

Supporting Information

Titanium Nanotubes with Tunable Diameters Re-establish Macrophage Homeostasis by Regulating Endoplasmic Reticulum Stress in Type II Diabetes

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Table S1. Primers used for real-time polymerase chain reaction

	Forward primer sequence (5'–3')	Reverse primer sequence (3'–5')
iNOS	GCAGAGATTGGAGGCCTTGTG	GGGTTGTTGCTGAACTTCCA GTC
IL-1 β	GCTTGGAAGCAATCCTTAATCT	CTATGGCAACTGTCCCTGAAC
IL-6	TGGAGTTCCGTTTCTACCTGG	GGATGGTCTTGGTCCTTAGCC
Arg1	AAGAAAAGGCCCATTCACCT	CACCTCCTCTGGTGTCTTCC
IL-10	ATGGCCCAGAAATCAAGGAGC	GAAGATGTCAAACATTCAT GGCC
IL-4	CTTT GAACCAGGTCACAG	CTCGTTCTCCGTGGTGTT
CD206	ACTGCGTGGTGATGAAAGG	TAACCCAGTGGTTGCTCACA
CD86	CGAACACTATTTGGGCGCAG	CAAAC TGGGGCTGCGAAAAA
ALP	GAAGTCCGTGGGCATCGT	CAGTGCGGTTCCAGACATAG
Runx2	CCCAACTTCCTGTGCTCC	AGTGAAACTCTTGCCTCGTC
OCN	GGCAGTAAGGTGGTGAATAG	GTCCTGGAAGCCAATGTG
IRE1 α	AGTGAATCTGGGGATGTCTTGT	AAATAGCGTAGGGTCTCCAC AG
Xbp1	TCATGGGCTTGTGATTGAGA	AGAGGCAACAGCGTCAGAAT
ATF6	TTCAACTTCAGACCCCTGGA	GCAATATCTGAACCCGTGCT
GRP78	CAAGAACCAACTCACGTCCA	TTTCTTCTGGGGCAAATGTC
CHOP	CCTAGCTTGGCTGACTGAGG	CTGCTCCTTCTCCTTCATGC
GAPDH	TGCTGAGTATGTCGTGGAG	GTCTTCTGAGTGGCAGTGAT

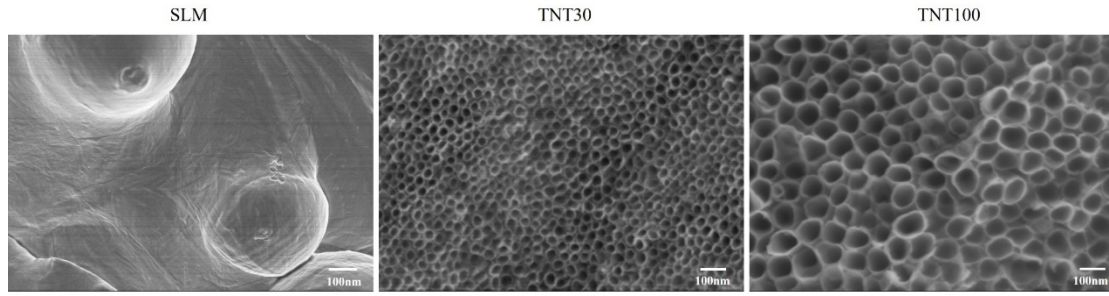


Figure S1. SEM of SLM, TNT30 and TNT100 surface (scale bar = 100 nm). Unmelted titanium particles and spheres were seen on SLM surface. TNTs with approximately 30 nm and 100 nm in diameter were respectively established on TNT30 and TNT100 surface.

