

Supplementary Materials

Green Synthesis of Gold, Iron and Selenium Nanoparticles Using Phytoconstituents: Preliminary Evaluation of Antioxidant and Biocompatibility Potential

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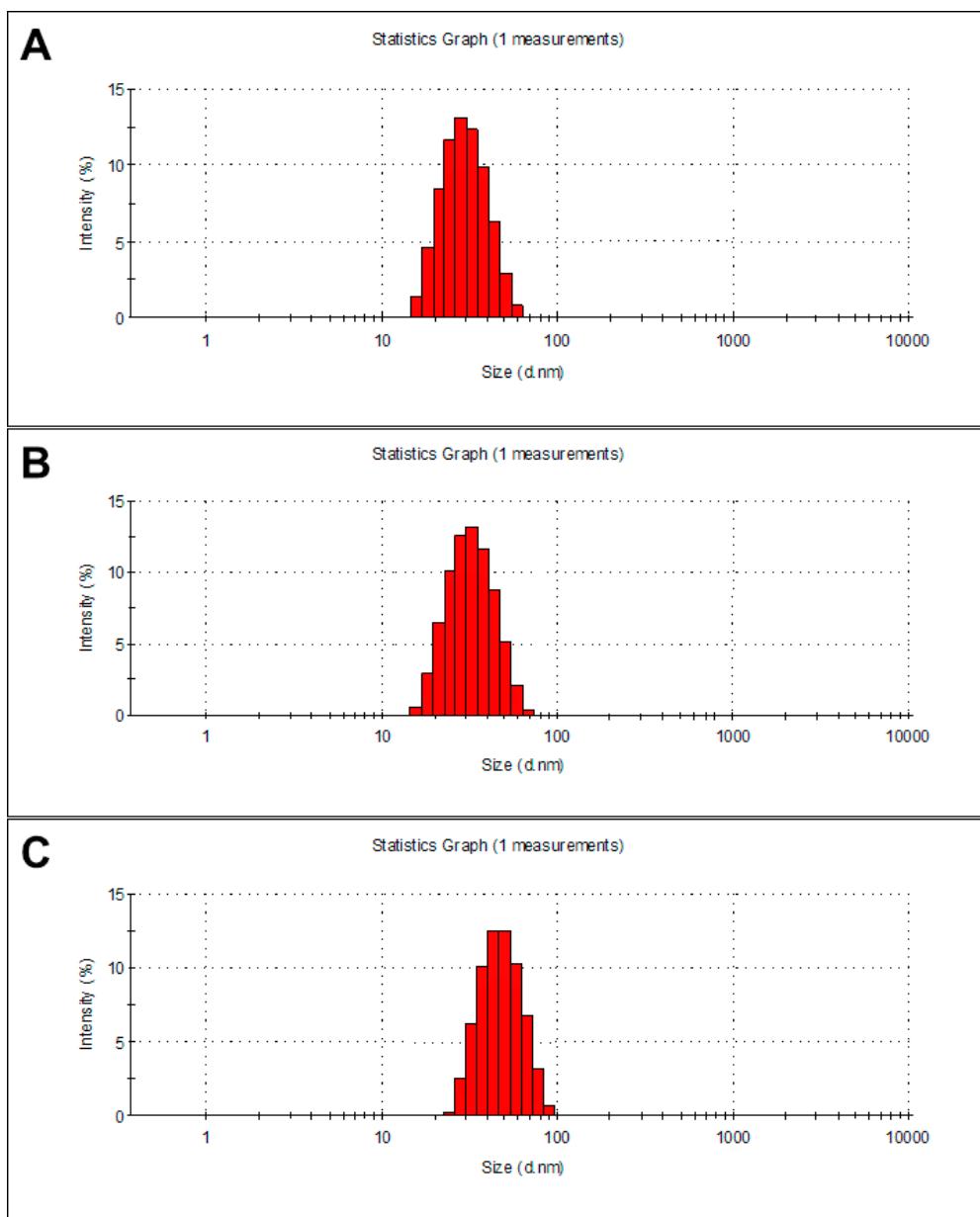
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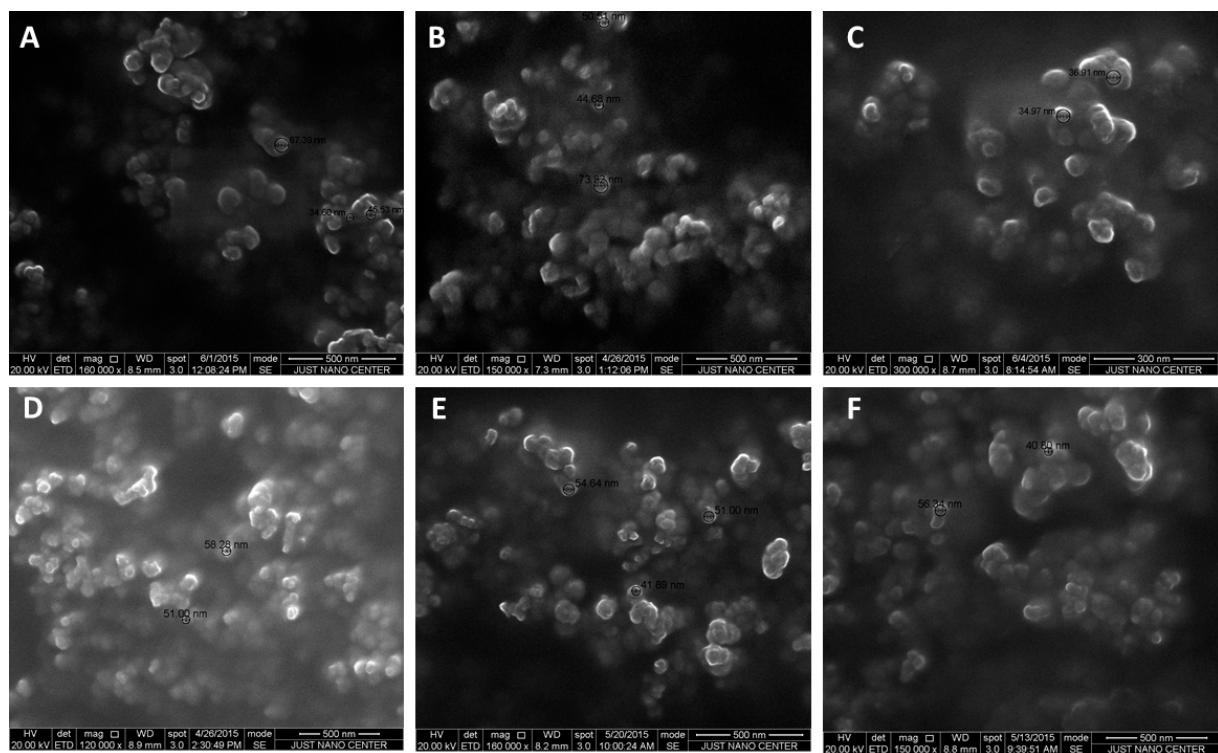
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Supplementary Table 1. Cytotoxicity of the phytoconstituents to the MCF-7 cell line.

