Appendix 1

Supplementary methods

CT scanning protocol

Contrast-enhanced abdominal computed tomography (CT) was performed for all patients using a Somatom Sensation 64 (Siemens Medical Solutions, Forchheim, Germany) or a Discovery CT750 HD scanner (GE Medical Systems, Milwaukee, WI, USA). Oral doses of water (500–1,000 mL) were administered to distend the stomach before scanning. The scanning parameters were: tube voltage, 120 kVp; tube current, 150–200 mA; field of view, 350 mm × 350 mm; matrix, 512×512; and reconstruction section thickness, 1.25 mm. Arterial- and portal venous-phase scans were acquired after delays of 20 and 60 seconds, respectively, following intraphase injection of contrast medium (2.5 mL/s, 1.2 mL/kg; Omnipaque 300, GE Healthcare, Chicago, IL, USA) via a syringe pump.

Image preprocessing

Before feature extraction, all CT images were resampled into 1.5×1.5×1.5 mm^3 resolution using linear interpolation. Z-score normalization was applied to unify the intensity range across scanners.

Radiomics signature formula

Radiomics score = 1.023 × PP-GLRLM.Gray Level Non-Uniformity Normalized
− 0.231 × PP-GLSZM.Size Zone Non-Uniformity Normalized
+ 1.331×AP-Wavelet-LLL-Firstorder.Entropy
+ 0.125 ×AP-GLSZM. Gray Level Variance
− 1.723 × PP-Wavelet-HHH-Firstorder.Energy [1]
− 0.672 × PP-Wavelet-LHH-Firstorder.Skewness
+ 0.318 × AP-NGTDM.Complexity
+ 0.235 ×DP-Maximum 3D diameter

AP, arterial phase; PP, portal phase; DP, delay phase; GLRLM, gray-level run-length matrix; GLSZM, gray-level size zone matrix; NGTDM, neighbourhood gray-tone difference matrix; LLL, low-low-low; HHH, high-high-high; LHH, low-high-high.

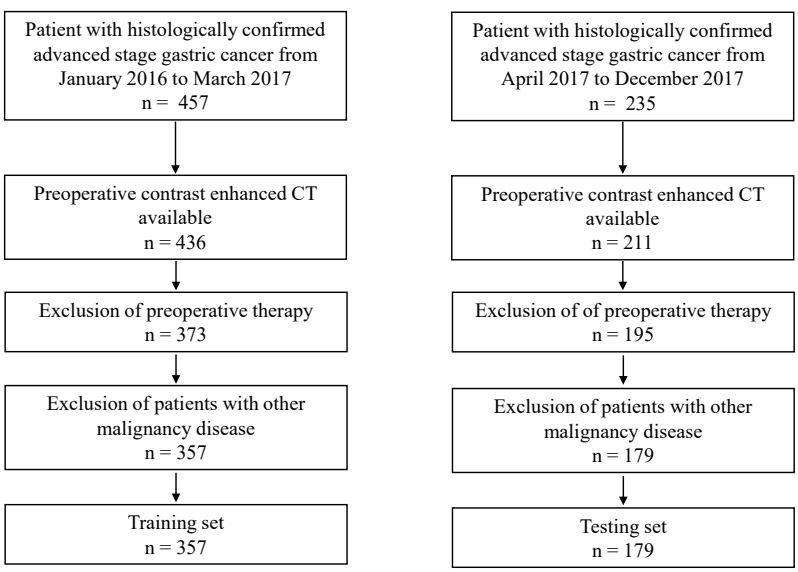

Figure S1 Recruitment pathways for patients. CT, computed tomography.

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https://dx.doi.org/10.21037/tcr-22-1690

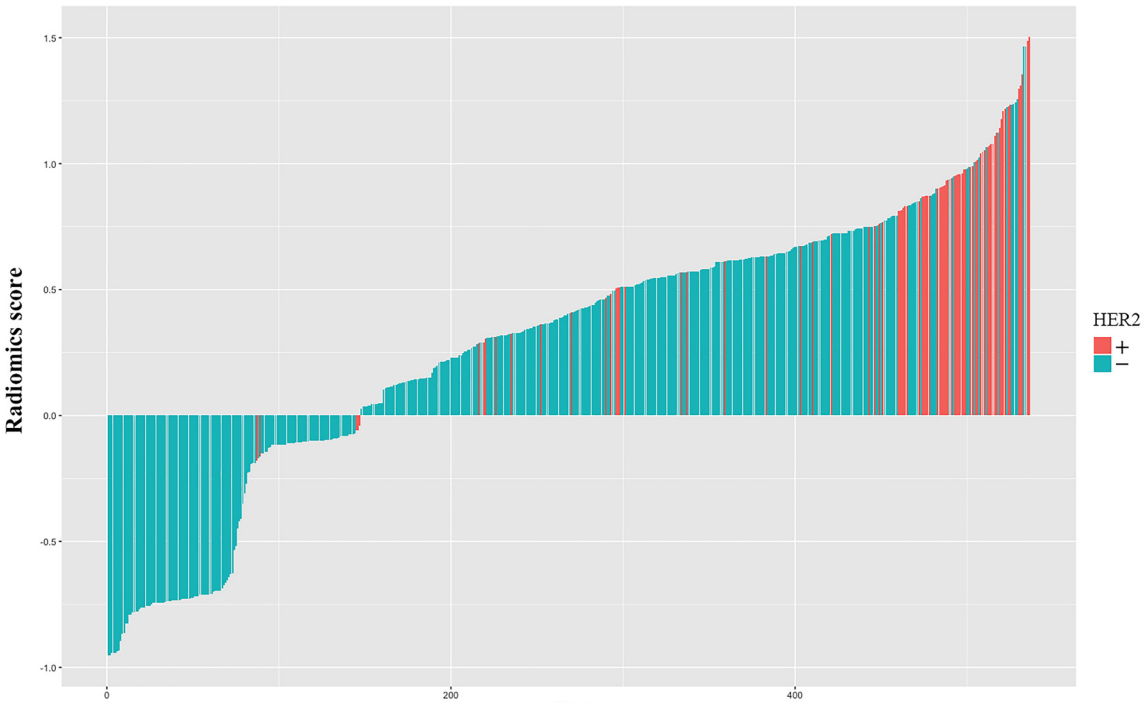

Figure S2 Radiomics score for each patient in the entire cohort. CT, computed tomography; HER2, human epidermal growth factor receptor 2.

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