Electronic Supplementary Information

Influence of Precursor Chemistry of CVD Grown TiO_2 Coatings: Differential Cell Growth and Biocompatibility

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Table 1. NMR data of precursors (1 - 6).

No	Precursor	Chemical Shifts (^{1}H) δ [ppm]	Chemical Shifts (^{13}C) δ [ppm]
1	$ClTi(O^iPr)_3$	1.26 *d* (CH_3); 4.80 *sep* (CH)	24.72 (CH_3); 81.06 (CH)
2	$Et_2NTi(O^iPr)_3$	1.13 *t* (CH_3); 1.22 *d* (CH_3); 3.49 *q* (CH_2); 4.52 *sep* (CH)	15.55 (CH_3); 15.61 (CH_3); 26.42 (CH_3); 47.50 (CH_2); 48.00 (CH_2); 75.37 (CH)
3	$(Me_3Si)_2NTi(O^iPr)_3$	0.35 *s* (CH_3); 1.88 *d* (CH_3); 4.50 *sep* (CH)	4.32 (CH_3); 26.15 (CH_3); 76.67 (CH)
4	$CpTi(O^iPr)_3$ Cp = C_5H_5	1.09 *d* (CH_3); 4.43 *sep* (CH); 6.12 *s* (CH)	25.65 (CH_3); 77.03 (CH); 111.78 (CH)
5	$Ti(O^iPr)_4$	1.19 *d* (CH_3); 4.50 *sep* (CH)	26.13 (CH_3); 75.74 (CH)
6	$Bu^tOTi(O^iPr)_3$	1,20 d (CH_3); 1.29 *s* (CH_3),); 4.45 *sep* (CH)	26.23 (CH_3); 31,87(CH_3); 75,64 (CH); 79,63 (C)

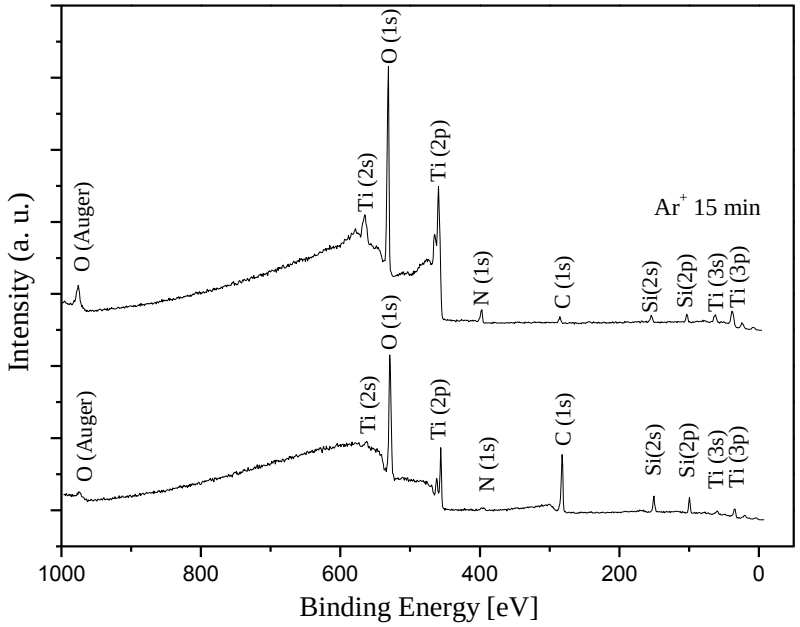

Figure S1: XPS overview spectra of TiO_2 (derived from $[(Me_3Si)_2NTi(O^iPr)_3]$) deposited at 650 ^oC.

