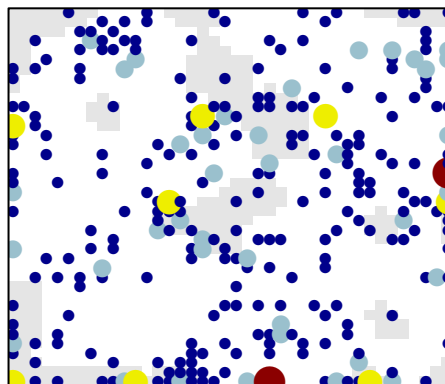


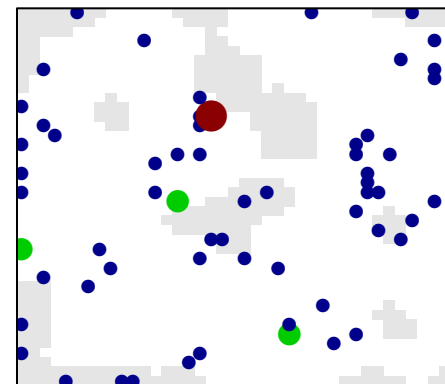
Breast cancer

all genes

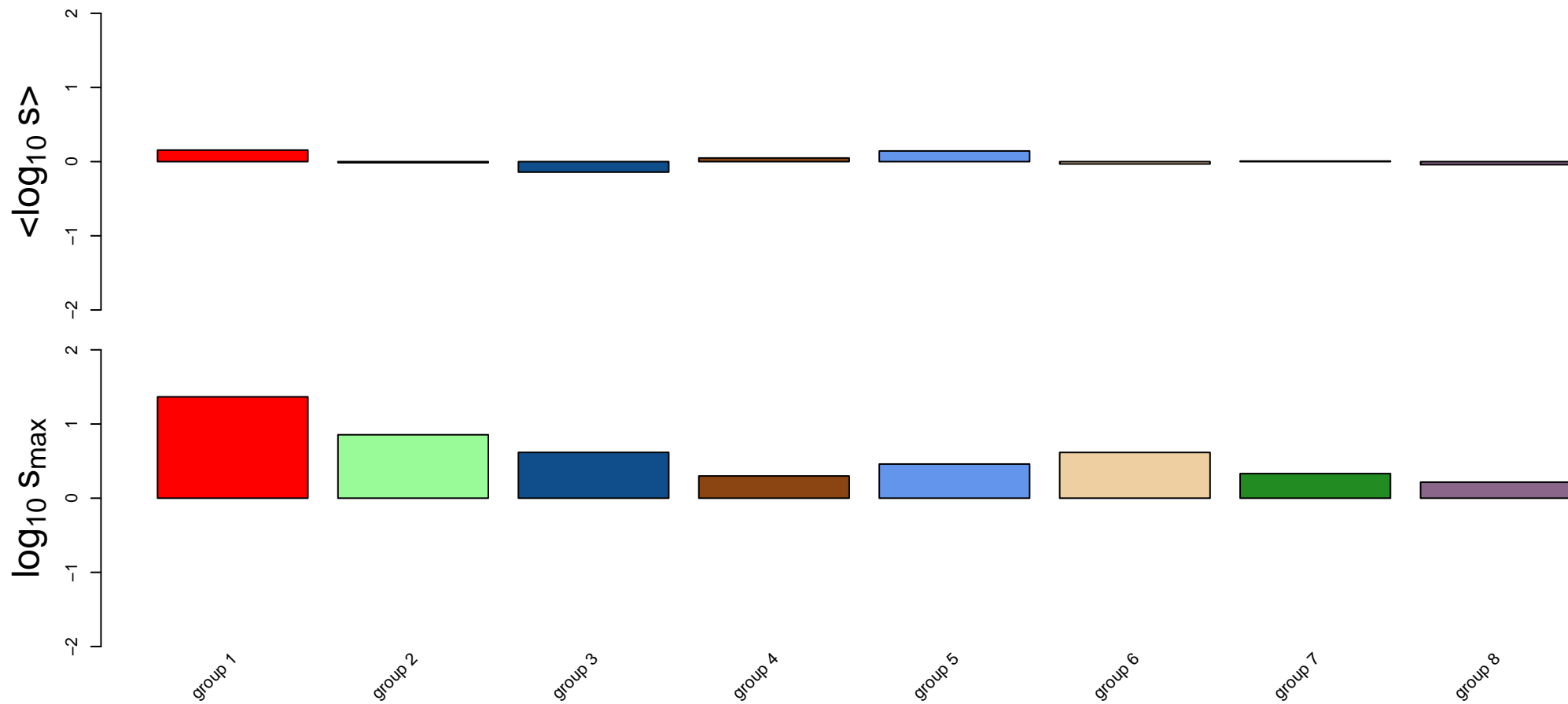


maximum = 4

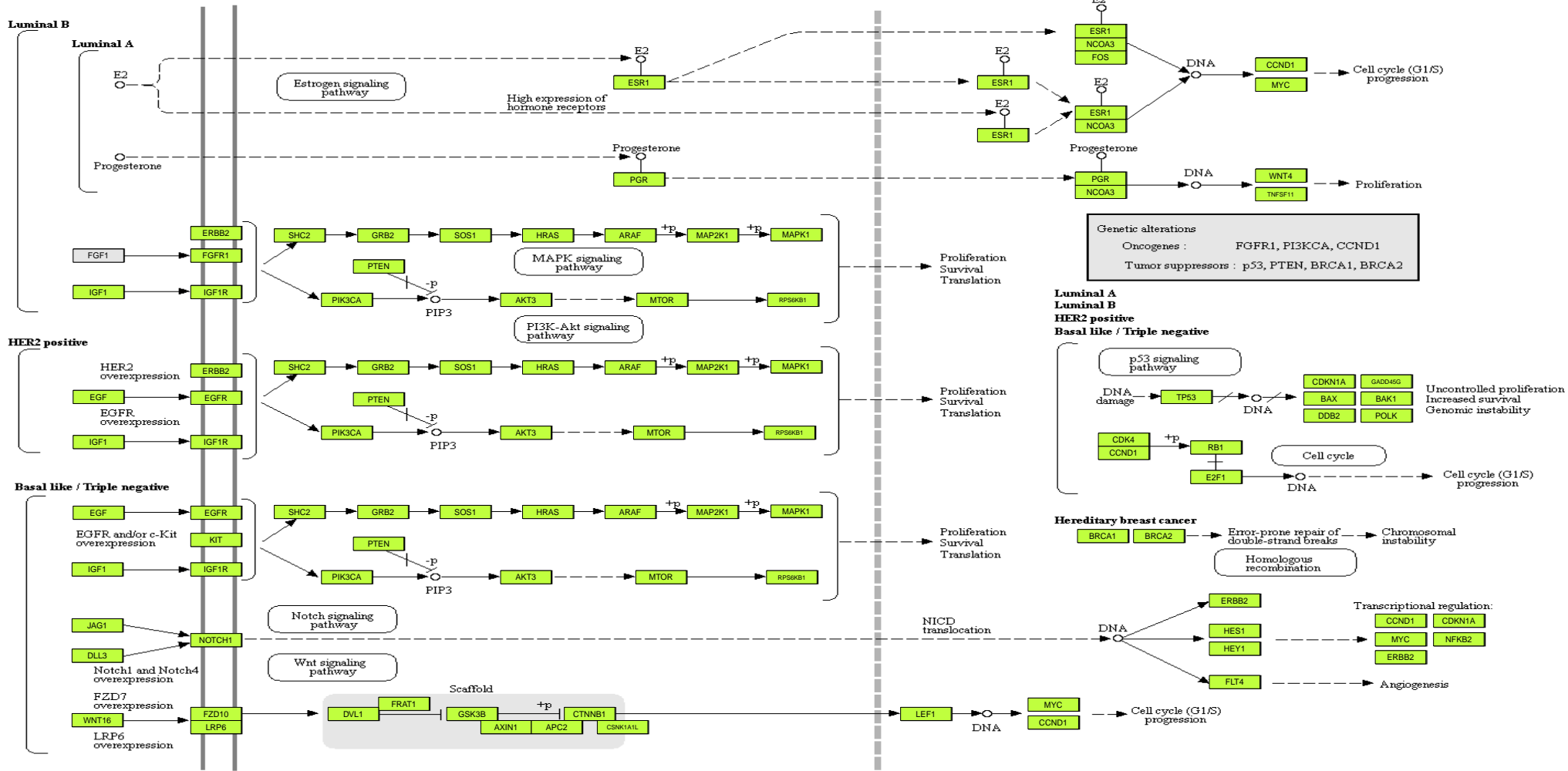
sink node genes



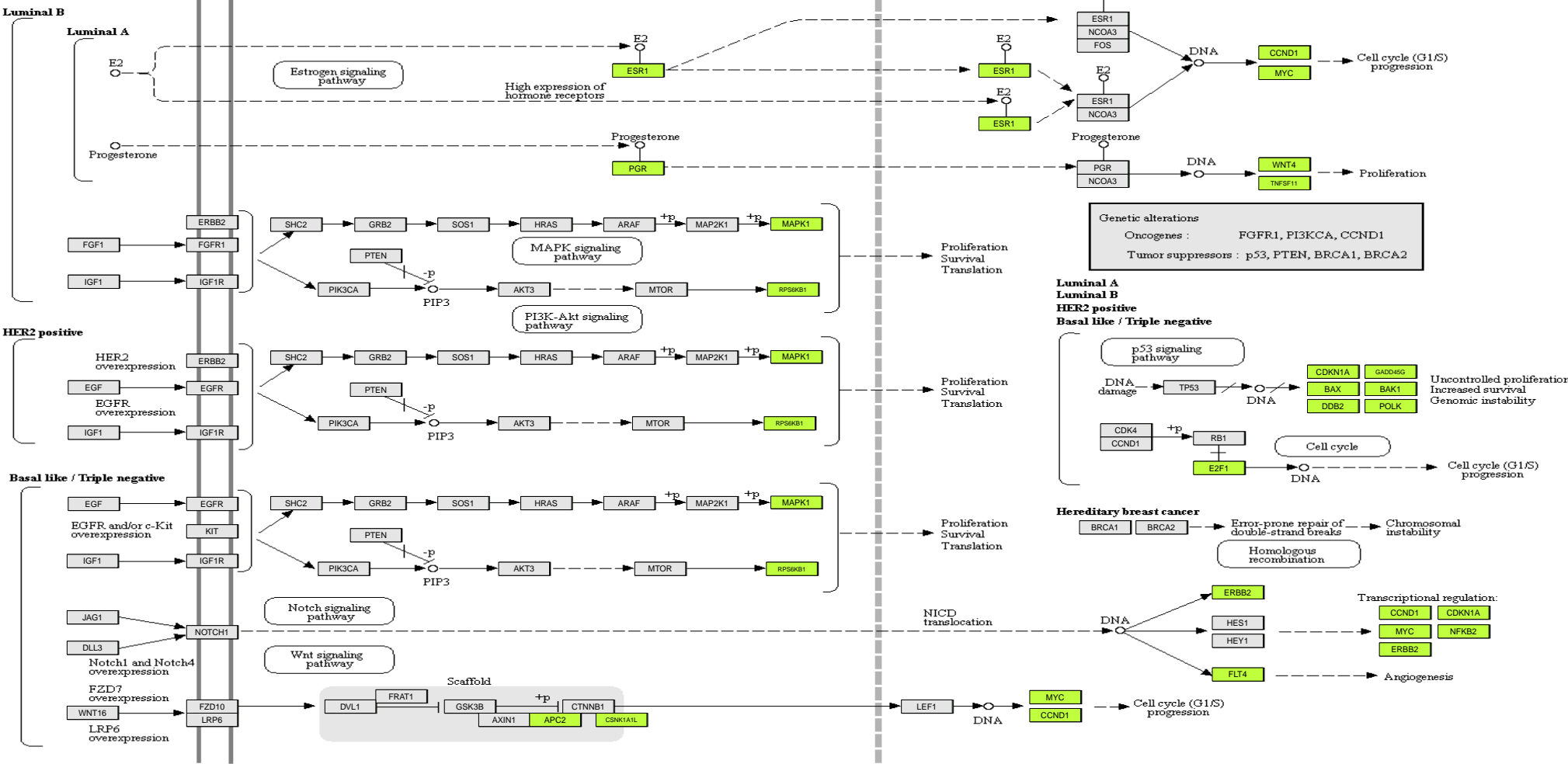
