

An injectable, self-healing and MMP-inhibiting hyaluronic acid gel via iron coordination

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This document is the Supplemental Material

Citation:

GAO, Ziyu, YANG, Xuebin, JONES, Elena, BINGHAM, Paul, SCRIMSHIRE, Alex, THORNTON, Paul and TRONCI, Giuseppe (2020). An injectable, self-healing and MMP-inhibiting hyaluronic acid gel via iron coordination. *International Journal of Biological Macromolecules*, 165 (B), 2022-2029. [Article]

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Supporting information

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Table S1 Formulation of different samples

Sample name	HA (2 wt.%, mL)	Fe ³⁺ -GSH (10 mg/ml, μ L)	HCl (120 mM, μ L)	H ₂ O (μ L)
Fe 100	1	100	0	400
Fe 200	1	200	0	300
Fe 300	1	300	0	200
Fe 400	1	400	0	100
Fe 500	1	500	0	0
Ctrl 0	1	0	0	500
Ctrl 100	1	0	100	400
Ctrl 200	1	0	200	300
Ctrl 300	1	0	300	200
Ctrl 400	1	0	400	100
Ctrl 500	1	0	500	0

**Solvent information: HA (H₂O), Fe³⁺-GSH (120 mM HCl), HCl (H₂O).*

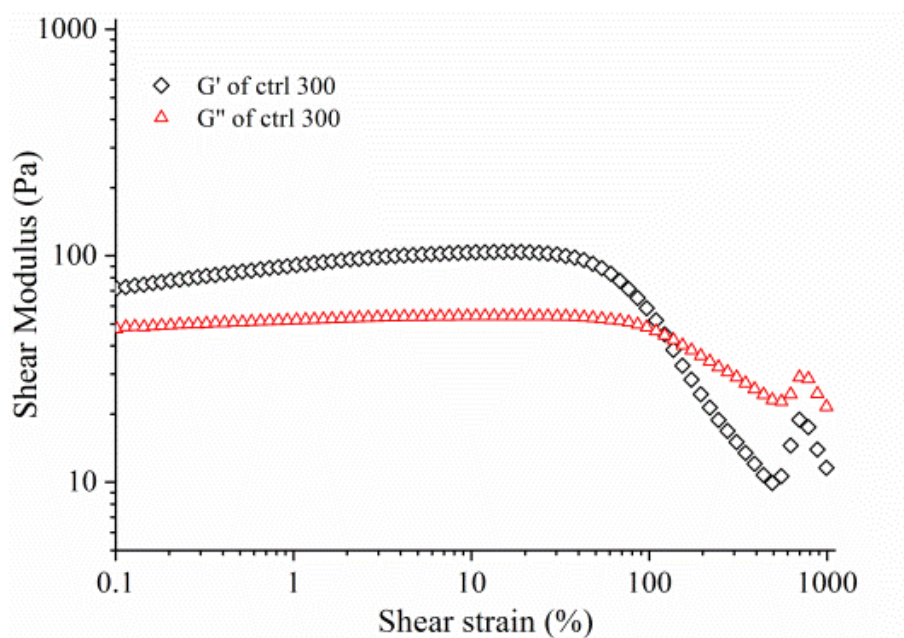


Fig.S1 Shear modulus of HA-HCl control sample measured via strain sweep.

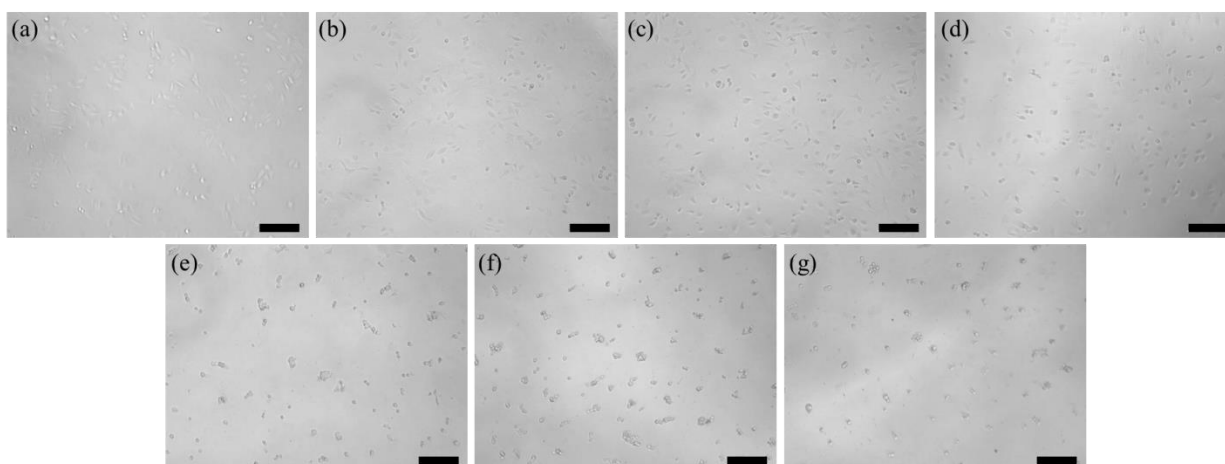


Fig.S2 Optical images of ATDC 5 cells after 1-day culture with Fe³⁺-GSH gel, (a) 0 μ L (TCPs), (b) 5 μ L, (c) 10 μ L, (d) 20 μ L, (e) 30 μ L, (f) 40 μ L and (g) 50 μ L per well. Scale bar: 100 μ m.

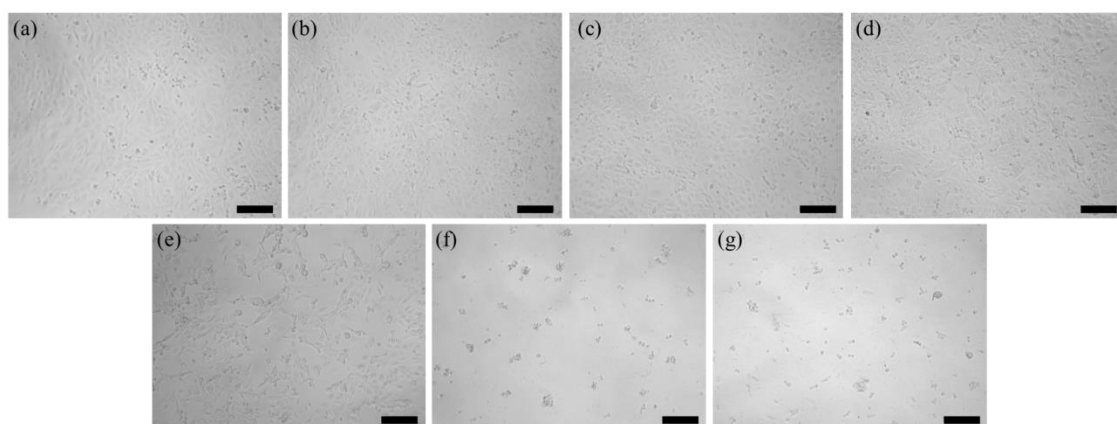


Fig.S3 Optical images of ATDC 5 cells after 5-day culture with Fe³⁺-GSH gel, (a) 0 μ L (TCPs), (b) 5 μ L, (c) 10 μ L, (d) 20 μ L, (e) 30 μ L, (f) 40 μ L and (g) 50 μ L per well. Scale bar: 100 μ m.