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Supporting information

Surface engineering of titanium implants with enzyme-triggered antibacterial property and enhanced osseointegration *in vivo*

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Sample	Young's moduli (GPa)	Hardness(MPa)
(Chi-c/HA-c)₅	3.09	32.54
(Chi-c/HA-c) ₂₀	2.0	21.71
(Chi-c/HA-c) ₃₀	1.2	19.99

Table S1. Young's moduli and hardness of coatings with different layers number



Figure S1. The amount of drugs loaded in TNT with different soaking times.



Figure S2. Different Van cumulative release curves of TNT@Van-LBLc substrates with different thicknesses under *S. aureus* bacterial strain (5×10⁸ cfu in 1 mL MHB medium)

at 37 °C for 24 h.