

Supplementary Information

A novel solid formulation of rivaroxaban eutectic using a hot melt extruder with improved thermal stability and dissolution profile

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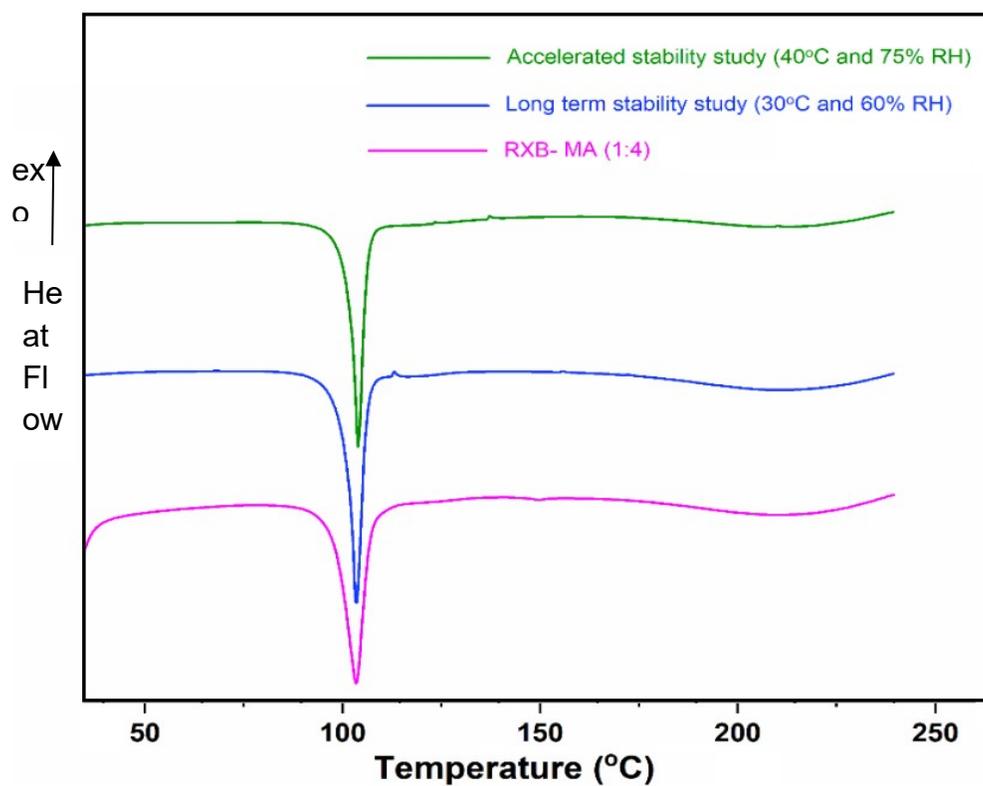


Figure S1. DSC profiles of RXB-MA (1:4) eutectics were recorded after accelerated and long-term stability study conditions.