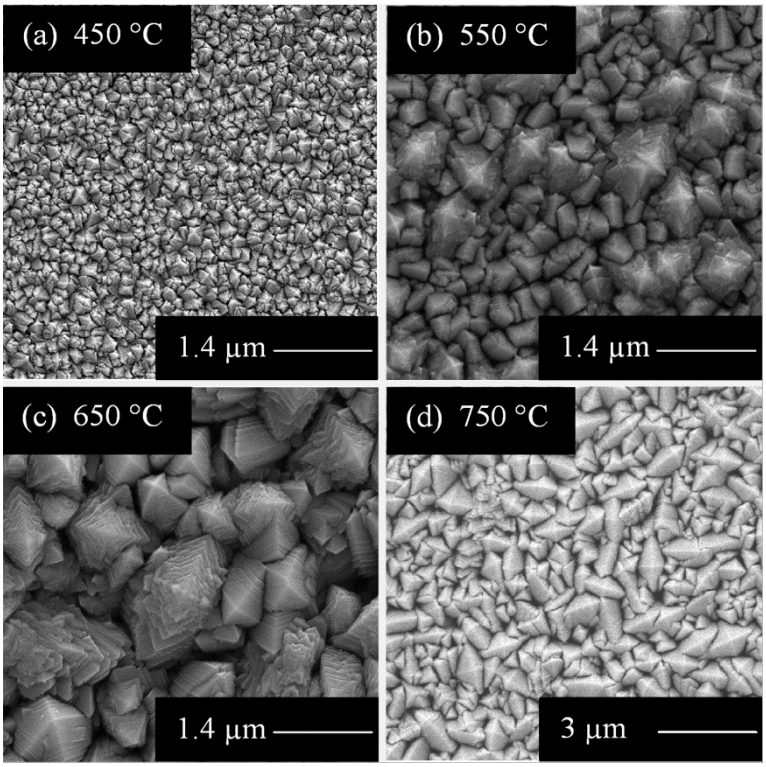

Figure S2 Influence of deposition temperatures on morphology. SEM images of films obtained during the CVD of $[Et_2NTi(O^iPr)_3]$ at (a) 450 °C, (b) 550 °C, (c) 650 °C and (d) 750 °C.

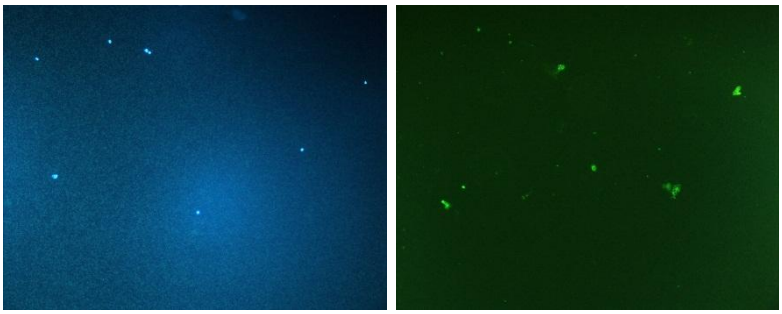

Figure S3 Optical microscope images of cultivated osteoblasts on TiO_2 surfaces obtained with precursor $[Et_2NTi(O^iPr)_3]$ at 550 °C.

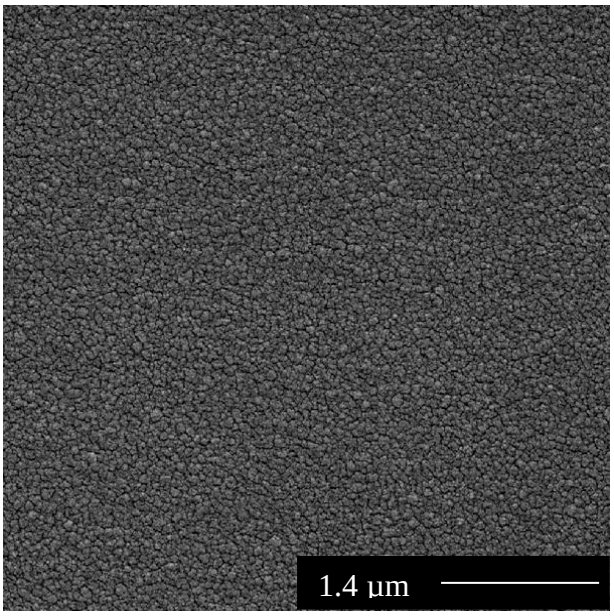

Figure S4 (a) SEM image of a film obtained during the CVD of $[(Me_3Si)_2NTi(O^iPr)_3]$ at 550 °C.

Figure S5 Optical microscope images of cultivated osteoblasts on TiO_2 surfaces obtained with precursor $[(Me_3Si)_2NTi(O^iPr)_3]$ at 550 °C.

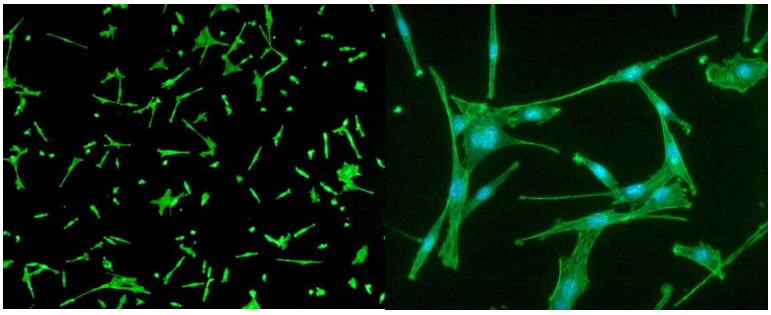

Figure S6 Optical microscope images of cultivated osteoblasts on TiO_2 surfaces obtained with precursor $[Ti(O^iPr)_4]$ at 550 °C.