

Supporting Information

Cocrystals of zileuton with enhanced physical stability

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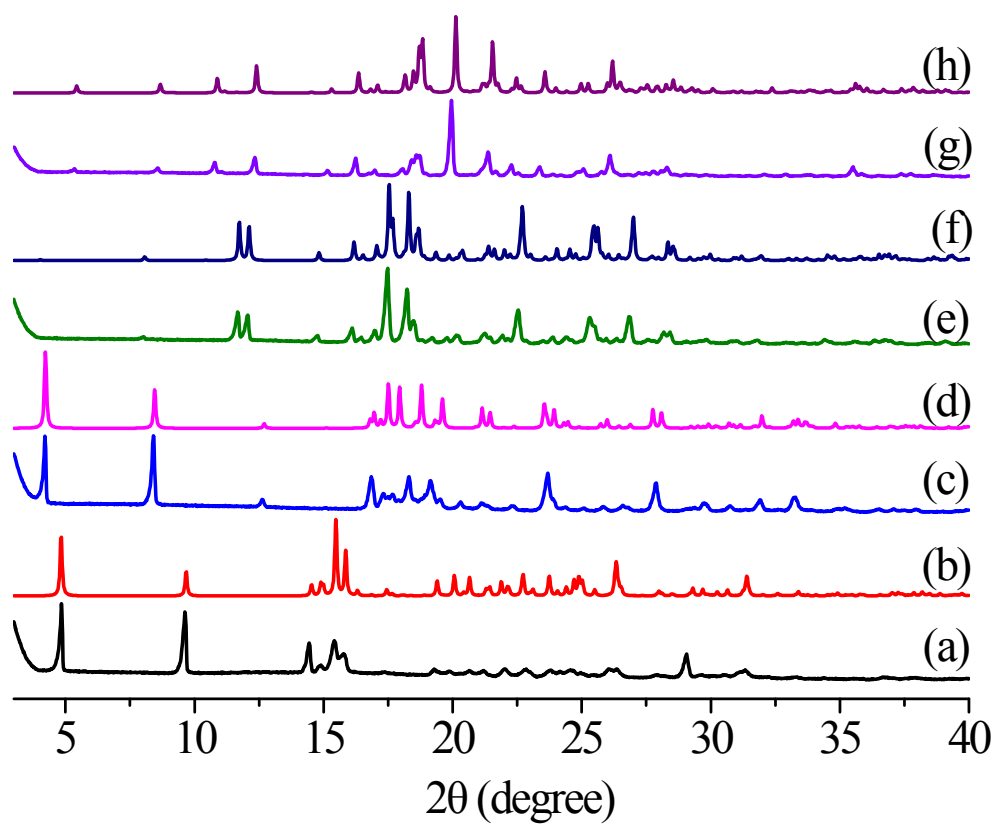


Fig. S1 Experimental and simulated powder XRD patterns of ZIL form A (a and b), ZIL form H (c and d), ZIL-NIC (e and f), and ZIL-ISO (g and h).