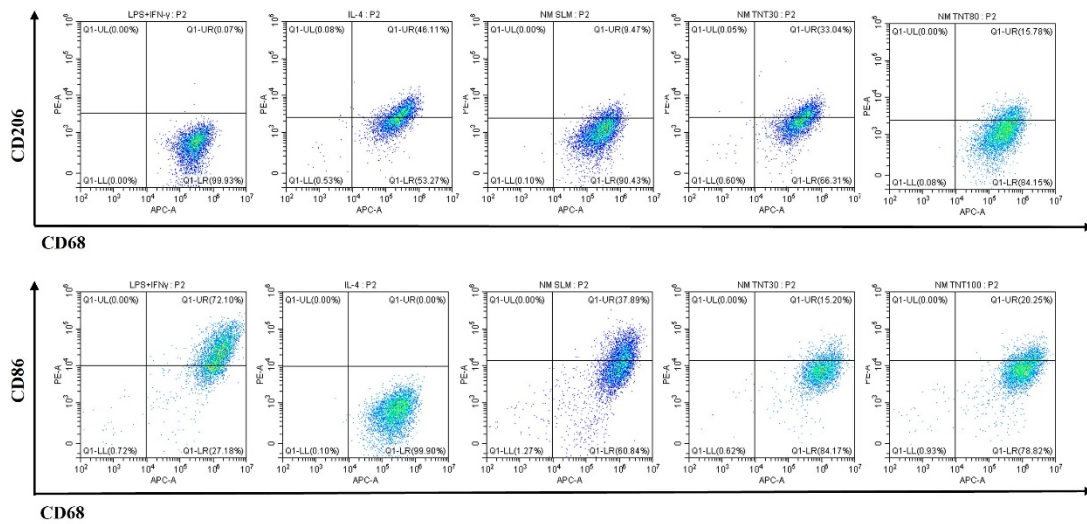


Figure S2. Representative flow cytometry results of CD68, CD206 and CD86 in NM-BMDMs. The positive expression of CD68 (surface marker of macrophage) were more than 99%.

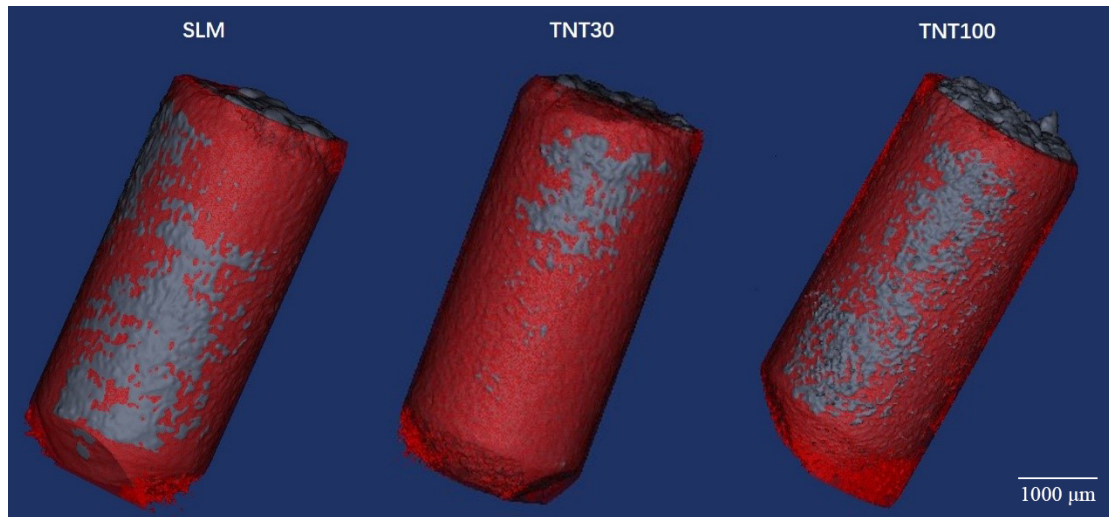


Figure S3. Radiographs and 3D reconstruction of bone tissue around implants by micro-CT after 4 weeks in diabetic rats (scale bar = 1000 μm).