Electronic Supplementary Information for

Supercooled Liquid during the Evaporation and Cooling Crystallization of Valsartan：A Macroscopic Observation

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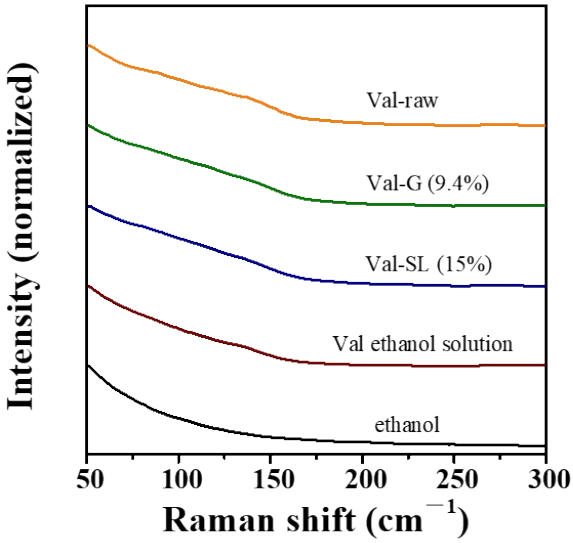

Figure S1. Low-frequency Raman spectroscopy of valsartan (Val) samples.

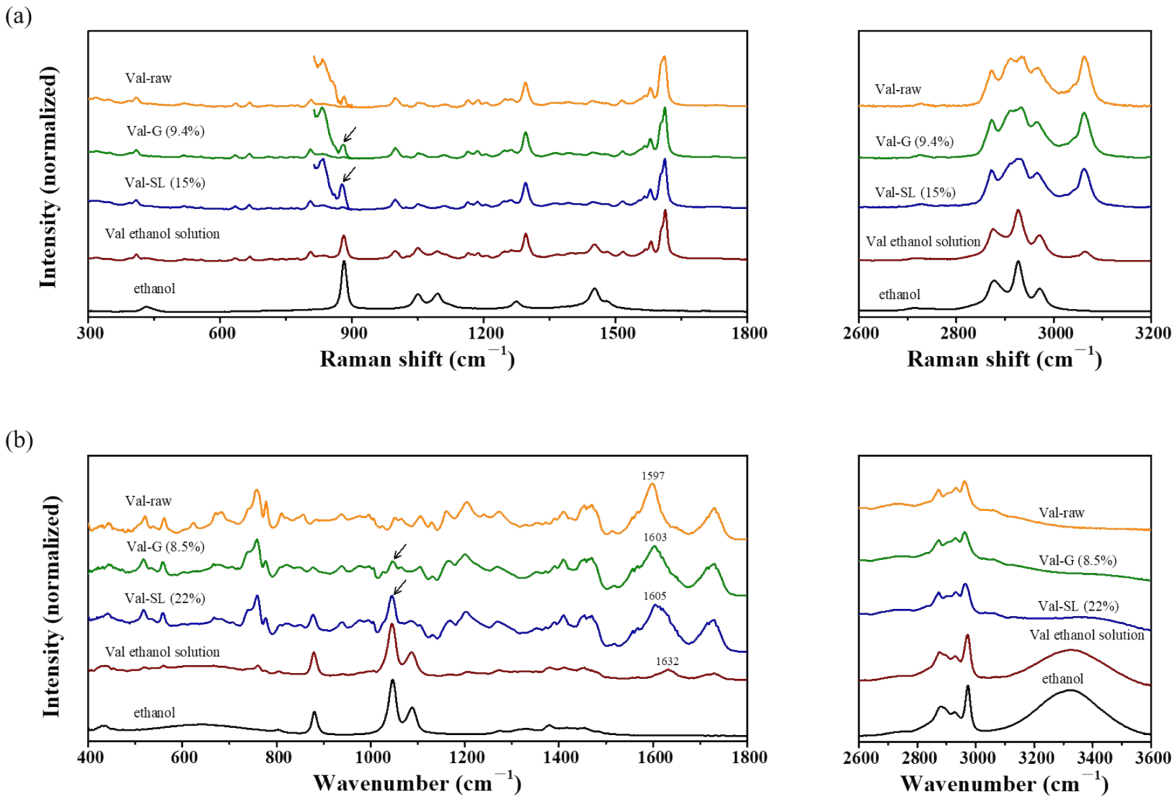

Figure S2. Vibrational spectroscopy of valsartan samples. (a) Raman and (b) IR spectra of ethanol, 40% valsartan ethanol solution, valsartan supercooled liquid (Val-SL), valsartan glass (Val-G) and raw valsartan (Val-raw). The bands' locations of Val-SL and Val-G cannot be distinguished in the Raman (difference < 2 cm^{-1}) and IR spectra (difference < 4 cm^{-1}), but the intensity of the corresponding ethanol bands shows a difference (indicated by black arrows).

Table S1. The Raman and IR bands of valsartan in Val-raw, Val-G, Val-SL and valsartan ethanol solution.

