Development of lornoxicam multiparticulate sustained release drug delivery system using copal gum-pectin and optimization by applying central composite design

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ANOVA for all the responses is represented in Table S1. From the ANOVA results, the responses Y_1, Y_2, Y_4, the quadratic effect (X_1^2, X_2^2) and linear effect (X_1- copal gum, X_2- pectin) are significant while for response Y_3, no model is significant.

Table S1. ANOVA for all responses

Sources	Y_1		Y_2		Y_3		Y_4	
	F Value	**p-value**	**F Value**	**p-value**	**F Value**	**p-value**	**F Value**	**p-value**
Model	9.35	0.0476	15.16	0.0244	1.28	0.4459	9.03	0.0499
X_1	27.23	0.0137	36.00	0.0093	0.14	0.7307	0.33	0.6079
X_2	2.80	0.1926	8.73	0.0598	5.49	0.1010	12.25	0.0395
X_1X_2	4.52	0.1236	10.93	0.0455	0.33	0.6067	3.04	0.1798
X_1^2	6.64	0.0820	9.68	0.0528	0.43	0.5599	3.07	0.1782
X_2^2	0.031	0.8706	0.26	0.6424	0.31	0.6170	25.83	0.0147

P* = < 0.05 indicate significant model terms

The extensive grid and feasibility searches provided that the optimum formulations and the desired function response overlay plot are as shown in Figure S1, where one solution was found with a highest desirability.

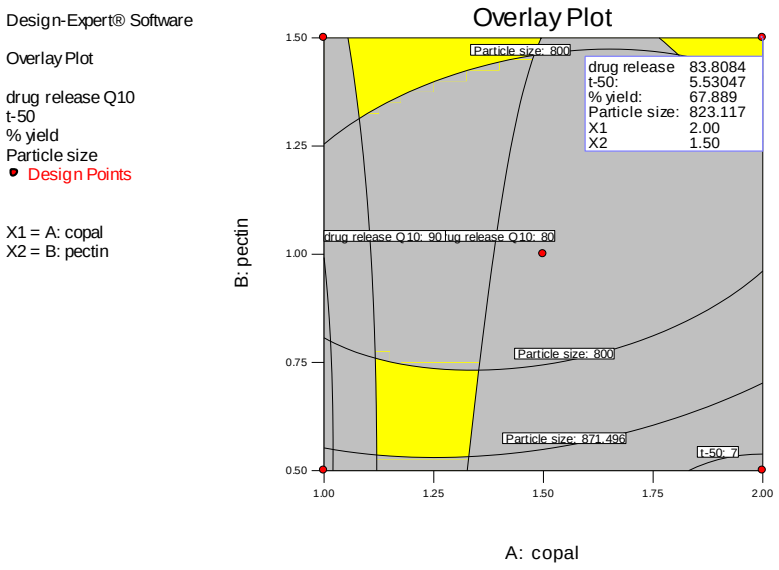

Figure S1. Overlay plot indicating the region of optimal process variable setting for pellets formulation