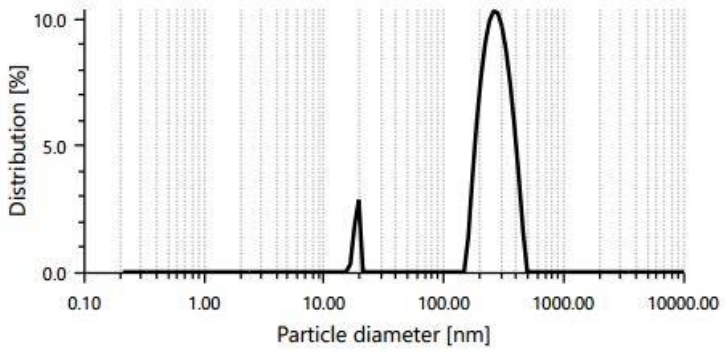
Particle size distribution (intensity) **Hydrodynamic diameter** 267.43 nm **Polydispersity Index** 40.3%

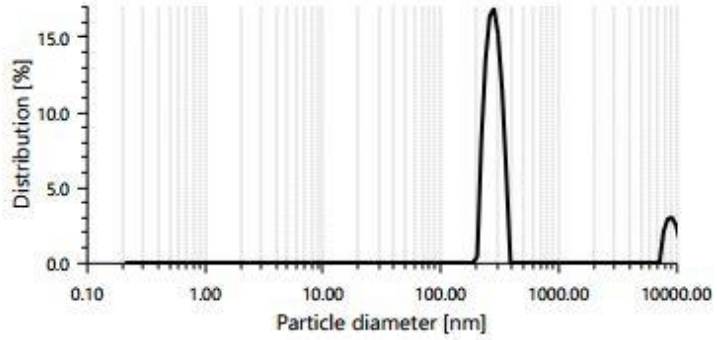


Results

Hydrodynamic diameter	267.4 nm	**Mean intensity**	316.3 kcounts/s
Polydispersity index	20.5 %	**Absolute intensity**	221445.0 kcounts/s
Diffusion coefficient	1.6 µm²/s	**Intercept g1²**	0.8564
Transmittance	52.1 %	**Baseline**	1.013

Figure S1. Particle size distribution of APX-NLC.

Particle size distribution (intensity) **Hydrodynamic diameter** 385.88 nm **Polydispersity Index** 20.6%



Results

Hydrodynamic diameter	385.9 nm	**Mean intensity**	315.0 kcounts/s
Polydispersity index	20.6 %	**Absolute intensity**	225612.6 kcounts/s
Diffusion coefficient	1.1 µm²/s	**Intercept g1²**	0.7809
Transmittance	52.6 %	**Baseline**	1.041

Figure S2. Particle size distribution of APX-PEG-NLC.

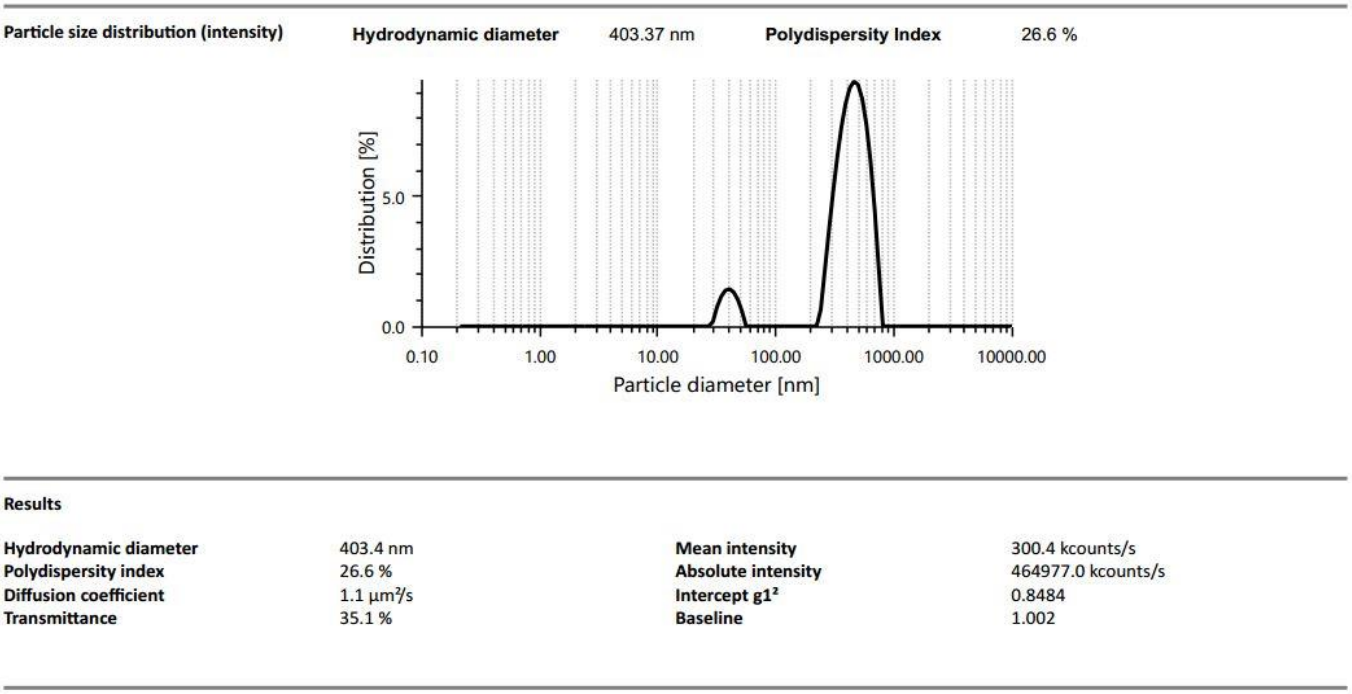


Figure S3. Particle size distribution of APX-Ch-NLC.

Table S1. Estimated release constants for different kinetic models of APX-loaded nanovesicles

Formula		Zero order	First order	Second order	Higuchi diffusion model	Hixon	Baker
APX-NLC	m_0	1.28 mg					
	k	2.81976	-0.0710	0.00212	18.2022	0.07923	0.00944
APX-PEG-NLC	m_0	1.36 mg					
	k	2.58081	-0.0522	0.0011	16.263	0.0632	0.0064
APX-Ch-NLC	m_0	1.37 mg					
	k	2.3612	-0.0433	0.0008	14.925	0.0543	0.005

Note: m_0 is the initial amount of drug in 3-ml sample filled in the dialysis bag (calculated according to EE% of each formulation) and k is the release rate constant for each model.

Table S2. Korsmeyer-Peppas constants for different APX-loaded nanovesicles

	APX-NLC	APX-PEG-NLC	APX-Ch-NLC
n	0.48955	0.51157	0.5062
K_{kp}	0.0312	0.0225	0.0214

Note: n is the diffusional exponent (n ≤ 0.5: Fickian diffusion, n = 0.5-1: Non-fickian release.) and K_{kp} is the release rate constant for Krosmeyer-Peppas model.