

Supporting Information

Nanosilver Functionalized Hybrid Hydrogels of Carboxymethyl Cellulose/Poly(vinyl alcohol) with Antibacterial Activity for Prevention and Therapy of Infections of Diabetic Chronic Wounds

Nádia S. V. Capanema ^{1,†}, Alexandra A. P. Mansur ^{1,†}, Sandhra M. Carvalho ¹, Talita Martins ¹, Maysa S. Gonçalves ², Rafaella S. Andrade ², Elaine M. S. Dorneles ², Letícia C. D. Lima ³, Érika L. F. C. de Alvarenga ⁴, Emanuel V. B. da Fonseca ⁴, Marcos Augusto de Sá ³, Andrey P. Lage ⁵, Zelia I. P. Lobato ⁵, Herman S. Mansur ^{1,*}

¹ Center of Nanoscience, Nanotechnology, and Innovation – CeNano²I, Department of Metallurgical and Materials Engineering, Federal University of Minas Gerais, UFMG, Belo Horizonte, Brazil

² Departamento de Medicina Veterinária, Universidade Federal de Lavras, UFLA, Lavras, Brazil

³ Department of Morphology, Institute of Biological Sciences, Federal University of Minas Gerais, UFMG, Belo Horizonte, Brazil

⁴ Department of Natural Sciences, Universidade Federal de São João Del-Rei, UFSJ, São João Del-Rei, Brazil

⁵ Departamento de Medicina Veterinária Preventiva, Federal University of Minas Gerais, UFMG, Brazil

* Correspondence: hmansur@demet.ufmg.br

† These authors contributed equally to this work

Tables

Table S1. Results of halo diameters (mm) of disk diffusion test performed according to Clinical & Laboratory Standards Institute (CLSI) using reference strains (\bar{x} : Average; SD: standard deviation).

Antimicrobial	<i>E. faecalis</i> ATCC 29212		<i>S. aureus</i> ATCC 29213		<i>E. coli</i> ATCC 25922		<i>P. aeruginosa</i> ATCC 27853	
	mm		Mm		mm		mm	
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
Cefotaxime (30 μ g)	31.5	0.5	29.5	0.5	34.5	1.0	21.5	0.5
Norfloxacin (10 μ g)	23.5	0.5	27.5	0.5	31.5	0.5	25.0	0.5

Table S2. Quality control ranges for antimicrobials according to CLSI M100-28th ed. [44].

Antimicrobial	<i>E. faecalis</i> ATCC 29212	<i>S. aureus</i> ATCC 29213	<i>E. coli</i> ATCC 25922	<i>P. aeruginosa</i> ATCC 27853
	mm	mm	mm	mm
Cefotaxime (30 μ g)	≥ 26	25-31	29-35	18-22
Norfloxacin (10 μ g)	≥ 17	17-28	28-35	22-29