

**Table S1. Scoring criteria for pathological states of UC**

Evaluation parameter	Score	Characteristic description
Inflammatory infiltrate	0	Normal
	1	Very little infiltration in the intrinsic layer, focused on multiple foci
	2	Mild infiltration of the intrinsic layer, multifocal, mild gland separation
	3	Moderate-to-mixed infiltrate, multifocal, minimal edema
	4	Significantly mixed into the submucosa and lamina propria with extensive glandular separation, lymphoid aggregates, edema
Epithelial cells	0	Normal
	1	Minimal: focal mucosal hyperplasia
	2	Mild: multifocal clustering of epithelial cells, increased number of cupped cells
	3	Moderate: multifocal to locally extensive epithelial attenuation or erosion of cupular cell hyperplasia
	4	Obvious: localized widespread to subtotal erosions or ulcers
Glandular	0	Normal
	1	Minimal: rare glandular dilatation
	2	Mild: multifocal glandular dilatation
	3	Moderate: multifocal glandular dilated abscess with occasional glandular abscission
Lesion depth	0	Normal
	1	Mucous membrane
	2	Mucosa and submucosa
	3	Transmural
Extent of lesion	0	None
	1	Minimal: <10%
	2	Mild: 10%–25%
	3	Moderate: 26%–50%
	4	Significant: >50%

**Table S2. Scoring criteria for pathological states of CAC**

Evaluation parameter	Score	Characteristic description
Histological morphology	0	Normal
	1	Recess shortened by one third from the basal layer with mild inflammation of lamina propria
	2	Recess shortened by two thirds from the basal layer with moderate inflammation of lamina propria
	3	Recess disappeared with severe inflammation of lamina propria, and mucosal epithelium still existed
	4	Disappearance of mucosal epithelium and severe inflammation (ulcer) of lamina propria mucosa and submucosa
Decrease in intestinal epithelial cells	0	Normal
	1	Single-cell reduction
	2	Group cytopenia
	3	Flat-ulcer formation
Formation of inflammation of glandular fossa	0	Normal
	1	Single inflammatory cell
	2	Adenocarpus inflammation
	3	Fossa abscess
	1	Mild increase
	2	Moderate increase
	3	Significant increase
Monocytes in lamina propria of the mucosa	0	Normal
	1	Mild increase
	2	Moderate increase
	3	Significant increase
Neutrophilic granulocyte	0	Normal
	1	Mild increase
	2	Moderate increase
	3	Significant increase
Epithelial hyperplasia	0	Normal
	1	Mild
	2	Moderate
	3	Pseudopolyp
Tumor score	0	Normal
	1	Low-grade dysplasia
	2	High-grade dysplasia
	3	Invasive adenocarcinoma