

List of tables

Table Number	Details of tables	Page Number
1	Plan of work in present study	14
2	Conventional and novel treatment strategies for TNBC and NSCLC	25
3	Clinical status of tested lipid and polymeric nanocarriers in TNBC and NSCLC	43
4	Active targeting strategies for lipid and polymer based nanocarriers in TNBC and NSCLC	51
5	Some Ongoing clinical trials of NSCLC and TNBC with lipid and polymer-based nanoparticles.	58
6	Chemical name, molecular weight, manufacturer, batch number and expiry date of the excipients used in formulation development.	120
7	Materials used in the method development of simultaneous estimation of the drugs	122
8	Gradient elution program change in buffer system and elution technique	126
9	Gradient elution program for change in buffer pH and column	128
10	Gradient elution program for change in polarity of mobile phase B	131
11	Gradient elution program for change in polarity of mobile phase B-condition II	133
12	Gradient elution program for modulations in chromatographic conditions	135
13	Gradient elution program for simultaneous determination of assay of both drugs	138
14	Gradient elution program for simultaneous determination of free drug content of both drugs	142
15	Combinatorial index determination heat map- in-vitro synergy with varying mole ratios of doxorubicin and vincristine	157
16	Results of dependent variables (entrapment efficiency of DOX and VCR; particle size and zeta potential) of formulations with the variation in independent variables based on one-factor-at-time (OFAT) studies	175
17	Full factorial design-based evaluation of the effect of variation of independent factors on the dependent responses (drug entrapment efficiency, Hydrodynamic diameter and surface potential) of formulations	197
18	Regression coefficients of individual and interaction of independent factors on the dependent responses of formulations	201
19	List of the evaluated physico-chemical properties of the optimized formulation	216

Table Number	Details of tables	Page Number
20	Results of entrapment efficiency, loading efficiency of DOX and VCR; content of lipids; particle size and zeta potential of optimised formulation.	229
21	Results of characterization using cryo-Transmission electron microscopy (TEM) analysis of the pictographs.	236
22	Results of fixed aqueous layer thickness (FALT) and electrolyte induced aggregation (EIG) study.	242
23	Results of zeta potential and hydrodynamic diameter before and after incubation with the serum and proteins	242
24	Plasma stability profile of optimized formulations- entrapped drug and particle size over 24 hours	243
25	Results of characterization using small angle X-ray scattering (SAXS) for drug free liposomes, VCR liposome; DOX liposome and dual drug liposome.	247
26	DOX and VCR drug release kinetics from single drug loaded and dual loaded liposomal formulations	253
27	Results of assay, free drug of VCR and DOX; particle size, zeta potential of optimized dual drug formulation on storage at 2-8 °C and 25°C.	259
28	Results of acute toxicity study of DOX-L, VCR-L and dual drug liposome at various concentrations: Survival (%) with varying doses and time	304
29	Results of in-vivo efficacy study in A549 xenograft model in nude athymic mice (n=6)	306
30	Results of in-vivo efficacy study in MDA-MB 231 xenograft model in nude athymic mice (n=6)	307
31	Results of % Test/control of drug treatments in A549 and MDA-MB 231 xenograft model in nude athymic mice (n=6)	308
32	Concentration vs Time profile of DOX and VCR on single IV dose of formulations at concentrations equivalent to 6 mg/Kg Lip DOX (3 mg/Kg Lip VCR)	312
33	Pharmacokinetic parameters of DOX and VCR on single IV dose of formulations at concentrations equivalent to 6 mg/Kg Lip DOX (3 mg/Kg Lip VCR)	313
34	Tissue distribution profile of the DOX and VCR on single IV dose of formulations at concentrations equivalent to 6 mg/Kg Lip DOX (3 mg/Kg Lip VCR)	316