**PAM50 subtypes**

- Basal-like n= 68
- HER2-enriched n= 34
- Luminal A n= 63
- Luminal B n= 46
- Normal-like n= 49

**HER2-amplified versus HER2-negative stratified by PAM50 subtypes**

- Basal-like n= 43
- HER2-amplified n= 84
- Luminal A n= 40
- Luminal B n= 29
- Normal-like n= 23

**HER2-amplified stratified by ER-status**

- HER2-amplified / ER+ n= 30
- HER2-amplified / ER− n= 54

**Percentage of aberrant cells (%)**

- P = 0.003