Figure S1. Cell invasion in all HNCCLs is stimulated by NE in a dose-dependent manner, but is not attenuated by addition of 1  $\mu$ M propranolol. The data of at least three independent experiments are presented. The Con group was not treated with norepinephrine or propranolol. (A) Oral cavity cancer cell line YD-10B. (B) Larynx cancer cell line SNU-1066. (C) Pharynx cancer cell line SNU-1041. (D) Nasal cavity cancer cell line RPMI-2650. \*P<0.05. Con, control; NE, norepinephrine; Pro, propranolol; HNCCLs, head and neck cancer cell lines.

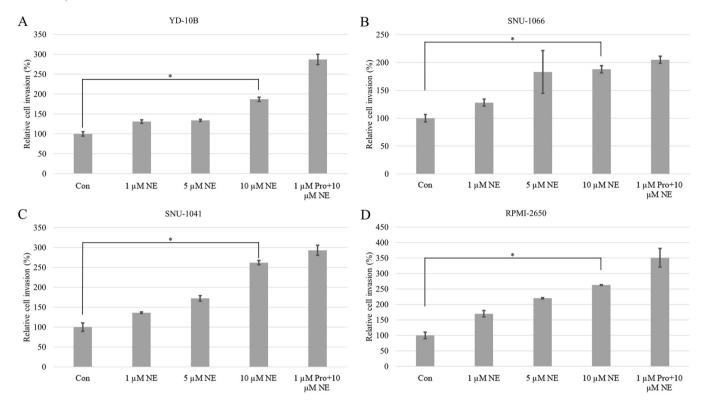


Figure S2. Representative images of the cell invasion assay in the oral cavity cancer cell line YD-10B.

## YD-10B cell invasion assay

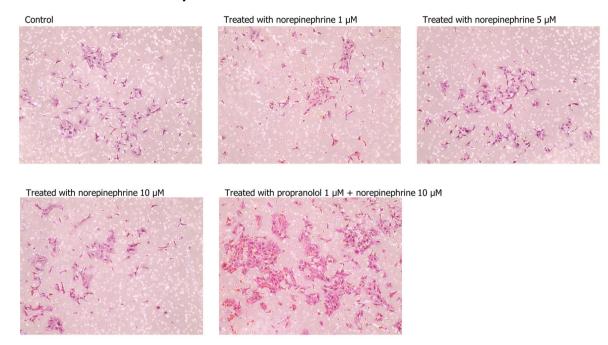


Figure S3. Representative images of the cell invasion assay in the larynx cancer cell line SNU-1066.

## SNU-1066 cell invasion assay

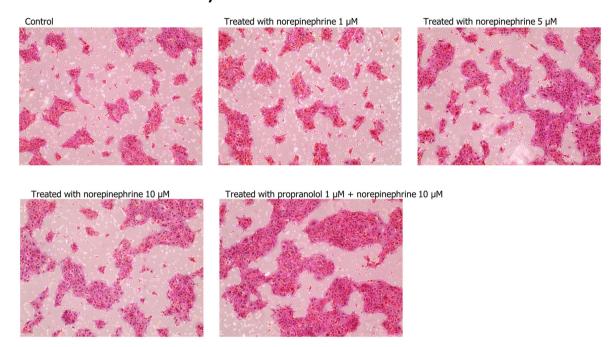


Figure S4. Representative images of the cell invasion assay in the pharynx cancer cell line SNU-1041.

## SNU-1041 cell invasion assay

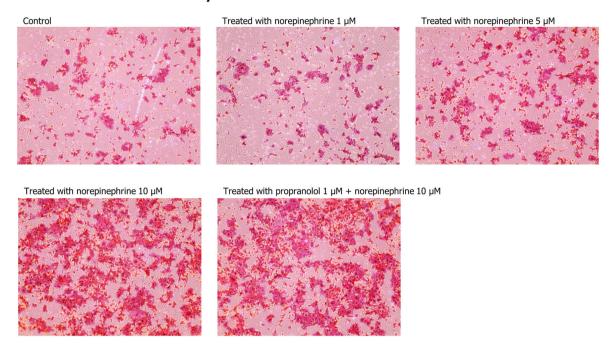


Figure S5. Representative images of the cell invasion assay in the nasal cavity cancer cell line RPMI-2650.

## RPMI-2650 cell invasion assay

