

Supplementary Information for

**Silver-deposited titanium as a prophylactic ‘nano coat’ for peri-implantitis**

**Vaibhav Madiwal<sup>a,b</sup> and Jyutika Rajwade<sup>a,b\*</sup>**

<sup>a</sup>*Nanobioscience Group, Agharkar Research Institute, G. G. Agarkar Road, Pune 411 004, India*

<sup>b</sup>*Savitribai Phule Pune University, Homi Bhabha Road, Pune 411 007, India*

**Table S1.** Sequences of primers used in the qPCR

Gene	Forward seq.	Reverse seq.
<i>GAPDH</i>	5' TTTTGCCTCGCCAGCCGAG 3'	5' CCAGAGTTAAAAGCAGCCCTGG 3'
<i>ALP</i>	5' CCCCTGAGCGTCCTGTTCT 3'	5' GCGGCAGACTTTGGTTTC 3'
<i>Col1a</i>	5' AGGGCCAAGACGAAGACATC 3'	5' AGATCACGTCATCGCACAACA 3'
<i>BMP-2</i>	5' GGCCCTCATCAAGGGTTGGA 3'	5'AGGGTGGGCAGAAAACACGA 3'
<i>RUNX-2</i>	5' CATCACTGTCCTTTGGGAGTAG 3'	5' CTTGGCCCTCCATTGTAAGA 3'

**Table S2.** Elemental analysis of Ti and Ag-deposited Ti surfaces using EDS

Samples	Elements (Weight %)				
	C K	Al K	Ti K	V K	Ag L
Ti	4.5	5.7	85.6	4.0	-
Ti-Ag <sub>1</sub>	5.5	5.5	85.0	3.7	<b>0.23</b>
Ti-Ag <sub>2</sub>	4.8	5.4	85.5	3.2	<b>0.99</b>
Ti-Ag <sub>5</sub>	5.8	5.3	83.7	3.1	<b>1.62</b>

**Table S3.** Average elastic modulus and hardness of Ti-Ag<sub>5</sub> sample determined by nanoindentation

<b>Indentation #</b>	<b>Avg. Modulus (Gpa)</b>	<b>Avg. Hardness (Gpa)</b>
<b>1</b>	389.5	29.59
<b>2</b>	416.0	35.03
<b>3</b>	453.0	34.89
<b>4</b>	382.1	29.90
<b>5</b>	358.3	28.67
<b>6</b>	369.0	27.70
<b>Avg.</b>	<b>394.7</b>	<b>30.96</b>
<b>SD</b>	<b>34.7</b>	<b>3.19</b>