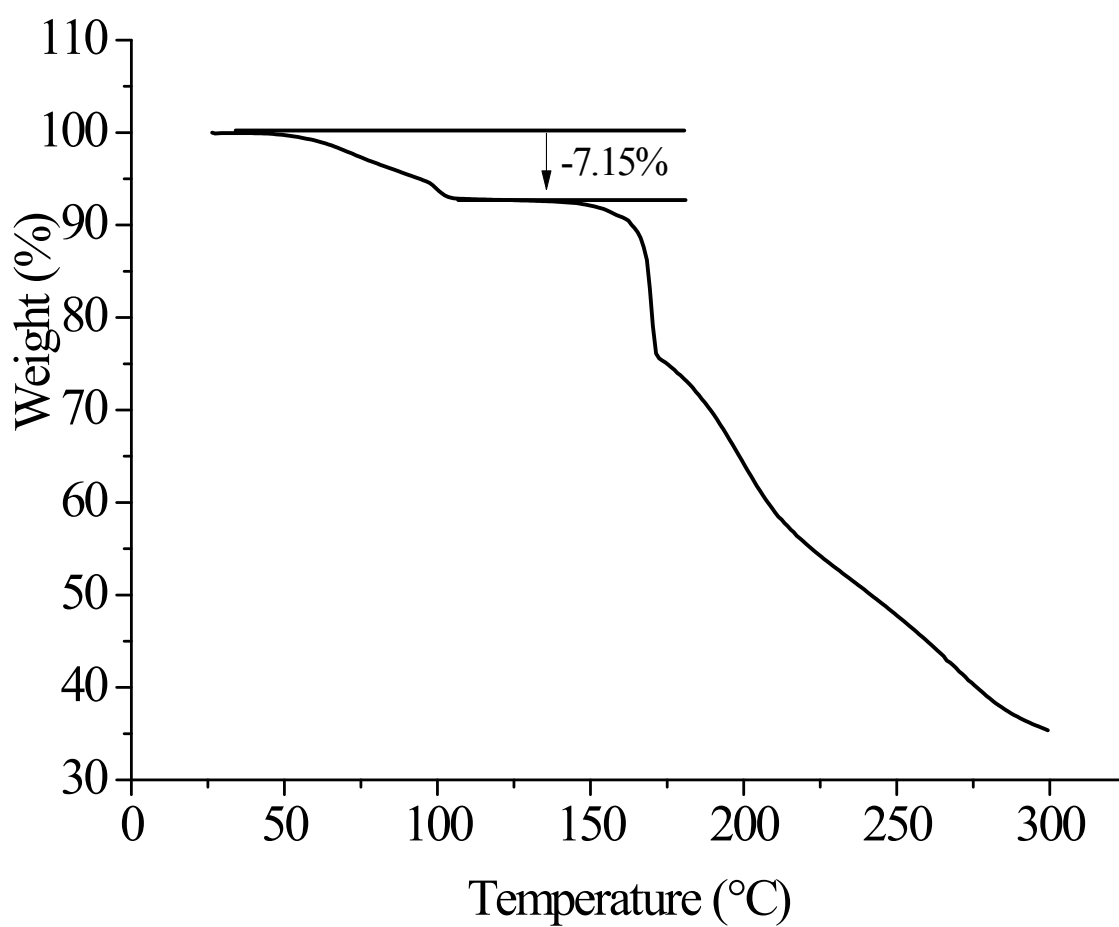


Fig. S2 TG curve of ZIL form H.

