

Supplementary Information

In vitro osteogenic and *in ovo* angiogenic effects of a family of natural origin P₂O₅-free bioactive glasses

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Day 1

Tukey's multiple comparisons test BG-GS	Adjusted P Value	Summary
100 vs. 200	0.0047	**
100 vs. 300	0.0022	**
100 vs. 400	0.0002	***
100 vs. 1000	0.7320	ns
200 vs. 300	0.7320	ns
200 vs. 400	<0.0001	****
200 vs. 1000	0.0112	*
300 vs. 400	<0.0001	****
300 vs. 1000	0.0047	**
400 vs. 1000	0.0001	***

Tukey's multiple comparisons test BG-WS	Adjusted P Value	Summary
100 vs. 200	<0.0001	****
100 vs. 300	<0.0001	****
100 vs. 400	0.4502	ns
100 vs. 1000	0.0006	***
200 vs. 300	<0.0001	****
200 vs. 400	<0.0001	****
200 vs. 1000	<0.0001	****
300 vs. 400	<0.0001	****
300 vs. 1000	0.0023	**
400 vs. 1000	0.0014	**

Tukey's multiple comparisons test BG-YS	Adjusted P Value	Summary
100 vs. 200	<0.0001	****
100 vs. 300	0.1371	ns
100 vs. 400	0.0001	***

100 vs. 1000	0.0001	***
200 vs. 300	<0.0001	****
200 vs. 400	0.0252	*
200 vs. 1000	0.0427	*
300 vs. 400	0.0004	***
300 vs. 1000	0.0003	***
400 vs. 1000	0.9695	ns

Day 7

Tukey's multiple comparisons test BG-GS	Adjusted P Value	Summary
100 vs. 200	>0.9999	ns
100 vs. 300	0.0266	*
100 vs. 400	0.0356	*
100 vs. 1000	0.0070	**
200 vs. 300	0.0248	*
200 vs. 400	0.0383	*
200 vs. 1000	0.0066	**
300 vs. 400	0.0015	**
300 vs. 1000	0.4891	ns
400 vs. 1000	0.0006	***

Tukey's multiple comparisons test BG-WS	Adjusted P Value	Summary
100 vs. 200	0.0038	**
100 vs. 300	0.0183	*
100 vs. 400	0.0003	***
100 vs. 1000	<0.0001	****
200 vs. 300	0.3056	ns
200 vs. 400	0.0150	*
200 vs. 1000	0.0018	**
300 vs. 400	0.0033	**
300 vs. 1000	0.0006	***
400 vs. 1000	0.0975	ns

Tukey's multiple comparisons test BG-YS	Adjusted P Value	Summary
100 vs. 200	<0.0001	****
100 vs. 300	0.6685	ns
100 vs. 400	<0.0001	****
100 vs. 1000	<0.0001	****
200 vs. 300	<0.0001	****
200 vs. 400	0.0143	*
200 vs. 1000	<0.0001	****
300 vs. 400	<0.0001	****
300 vs. 1000	<0.0001	****
400 vs. 1000	<0.0001	****

Day 14

Tukey's multiple comparisons test	Adjusted P Value	Summary
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BG-GS		
100 vs. 200	0.7293	ns
100 vs. 300	<0.0001	****
100 vs. 400	0.0001	***
100 vs. 1000	<0.0001	****
200 vs. 300	<0.0001	****
200 vs. 400	<0.0001	****
200 vs. 1000	<0.0001	****
300 vs. 400	0.0004	***
300 vs. 1000	0.0317	*
400 vs. 1000	0.0043	**

Tukey's multiple comparisons test BG-WS	Adjusted P Value	Summary
100 vs. 200	0.0001	***
100 vs. 300	<0.0001	****
100 vs. 400	0.0007	***
100 vs. 1000	<0.0001	****
200 vs. 300	<0.0001	****
200 vs. 400	0.0243	*
200 vs. 1000	<0.0001	****
300 vs. 400	<0.0001	****
300 vs. 1000	<0.0001	****
400 vs. 1000	<0.0001	****

Tukey's multiple comparisons test BG-YS	Adjusted P Value	Summary
100 vs. 200	<0.0001	****
100 vs. 300	<0.0001	****
100 vs. 400	<0.0001	****
100 vs. 1000	<0.0001	****
200 vs. 300	0.0006	***
200 vs. 400	<0.0001	****
200 vs. 1000	<0.0001	****
300 vs. 400	<0.0001	****
300 vs. 1000	<0.0001	****
400 vs. 1000	0.2129	ns

Figure S1. Detailed statistical comparison of the influence of different concentrations of BG-GS, BG-WS, and BG-YS on days 1, 7, and 14 on the DNA content of hMSCs.

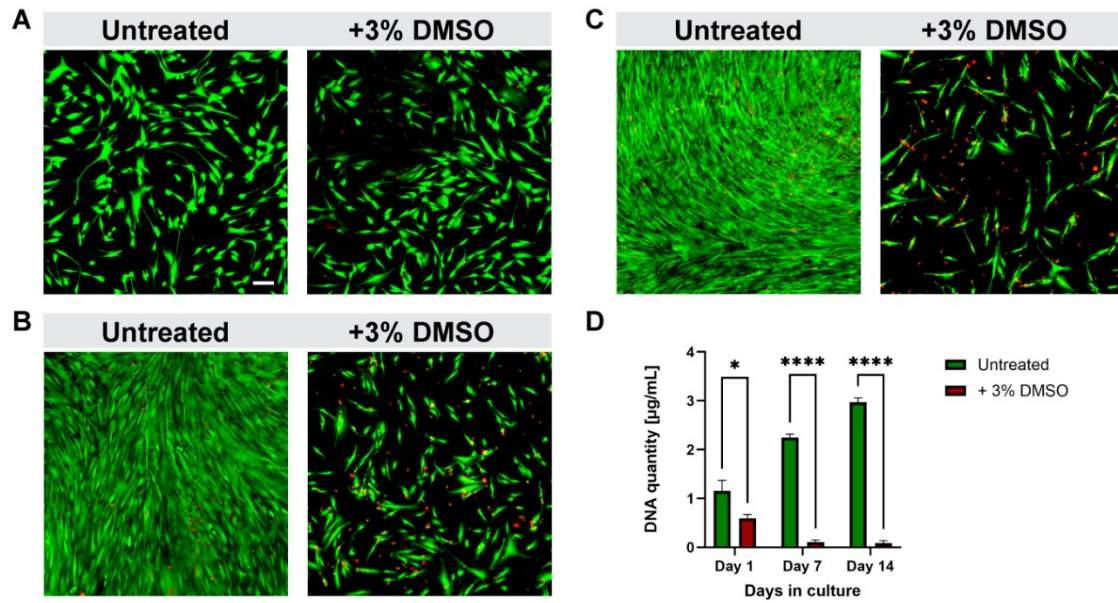


Figure S2. Live/Dead staining showing viability as well as morphology of hMSCs cultured with basic culture medium (untreated) and with basic culture medium containing 3% DMSO for A) 1 day, B) 7 days, and C) 14 days. Scale bar is equal to 100 μm . Calcein AM stained the viable cells green while EthD-1 labelled the non-viable cells red. D) DNA content on day 1, 7, and 14 of cell culture in the above-mentioned conditions.