



Supplementary Materials

Voriconazole Eye Drops: Enhanced Solubility and Stability through Ternary Voriconazole/Sulfobutyl Ether β -cyclodextrin/Polyvinyl Alcohol Complexes

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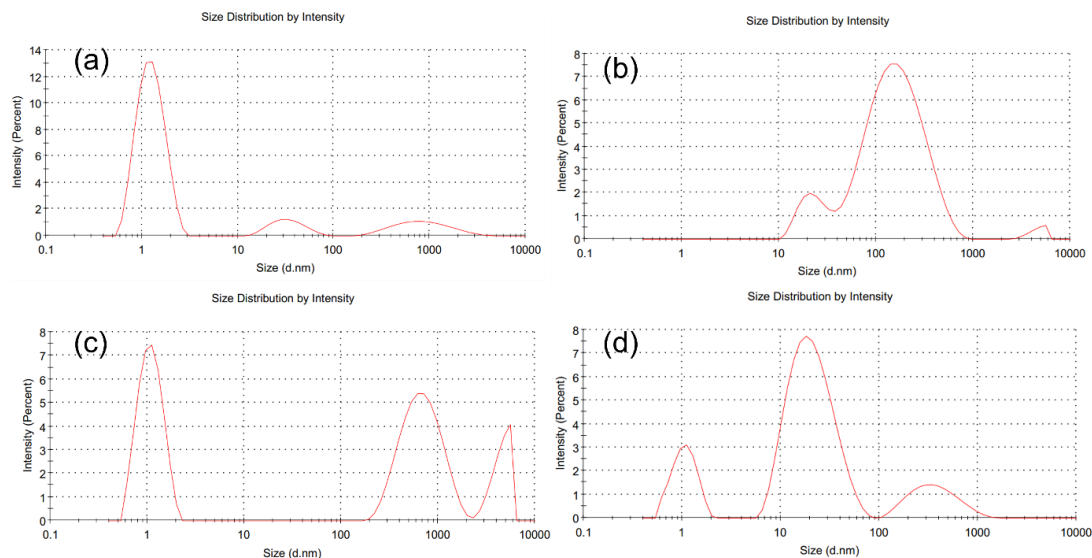


Figure S1. Aggregate size and size distribution by intensity of binary VCZ/SBE β CD and ternary VCZ/SBE β CD/polymer complex aggregates determined by DLS technique at 25 °C; (a) VCZ/SBE β CD, (b) VCZ/SBE β CD/CS, (c) VCZ/SBE β CD/HA and (d) VCZ/SBE β CD/PVA

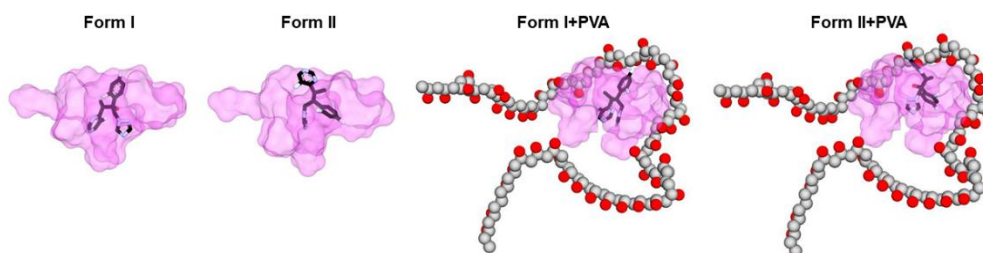


Figure S2. Two different forms of the VCZ/SBE β CD and VCZ/SBE β CD/PVA inclusion complexes generated from molecular docking protocol used as the initial models for MD simulations..



Table S1. Release kinetic model fitting of VCZ from PVA-L solution and PVA-H hydrogel.

Formulation	Zero order		First order			Higuchi		Hixson-Crowell		Korsmeyer-Peppas		
	K_0^a	R^2	K_1^b	n	R^2	K_H^c	R^2	K_{Hc}^d	R^2	n^f	K^e	R^2
PVA-L solution	1.0439	0.8028	-0.0067	1.9506	0.8710	8.7126	0.9318	0.0208	0.1762	0.7446	0.6391	0.9120
PVA-H hydrogel	0.7511	0.8267	-0.0041	1.9702	0.8628	6.2270	0.9469	0.0136	0.8512	0.7996	0.4040	0.9402

^a K_0 : zero order release constant; ^b K_1 : first order release constant; ^c K_H : Higuchi constant; ^d K_{Hc} : Hixson-Crowell constant; ^e K : Korsmeyer-Peppas constant; ^f n : the diffusion or release exponent