

**SUPPLEMENTARY FIG. S5.** Implantation of the collagen hydrogels without HDFs did not stimulate any inflammatory response and or generate blood vessel production. **(A)** Top view of an implant on chorioallantoic membrane (CAM). Cross sections of the implants of the collagen hydrogel **(B)** and the collagen–hydrogel **(C)** stained with hematoxylin and eosin (H&E), respectively.