## **Supporting Information**

## Bionic, porous, functionalized hybrid scaffolds with vascular endothelial growth factor promote rapid wound healing in Wistar albino rats

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Fig. S1. Enlarged FTIR spectra of the hybrid scaffolds.

**Fig. S2.** SEM images showing the surface morphology of (a) and (b) 100/0 and, (c) and (d) 100/100 wt.% C/PDALB hybrid scaffolds.



**Fig. S3.** Digital images of as-prepared freeze dried hybrid scaffolds showing the surface and cross section morphology.



**Fig. S4.** Individual fluorescence microscopic images of fluorescein diacetate stained Swiss 3T6 mouse fibroblast cells on the 100/0, 100/100 wt.% C/PDALB and 100/100 wt.% C/PDALB loaded with VEGF hybrid scaffolds at 24 h culture period.



**Fig. S5.** Individual fluorescence microscopic images of fluorescein diacetate stained Swiss 3T6 mouse fibroblast cells on the 100/0, 100/100 wt.% C/PDALB and 100/100 wt.% C/PDALB loaded with VEGF hybrid scaffolds at 72 h culture period.



**Fig. S6.** Individual photomicrographs of control group after Masson's trichrome staining at (a) 4<sup>th</sup>, (b) 8<sup>th</sup> and (c) 12<sup>th</sup> day of granulation tissue. Blue colour stained region in the images indicates the collagen formation.



**Fig. S7.** Individual photomicrographs of 100/0 wt.% C/PDALB hybrid scaffold treated group after Masson's trichrome staining at (a) 4<sup>th</sup>, (b) 8<sup>th</sup> and (c) 12<sup>th</sup> day of granulation tissue. Blue colour stained region in the images indicates the collagen formation.



**Fig. S8.** Individual photomicrographs of 100/100 wt.% C/PDALB hybrid scaffold treated group after Masson's trichrome staining at (a) 4<sup>th</sup>, (b) 8<sup>th</sup> and (c) 12<sup>th</sup> day of granulation tissue. Blue colour stained region in the images indicates the collagen formation.



**Fig. S9.** Individual photomicrographs of 100/100 wt.% C/PDALB loaded with VEGF hybrid scaffold treated group after Masson's trichrome staining at (a) 4<sup>th</sup>, (b) 8<sup>th</sup> and (c) 12<sup>th</sup> day of granulation tissue. Blue colour stained region in the images indicates the collagen formation.



**Fig. S10.** Individual photomicrographs of control group after haematoxylin and eosin staining at (a) 4<sup>th</sup>, (b) 8<sup>th</sup> and (c) 12<sup>th</sup> day of granulation tissue. F and M refer to fibroblasts and macrophages, respectively. Schematic shows the structural morphology of fibroblasts, inflammatory cells and blood vessels.



**Fig. S11.** Individual photomicrographs of 100/0 wt.% C/PDALB hybrid scaffold treated group after haematoxylin and eosin staining at (a) 4<sup>th</sup>, (b) 8<sup>th</sup> and (c) 12<sup>th</sup> day of granulation tissue. F and M refer to fibroblasts and macrophages, respectively. Schematic shows the structural morphology of fibroblasts, inflammatory cells and blood vessels.



**Fig. S12.** Individual photomicrographs of 100/100 wt.% C/PDALB hybrid scaffold treated group after haematoxylin and eosin staining at (a) 4<sup>th</sup>, (b) 8<sup>th</sup> and (c) 12<sup>th</sup> day of granulation tissue. F and M refer to fibroblasts and macrophages, respectively. Schematic shows the structural morphology of fibroblasts, inflammatory cells and blood vessels.



**Fig. S13.** Individual photomicrographs of 100/100 wt.% C/PDALB loaded with VEGF hybrid scaffold treated group after haematoxylin and eosin staining at (a) 4<sup>th</sup>, (b) 8<sup>th</sup> and (c) 12<sup>th</sup> day of granulation tissue. F, M and BV refer to fibroblasts, macrophages and blood vessels, respectively. Schematic shows the structural morphology of fibroblasts, inflammatory cells and blood vessels.

