Supporting Information

for

Gold nanoparticles disrupt tumor microenvironment - endothelial cell crosstalk to inhibit angiogenic phenotypes in vitro

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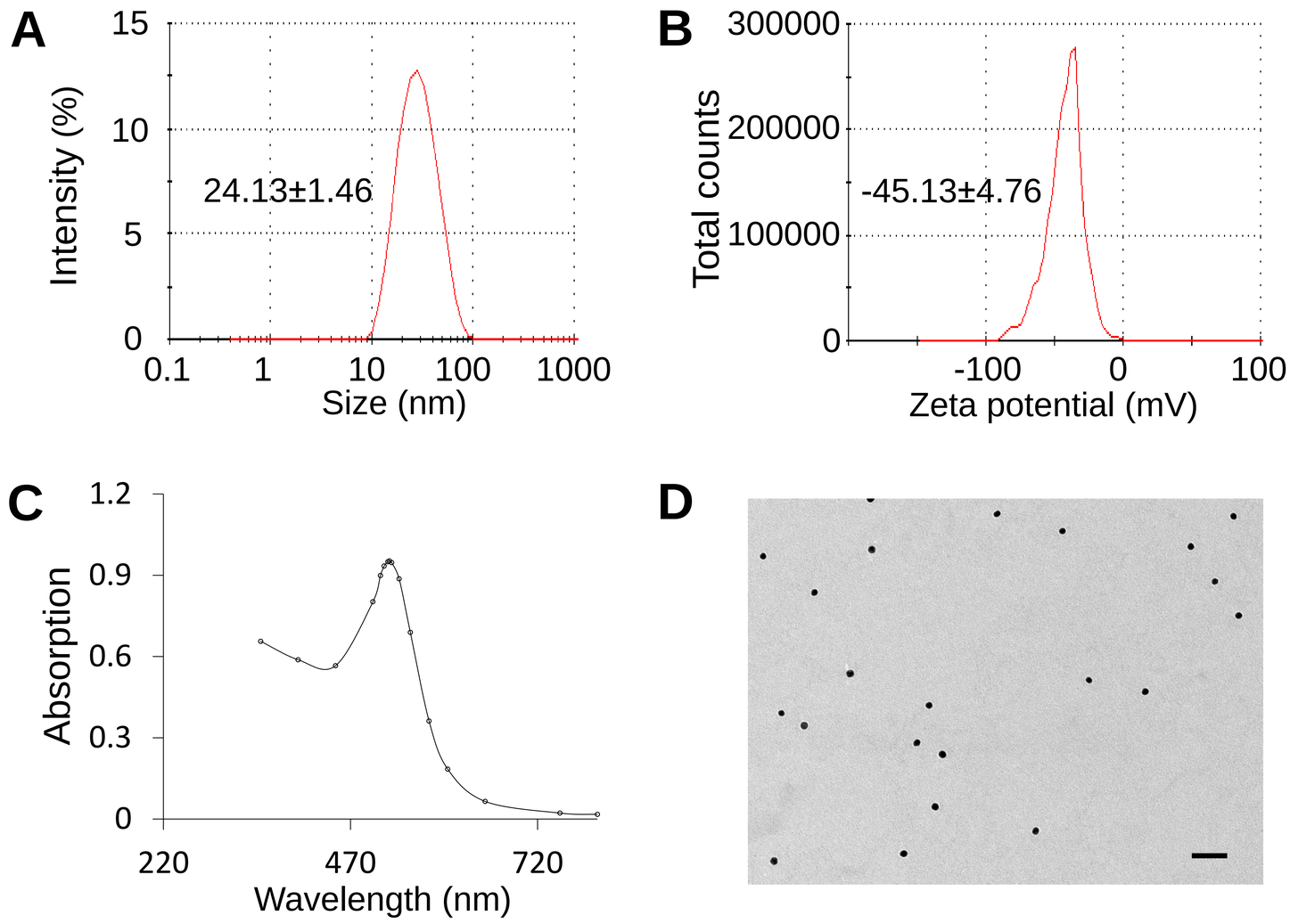

