## **Supporting Information**

The Supporting Information contains the complete XPS spectra for the systems studied.

C 1s s#6/54

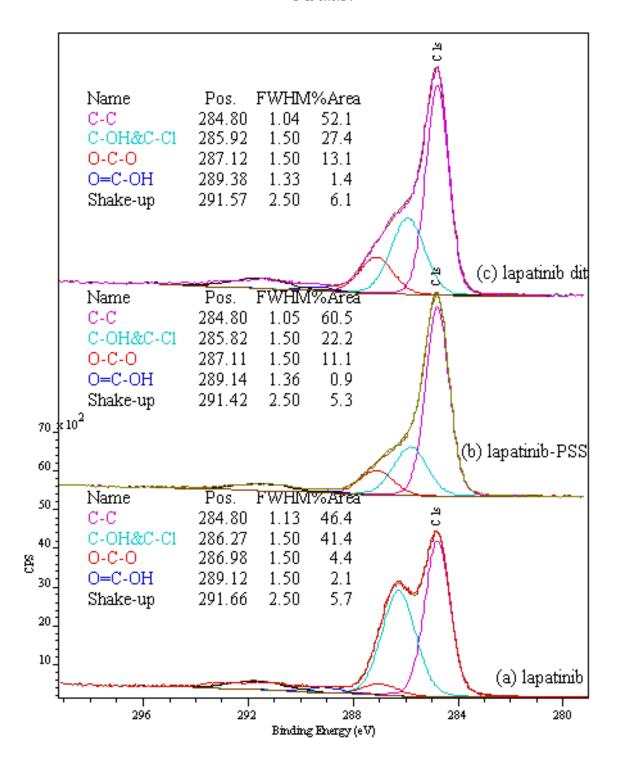


Figure S1. C 1s peaks obtained from (a) lapatinib freebase, (b) lapatinib-PSSA solid dispersion at 40% drug load, and (c) lapatinib ditosylate salt.

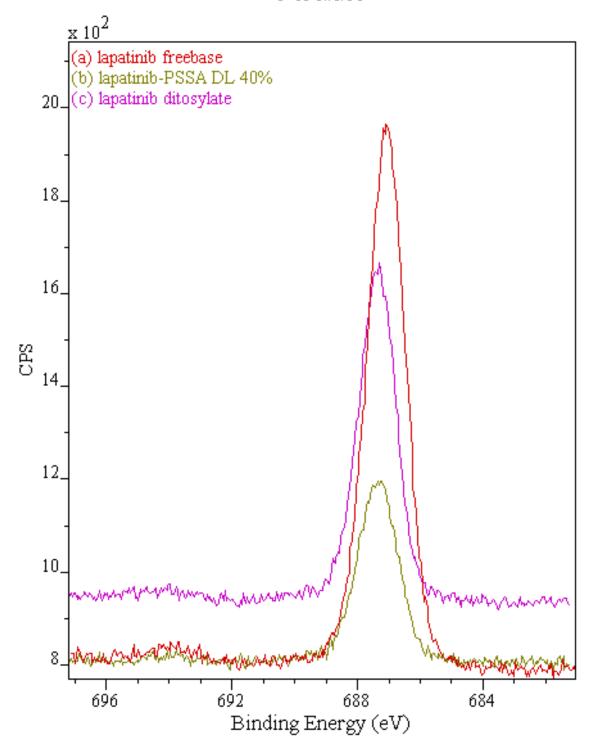


Figure S2. F 1s peaks obtained from (a) lapatinib freebase, (b) lapatinib-PSSA solid dispersion at 40% drug load, and (c) lapatinib ditosylate salt.

