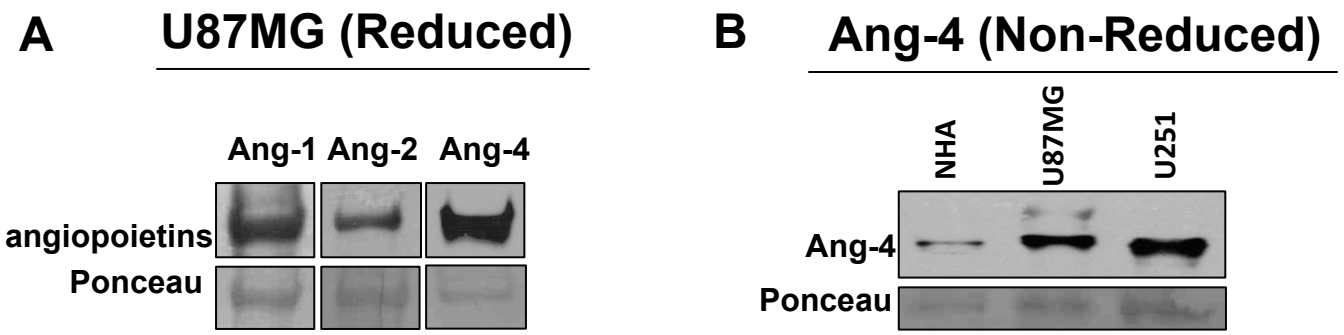
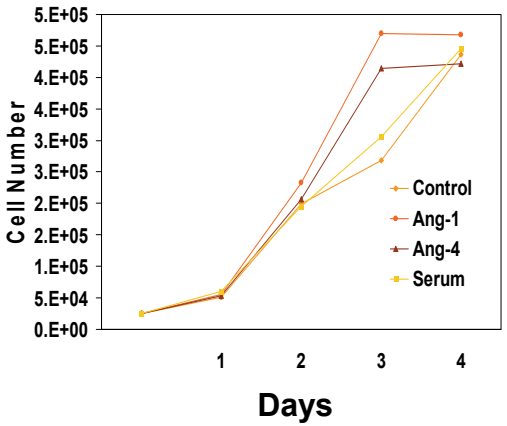
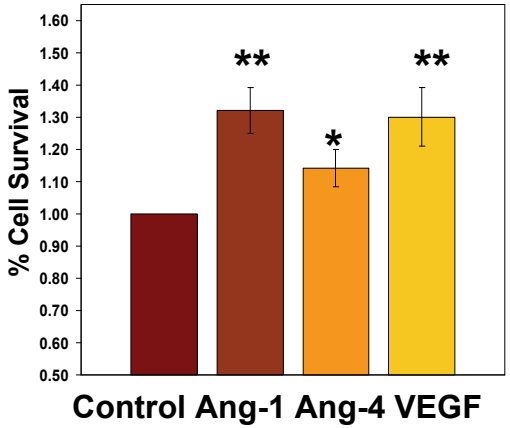


Brunckhorst_Supplemental Fig 1

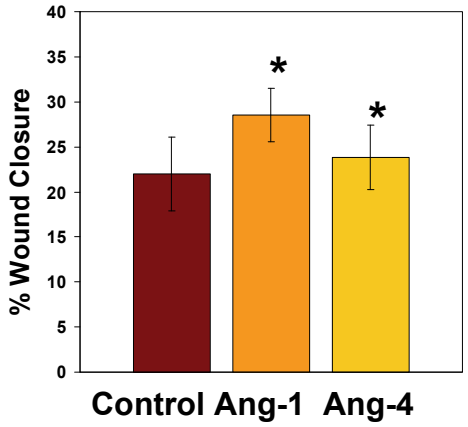
A. Cell proliferation assay:



B. Cell survival assay:

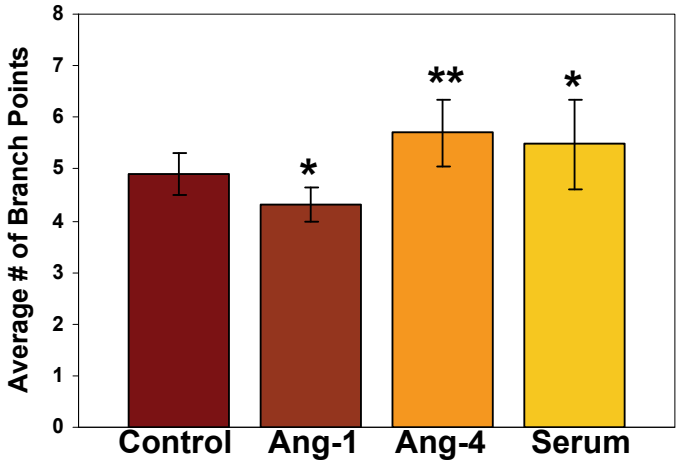


C. Wound healing/migration assay:

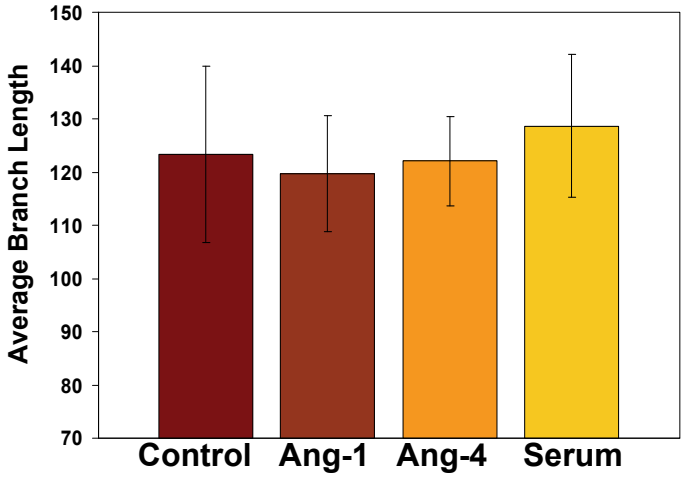


D. Tubulogenesis Assay:

Branching points:



Branch length:



Brunckhorst_Supplemental Fig 1

Supplemental Figure 1. Expression of angiopoietins by GBM cells: Endogenous Ang-1, Ang-2, and Ang-4 secreted by U87MG cells (**A**) and endogenous Ang-4 produced by NHAs, U251, and U87MG (**B**) were detected by western blotting with anti-Ang-1 (R&D), Ang-2 (Santa Cruz), or Ang-4 (R&D) antibodies. The SDS-PAGEs were run either under reducing conditions (**A**) or non-reducing conditions (**B**). 160μg of proteins from concentrated serum-free cell culture media was loaded in each lane. The intensities of ~50kDa ponceau-stained bands on the transferred membranes were used as the controls for protein loading and transferring efficiency.

Supplemental Figure 2. The effects of Ang-4 on endothelial cell proliferation, survival, migration, and tubulogenesis assays: endothelial cell proliferation (**A**) survival (**B**), migration (**C**), and tubulogenesis (**D**) assays were performed in the presence or absence of 200ng/ml of Ang-1 or Ang-4, 20ng/ml of VEGF, or 10%FBS.