Supporting Information

Article title: "Cocrystals are the key intermediates for the production of a new polymorph of Vorinostat" Authors: Cristina Puigjaner, *^a Rafael Barbas,^a Anna Portell,^a Ismael Valverde,^c Xavier Vila,^c Xavier Alcobé, ^b Mercè Font-Bardia,^b and Rafel Prohens*^a

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Table 1. Experimental conditions for the polymorph screening

Methodology	N° Exp.	N° Solids	Form obtained (according to XRPD)
Precipitations at 0°C	8	4	Form I, mixture forms I+II
Precipitations at r.t. (toluene as antisolvent)	9	9	Form I, mixture I+II, mixture I+VI, mixture I+II+VI
Precipitations at different temperatures (toluene as antisolvent)	12	8	Form II, form VI, mixture II+VI, mixture I+VI, mixture I+II+VI
Precipitations at r.t. (pentane as antisolvent)	3	3	Mixture I+II, mixture I+VI
Precipitations at r.t. (heptane as antisolvent)	3	3	Mixture I+II, mixture I+VI, mixture I+II+VI
Precipitations at 0°C (Et ₂ O as antisolvent)	9	9	Form I, mixture I+II, mixture I+VI
Precipitations at 0°C (AcOEt as antisolvent)	10	9	Form I, mixture I+VI
Precipitations at 0°C (hexane as antisolvent)	10	10	Form I, form II, mixture I+II, mixture I+VI, mixture I+II+VI
Precipitations at 0°C (heptane as antisolvent)	4	4	Mixture I+II
Precipitations at 0°C (pentane as antisolvent)	4	4	Mixture I+II
Precipitations at 0°C (CHCl ₃ as antisolvent)	4	4	Form I
Precipitations at -20°C (hexane as antisolvent)	4	4	Mixture I+II, mixture I + III
Precipitations at -20°C (heptane as antisolvent)	4	4	Mixture I+II, mixture I+II+III
Precipitations at -20°C (pentane as antisolvent)	4	4	Mixture I+II, mixture I+II+III
Evaporations under reduced pressure	4	4	Form I, mixture I+III
Lyophilization	8	8	Form I, mixture I+III, mixture I+II, mixture I+VI
Crystallisations (evaporation of solvent at r.t.)	8	8	Form I
Crystallisations (evaporation of solvent from high temperature)	10	1	Form I

Electronic Supplementary Material (ESI) for CrystEngComm This journal is © The Royal Society of Chemistry 2011 **Fig. 1** XRPD of experimental and simulated forms I and VI