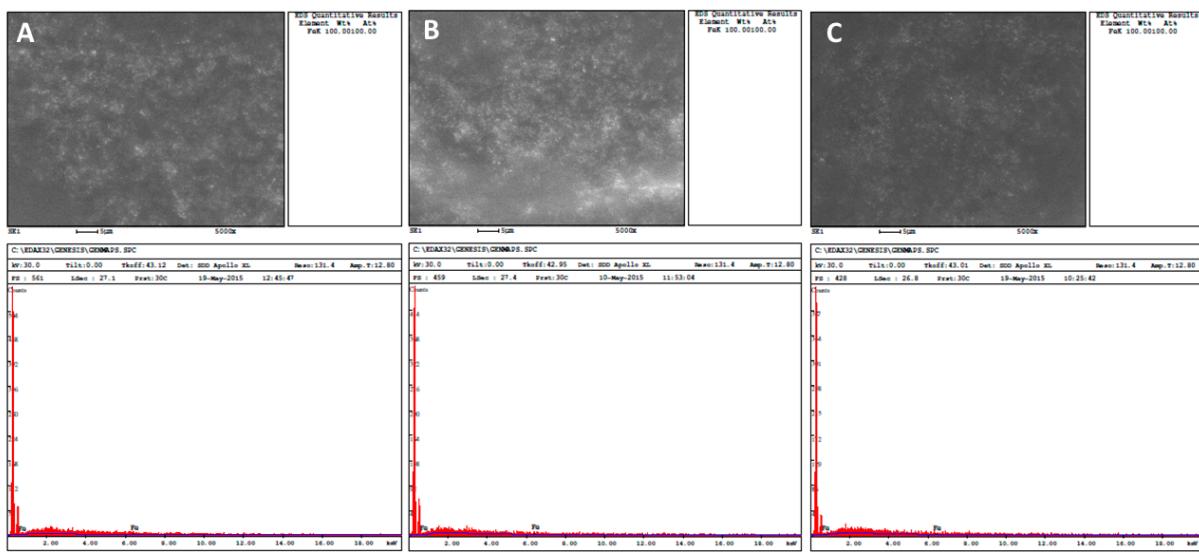
		400 mcg/ml	200 mcg/ml	100 mcg/ml	50 mcg/ml	25 mcg/ml	12.5 mcg/ml	6.25 mcg/ml	3.125 mcg/ml	1.5625 mcg/ml	
Punica granatum	Viability	1.134783	0.908696	0.989855	1.121739	1.097101	1.156522	0.982609	0.923913	1.154348	Viability
Punica granatum	std	0.122975	0.037063	0.012467	0.165141	0.162073	0.056522	0.026087	0.041304	0.01087	std
Pistachio	Viability	0.99453	1.014957	1.079772	1.052707	1.037037	1.014245	0.957265	0.878917	0.91453	Viability
Pistachio	std	0.151709	0.019231	0.091811	0.092472	0.138272	0.043906	0.087233	0.029054	0.054505	std
Ephedra	Viability	0.905858	1.09484	1.037657	0.956764	0.893305	1	1.008368	0.898187	0.951185	Viability
Ephedra	std	0.031381	0.054393	0.016736	0.035565	0	0.075314	0.023254	0.054393	0.004184	std