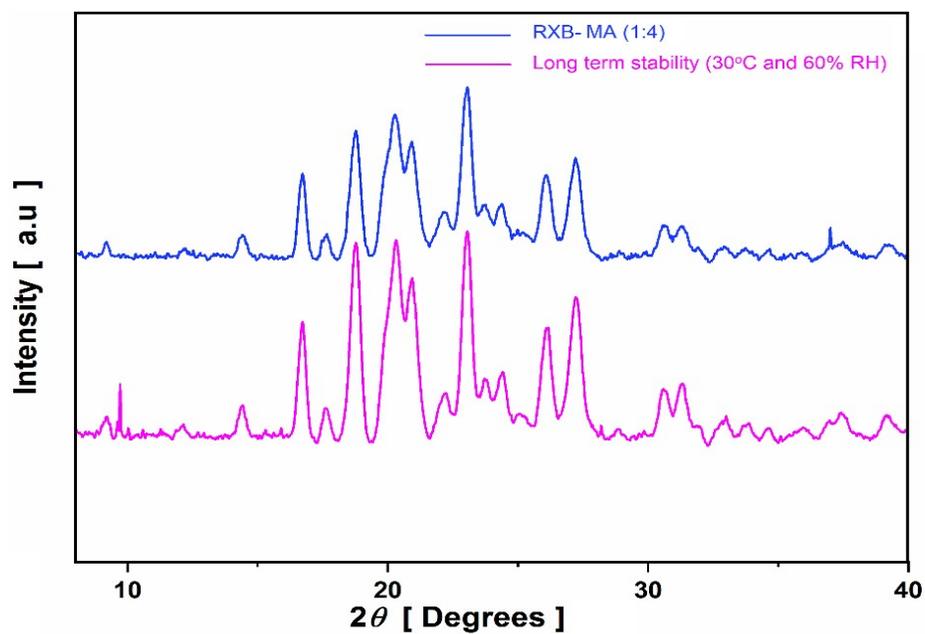


Figure S2. PXRD was measured for eutectics after long-term stability studies.

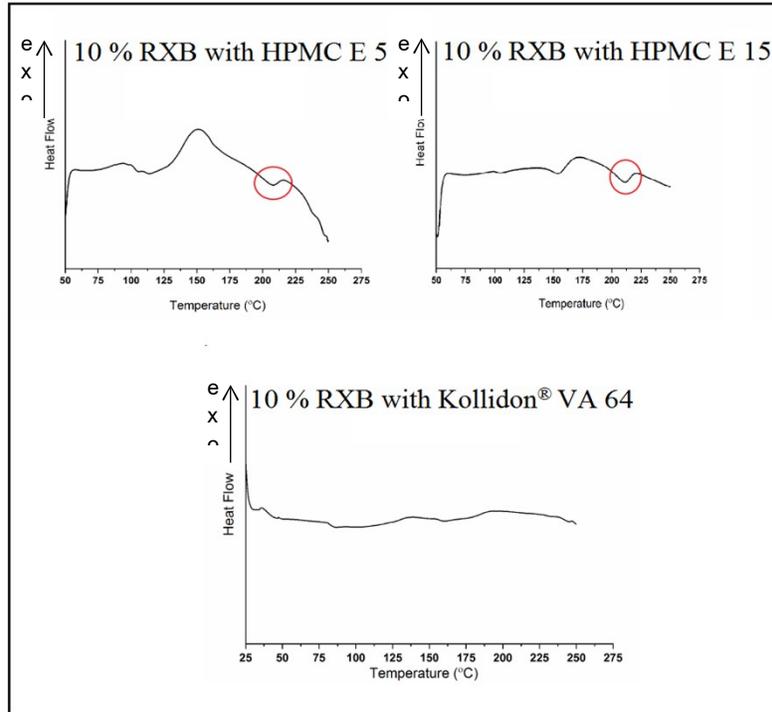


Figure S3. DSC thermograms for extrusion batches of 10% RXB with different hydrophilic polymers.

