

Legends for Supplementary Figures

Supplementary Figure S1. Correlation between the density of tumor-infiltrating plasmacytoid dendritic cells (pDCs) and clinicopathological characteristics of patients with colon cancer. Boxplots show the association between the frequency of colon cancer-associated pDCs and the microsatellite instable/microsatellite stable (MSI/MSS) status of the patients.

Supplementary Figure S2. Co-localization of colon cancer-infiltrating interferon regulatory factor 7 (IRF7) positive plasmacytoid dendritic cells (pDCs) and granzyme B (GrzB)-expressing CD8⁺ T cells. (A-C) Multiplex immunofluorescence stainings using antibodies against BDCA-2 (green), CD8 (red), IRF7 (purple), GrzB (yellow), and pan-cytokeratin (cyan) were performed in 10 colon cancer tissues. (A) As a representative example, the spatial distribution of IRF7-expressing BDCA-2⁺ pDCs and GrzB-expressing CD8⁺ T cells within colon-cancer tissues is shown. (B,C) In various tumor stroma regions, IRF7⁺ pDCs were located in the neighborhood of GrzB-expressing CD8⁺ T cells. Original magnification was x200.

Supplementary Figure S3. A high tertiary lymphoid structures (TLS) density is associated with improved clinical outcome of colon cancer patients. (A,B) Kaplan-Meier curves illustrate the association between the density of colon cancer-associated TLS and (A) progression-free survival (PFS) and (B) overall survival (OS) of patients. Significance was assessed using the log-rank test.

Supplementary Figure S4. A proportion of tertiary lymphoid structures (TLS)-associated plasmacytoid dendritic cells (pDCs) displays an activated phenotype. (A-C)

Immunofluorescence multiplex staining against CD4 (green), CD3 (cyan), CD20 (magenta), BDCA-2 (yellow), and interferon regulatory factor 7 (IRF7, red) was performed in seven colon cancer tissue sections. **(A)** As a representative example, the spatial distribution of IRF7-expressing BDCA-2⁺ pDCs within colon-cancer-associated TLS is depicted. **(B,C)** TLS-associated pDCs showing a nuclear IRF7 expression were located close to CD4⁺ T cells. Original magnification was x200.