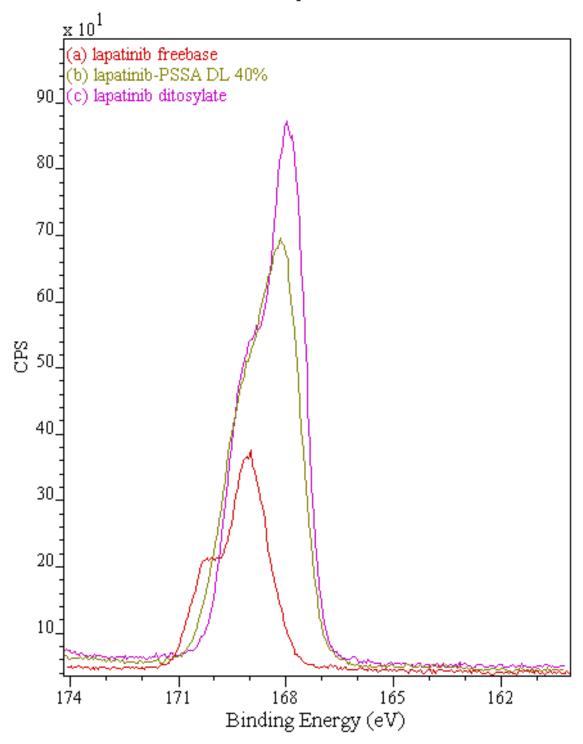


Figure S3. S 2p peaks obtained from (a) lapatinib freebase, (b) lapatinib-PSSA solid dispersion at 40% drug load, and (c) lapatinib ditosylate salt.

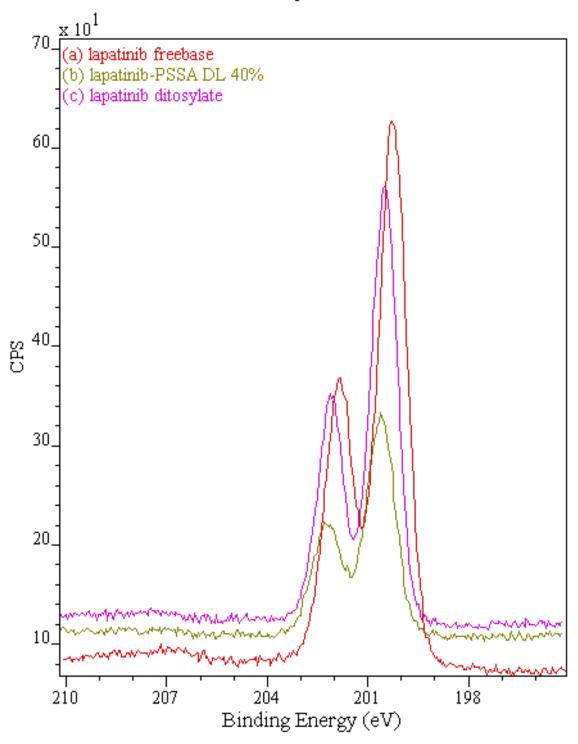


Figure S4. Cl 2p peaks obtained from (a) lapatinib freebase, (b) lapatinib-PSSA solid dispersion at 40% drug load, and (c) lapatinib ditosylate salt.

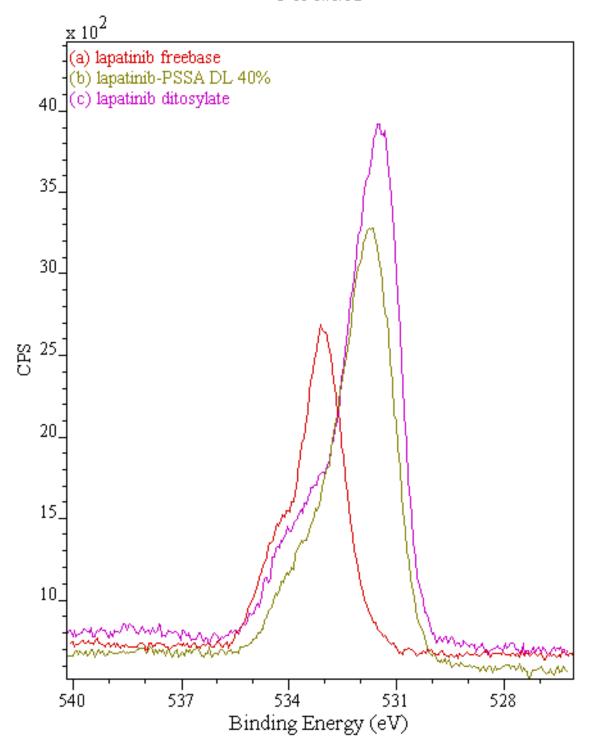


Figure S5. O 1s peaks obtained from (a) lapatinib freebase, (b) lapatinib-PSSA solid dispersion at 40% drug load, and (c) lapatinib ditosylate salt.