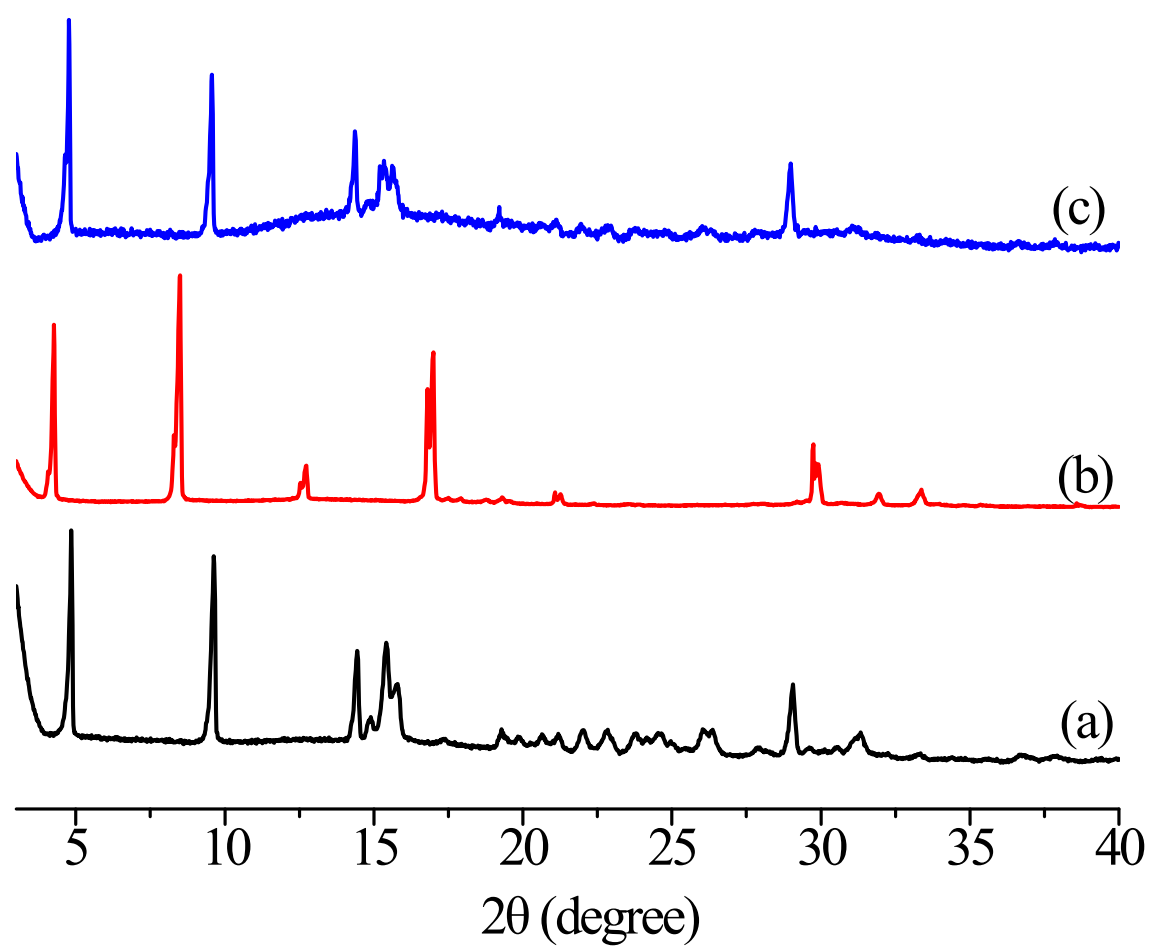


Fig. S3 Powder XRD patterns of ZIL form A (a), ZIL form H (b), and form H after dehydration (c).

