

| DNA Copy number aberrations | PYCR1 | | | ALDH18A1 | | | GLS | | |
|-----------------------------|------------|------------|--------------------------------------|------------|----------|------------------------|------------|----------|--------------------------------------|
| | None | Gain | χ^2 (p-value) | None | Loss | χ^2 (p-value) | None | Gain | χ^2 (p-value) |
| PAM50 | | | | | | | | | |
| Luminal A | 649 (92.3) | 54 (7.7) | | 704 (98.9) | 8 (1.1) | | 708 (99.2) | 6 (0.8) | |
| Luminal B | 354 (75.3) | 116 (24.7) | | 466 (96.1) | 19 (3.9) | | 470 (98.3) | 8 (1.7) | |
| Basal | 272 (83.4) | 54 (16.6) | 89.3 (1.9x10⁻¹⁸) | 308 (94.2) | 19 (5.8) | 22.4 (0.0002) | 303 (92.7) | 24 (7.3) | 49.5 (4.7x10⁻¹⁰) |
| HER2 | 211 (89.8) | 24 (10.2) | | 231 (97.9) | 5 (2.1) | | 229 (95.8) | 10 (4.2) | |
| Normal | 184 (95.3) | 9 (4.7) | | 196 (98.5) | 3 (1.5) | | 196 (100) | 0 | |

Table 1. Gln-Pro enzymes and breast cancer molecular subtypes