.

	N (%)
Gender (M/F)	26 (54.2) / 22 (45.8)
Age(yrs)	
Median; range	62.7; 29-79
Mean ± SD	61.2 ± 10.7
Neoadjuvant chemotherapy (Yes/No)	45 (93.7) / 3 (6.3)
Chemotherapy lines	
Median; range	1; 0-2
Mean ± SD	1.1 ± 0.4
Type of chemotherapy	
5FU-based	44 (91.6)
Oxaliplatin-based	27 (56.2)
Irinotecan-based	28 (58.3)
+anti-VEGF	16 (33.3)
+anti-EGFR	17 (35.4)
Number of CLM	
Median; range	5; 1-25
Mean ± SD	6.96 ± 6.57
Size of CLM (cm)	
Median; range	4; 0.5 – 17
Mean ± SD	4.23 ± 2.78
Bilateral involvement of the liver	39 (81.2)
T status of primary tumor	
T1-2	4 (8.3)
T3-4	43 (89.6)
n/a	1 (2.1)
N status of primary tumor	
Positive	37 (75.5)
Negative	10 (20.4)
n/a	1 (2.1)
Site of primary tumor	
Right colon	9 (18.7)
Left colon	20 (41.7)
Rectum	19 (39.6)
Synchronous presentation	40 (83.3)
RAS status	
Wild-type	30 (62.5)
Mutated	17 (35.4)
n/a	1 (2.1)

Table S5. Univariate analysis for clinicopathological predictors of DFS.

	P-value ^a
Neoadjuvant chemotherapy, Yes vs No	0.99
Synchronous presentation, Yes vs No	0.05
<i>RAS</i> status, mutated vs wild-type	0.41
Bilobar disease, Yes vs No	0.35
Size of CLM, cm	0.10
T status of primary tumor, T1-2 vs T3-4	<0.01
N status of primary tumor, N+ vs N0	0.10
Site of primary tumor, Right Colon vs Left Colon vs Rectum	0.14

^a by log-rank or Mann-Whitney test