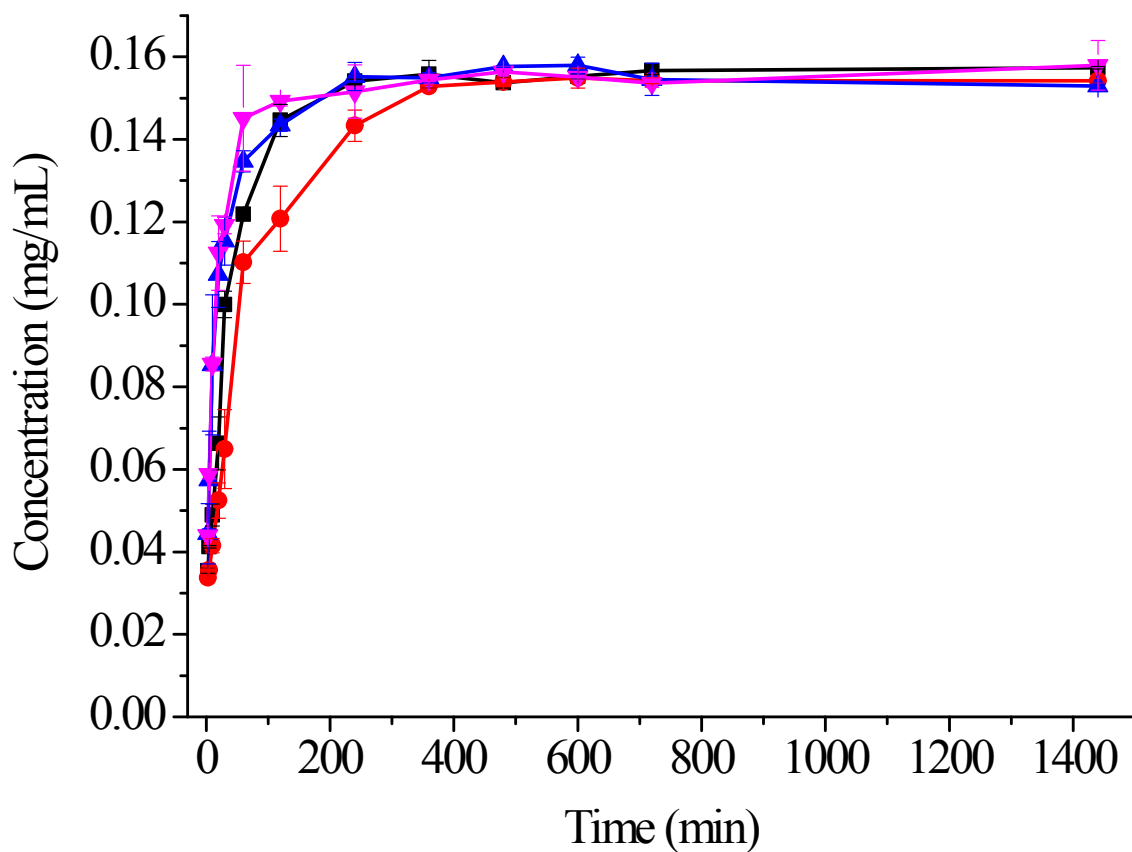


Fig. S4 Dissolution profiles of ZIL form A (■), ZIL form H (●), ZIL-NIC (▲), and ZIL-ISO (▼) in HCl aqueous solution (pH 1.2) at 37 °C .

