U118

In a study, both U118 cell and GSC23 cell exhibited good printability and cell proliferation. Compared with 3D-U118, 3D-GSC23 had a greater ability to form cell spheroids, to secrete VEGFA, and to form tubule-like structures in vitro. More importantly, 3D-GSC23 cells had a greater power to transdifferentiate into functional endothelial cells, and blood vessels composed of tumor cells with an abnormal endothelial phenotype was observed in vivo. In summary, 3D bioprinted hydrogel scaffold provided a suitable tumor microenvironment (TME) for glioma cells and GSCs. This bioprinted model supported a novel TME for the research of glioma cells, especially GSCs in glioma vascularization and therapeutic targeting of tumor angiogenesis [1].

1)
Wang X, Li X, Ding J, et al. 3D bioprinted glioma microenvironment for glioma vascularization [published online ahead of print, 2020 Aug 10]. J Biomed Mater Res A. 2020;10.1002/jbm.a.37082. doi:10.1002/jbm.a.37082