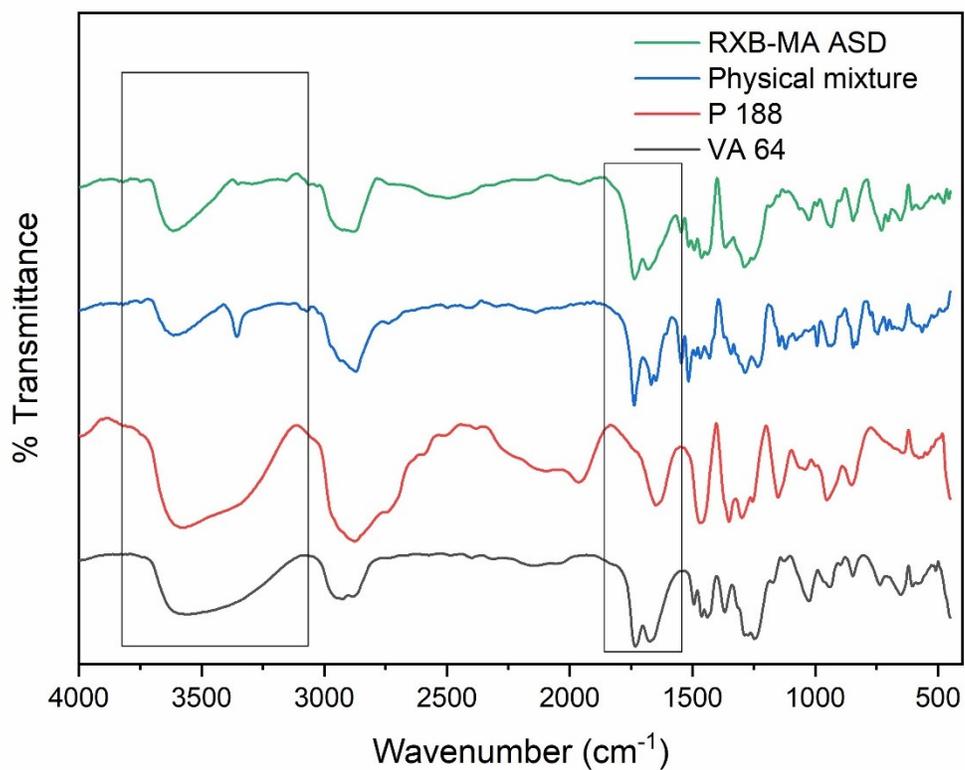


Figure S4. FTIR overlay of polymer, plasticizer, physical mixture of all the components in the ASD and formulated ASD.

