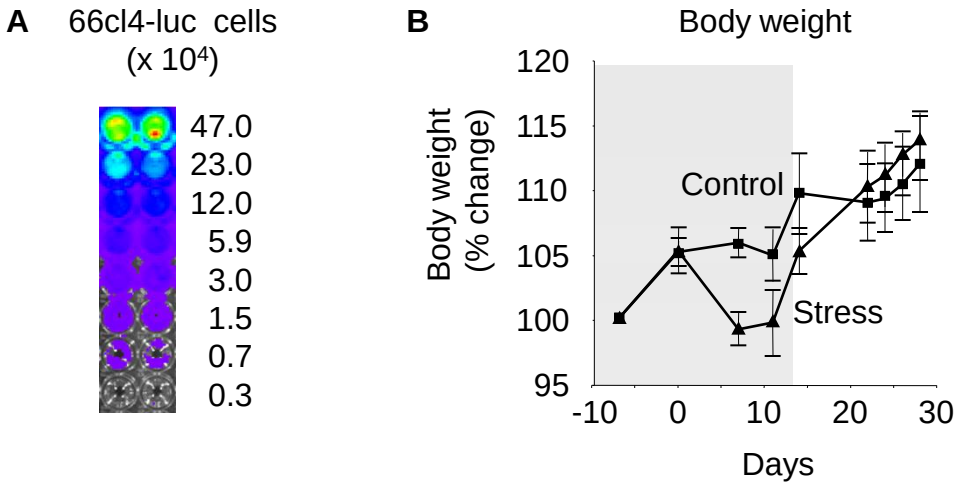
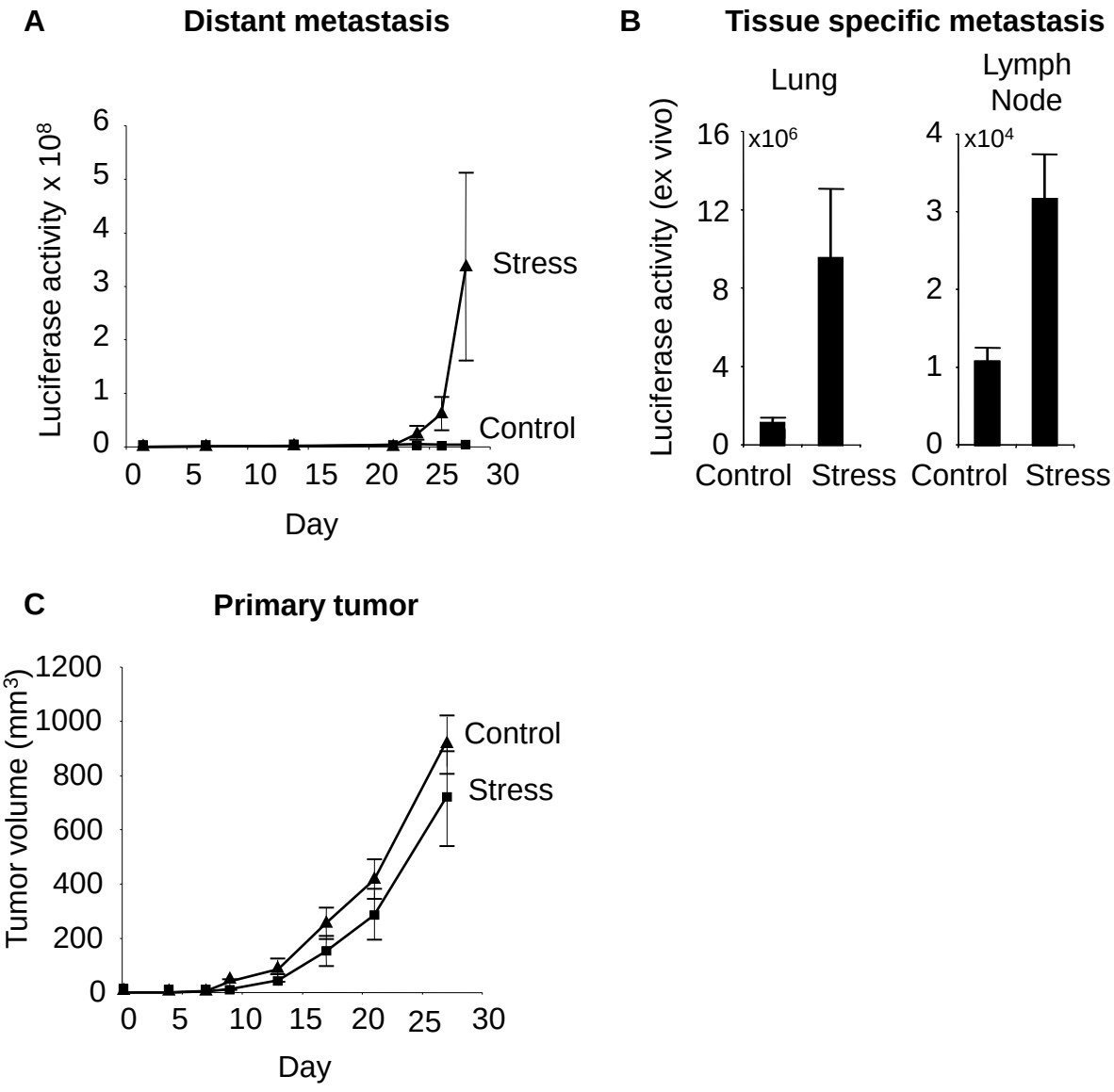
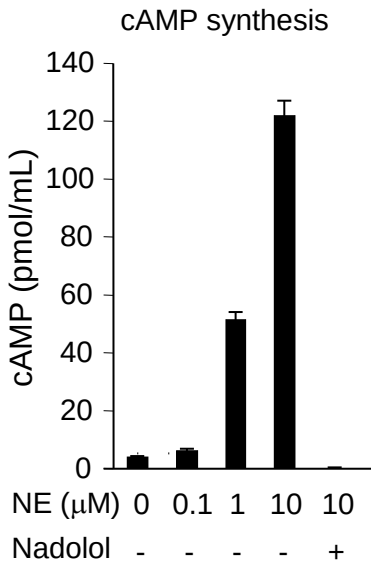


