

Novel amoxycillin loaded sericin biopolymeric nanoparticles: Synthesis, Optimization and antibacterial and wound healing activities

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Table S1. ANOVA study of the experimental responses.

Dependent variable	Zeta size (nm)				
	DF	Adj. SS	Adj. MS	F-value	p-value
Corrected Model	19	150097773.36	7899882.81	219644.564	<0.001*
Ser. %	4	29074812.14	7268703.04	202095.543	<0.001*
St-Time (min)	3	23248530.87	7749510.29	215463.678	<0.001*
Ser. % * St-Time (min)	12	97774430.35	8147869.20	226539.459	<0.001*
Lack-of-fit	0	0.000	–	–	–
	Zeta pot. (mV)				
	DF	Adj. SS	Adj. MS	F-value	p-value
Corrected Model	19	2185.768	115.040	3.381	0.001*
Ser. %	4	1090.506	272.627	8.012	<0.001*
St-Time (min)	3	431.537	143.846	4.227	0.011*
Ser. % * St-Time (min)	12	663.726	55.310	1.625	0.123
Lack-of-fit	0	0.000	–	–	–
	PDI				
	DF	Adj. SS	Adj. MS	F-value	p-value
Corrected Model	19	3.400	0.179	26.309	<0.001*
Ser. %	4	1.126	0.282	41.382	<0.001*
St-Time (min)	3	0.333	0.111	16.298	<0.001*
Ser. % * St-Time (min)	12	1.942	0.162	23.788	<0.001*
Lack-of-fit	0	0.000	–	–	–
	Antibacterial activity (mm)				
	DF	Adj. SS	Adj. MS	F-value	p-value
Corrected Model	19	375.495	19.763	22.988	<0.001*
Ser. %	4	332.477	83.119	96.685	<0.001*
St-Time (min)	3	11.439	3.813	4.435	0.009*
Ser. % * St-Time (min)	12	31.578	2.632	3.061	0.004*
Lack-of-fit	0	0.000	–	–	–

: Not applicable

Table S2. Regression model for independent variables.

Dependent variables	R ² (%)	Adjusted R ² (%)
Zeta size (nm)	7.5	4.3
Zeta-pot. (mV)	0.3	-3.2
PDI	1.0	-2.5
Antibacterial (mm)	62.8	61.5

Table S3. One-way ANOVA of the entrapment efficiency versus Amoxycillin conc (mg/mL).

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Amoxycillin conc (mg/mL)	2	2972.41	1486.21	8917.24	0.000
Error	3	0.50	0.17	-	-
Total	5	2972.91	-	-	-

: Not applicable