Supplementary Materials

Phosphorous pentoxide-free bioactive glass exhibits dose-dependent angiogenic and osteogenenic capacities which are retained in glass polymeric composite scaffolds

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Supplementary table 1. Primers used for qPCR

Target	Forward (5' - 3')	Reverse (5' - 3')
ALP	ACGTGGCTAAGAATGTCATC	CTGGTAGGCGATGTCCTTA
Bcl-2	CGGGAGATGTCGCCCCTGGT	GCATGCTGGGGCCGTACAGT
Caspase 3	TGTGAGGCGGTTGTAGAAGT	TCCAGAGTCCATTGATTCGCT
Cyclin D1	AACTACCTGGACCGCTTCCT	CCACTT GAGCTTGTTCACCA
Collagen IA	AGCGGACGCTAACCCCCTCC	CAGACGGGACAGCACTCGCC
Mcm5	CCCATTGGGGTATACACGTC	ACGGTCATCTTCTCGCATCT
Osteocalcin	CCAGCGGTGCAGAGTCCAGC	GACACCCTAGACCGGGCCGT
Osteopontin	CTCCATTGACTCGAACGACTC	CGTCTGTAGCATCAGGGTACTG
RunX2	TGCCTAGGCGCATTTCAGGTGC	TGAGGTGACTGGCGGGGTGT
VEGF	ATCTTCAAGCCATCCTGTGTGC	GCTCACCGCCTCGGCTTGT
β-tubulin	GAGGGCGAGGACGAGGCTTA	TCTAACAGAGGCAAAACTGAGCACC

Supplementary table 2. Elemental concentration determined by inductively coupled plasma mass spectrometry (ICP-MS)

	Si (ppm)	Ca (ppm)
EM	n.d.	17.7
EM + 52S-BG	89	76

Abbreviations: n.d. = Not detected, EM = Embryonic medium, EM + 52S-BG = embryonic medium containing the ionic dissolution products from the 52S-BG particles

Supplementary Figure S1. Gene expression analysis of Mcm5 and Bcl2 in human adipose-derived mesenchymal stem cells (AdMSCs) and human osteoblasts (OBs) exposed to 100 or 300 µg/ml 52S-BG particles for up to 14 days *in vitro*. The effect of adding β -glycerophosphate (β GlyP) and L-ascorbate-2-phosphate (AA) is shown. Gene expression is expressed as fold change (mean ± SEM) of ddC_t values (2^{-ddCt}) with respect to the control sample (dashed line). Three independent experiments were performed using cells from three independent donors. In each experiment, samples were used in triplicate.