maximum = 3



Breast_cancer genes with data



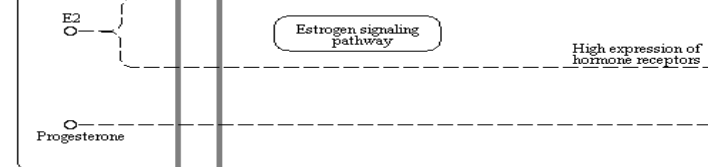
Breast_cancer sink nodes



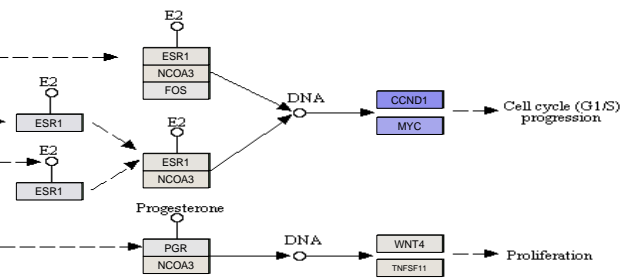
Breast_cancer group 1

Luminal B

Luminal A



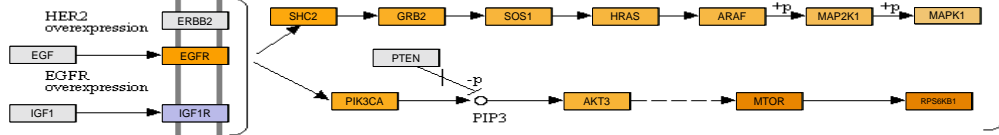
High expression of hormone receptors



Genetic alterations
 Oncogenes : FGFR1, PI3KCA, CCND1
 Tumor suppressors : p53, PTEN, BRCA1, BRCA2

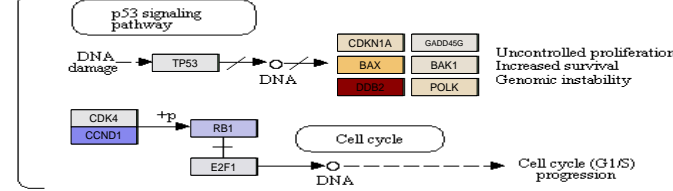
Luminal A
 Luminal B
 HER2 positive
 Basal like / Triple negative

