

## But what about breast cancer?

Name	Predictors	Targets	Prediction	Technology	Legit?
Oncotype DX	21 genes	ER +	Score	qRT-PCR	ASCO, NCCN
Prosigna	50 genes	Hormone receptor +	Score	NanoString	FDA 510k
MammaPrint	70 genes	Any ER status	Binary	DNA microarray	FDA

- ▶ Alvarado et. al. (2015) reported poor concordance in the prediction scores
- ▶ Hyeon et. al. (2017) considered NanoString as a viable alternative to RT-PCR

# Statistical challenges

1. Single-patient prediction
2. Different scaling on genes between platforms
3. Concordance in feature selection/coefficient estimates

## Transferability

The prediction on one gene expression platform should be equivalent to another platform