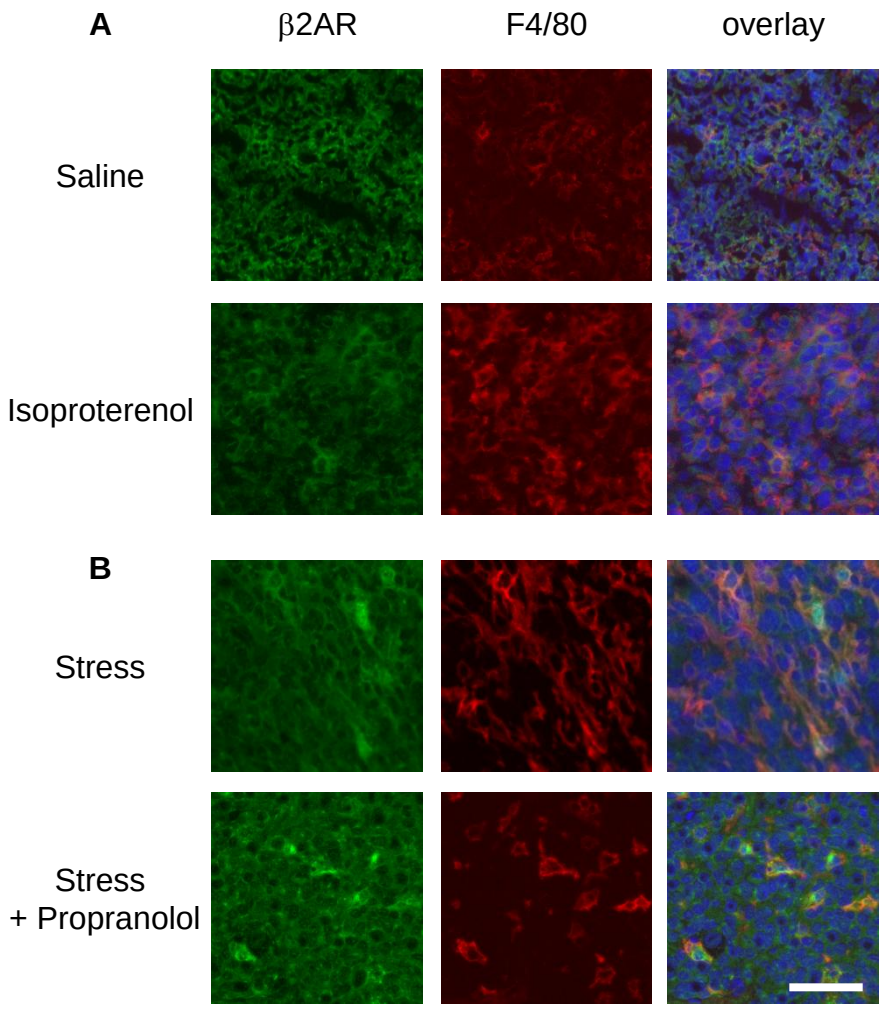
Supplemental Figure 1. Detection sensitivity and effects of restraint stress. A. Luciferase activity was measured in serial dilutions of luciferase-tagged 66cl4 mammary adenocarcinoma cells. B. Relative change in mouse body weight following the initiation of stress on day -7 prior to tumor inoculation on Day 0. Duration of stress: grey shading.