HER2 positive

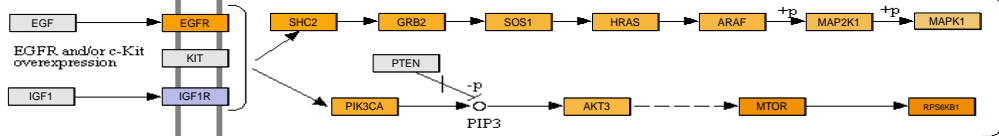


Proliferation
 Survival
 Translation

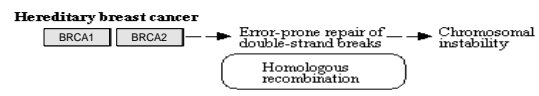
Proliferation
 Survival
 Translation



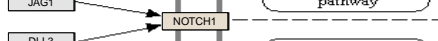
Basal like / Triple negative



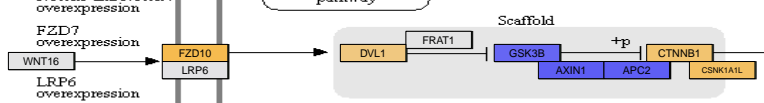
Proliferation
 Survival
 Translation



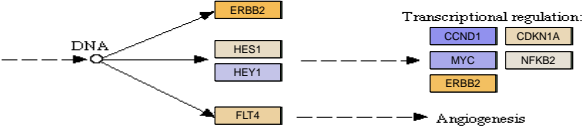
Notch signaling pathway



Wnt signaling pathway



NICD translocation

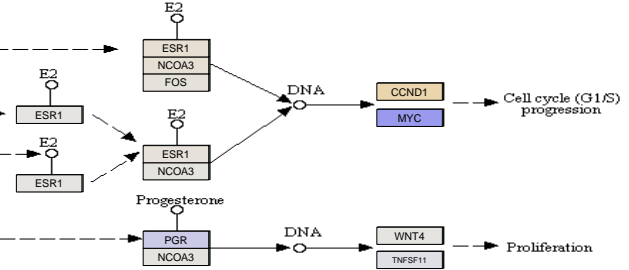
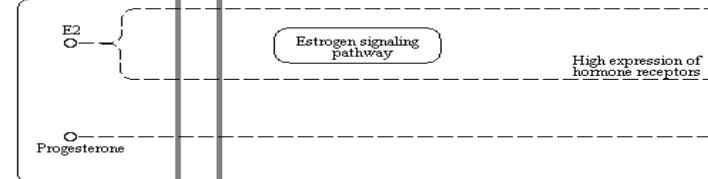


Cell cycle (G1/S) progression

Breast_cancer group 2

Luminal B

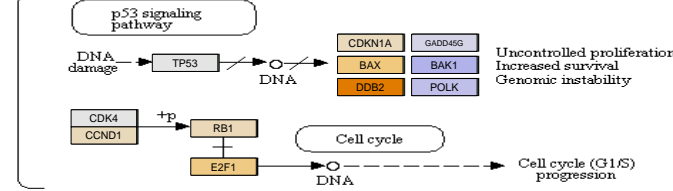
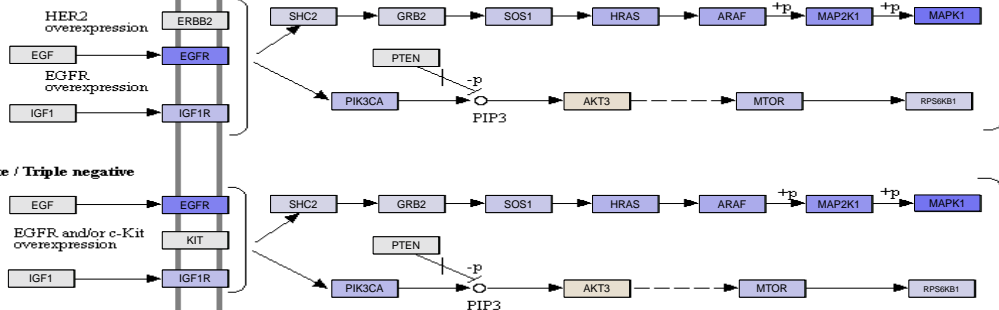
Luminal A



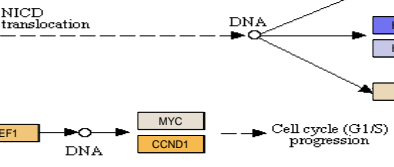
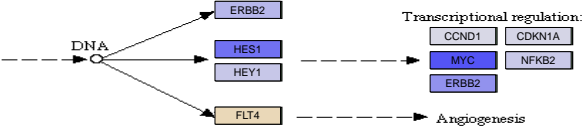
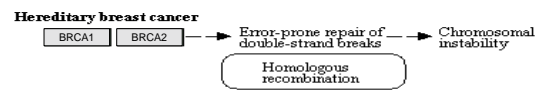
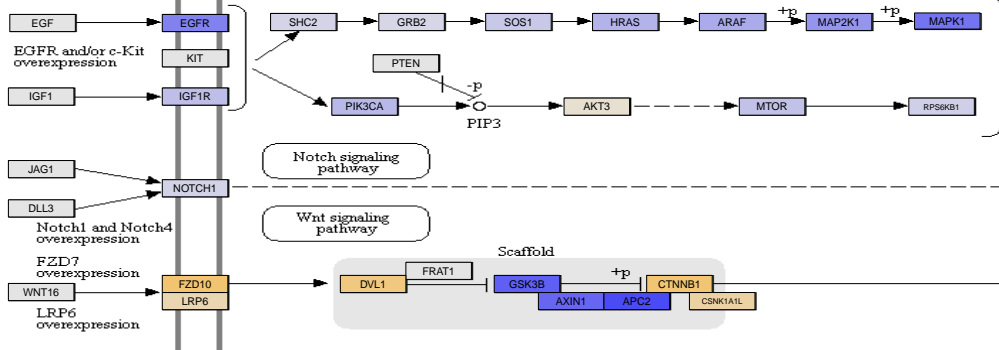
Genetic alterations
 Oncogenes : FGFR1, PI3KCA, CCND1
 Tumor suppressors : p53, PTEN, BRCA1, BRCA2