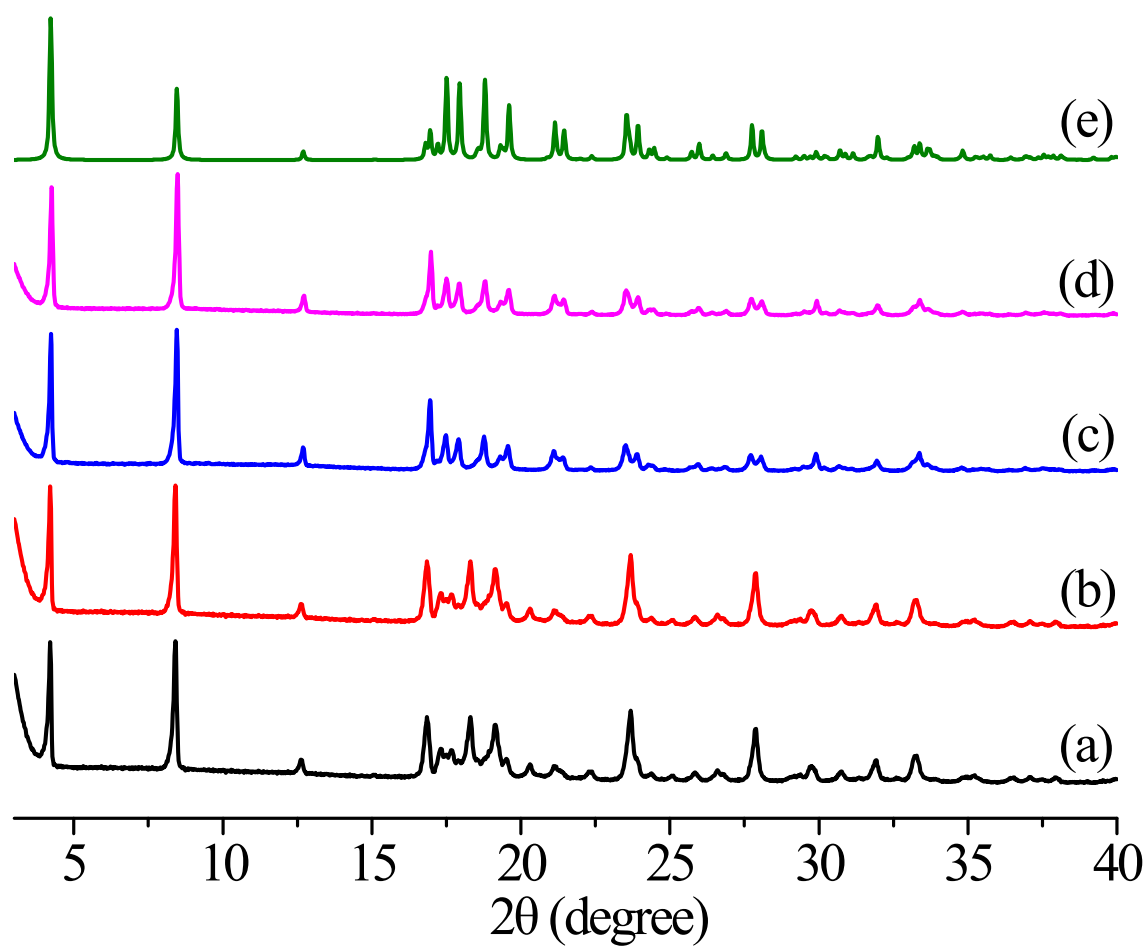


Fig. S5 Powder XRD patterns of ZIL form A (a), ZIL form H (b), ZIL-NIC (c), and ZIL-ISO (d) after dissolution experiments. Simulated powder XRD patterns of ZIL form H (e).

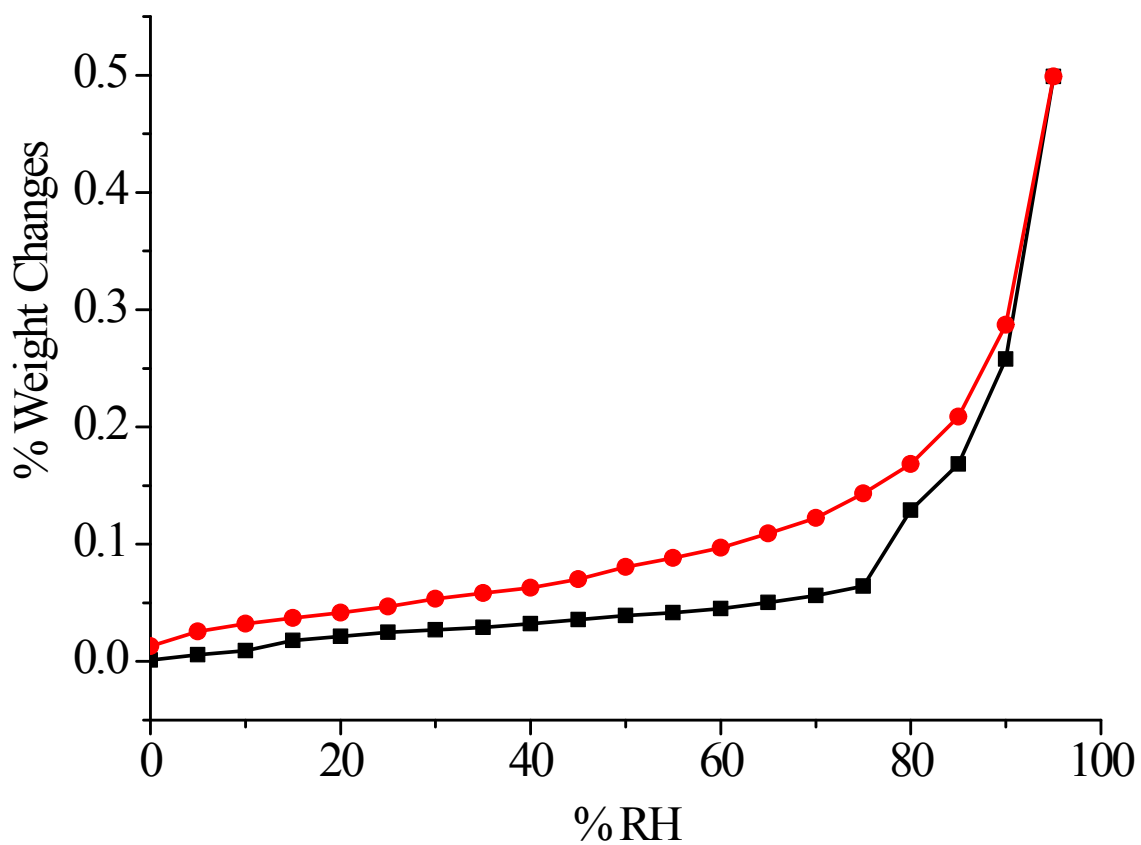


Fig. S6 DVS curve of ZIL form A. Square symbols represent moisture sorption and roundness symbols represent moisture desorption.

