Supplementary Material

Figure S1: Temporal course of PL-MSCs fibrin degradation and FA detection postfibrinolysis. (a) Macroscopical evaluation of PL-MSCs fibrinolysis in a temporal course. Note that the degraded zones were more apparent at 72 h. Bars represent 2 mm. (b) Cells were cultured in fibrin hydrogels for 3 days, fixed and stained for nuclei (blue), F-actin (red), and vinculin (green). PL-MSCs degraded fibrin, dropped to the bottom and generated a monolayer over plastic tissue culture. These cells had stress fibers and expressed vinculin in FAs. Representative epifluorescence micrographs are shown. PL-MSCs, placenta mesenchymal stem cells; BM-MSCs, bone marrow mesenchymal stem cells; WJ-MSCs, Wharton's jelly mesenchymal stem cells. Bars represent 100 μm.

Figure S2: Integrin αV detection in PL-MSCs and BM-MSCs cultured in fibrin hydrogels for 48 h. Cells were fixed and stained for nuclei (blue), F-actin (red), vinculin (magenta) and integrin αV (green). Note, that in addition to what can be observed in Figure 5 and Videos S1-3, integrin αV was also detected in certain BM-MSCs and not in some from PL-MSCs. Representative confocal micrographs are shown. PL-MSCs, placenta mesenchymal stem cells; BM-MSCs, bone marrow mesenchymal stem cells. Bars represent 50 μm.

Figure S3: Outlines from degraded zones in fibrin hydrogels. Black lines delimit degraded zones, and the red points represent the respective numbers of these zones. PL-MSCs, placenta mesenchymal stem cells; BM-MSCs, bone marrow mesenchymal stem cells; WJ-MSCs, Wharton's jelly mesenchymal stem cells; TA, tranexamic acid; Ap, aprotinin.

Video S1: 3D reconstruction of placenta mesenchymal stem cells cultured in fibrin hydrogel. Cells were fixed and stained for nuclei (blue), F-actin (red), vinculin (magenta) and integrin αV (green). 3D reconstruction is displayed in Figure 5. A 197.1MB video was created from a 2.7MB file using the codec H.264.

Video S2: 3D reconstruction of bone marrow mesenchymal stem cells cultured in fibrin hydrogel. Cells were fixed and stained for nuclei (blue), F-actin (red), vinculin (magenta) and integrin αV (green). 3D reconstruction is displayed in Figure 5. A 192.6MB video was created from a 2.7 MB file using the codec H.264.

Video S3: 3D reconstruction of Wharton's jelly mesenchymal stem cells cultured in fibrin hydrogel. Cells were fixed and stained for nuclei (blue), F-actin (red), vinculin (magenta) and integrin αV (green). 3D reconstruction is displayed in Figure 5. A 192.6MB video was created from a 2.7MB file using the codec H.264.