Luminal A
 Luminal B
 HER2 positive
 Basal like / Triple negative

HER2 positive



Basal like / Triple negative



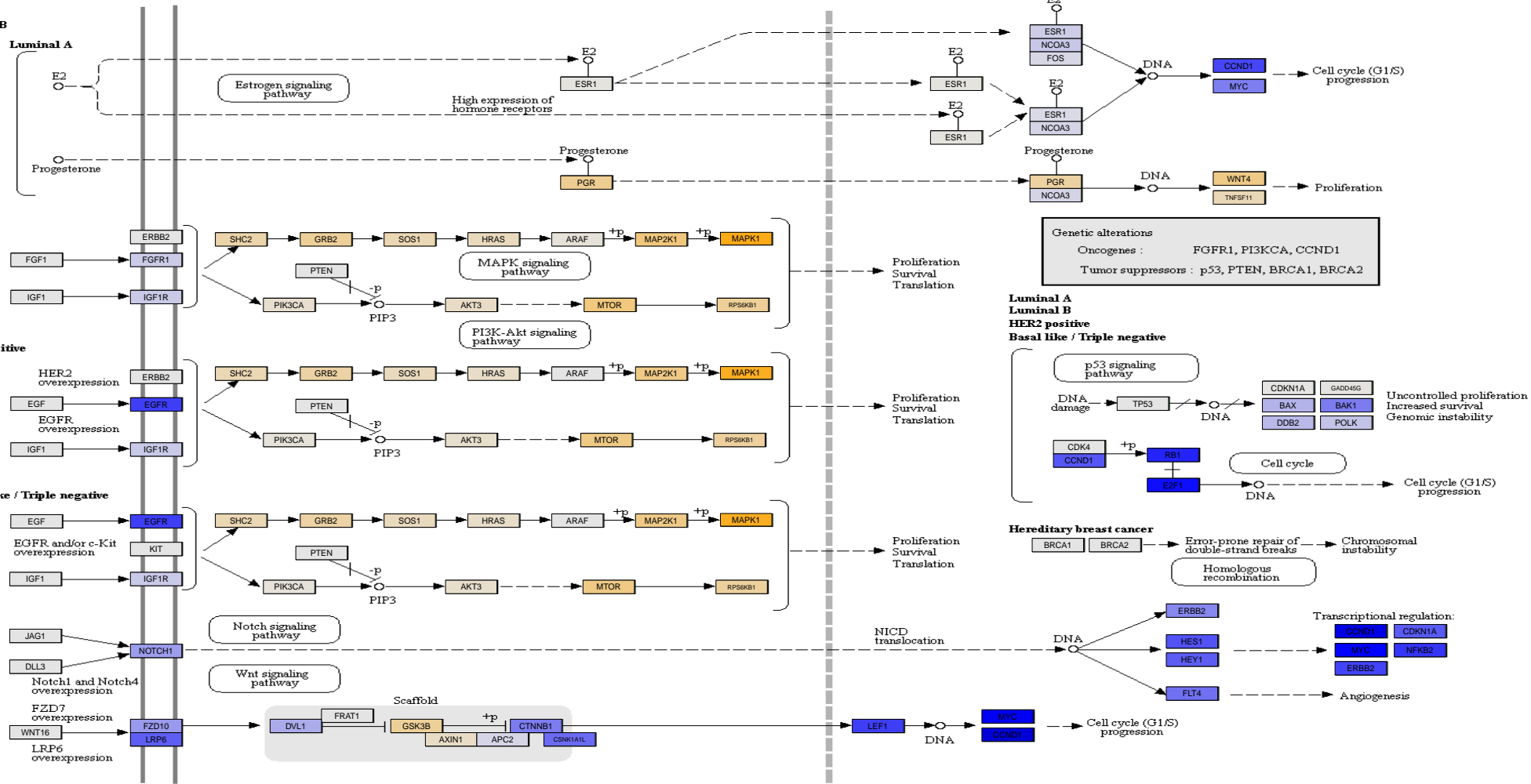
Breast_cancer group.3

Luminal B

Luminal A

HER2 positive