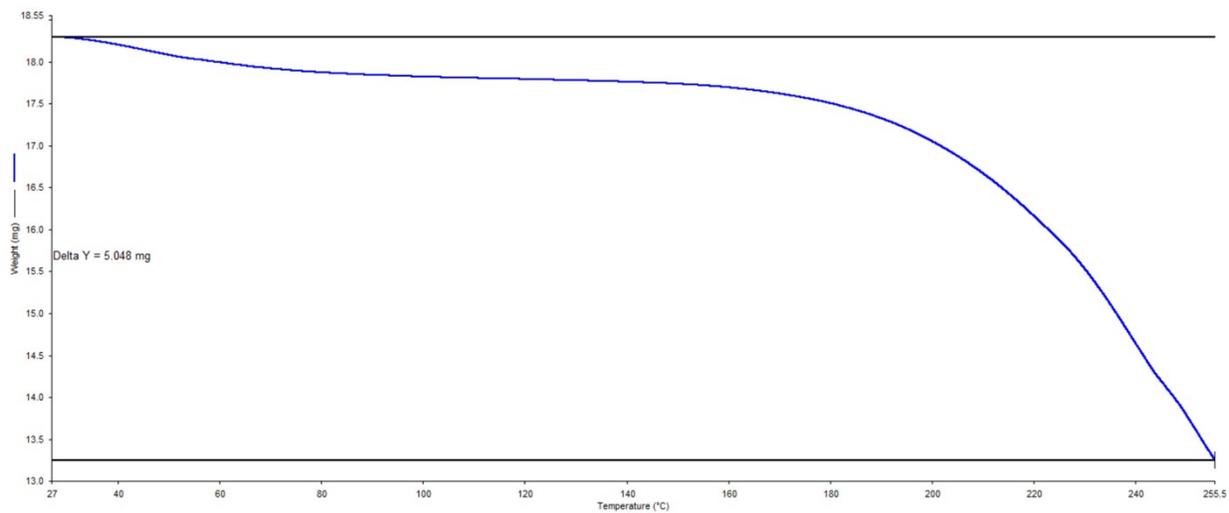
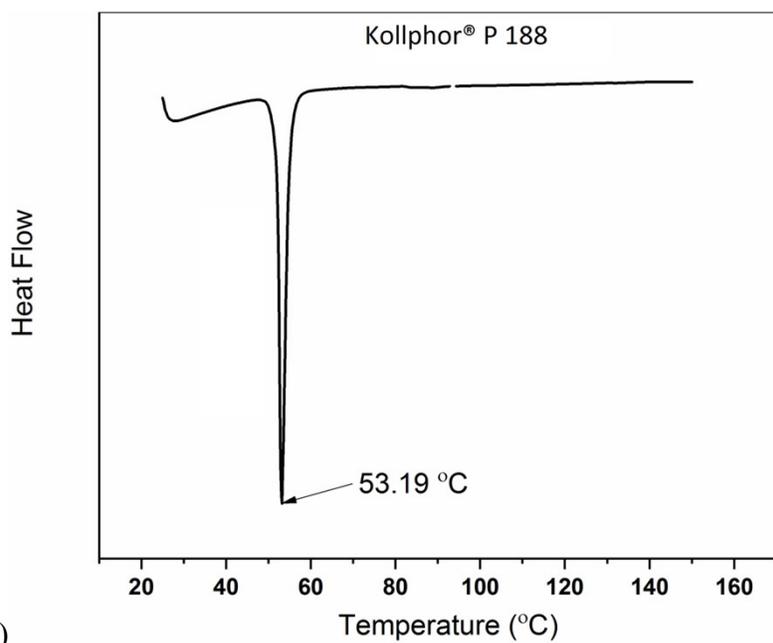
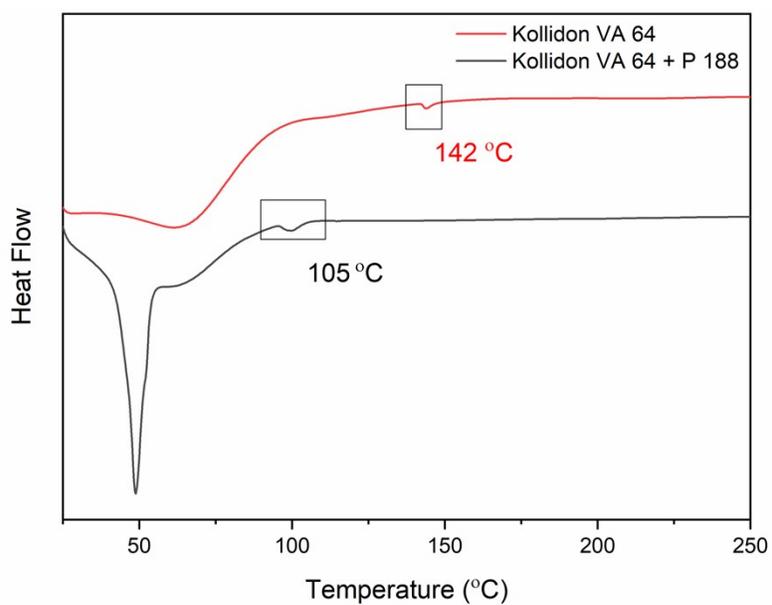


