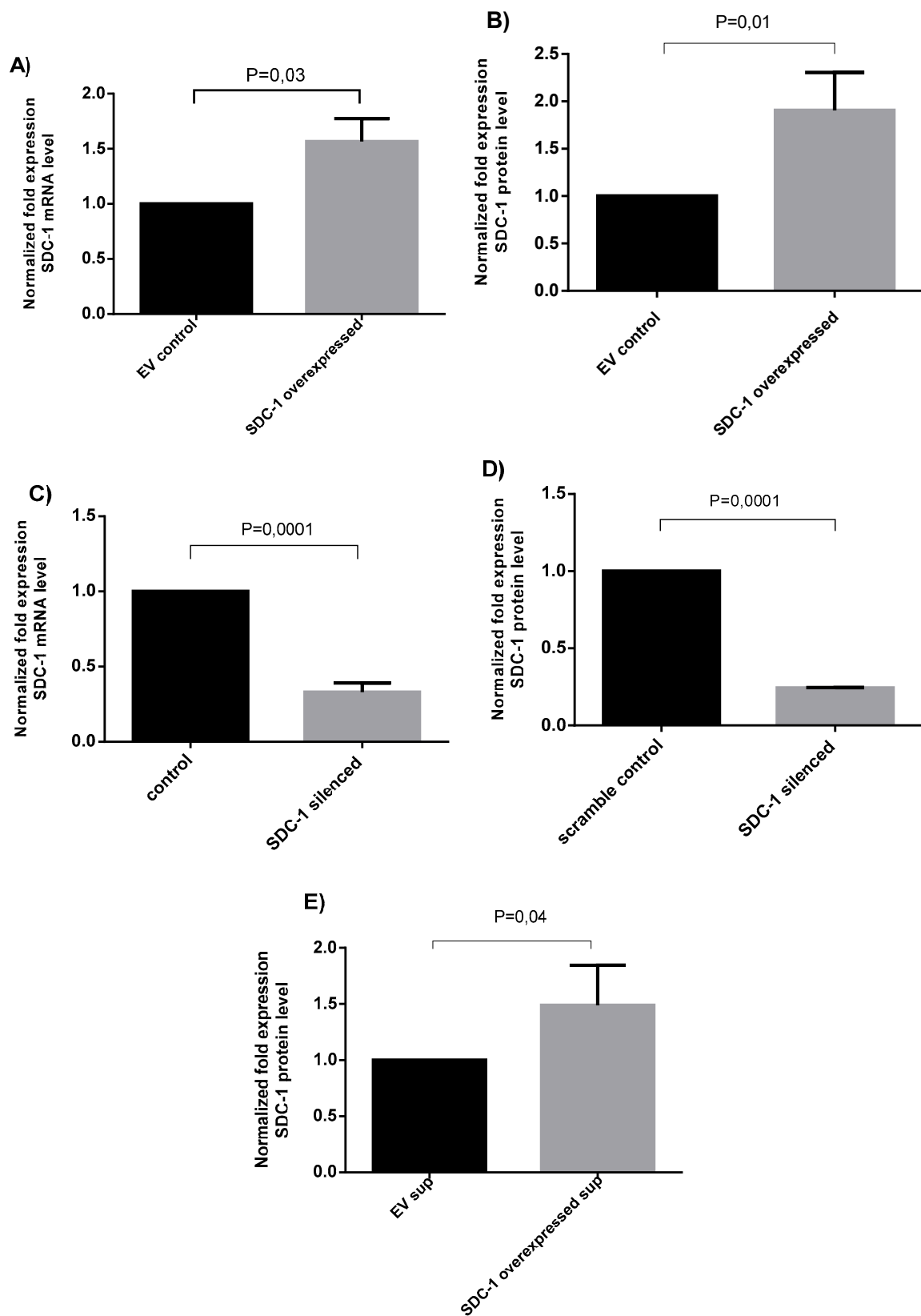
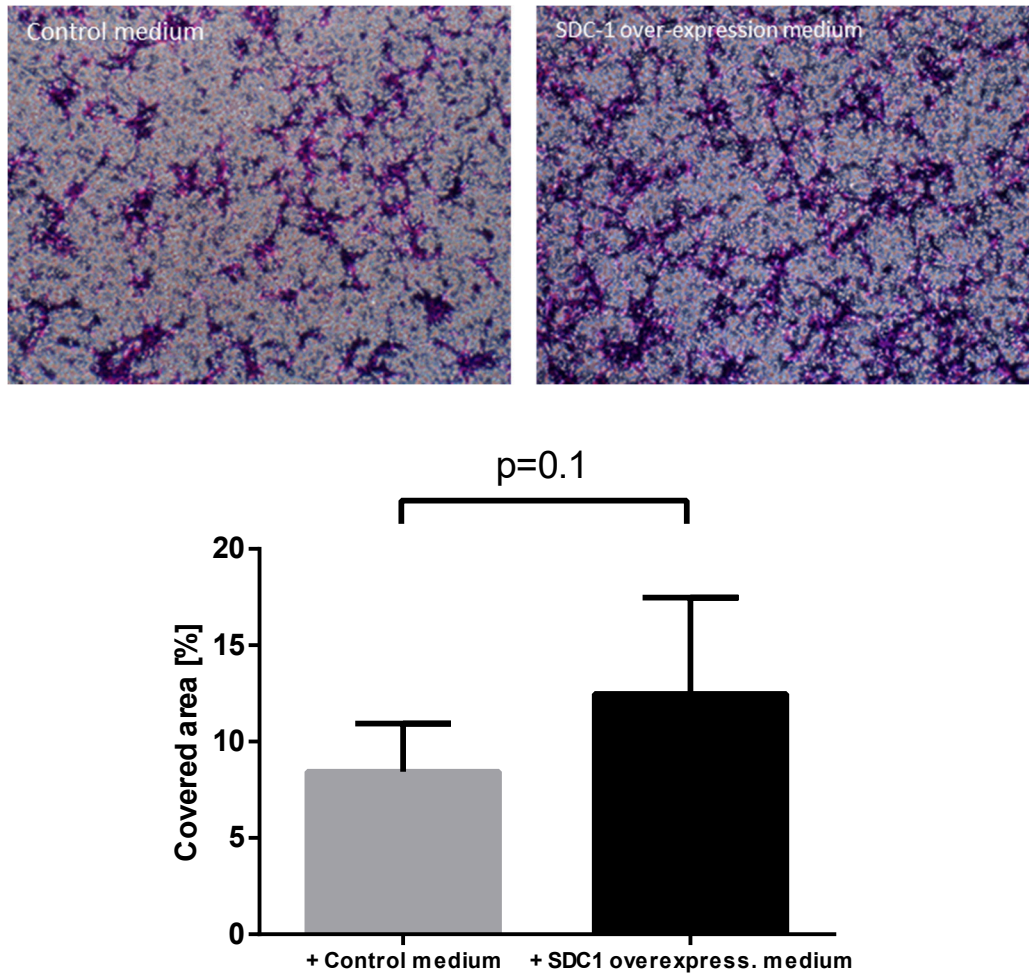

Supplemental Materials: Syndecan-1 Overexpressing Mesothelioma Cells Inhibit Proliferation, Wound Healing, and Tube Formation of Endothelial Cells

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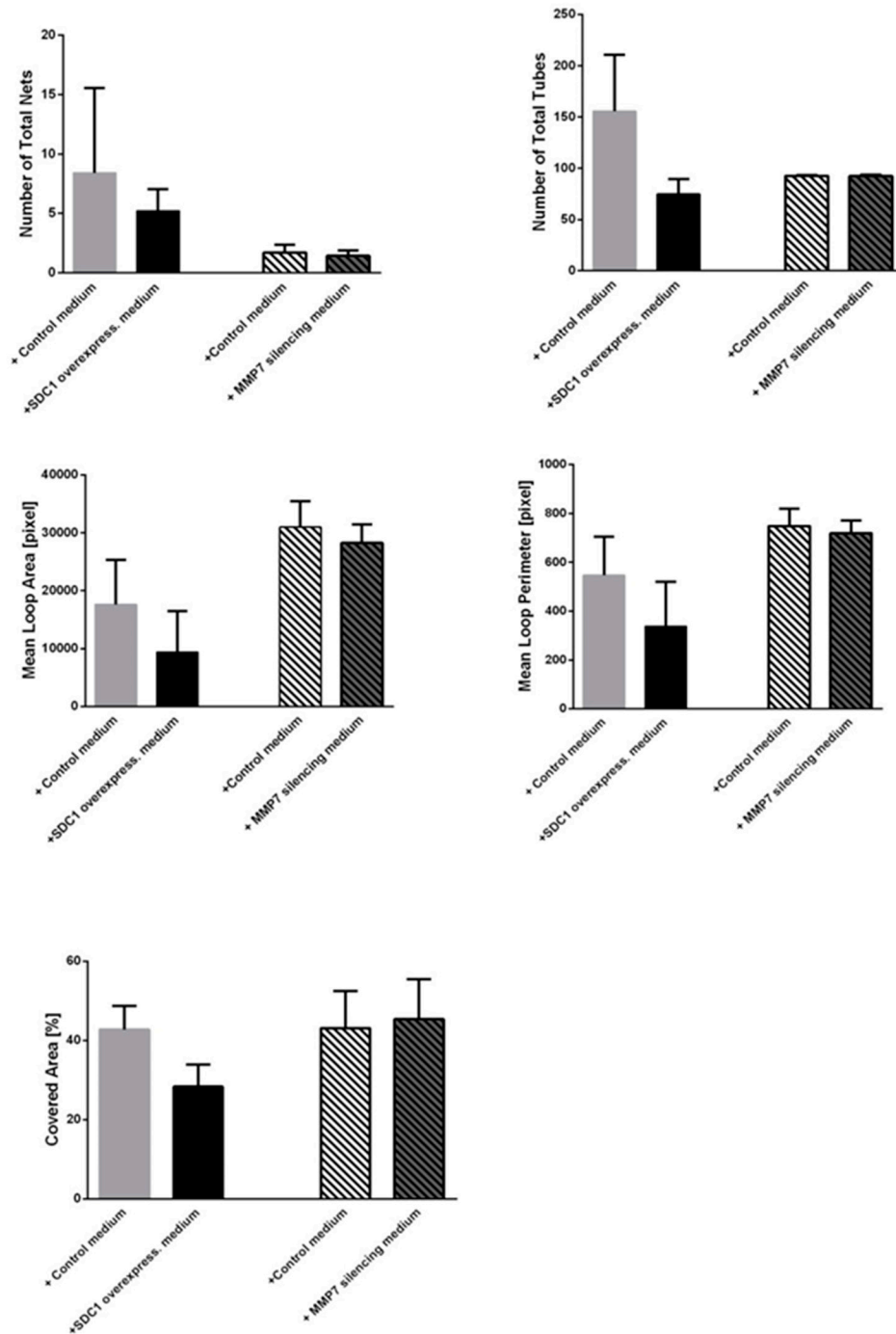


