

List of Tables

Table No.	Description	Page No.
2.1	Some nanoparticulate drug-carrier system developed for breast cancer management	12
2.2	Some docetaxel-loaded nanoparticulate carrier based drug delivery system	19
2.3	Some PHBV based nanoparticulate carriers in drug delivery	22
2.4	Commercially approved nanoparticulate drug delivery system	28
2.5	Some polymeric nanoparticulate carriers in drug delivery system	34
2.6	Some passively targeted nanoparticulate carriers in drug delivery	37
2.7	Some pH-responsive nanoparticulate carrier in drug delivery	40
4.1	FTIR spectra obtained in the spectral region 4,000 to 400 cm^{-1}	56
4.2	Prioritized Independent variables based on FMEA study	65
4.3	Representative synthetic route for chitosan derivatives containing targeting moieties	72
5.1	Absorbance data for calibration curve of docetaxel	92
5.2	Box-Behnken design with 17 experimental runs and their measured responses	93
5.3	Independent and dependent variables with their levels in Box-Behnken design	93
5.4	Optimization solution with predicted and experimental values	96
5.5	Results of ruggedness and robustness of the process	98
5.6	Results of intraday, inter-day precision and reproducibility of the process	99
5.7	Results of the limit of detection and limit of quantitation	100

5.8	Plackett-Burman design matrix representing experimental runs with independent variables and their observed responses	102
5.9	Independent and dependent variables with their levels in Box-Behnken design	104
5.10	Quadratic equation generated by BBD	104
5.11	Statistical ANOVA analysis results of quadratic model	106
5.12	Results of optimization utilizing Box-Behnken design	106
5.13	Independent and dependent variables with their levels in Box-Behnken design	114
5.14	Quadratic equation generated by BBD	116
5.15	Control Impact Matrix	121
5.16	FMECA analysis based on severity, occurrence, detection, criticality and risk priority number	122
5.17	Box-Behnken Design Matrix representing various combinations of independent variables and their observed responses	125
5.18	Independent and dependent variables with their levels, constraints, and goals in Box-Behnken design	126
5.19	QTPP elements with their target	132
5.20	Box-Behnken design matrix	133
5.21	Independent and dependent variables with their levels, constraints, and goal in Box-Behnken design	136
5.22	Different optimized formulations with their particle size, PDI and zeta potential	138
5.23	Pharmacokinetic parameter (non-compartmental) calculated through PKPlus™ software	157
5.24	Maximum tolerated dose evaluation	161