Basal like / Triple negative



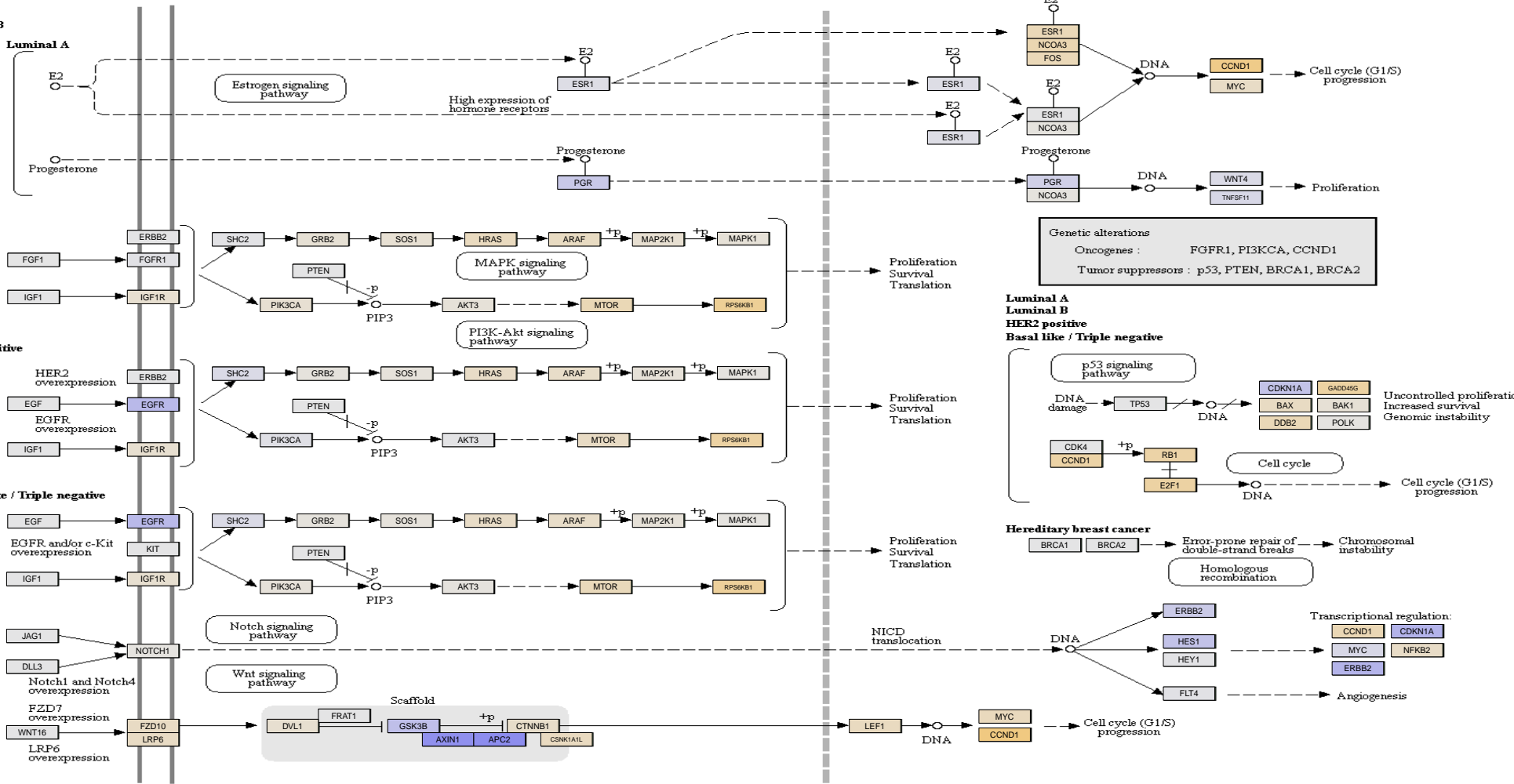
Breast_cancer group 4

Luminal B

Luminal A

HER2 positive

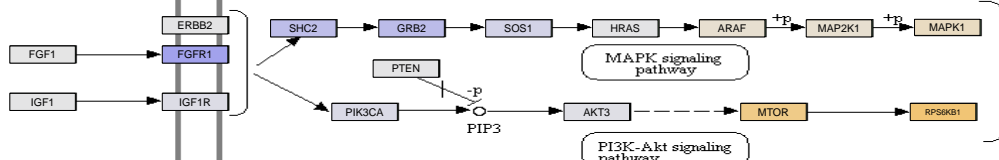
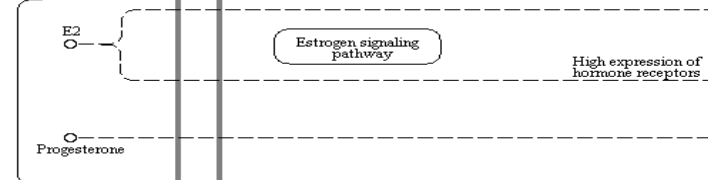
Basal like / Triple negative