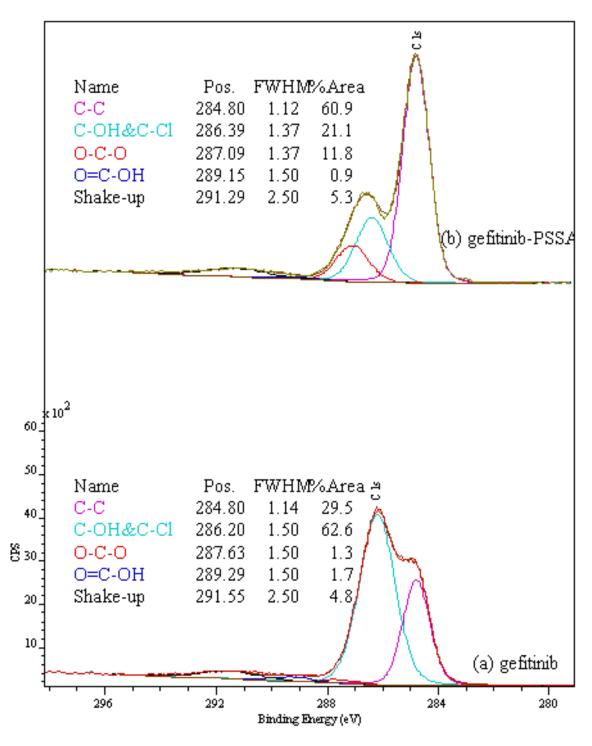


Figure S6. XPS C 1s peaks obtained from (a) gefitinib, and (b) gefitinib-PSSA solid dispersion at 40% drug load.

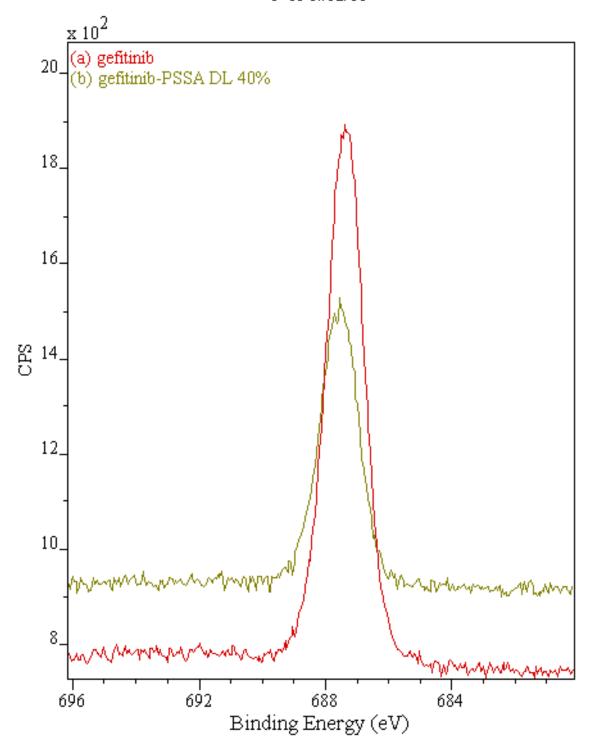


Figure S7. XPS F 1s peaks obtained from (a) gefitinib, and (b) gefitinib-PSSA solid dispersion at 40% drug load.