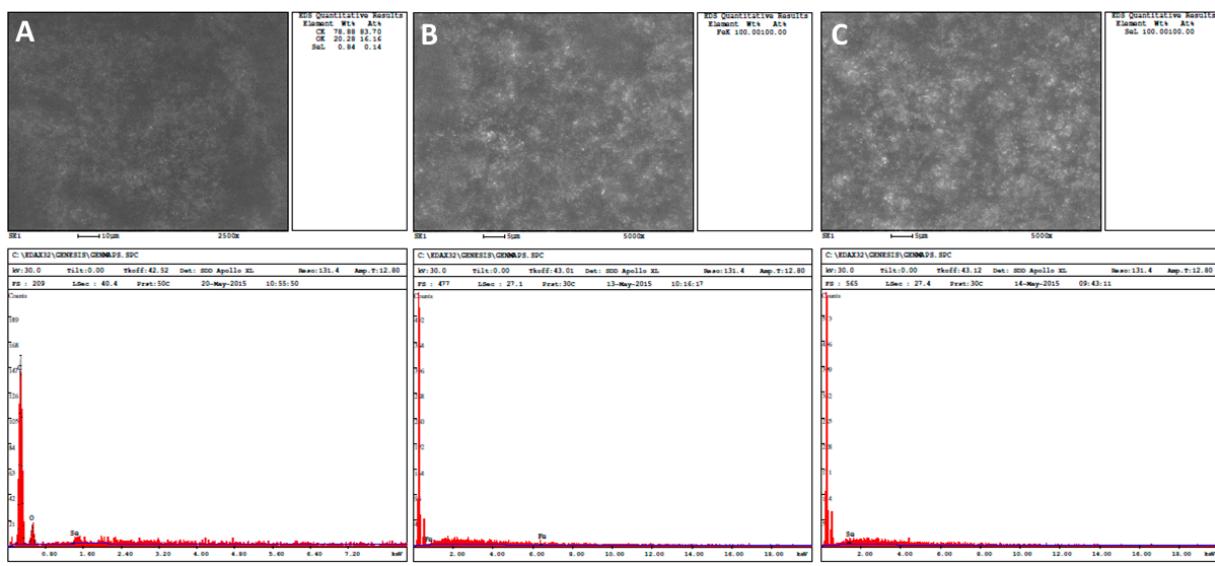
Supplementary figure 1. Histograms obtained from the Zetasizer for the (A) gold nanoparticles using ephedra extract, (B) iron nanoparticles using *Punica granatum* extract and (C) selenium nanoparticles using *Punica granatum* extract.



Supplementary figure 2. Scanning electron micrographs of prepared nanoparticles. Representative images A) iron nanoparticles prepared with *Punica granatum* seed extract using ferrous sulphate, B) iron nanoparticles prepared with *Punica granatum* seed extract using iron (III) perchlorate, C) selenium nanoparticles with *Punica granatum* seed extract using selenium tetrachloride, D) selenium nanoparticles with *Punica granatum* seed extract using selenous acid, E) selenium nanoparticles with *Punica granatum* peel extract using selenium tetrachloride, and F) selenium nanoparticles with *Punica granatum* juice using selenous acid.



Supplementary figure 3. Characteristics of iron nanoparticles. Representative energy-dispersive X-ray analysis of iron nanoparticles prepared with A) *Punica granatum* peel extract using ferric chloride, B) *Punica granatum* juice using ferric chloride, and C) *Punica granatum* juice using ferrous sulphate.



Supplementary figure 4. Characteristics of selenium nanoparticles. Representative energy-dispersive X-ray analysis of iron nanoparticles prepared with A) *Punica granatum* peel extract using selenium chloride, B) *Punica granatum* juice using selenous acid, and C) *Punica granatum* juice using selenium chloride.