Supporting Information

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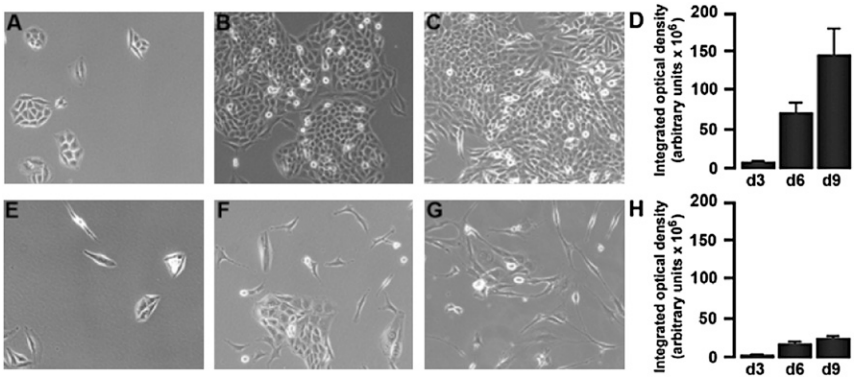

Fig. S1. Effect of VEGF-A knock down by shRNA on MC3T3.E1 cell number. MC3T3 cells were cultured in differentiation medium with ACTH (10^{-8} M). Shown are cells transfected with empty vector (*A–D*) or VEGF-A shRNA (*E–H*) at 3 (*Left*, 3), 6 (*Middle*, 6), or 9 (*Right*, 9) days. Cell density was assessed by digitizing the images and using National Institutes of Health Image to calculate an integrated optical density. Results are expressed as mean ± SEM of duplicate experiments.

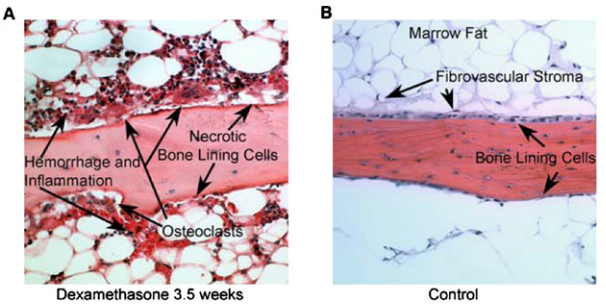

Fig. S2. Initial damage in glucocorticoid-induced osteonecrosis due to microvascular necrosis. Hematoxylin- and eosin-stained sections at high power (300 × 180 μm) of bones from a methylprednisolone acetate-treated (*A*) or untreated rabbits (*B*). The border of rapidly resorbed bone is consistent with early necrosis of perivascular tissue and capillaries mixed with extravasated blood and inflammatory cells. In addition, there are several solitary osteoclasts, as commonly seen in fractured bone adjacent to degenerating marrow. Bone adjacent to these regions also includes necrotic osteons, as demonstrated previously by terminal deoxynucleotidyl transferase labeling (1).

1. Eberhardt AW, Yeager-Jones A, Blair HC (2001) Regional trabecular bone matrix degeneration and osteocyte death in femora of glucocorticoid-treated rabbits. *Endocrinology* 142: 1333–1340.