**Figures Legends**

**Fig. S1.** C-index analyses of the different prognostic models built and tested in the EGF30008 trial.

PAM50, Prediction Analysis of Microarray 50.

**Fig. S2**. Survival outcomes based on the PAM50MET score in the EGF30008 trial. (A) Progression-free survival using a predefined cutoff in patients treated with placebo. (B) Progression-free survival using a predefined cutoff in patients treated with lapatinib. (C) Overall survival using a predefined cutoff in patients treated with placebo. (D) Overall survival using a predefined cutoff in patients treated with lapatinib. Interaction tests between PAM50 and treatment arm for PFS and OS were statistically non-significant (all p-values >0.05).

PAM50MET, final model.

**Fig. S3.** Survival outcomes based on the PAM50MET score in the BOLERO-2 trial. (A) Progression-free survival using a predefined cutoff in patients treated with placebo. (B) Progression-free survival using a predefined cutoff in patients treated with everolimus. (C) Overall survival using a predefined cutoff in patients treated with placebo. (D) Overall survival using a predefined cutoff in patients treated with everolimus. Interaction tests between PAM50 and treatment arm for PFS and OS were statistically non-significant (all p-values >0.05).

PAM50MET, final model.

**Fig. S4.** PAM50MET score as a continuous predictor of probability of (A) progression-free survival and (B) overall survival in EGF30008 and (C) progression-free survival (D) and overall survival in BOLERO-2 (dashed lines as 95% CI).

CI, confidence interval; PAM50MET, final model.

**Fig. S5.** Survival outcomes based on the PAM50MET score in the BOLERO-2 trial according to non-visceral versus visceral disease. (A) Progression-free survival of PAM50MET in patients with non-visceral disease. (B) Overall survival of PAM50MET in patients with non-visceral disease. (C) Progression-free survival of PAM50MET in patients with visceral disease. (D) Overall survival of PAM50MET in patients with visceral disease.

CI, confidence interval; PAM50MET, final model.