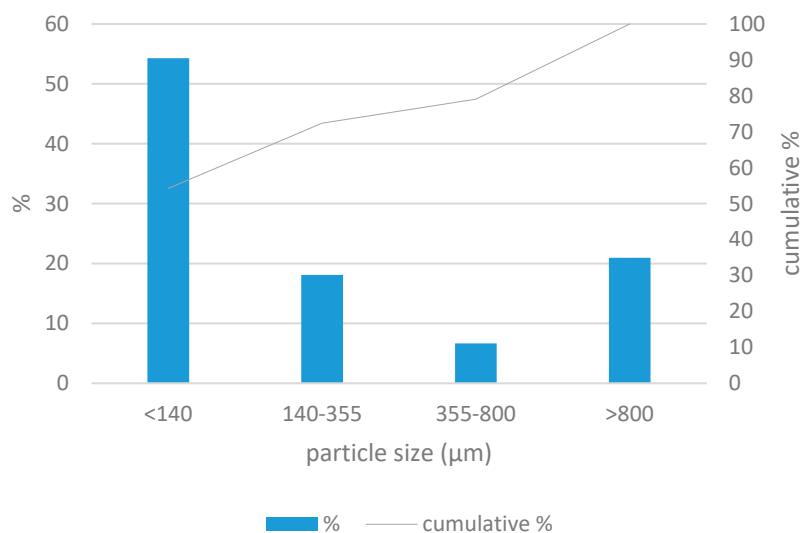
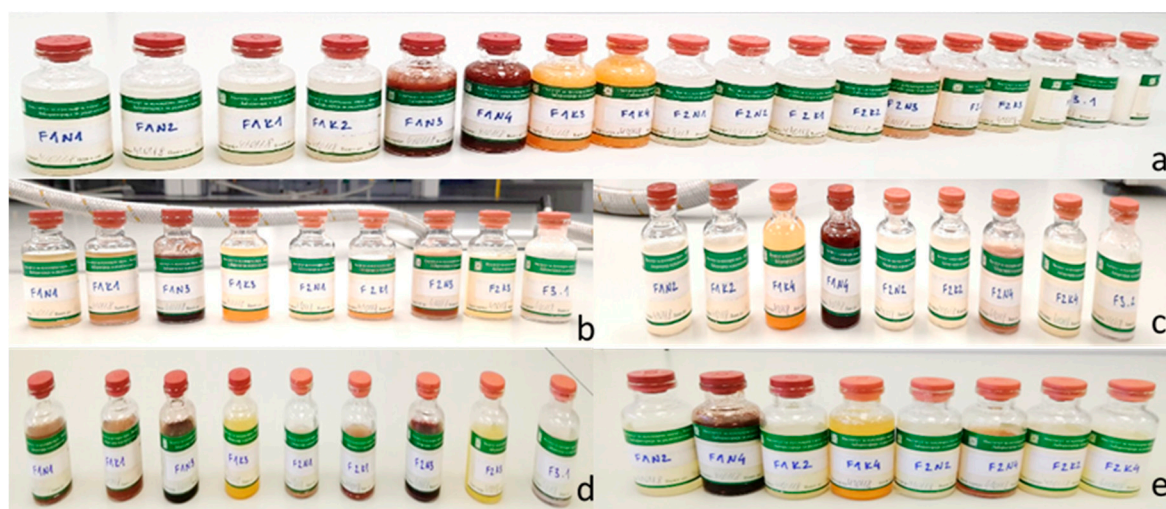


# SUPPLEMENTARY MATERIALS



**Figure S1.** Particle size distribution of crashed tablets (crashing method mortar and pestle).



**Figure S2.** Color of prepared pantoprazole formulations a) 0 day all formulations, b) 7 days formulations kept on room temperature, c) 7 days formulations kept in refrigerator, d) 28 days formulations kept at room temperature and e) 28 days formulations kept in refrigerator

**Table S1.** Comparison of pantoprazole content (%) in prepared formulations 0 vs 7 days and 0 vs 28 days.

fromulation	p values	
	0 vs 7	0 vs 28
F1N1	0.020	0.000
F1N2	0.900	0.250
F1K1	0.797	0.004
F1K2	0.419	0.012
F1N3	0.000	0.000
F1N4	0.000	0.000
F1K3	0.000	0.000
F1K4	0.000	0.000
F2N1	0.000	0.000
F2N2	0.050	0.015
F2K1	0.000	0.000
F2K2	0.001	0.000
F2N3	0.000	0.000
F2N4	0.003	0.000
F2K3	0.000	0.000
F2K4	0.000	0.000
F3.1	0.720	0.180
F3.2	0.247	0.024

**Table S2.** Comparison of pantoprazole content (%) in prepared formulations F1N1, F2N2, F31 and F32 in 0, 7 and 28 days (Student T test,  $p < 0.05$  statistical significance).

days	0				7				28			
fromulation	F1N2	F2N2	F31	F32	F1N2	F2N2	F31	F32	F1N2	F2N2	F31	F32
F1N2	/	0.999	0.537	0.537	/	1.000	1.000	1.000	/	1.000	1.000	1.000
F2N2	0.999	/	0.999	0.999	1.000	/	1.000	0.998	1.000	/	1.000	1.000
F31	0.537	0.999	/	1.000	1.000	1.000	/	1.000	1.000	1.000	/	1.000

**Table S3.** Dissolution profiles comparison between F4, F5 and F6 in medium pH 6.8 (referent formulations) and dissolution profiles in mediums after addition apple juice and chamomile tea (test formulations) using model-independent method

Excipients	Apple juice		Cmamomile tea	
	f1	f2	f1	f2
F4	11	43	3	75
F5	6	63	23	26
F6	26	42	14	51

\*Profiles are similar if  $f1 < 15$  and  $f2$  is between 50 and 100.

**Table S4.** Dissolution profiles comparison between F4 (capsules with LAC as referent formulation) and F5/F6 (test formulations) in different dissolution mediums using model-independent method

Dissolution medium	F5		F6	
	f1	f2	f1	f2
pH 6,8	6	44	30	26
Apple juice	14	38	15	42
Chamomile tea	18	30	37	23

\*Profiles are similar if  $f1 < 15$  and  $f2$  is between 50 and 100. Profiles between F5 and F6 are differenced in all three mediums ( $f1 = 33, 25, 46$ , and  $f2 = 26, 29, 17$  in pH 6.8, apple juice and chamomile tea respectively)