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Supporting Information

Controlled therapeutic cholesterol delivery to cells for proliferation and differentiation of keratinocytes

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Fig. S1. Accumulation of labeled cholesterol in cells not having direct contact with the scaffold. a CLSM images of HaCaT cells on glass in the presence of a PI scaffold with added

cholesterol, after 5 days of culture. **b** Labeled cholesterol (orange) stained by CholEsteryl BODIPY; **c** the nuclei were stained with DAPI (blue), and **d** the actin filaments with Alexa Fluor 488 Phalloidin (green). Scale bar = $20 \mu m$.



Fig. S2. Cell morphology of cells growing on scaffolds. CLSM images of HaCaT cells on PI fibers (a) and on PI+Chol fibers (b) after 7 days of culture. The nuclei were stained withDAPI (blue), and the actin filaments with Alexa Fluor 488 Phalloidin (green). Scale bar = $100 \mu m$.