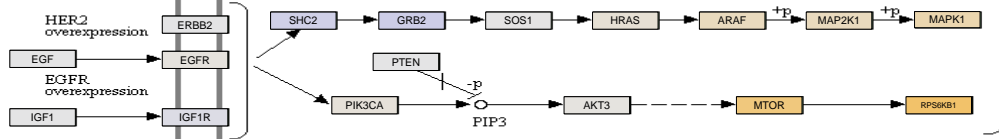
Breast_cancer group.5

Luminal B

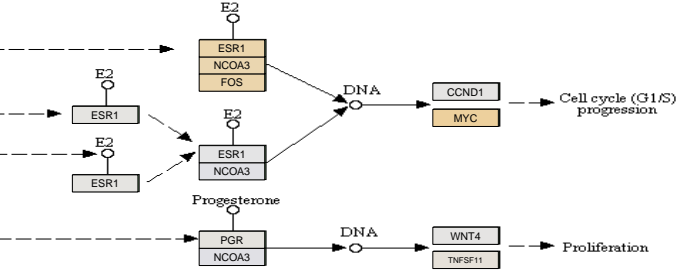
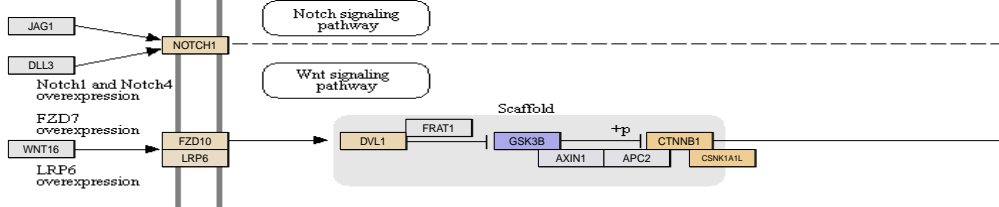
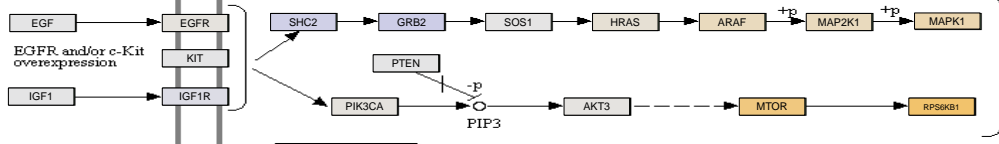
Luminal A



HER2 positive

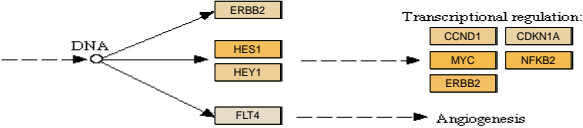
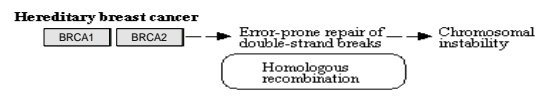
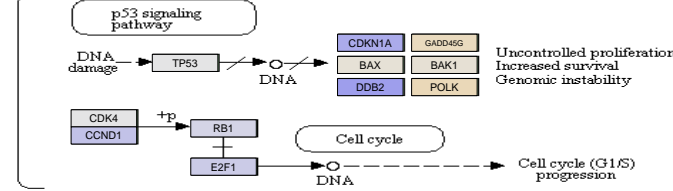


Basal like / Triple negative



Genetic alterations
 Oncogenes : FGFR1, PI3KCA, CCND1
 Tumor suppressors : p53, PTEN, BRCA1, BRCA2

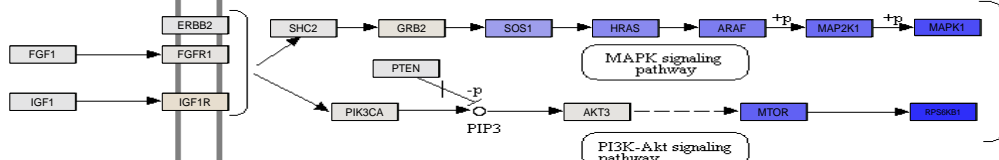
Luminal A
 Luminal B
 HER2 positive
 Basal like / Triple negative



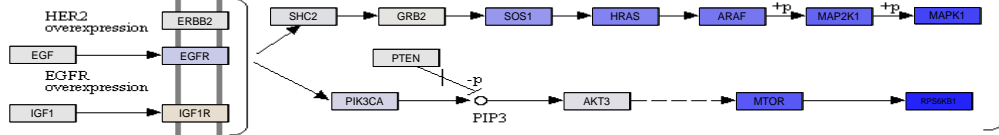
Breast_cancer group.6

Luminal B

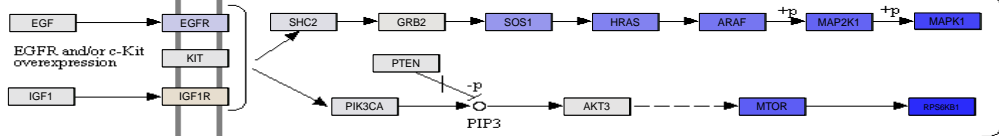
Luminal A



HER2 positive

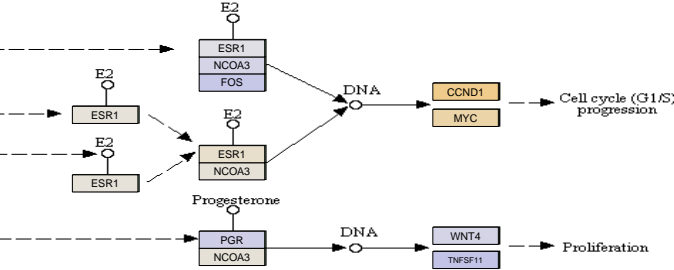
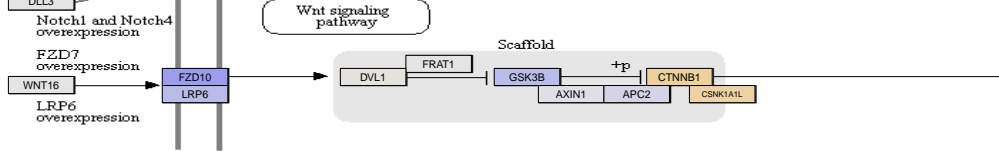


