

Supplementary Information

***In situ* synthesis of silver nanoparticles in a hydrogel of carboxymethyl cellulose with phthalated-cashew gum as a promising antibacterial and healing agent**

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1. EDS Results.

EDS Spectra were obtained with the electron beam focussed directly on agglomerates of nanoparticles within each AgNP-containing hydrogel. The results below indicate a high weight % of silver in the along with a majority of organic material, and some small contamination with iron and silicon.

Table 1: EDS analysis results from sample of hydrogel containing NCG-AgNPs.

Element	Peak Area	Weight %	Atomic %
C	29466	9.01	44.64
O	836	0.19	0.72
Si	20527	2.59	5.49
Fe	892	0.14	0.15
Ag	388357	87.76	48.43

Table 2: EDS analysis results from sample of hydrogel containing PhCG-AgNPs.

Element	Peak Area	Weight %	Atomic %
C	61831	54.04	81.81
O	8791	5.79	6.58
Si	1190	0.43	0.28
Fe	337	0.15	0.05
Ag	46605	30.12	5.08