



S2 Fig. Examples of magnetic resonance imaging (MRI) assessment of tumor regression grade (mrTRG). (A) MRI scans of a 76-year-old male patients with clinical T3 rectal adenocarcinoma in mid-rectum before neoadjuvant chemoradiation (NCRT) (white arrow-heads). There was no evidence of disease after NCRT, therefore, the mrTRG was 1 (B). (C) MRI scans of A 72-year-old male patients with clinical T3 rectal adenocarcinoma in mid-rectum before NCRT (white arrow-heads). After the NCRT the wall thickening disappeared, however, there was hypointense fibrosis which was graded as mrTRG 2 (D). (E) MRI scans of a 52-year-old male patients with clinical T2 rectal adenocarcinoma in lower-rectum before NCRT (white arrow-heads). After the NCRT the tumor shrank, however, there was residual tumor with intermediate signal intensity which corresponded to mrTRG 3 (F). (G) MRI scans of A 65-year-old female patients with clinical T3 rectal adenocarcinoma in mid-rectum before NCRT (white arrow-heads). After NCRT there was minimal tumor degeneration which was graded as mrTRG 4 (H). (I) MRI scans of A 42-year-old male patients with mucinous adenocarcinoma in upper-rectum before NCRT (white arrow-heads). There was no change in the size of tumor after the NCRT, therefore, the response was graded as mrTRG 5 (J).