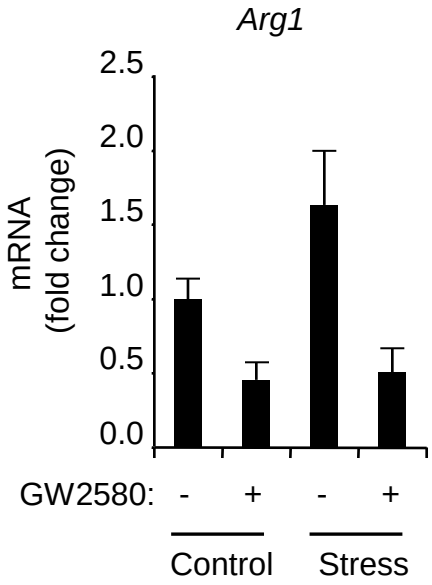
Supplemental Figure 2. Role of T lymphocytes. A. 66cl4 tumor cells (1 x 10^5) were injected into the 4th mammary fat pad of T cell-deficient *nu*/*nu* mice and metastasis to distant tissues was quantified over time using in vivo bioluminescent imaging. B. On day 28, tissue-specific metastasis was quantified by ex vivo bioluminescent imaging of tumor masses in lung and lymph nodes (axillary and brachial). C. Primary tumor volume was determined by caliper measurements. Data: mean $\pm$ S.E.



Supplemental Figure 3. cAMP synthesis in response to NE stimulation. 66cl4 cells were treated with norepinephrine (NE) ± nadolol and cAMP synthesis was quantified by ELISA.



Supplemental Figure 4. Effects of SNS signaling on macrophage infiltration of primary mammary tumors. Mammary tumor cryosections from (A) saline and isoproterenol treated mice, or (B) stressed mice treated with placebo vs. propranolol were immunostained with anti-β2AR (green) and anti-F4/80 (red), and nuclei were counterstained with Hoechst 33324 (blue). Scale bar: 50μm.



Supplemental Figure 5. *Arg1* mRNA levels were assayed by RT-PCR in primary mammary tumor RNA.