Val-raw	Val-G	Val-SL	solution	Val-raw	Val-G	Val-SL	solution
Raman				IR			
316	318	316	316	520	517	517	519
345	348	346	348	561	558	559	559
392	394	392	395	670	666	666	666
409	409	409	409	758	758	759	761
516	517	517	518	777	776	777	776
634	633	633	635	937	938	938	940
667	666	667	668	1052			
806	806	805	805	1066	1065		
999	998	1000	998	1105	1105	1105	
1052	1051	1051		1129	1129	1132	
1112	1114	1113		1162	1165	1167	
1165	1165	1164	1165	1204	1201	1202	1205
1187	1186	1187	1186	1274	1270	1269	
1206	1206	1206	1207	1410	1412	1410	1412
1249	1248	1248	1248	1471	1470	1469	
1263	1262	1263	1263	1599	1603	1603	1633
1295	1296	1296	1295	1731	1729	1730	1732
1447	1448	1448					
1516	1516	1515	1517				
1566	1566	1566	1567				
1580	1581	1581	1580				
1612	1612	1612	1614				
2871	2873	2871		2871	2871	2871	
2910	2910			2931	2931	2931	
2933	2932			2962	2962	2962	
2966	2964	2964					
3064	3062	3062	3064				

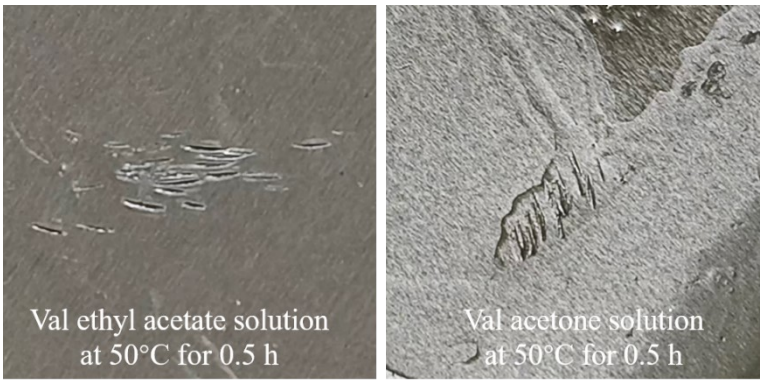

Figure S3. Optical images of the supercooled liquid products prepared by heating Val ethyl acetate and acetone solution at 50 °C for 0.5 h.

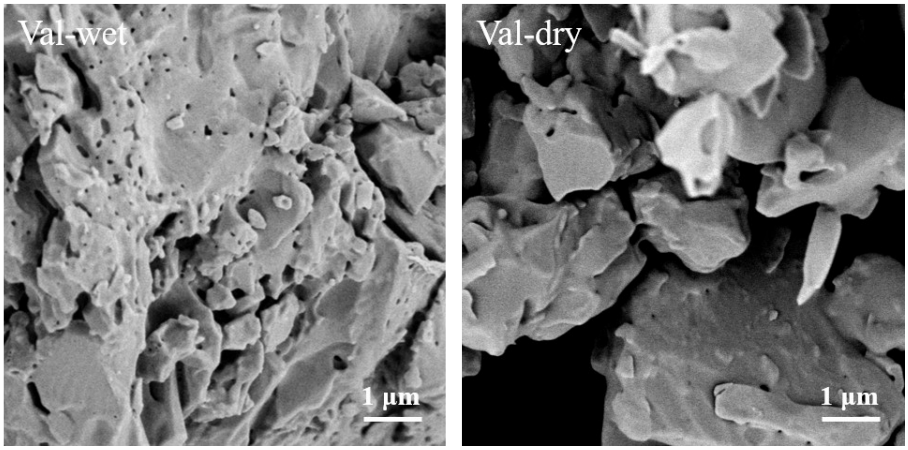

Figure S4. SEM images of the filtered product of valsartan suspension (Val-wet) and the dried product of Val-wet (Val-dry).

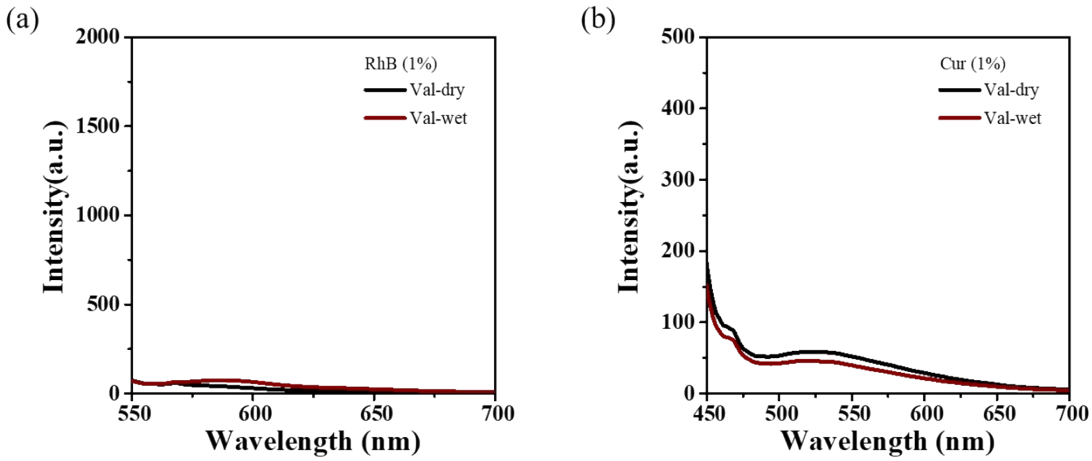

Figure S5. Fluorescent probe method for distinguishing Val-dry and Val-wet via physically mixing. Fluorescence spectra of Val-dry and Val-wet samples prepared by physically mixing with (a) rhodamine B and (b) curcumin as fluorescent probes.