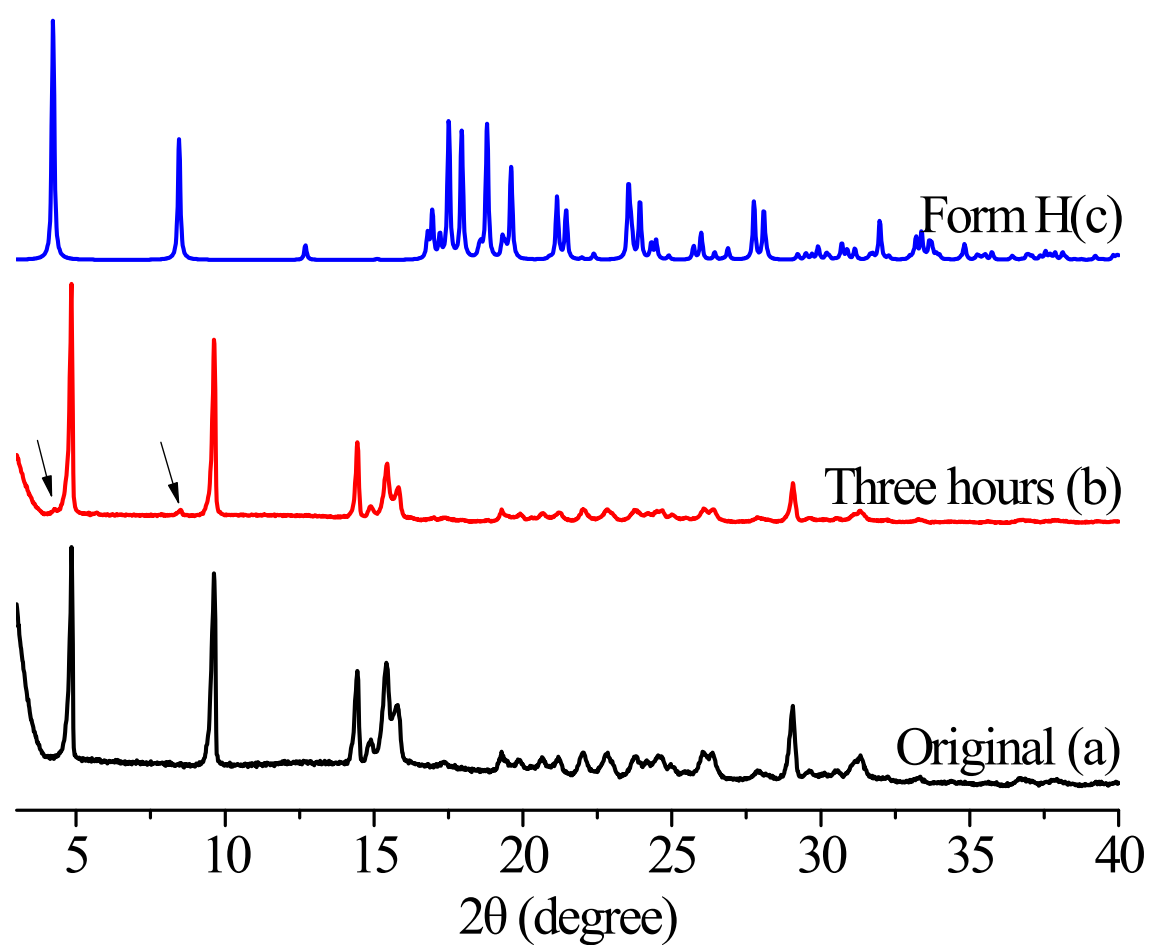


Fig. S7 Powder XRD patterns of ZIL form A (a and b) before and after equilibrating at 95% RH/25°C for 3 h. Simulated powder XRD pattern of ZIL form H (c).

