

Supporting Information

J. Chem. Metrol. 18:1 (2024) 10-18

Development of an RP-HPLC Method to Evaluate the Basic Characteristics of Talazoparib-Loaded PLGA Nanoparticles

Beril Taş Topçu^{1*}, Ozan Kaplan², Sibel Bozdağ Pehlivan¹, Mustafa Çelebier²
and Levent Öner¹

¹*Hacettepe University, Faculty of Pharmacy, Department of Pharmaceutical Technology,*

Ankara, Türkiye

²*Hacettepe University, Faculty of Pharmacy, Department of Analytical Chemistry, Ankara, Türkiye*

Table of Contents	Page
Figure S1: Chromatograms for standard talazoparib (10.0 µg/mL) and blank nanoparticles obtained under the optimum conditions	2
Table S1: Comparison of theoretical and practical concentrations of standards at 0.1, 5.0 and 10.0 µg/mL concentrations	3

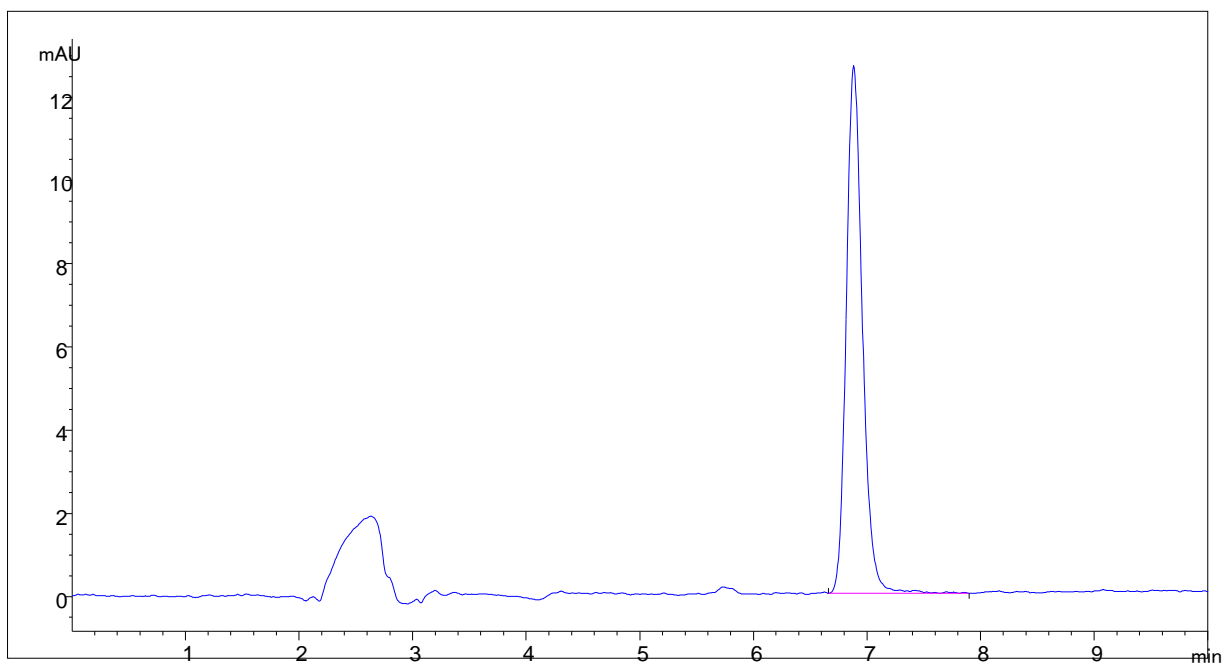
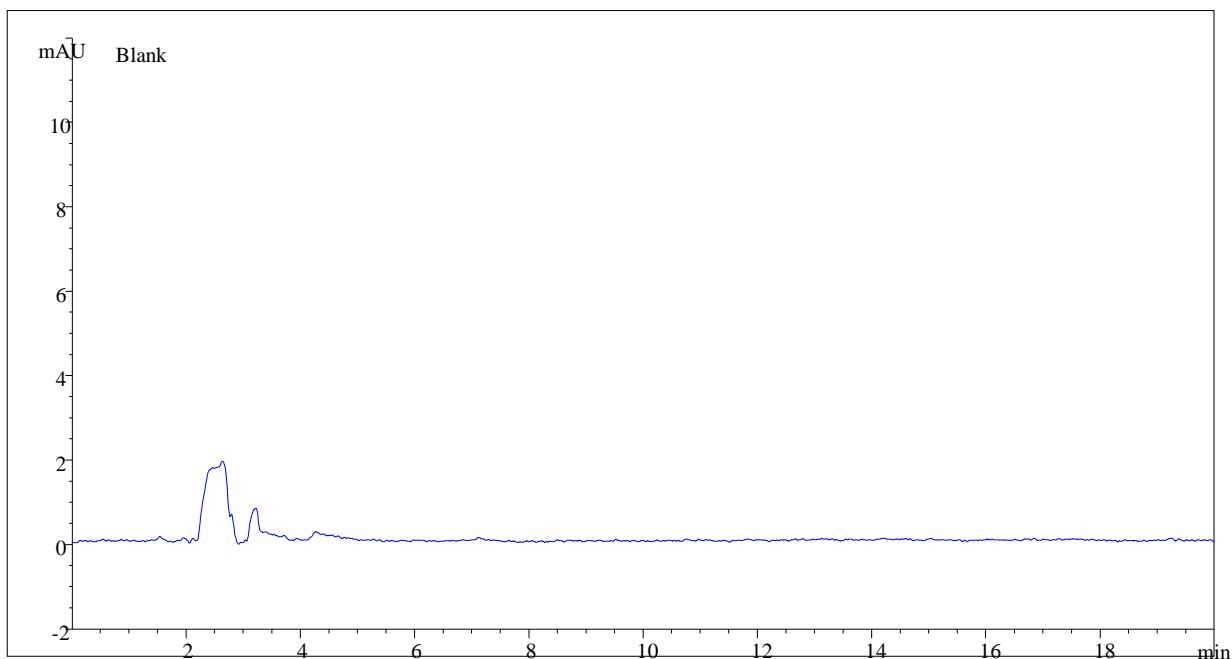


Figure S1 : Chromatograms for standard talazoparib (10.0 $\mu\text{g/mL}$) and blank nanoparticles obtained under the optimum conditions: Shiseido 5 μm C18 100 \AA Column (250 x 4.6 mm). The flow rate: 1.0 mL/min [isocratic elution with ACN:Buffer (35:65) mixture], injection volume: 5 μL , UV detection: 227 nm.

Table S1 : Comparison of theoretical and practical concentrations of standards at 0.1, 5.0, and 10.0 $\mu\text{g/mL}$ concentrations

Talazoparib Solutions	Theoretical Quantities (mg/mL)	Recovery %
<i>Upper limit</i>	1	10.0
	2	10.0
	3	10.0
	Mean Accuracy (%)	100.70
	Standard Deviation	0.25
	RSD (%)	0.25
<i>Intermediate limit</i>	1	5.0
	2	5.0
	3	5.0
	Mean Accuracy (%)	100.89
	Standard Deviation	0.70
	RSD (%)	0.70
<i>Lower limit</i>	1	0.1
	2	0.1
	3	0.1
	Mean Accuracy (%)	100.36
	Standard Deviation	0.40
	RSD (%)	0.40