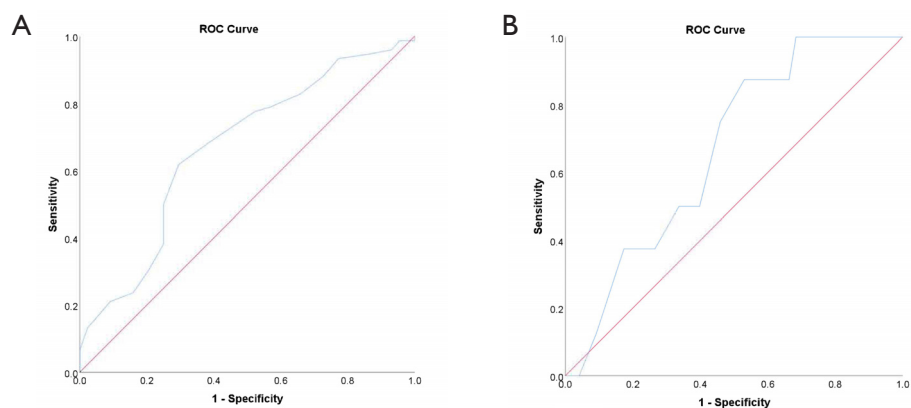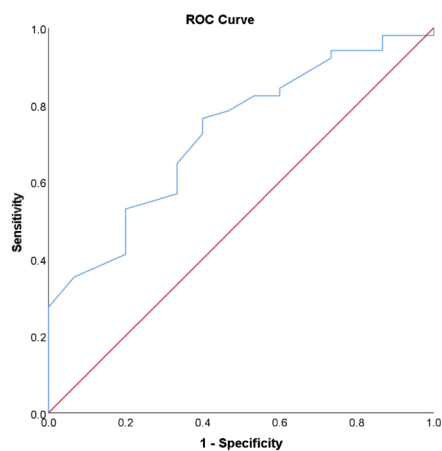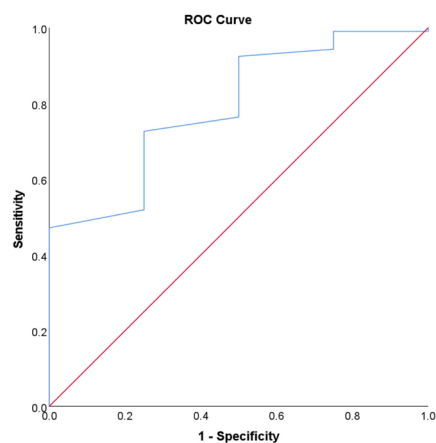**Figure S1** The figures illustrated the prediction of serum protein level/serum albumin level/serum albumin to globulin ratio and the disease control or response by afatinib with Receiver Operating Curve (ROC) analysis for all patients on afatinib. Serum protein, albumin level and albumin to globulin ratio can fairly predict disease control and response to afatinib according to the results in ROC analysis. (A) Receiver Operating Curve (ROC) for serum protein level and disease under control for all patients on afatinib. (B) Receiver Operating Curve (ROC) for serum albumin level and disease under control for all patients on afatinib. (C) Receiver Operating Curve (ROC) for serum albumin to globulin ratio and disease under control for all patients on afatinib. (D) Receiver Operating Curve (ROC) for serum protein level and response of disease for all patients on afatinib. (E) Receiver Operating Curve (ROC) for serum albumin level and response of disease for all patients on afatinib.

Figure S2 The figures illustrated the prediction of serum albumin and protein level and the disease control or response by afatinib with Receiver Operating Curve (ROC) analysis for patients on second line afatinib. Serum albumin and protein level can fairly predict disease control and response to afatinib according to the results in ROC analysis. (A) Receiver Operating Curve (ROC) for serum albumin level and disease control for patients on second line afatinib. (B) Receiver Operating Curve (ROC) for serum protein level and response to disease for patients on second line afatinib.

Figure S3 Receiver Operating Curve (ROC) for serum protein level and grade 2 or above gastrointestinal adverse effects for patients on first line afatinib and with ECOG PS at 1 or above. ECOG PS, Eastern Cooperative Oncology Group Performance State.

Figure S4 Receiver Operating Curve (ROC) for serum protein level and grade 3 or above cutaneous adverse effects for patients on second line afatinib and with ECOG PS at 1 or above. ECOG PS, Eastern Cooperative Oncology Group Performance State.