Supplementary Figure S1. Syndecan-1 (SDC-1) mRNA and protein expression level upon SDC-1 overexpression and silencing. SDC-1 mRNA level in SDC-1 overexpressed cells compared with empty vector (EV) control (A). The expression of SDC-1 was detected by qPCR and GAPDH was used as an internal control. SDC-1 protein level measured by ELISA in SDC-1 overexpressing cells compared with the EV control (B), SDC-1 mRNA level measured by qPCR in SDC-1 silenced

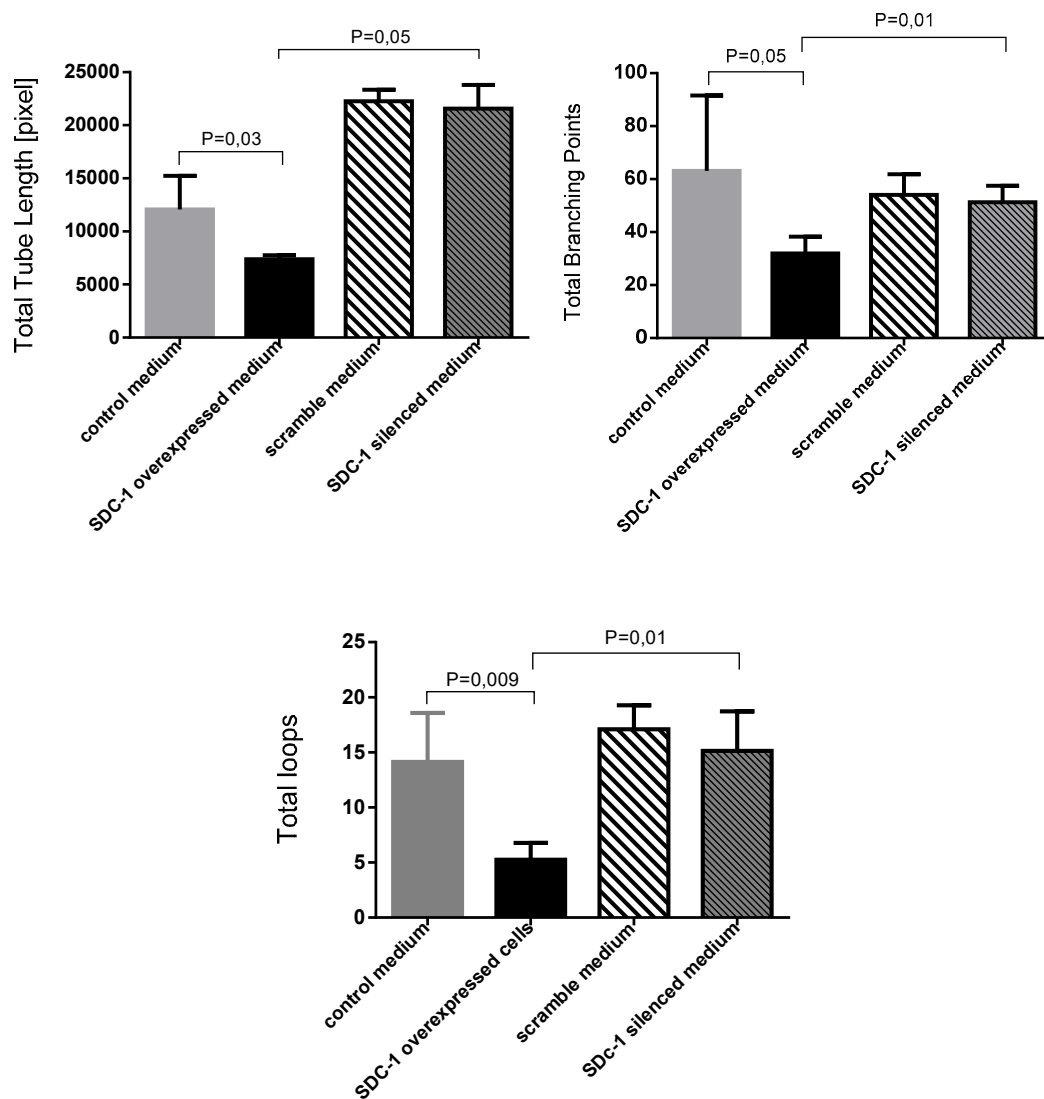
cells compared with the scrambled control (C), SDC-1 protein level measured by Luminex in SDC-1 silenced cells compared with scrambled control (D) and shed SDC-1 protein level in SDC-1 overexpressing cells supernatant (E). Columns represent Mean \pm SEM of three independent experiments and data were analyzed with t-test to evaluate differences in SDC-1 expression ($p < 0.05$).



