Supplementary



Figure S1 HMGB3 was upregulated in STAD. (A) GEPIA (http://gepia.cancer-pku.cn/) was used to analyze HMGB3 expression in multiple tumors. The arrow shows HMGB3 level in STAD. (B) GEPIA shows HMGB3 level in STAD. "*" indicates P<0.05. (C) The higher level of HMGB3 was associated with poorer survival of STAD patients. (D) The human protein atlas (https://www.proteinatlas.org/ ENSG00000029993-HMGB3/pathology/stomach+cancer#img) was used to analyze HMGB3 expression in normal stomach tissue and GC tissues. HMGB3 was stained by immunohistochemistry. STAD, stomach adenocarcinoma; GC, gastric cancer.



Figure S2 The correlation analysis of HMGB3 with immune cells in STAD. (A) The correlation analysis of HMGB3 with immune cells, including B cells, CD8+ T cell, CD4+ T cell, macrophages, neutrophil and dendritic cell were performed via TIMER2.0 (http://timer.compgenomics.org/). (B) SCNA module provides the comparison of tumor infiltration levels among tumors with different somatic copy number alterations for HMGB3. P-value Significant Codes: * P<0.05, **P<0.01, ***P<0.001.



Figure S3 (A-E) GEPIA (http://gepia.cancer-pku.cn/) was used to analyze the correlations of HMGB3 level with the expressions of ERK1/2, JNK, β -catenin, TCF4, c-Myc, and Cyclin in STAD. STAD, stomach adenocarcinoma.



Figure S4 M plotter was used to analyze the relationship of the miR-200b level with STAD patients' overall survival. K-M, Kaplan-Meier; STAD, stomach adenocarcinoma.



Figure S5 GC cells were co-cultured with NGFs for 24 hours. (A,B) The viability of NGF was tested by the CCK-8 assay and colony formation experiment. The cell colonies were stained by 0.1% Crystal Violet Ammonium Oxalate Solution and the images were taken by a camera. (C) Transwell assay was employed to verify cell invasion. The cells were stained by 0.1% Crystal Violet Ammonium Oxalate Solution. (D) The MTT assay was conducted to determine the IC_{50} of NGF to CDDP. (E) The HMGB3 expression in NGF was monitored by qRT-PCR. (F) Western blot was carried out to determine the HMGB3 profile. (G,H) The expression of EMT-related markers (E-cadherin, Caludin1, Slug, Twist, N-cadherin, and Vimentin) and the activation of ERK1/2, JNK and Wnt/ β -catenin (including β -catenin, c-Myc, and Cyclin D1) were determined by Western blot. ns (no significance) stands for P>0.05, N=3. GC, gastric cancer; NGFs, normal gastric fibroblasts; CCK-8, Cell Counting Kit-8; MTT, 3-(4,5-dimethylthiazolyl-2)-2,5-diphenyltetrazolium bromide; CDDP, cisplatin; qRT-PCR, quantitative real-time polymerase chain reaction; EMT, epithelial-mesenchymal transition.