Figure S1. Physicochemical characterizations of AuNPs. The size (A) and zeta potential (B) of as synthesized AuNPs were measured by means of dynamic light scattering microscope (DLS). The UV-Visible spectrum of as synthesized AuNPs showed surface plasmon resonance (SPR) band at around 522 nm (C). A spherical shape of ~20 nm in diameter of as synthesized AuNPs was observed by transmission electron microscopy (TEM). Scale bar 100 nm.

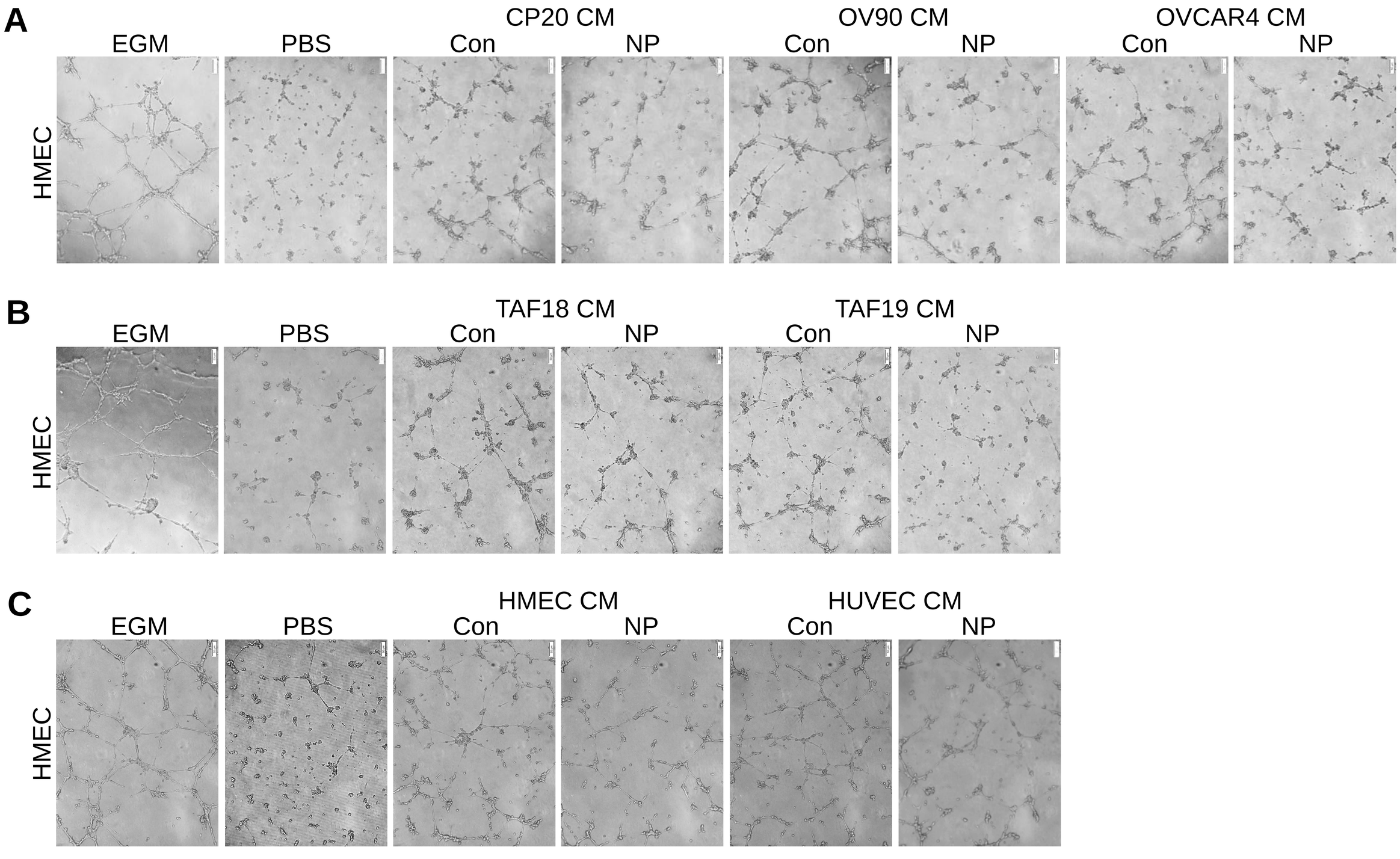

Figure S2. Tube formation of HMEC treated with CM from CC, CAF or EC cells. Typical images of tube formation of HMEC treated with CM of (A) CCs; (B) CAFs or (C) ECs. Con: control, NP: AuNPs. Scale bar: 50 μm.