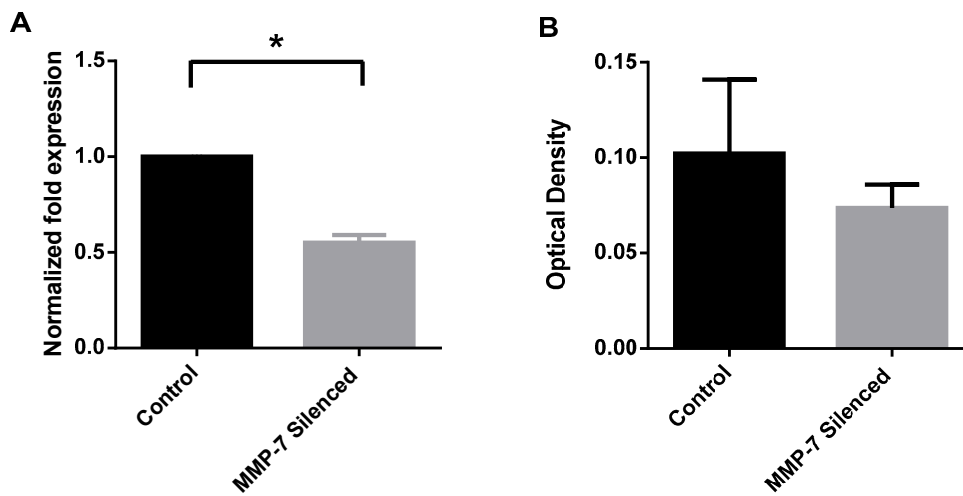
Supplementary Figure S2. Chemotactic directional movement of HUVEC cells toward the conditioned medium of malignant mesothelioma cells overexpressing SDC-1. Representative pictures of directional movement of endothelial cells. The percentage of total image area covered by HUVEC cells was determined by image analysis. Values show means of three independent experiments (\pm SD) conducted in duplicates. A paired t-test was performed to test the statistical significance at $p < 0.05$.



Supplementary Figure S3. Number of total nets and total tubes; mean loop area and perimeter, and percentage of covered area by tubes tended to be lower in HUVEC cells incubated with conditioned medium from SDC-1 over-expressing cells compared to corresponding controls. However, neither of these features did change when MMP7 was silenced. Two-tailed student's *t*-test was performed to test the statistical significance, where $p < 0.05$. Three independent experiments were performed. Values are mean \pm SEM.



Supplementary Figure S4. Number of total tube length, total branching points and total loops are not significantly affected in HUVEC cells treated with conditioned medium from SDC-1 silenced cells compared to HUVEC cells treated with conditioned medium from negative silencer control (Sc). Conditioned medium from SDC-1 silenced malignant mesothelioma cells does not inhibit tube formation of HUVEC cells. A) Total tube length B) Total branching points C) Total loops. Two-tailed student's *t*-test was performed to test the statistical significance, where $p < 0.05$. Three independent experiments were performed. Values are mean \pm SEM.



Supplementary Figure S5. MMP-7 expression level of malignant mesothelioma cells after MMP7 silencing and its effect of SDC-1 shedding. mRNA levels of MMP-7 after silencing compared to scrambled control (A). Shed SDC-1 levels in supernatant from MMP-7 silenced malignant mesothelioma cells compared to scrambled control (B). Shed SDC-1 level was measured by ELISA. Values show means of three independent experiments (\pm SD). Two-tailed student's *t*-test was performed to test the statistical significance, where $p < 0.05$. Three independent experiments were performed. Values are mean \pm SEM.