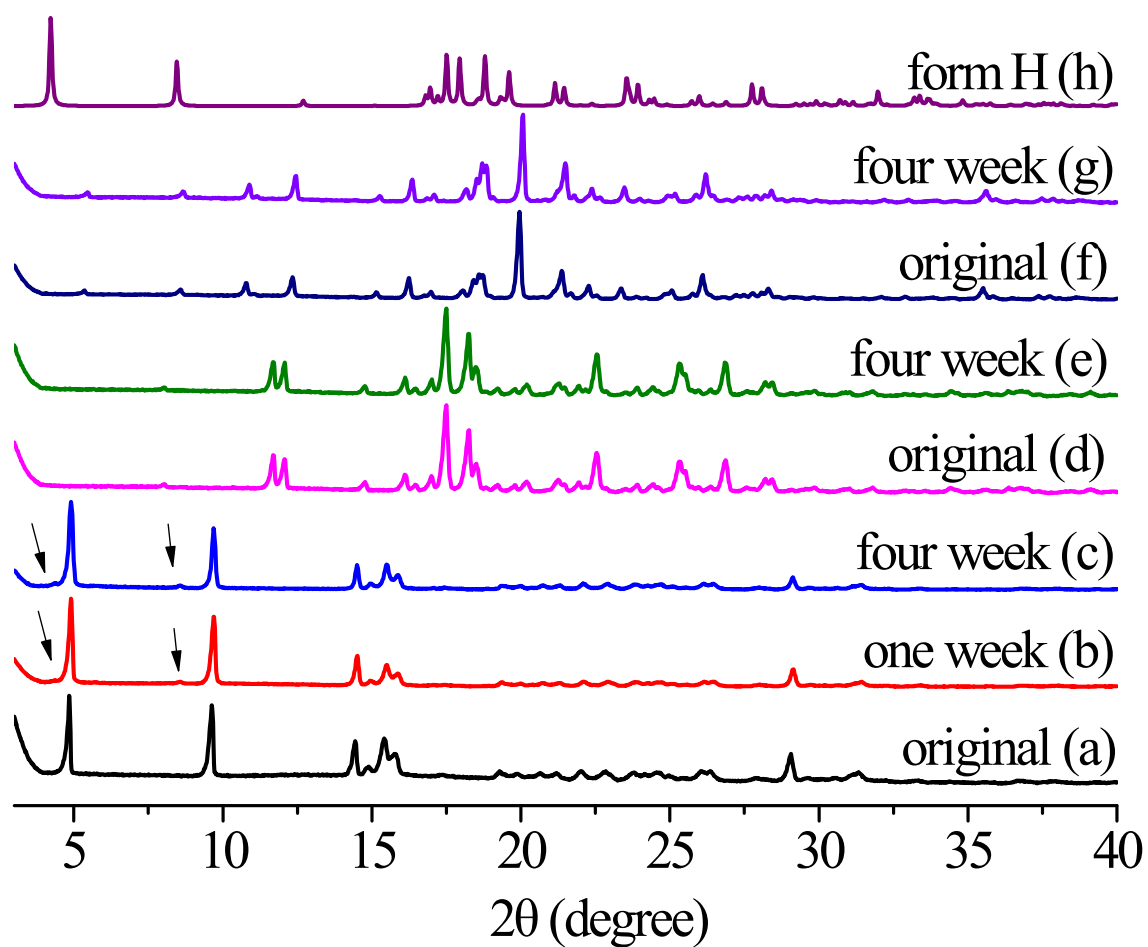


Fig. S8 Powder XRD patterns of ZIL form A (a-c), ZIL-NIC (d and e), and ZIL-ISO (f and g) before and after equilibrating at 75% RH/40°C for different periods. Simulated powder XRD patterns of ZIL form H (h).

Table. S1 pH values before and after dissolution experiment.

Name	ZIL form A	ZIL form H	ZIL-NIC	ZIL-ISO
before	1.2	1.2	1.2	1.2
after	1.06	1.08	1.06	1.12