Figure S5. TGA profile of polymer Kollidon® VA 64



a)



b)

Figure S6. DSC thermograms of a) Kolliphor® P 188 and b) Kollidon® VA 64 and physical mixture of polymer and plasticizer.

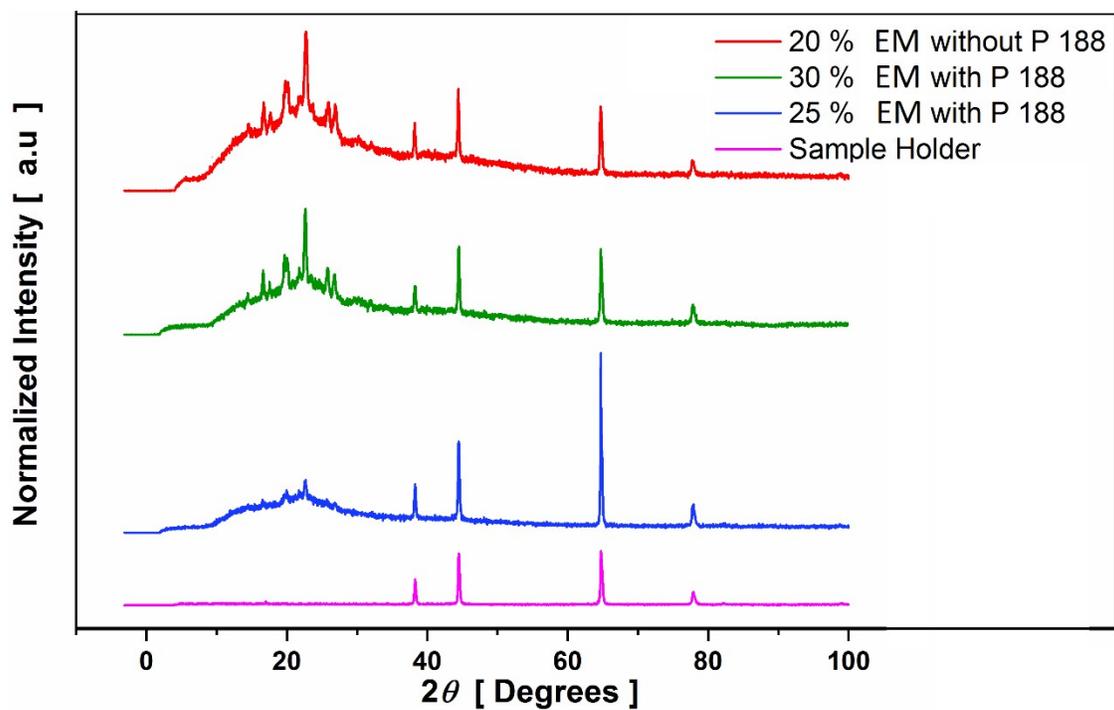


Figure S7. Maximum possible eutectics loading with and without Kolliphor® P 188 as a plasticizer.

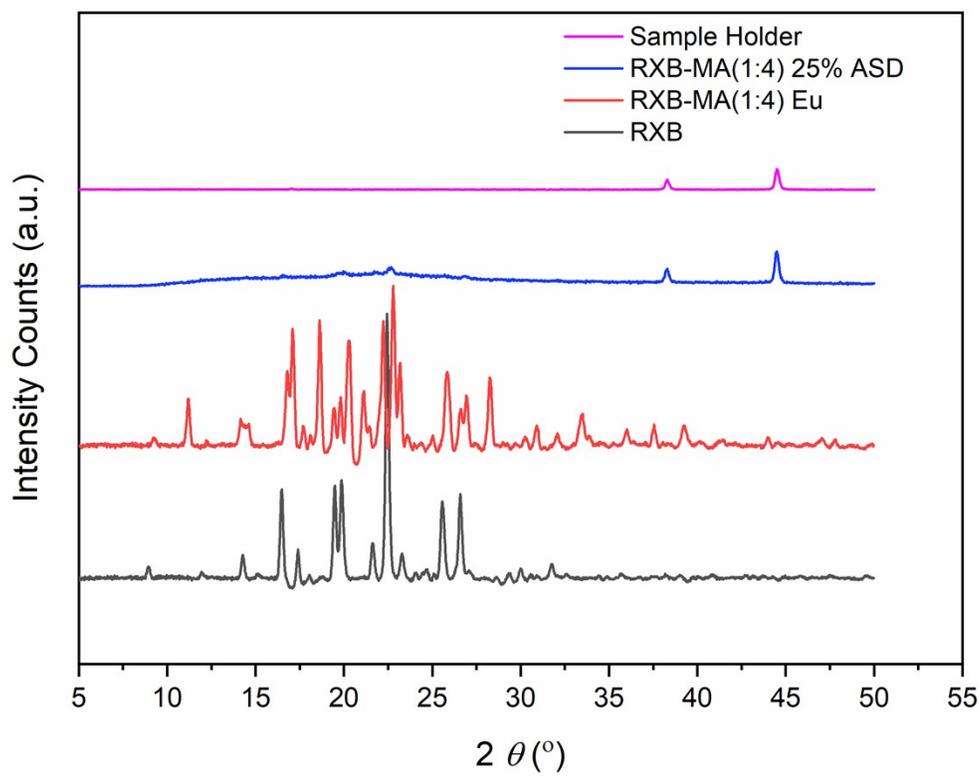


Figure S8. PXRD overlay of RXB, RXB-MA (1:4) eutectic, RXB-MA (1:4) 25% ASD and sample holder suggesting conversion of crystalline form to amorphous form.

Table S1. 2θ peak positions for RXB, MA and RXB-MA eutectics.

RXB (2θ)	MA (2θ)	RXB- MA eutectic (2θ)
16.25	11.13	11.15
19.89	17.06	16.23
22.5	18.03	17.02
25.48	20.36	18.04
26.96	22.41	20.31
	22.97	22.45
	26.08	22.53
	33.13	23.01
		25.48
		26.05
		26.92
		33.08