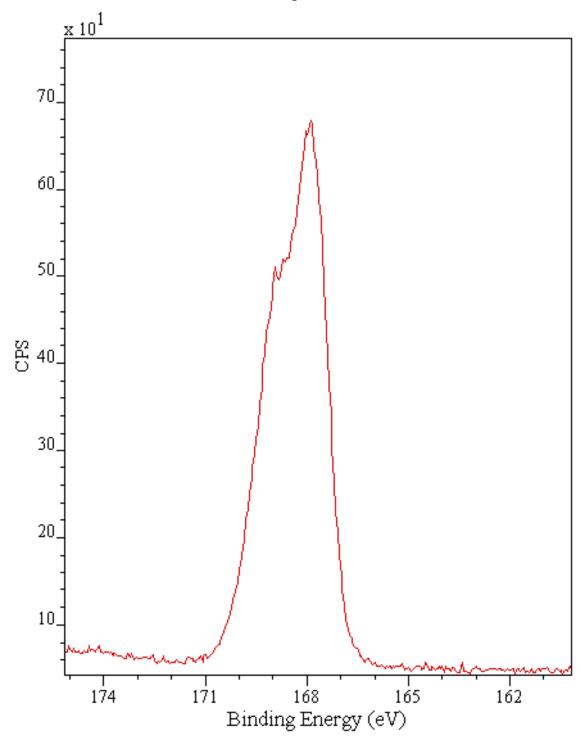


Figure S8. XPS S 2p peaks obtained from gefitinib-PSSA solid dispersion at 40% drug load.

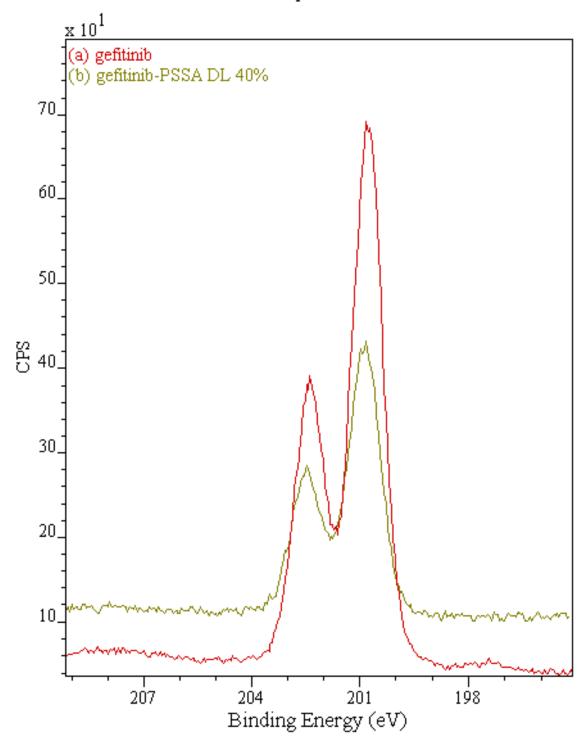


Figure S9. XPS Cl 2p peaks obtained from (a) gefitinib, and (b) gefitinib-PSSA solid dispersion at 40% drug load.

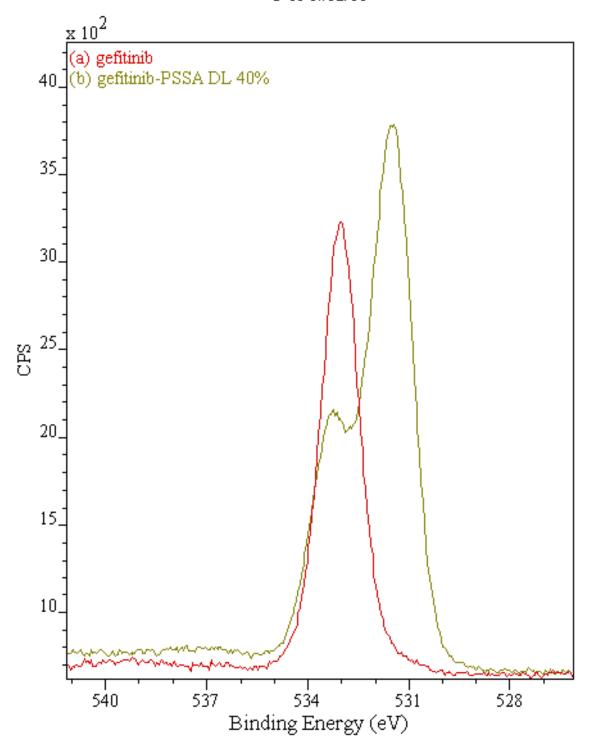


Figure S10. XPS O 1s peaks obtained from (a) gefitinib, and (b) gefitinib-PSSA solid dispersion at 40% drug load.