Supplementary Figures

Supplementary Figure S1: Representative micrographs of immunohistochemistry or hematoxylin-eosin staining. (A) For various CMTM6 staining intensity scores. (B) Schematic diagram of different regions in CRC tissues. (C) For PD-L1 staining. (D) For the staining of CD4, CD8 and FOXP3.
Supplementary Figure S2: The analysis for the possible mechanisms of CMTM6 regulating immune microenvironment. (A) A heatmap of differentially expressed genes in the tumor tissues with CMTM6^{High} or CMTM6^{Low} from the TCGA cohort. (B & C) Gene ontology enrichment analysis (B) for the top 50 upregulated genes in CMTM6^{High} group and (C) for possible proteins directly or indirectly binding with CMTM6 (Proteins detected by mass spectrometry following co-immunoprecipitation using anti-Flag agarose beads in CMTM6-Flag expressing cells, but not in control cells).
Supplementary Figure S3: CMTM6 expression levels (IHC scores) in tissues with PD-L1\(^{-}\) or PD-L1\(^{+}\).
PD-L1(whole), PD-L1(TS) or PD-L1(CC) indicates PD-L1 expression in whole tumor tissue (whole), in the tumor stroma (TS) or in cancer cells (CC), respectively. *, P<0.05; n.s, no significant difference.

Supplementary Figure S4: The association of PD-L1 expression with the infiltration of T cells.
(A-C) The infiltration of (A) CD4\(^{+}\), (B) CD8\(^{+}\) or (C) FoxP3\(^{+}\) T cells in CRC tissues with PD-L1(whole)\(^{+}\) (+) or PD-L1(whole)\(^{-}\) (−). (D-F) The infiltration of (D) CD4\(^{+}\), (E) CD8\(^{+}\) or (F) FoxP3\(^{+}\) T cells in CRC tissues with PD-L1(CC)\(^{+}\) (+) or PD-L1(CC)\(^{-}\) (−). IM, invasive margin; TS, tumor stroma; n.s, no significant difference.
Supplementary Figure S5: The association of CMTM6/PD-L1 coexpression with the prognosis of CRC patients from the SYSUCC cohort. (A & B) Kaplan-Meier survival curves for (A) progression-free survival (PFS) and (B) overall survival (OS) based on the coexpression status of CMTM6/PD-L1(whole). (C & D) Kaplan-Meier survival curves for (C) PFS and (D) OS based on the coexpression status of CMTM6/PD-L1(CC). PD-L1(whole), PD-L1 expression in whole tumor tissue; PD-L1(CC), PD-L1 expression in cancer cells; P<0.05 indicating significant difference.
Supplementary Figure S6: The association of PD-L1 expression with the prognosis of CRC patients received adjuvant chemotherapy. Kaplan-Meier survival curves for the PFS and OS of CRC patients from the SYSUCC cohort, who received adjuvant chemotherapy, based on the expression status of (A) PD-L1(whole), (B) PD-L1(CC). *, P<0.05 indicating significant difference.

Supplementary Figure S7: The association of CMTM6/PD-L1 coexpression with the prognosis of CRC patients received adjuvant chemotherapy. Kaplan-Meier survival curves for (A) progression-free survival (PFS) and (B) overall survival (OS) of CRC patients from the SYSUCC cohort, who received adjuvant chemotherapy, based on the coexpression status of CMTM6/PD-L1(TS). P<0.05 indicating significant difference.
Supplementary Figure S8: The infiltration of CD4⁺ (A), CD8⁺ (B) or FoxP3⁺ (C) in CRC tissues from groups 1, 2 and 3 in the adjuvant chemotherapy subgroup. *, P<0.05 indicating significant difference; **, P<0.01; ***, P<0.001; n.s, no significant difference.