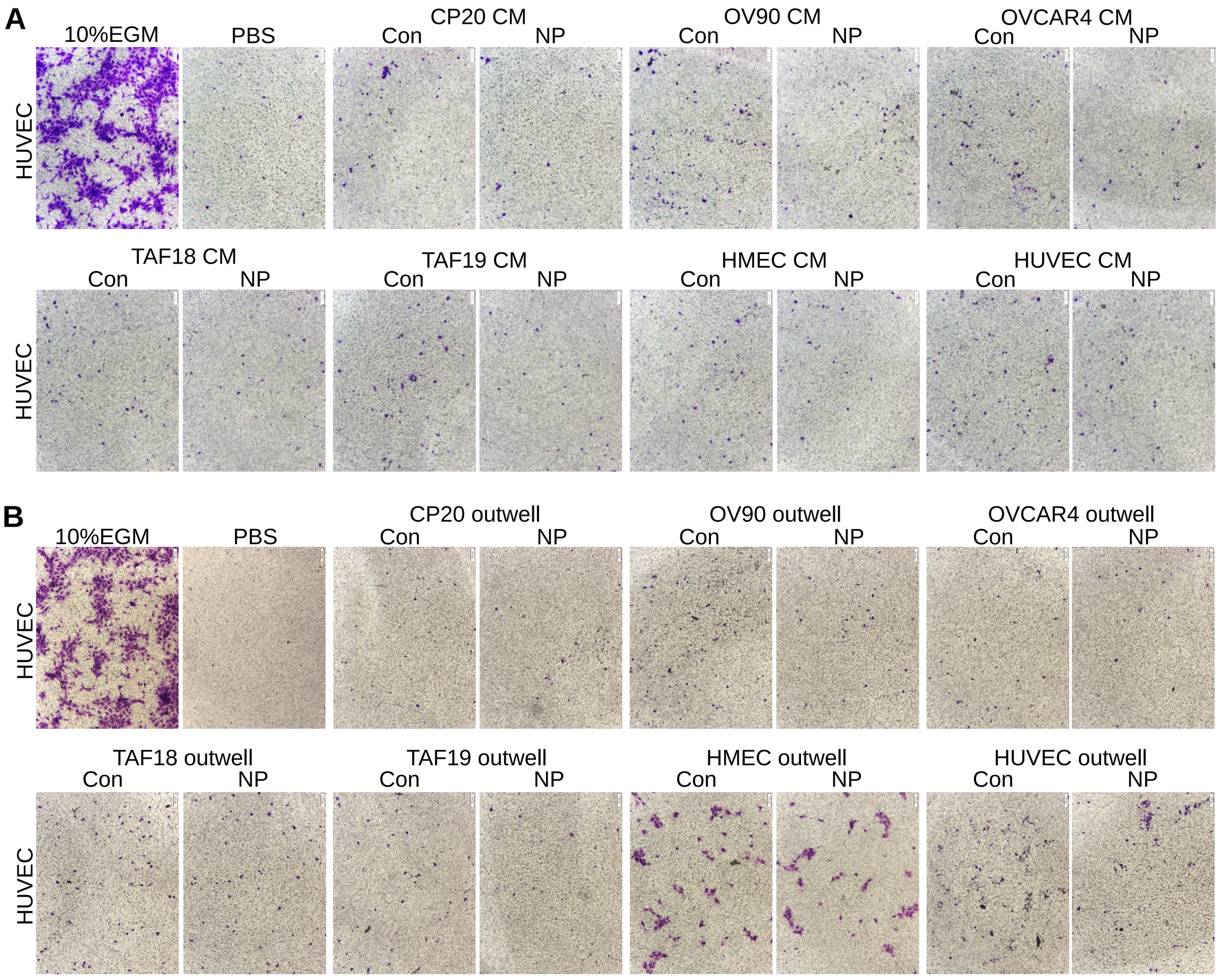

Figure S3. Migration of HUVEC treated with cell CM, or co-cultured with cells treated with AuNP. Typical images of migration of HUVEC (A) treated with CM from CCs, CAFs or ECs; (B) co-cultured with CCs, CAFs or ECs treated with AuNPs. Scale bar: 100 μm.

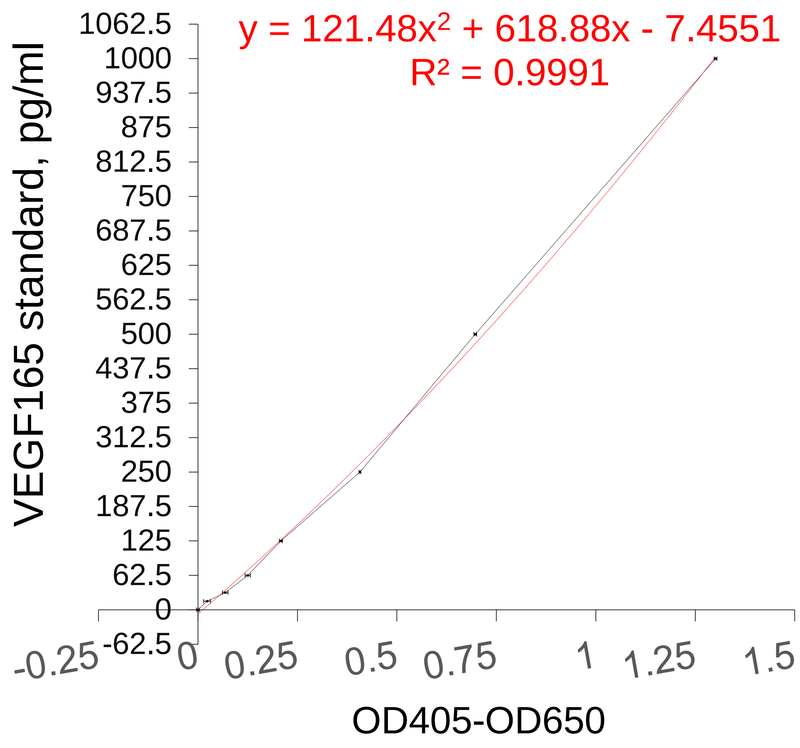

Figure S4. Typical standard curve for VEGF165 ELISA quantification and the calculation of sample VEGF165. Concentrations of standard VEGF165 used were 1000, 500, 250,125, 62.5, 31.25, 15.625 and 0 pg/ml, and the corresponding OD405-OD650 readings are between 1.487 (1000 pg/ml) to 0.179 (0 pg/ml). After average background value is subtracted from all readings, a standard curve (black line) is made using Excel/Scatter. A polynomial trend line (red) was then generated with R-squared value (red) and equation (red. x: OD405-OD650, y, concentration of VEGF165). Concentration of all the tested samples were calculated using the equation. Experiments were performed in triplicates. Horizontal bar: SEM.