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Figure S1. Effects of isoproterenol (ISO) and ICI118,551 (ICI) on the expression of 3 β2-AR, an epithelial marker (E-cadherin) and mesenchymal markers (N-cadherin, 4 ZEB-1, Vimentin, Snail, Slug and α-SMA). SGC-7901 cells were treated with 0, 2μM, 5 10µM, or 20µM ISO or 20µM, 40µM, or 50µM ICI, and the cells were collected for 6 detection 12 or 24 hours later. The protein levels of β 2-AR, E-cadherin, N-cadherin, 7 ZEB-1, Vimentin, Snail, Slug and α -SMA were determined by western blotting. Three 8 independent repeated tests were conducted. The gray values of the protein bands were 9 analyzed through ImageJ software, relative values to glyceraldehyde-3-phosphate 10 dehydrogenase (GAPDH) were calculated. The protein bands and associated 11 statistical analysis data in the ISO group are shown in (A-B), and those in the ICI 12 group are presented in (C-D). The data are presented as the mean \pm s.d. *, P < 0.05; **, 13 P < 0.01; ***, P < 0.001; ****, P < 0.0001. 14

Figure S2. Isoproterenol (ISO)-promoted gastric cancer cell EMT was ameliorated by 15 the JAK-STAT3 inhibitors AG490 and Stattic. SGC-7901 cells were treated with 16 20µM isoproterenol (ISO), 20µM AG490 or 20µM Stattic for 12 or 24 hours, and the 17 cells were collected for the next assay. The protein results for β2-AR, E-cadherin, 18 N-cadherin, ZEB-1, Vimentin, Snail, Slug and α-SMA were obtained by western 19 20 blotting. Three independent repeated experiments were conducted. The gray values of the protein bands were analyzed through ImageJ software, relative values to 21 glyceraldehyde-3-phosphate dehydrogenase (GAPDH) were calculated. The protein 22 bands and correlative statistical analysis data are shown in (A-B). Then, scratch tests 23 were performed to determine the migration ability of SGC-7901 cells. Images are 24 shown in (C-D). The data are presented as the mean \pm s.d. *, P < 0.05; **, P < 0.01; 25 ***, P < 0.001. 26

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35 Figure S1



