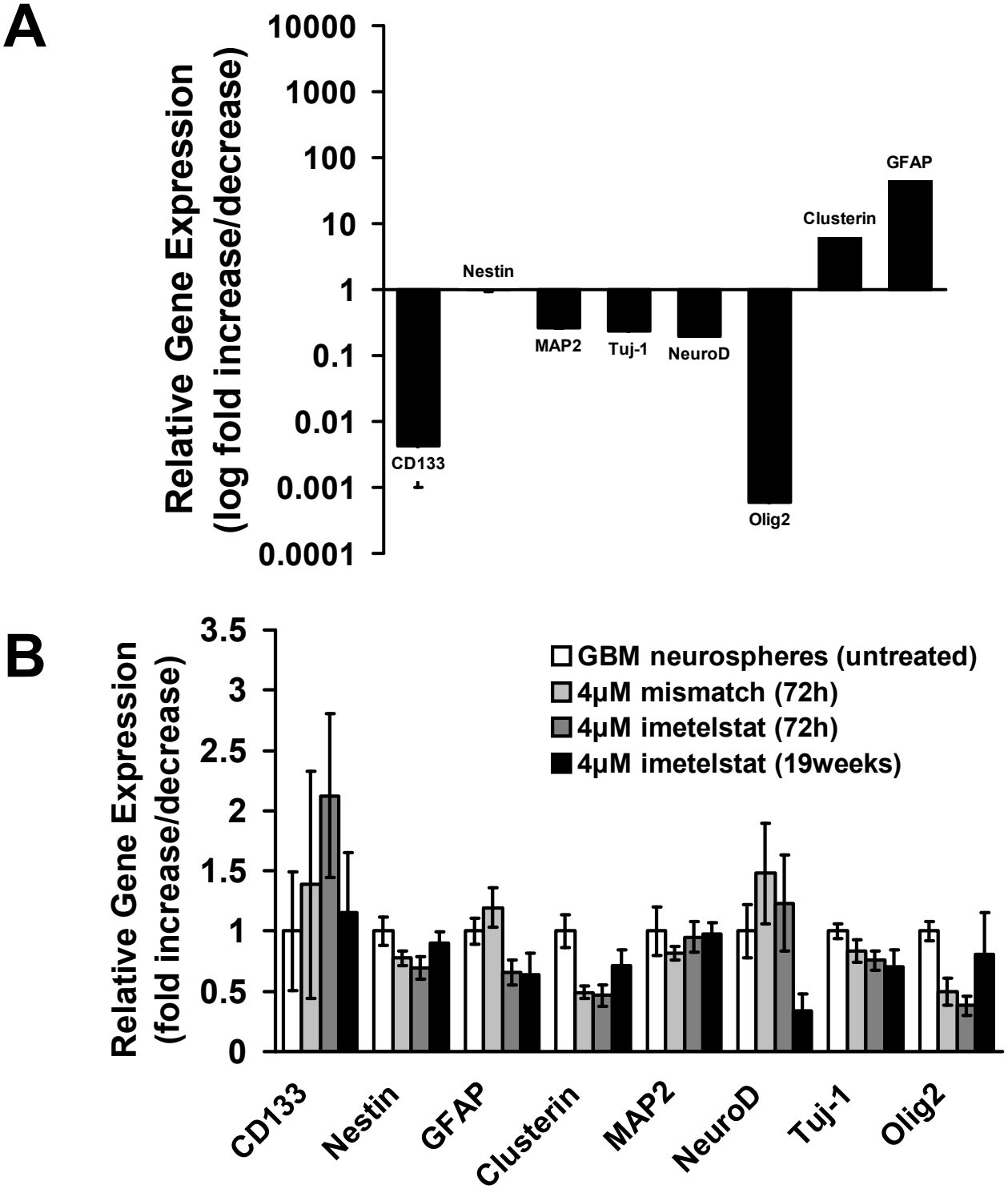
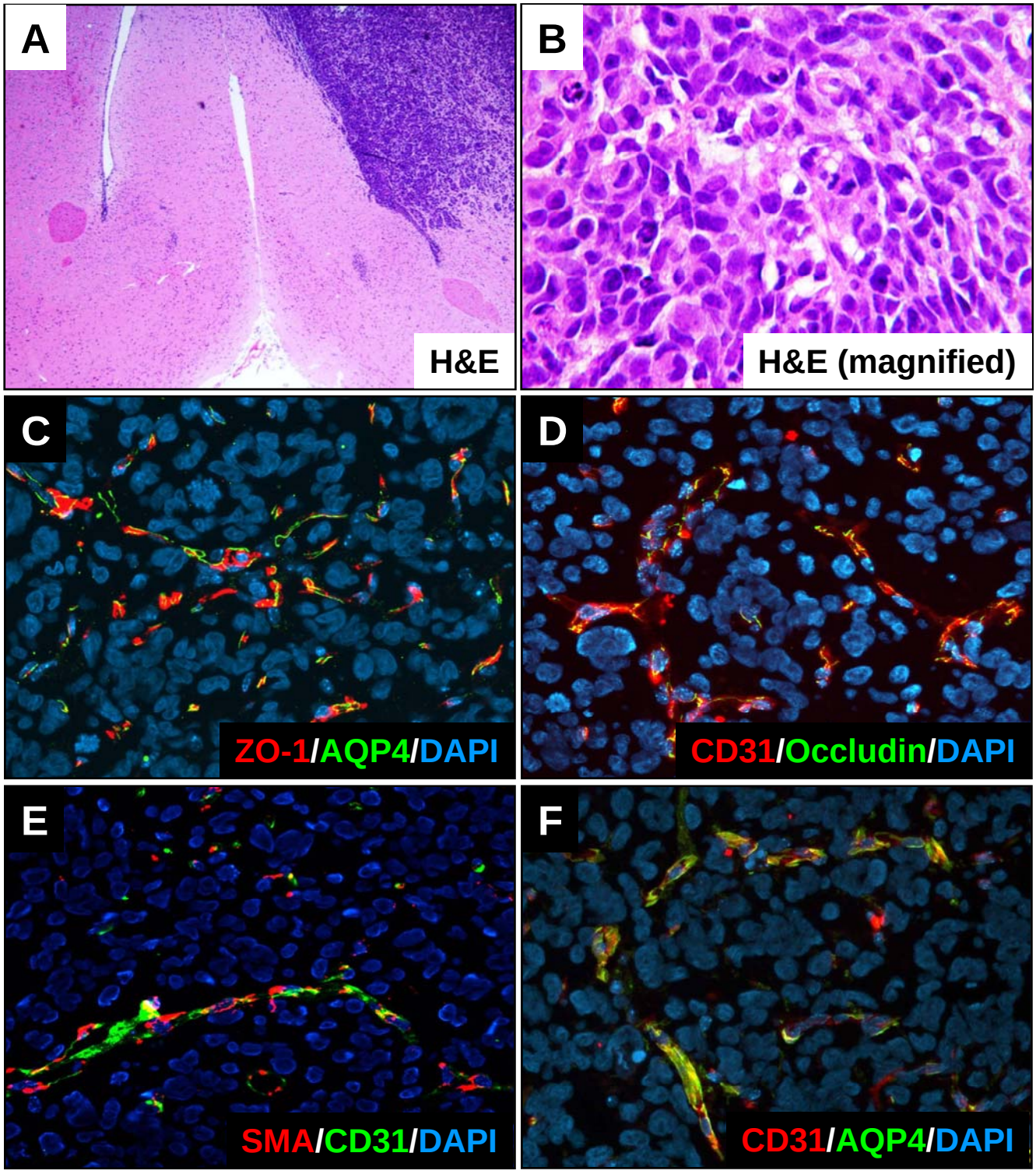


Supplemental Figure 1. Imetelstat treatment does not induce differentiation in GBM neurospheres. A. The GBM tumor-initiating cells have the capacity to differentiate and grow as a monolayer in media supplemented with 2% FBS. qRT-PCR analysis shows the up-regulation of glial markers and the down-regulation of neural progenitor markers. The gene expression data is plotted on a logarithmic scale; **B.** qRT-PCR for CD133, nestin and several differentiation markers in GBM cells treated for short term (72h) or long term (19 weeks) with imetelstat. The data is normalized to GAPDH expression.



Supplemental Figure 2. GBM tumor-initiating cells implanted intracranially in immunodeficient mice develop tumors that preserve an intact blood-brain barrier. A,B. H&E stained orthotopic xenograft sections with typical glioblastoma pathology; **F, G, H, I.** Immunofluorescent staining shows tight junctions proteins (ZO-1 and Occludin) associated with CD31 labeled endothelial cells; CD31 positive cells were also associated with smooth muscle actin (SMA) positive pericytes as well as Aquaporin-4 (AQP4) positive processes indicative of astrocyte foot process. These 'normal' vascular structures are seen surrounded by the DAPI (blue) labeled nuclei of tumor cells.