



Figure. S1. ICG-001 blocked osteogenic function via inhibiting Wnt/ β -catenin signaling pathway whether Ti was added or not. (A) Western blot analysis of expression levels of OCN, Runx2, ALP, Osterix, Axin-2 and β -catenin. (B-G) The relative grey levels. (H-M) qRT-PCR analysis of the mRNA expression levels of OCN, Runx2, ALP, Osterix, Axin-2 and β -catenin. The concentration of titanium particles and ICG-001 was 5 µg/cm² and 20 µM, respectively. Data are presented as means ± SD. n=6 or 9 in western blot and in qRT-PCR, respectively. **P*<0.05 and ***P*<0.01,

compared with the control group. $^{\&}P < 0.05$ and $^{\&\&}P < 0.01$, compared with the Ti+ICG-001 group.



Figure. S2

Figure. S2. ICG-001 inhibited osteogenic differentiation and mineralization whether Ti was added or not. (A) ALP staining. (B) The number of ALP-positive cells. (C) ARS staining. (D) Semi-quantitative analysis of ARS staining. Cell differentiation was induced for 7 or 21 days. The concentration of titanium particles and ICG-001 was 5 μ g/cm² and 20 μ M, respectively. Data are presented as means ± SD, n= 9 for ALP, ARS staining and Semi-quantitative analysis of ARS. **P*<0.05 and ***P*<0.01, compared with the control group. **P*<0.05 and ***P*<0.01, compared with the Ti+ICG-001 group.