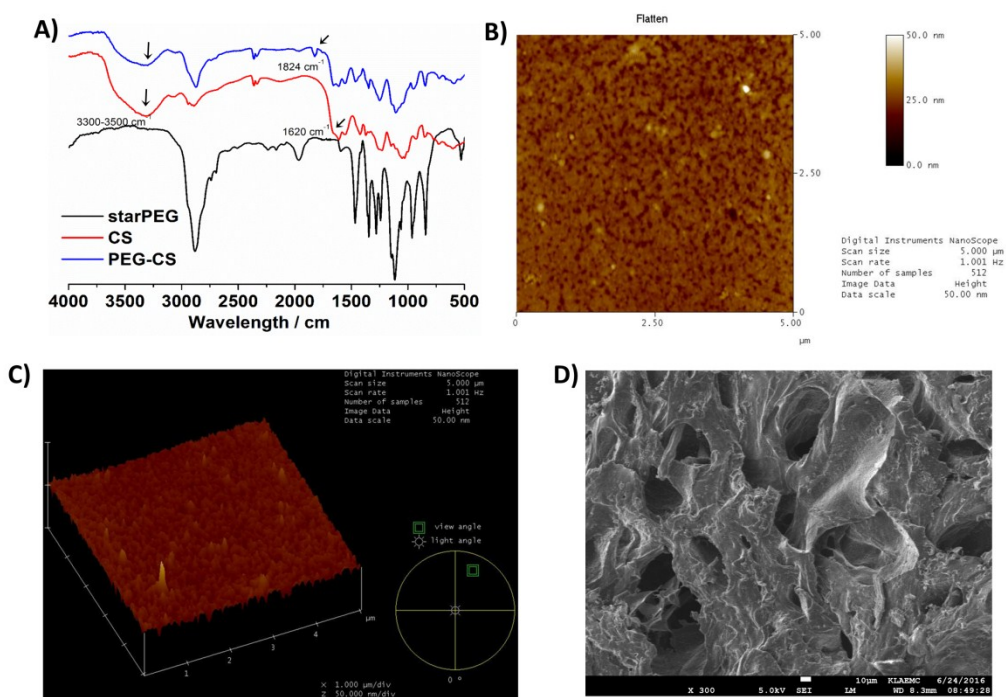


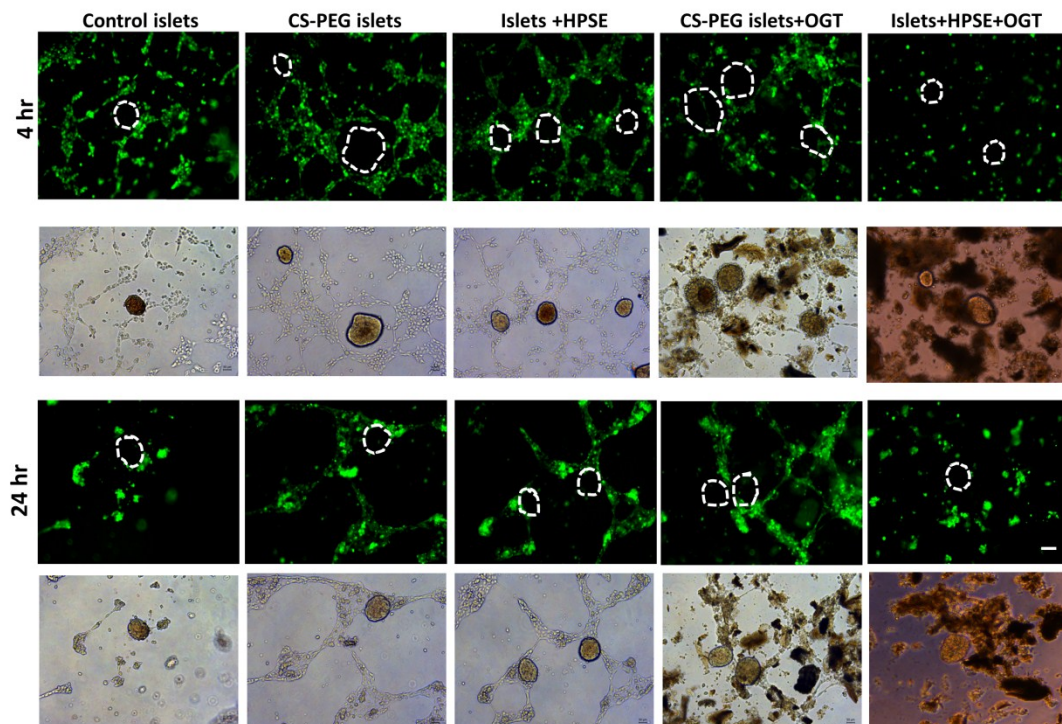
Supplementary Figure S1



Supplementary Figure S1 Chemical characteristics of CS-PEG.

(A) Infrared spectrum of PEG-(NH₂)₈, CS and CS-PEG in dried state; **(B&C)** AFM images obtained of dry state CS-PEG that had been adsorbed onto amine-functionalized glass chips. The images are 5×5 μm in size and the z-range is 50 nm; **(D)** SEM image of CS-PEG in dried state.

Supplementary Figure S2



Supplementary Figure S2 CS-PEG surface engineering facilitates *in situ* islet revascularisation.

Bright field images and images taken under an inverted fluorescence microscope of matrigel tube formation with CFSE-labelled MS1 cells (shown in green) and CS-PEG islets or naked control islets are presented here. Scale bar=100 μ m. White dotted lines indicate location of the pancreatic islets.