Basal like / Triple negative



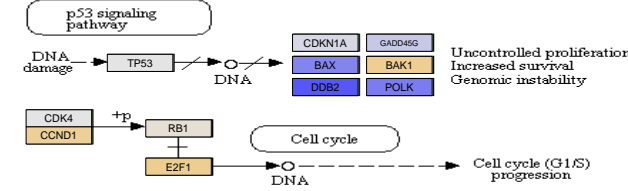
Notch signaling pathway

Wnt signaling pathway

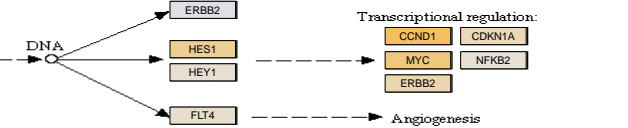
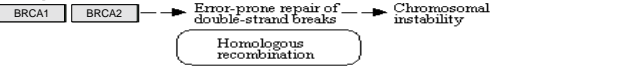


Genetic alterations
 Oncogenes : FGFR1, PI3KCA, CCND1
 Tumor suppressors : p53, PTEN, BRCA1, BRCA2

Luminal A
 Luminal B
 HER2 positive
 Basal like / Triple negative



Hereditary breast cancer



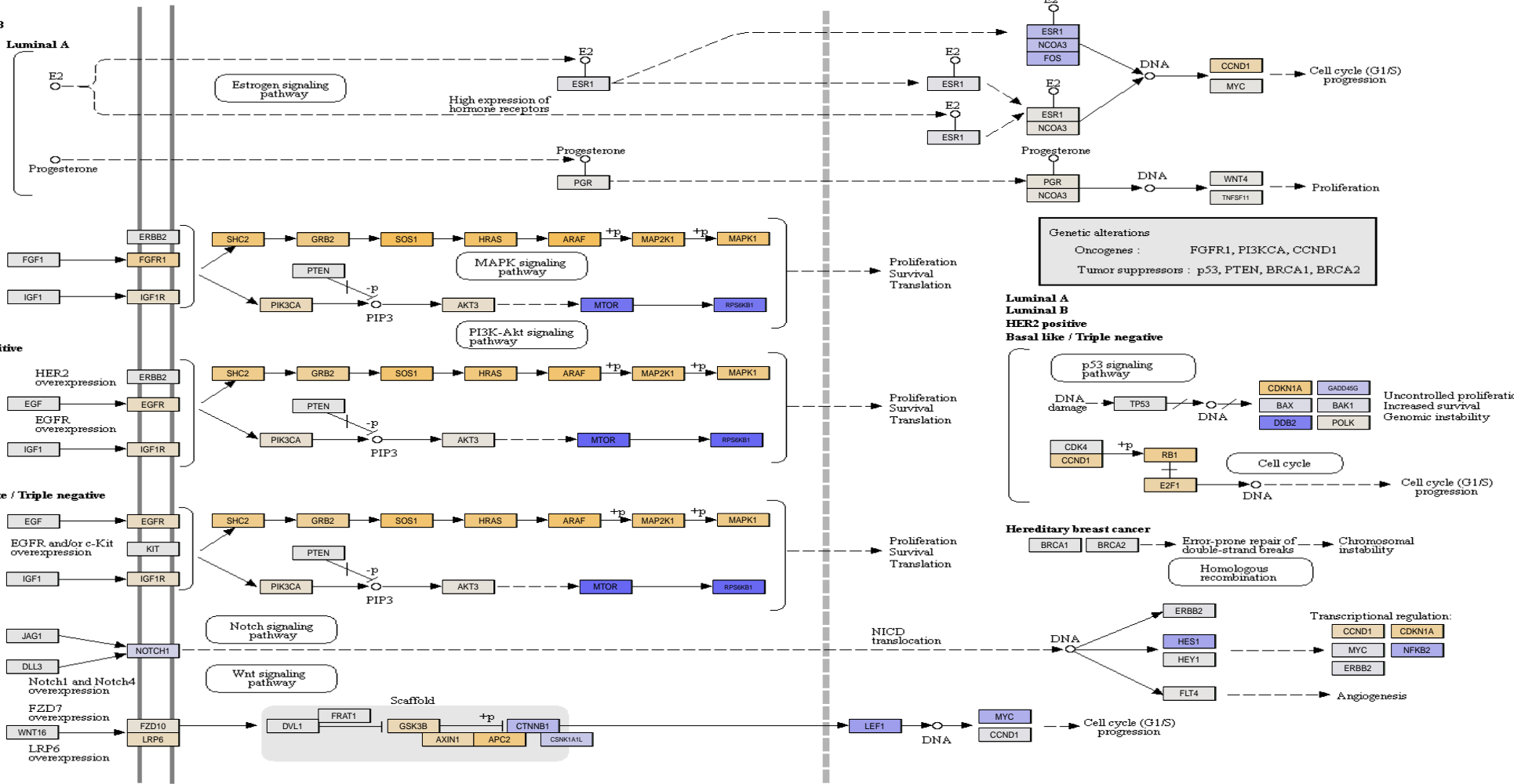
Breast_cancer group 7

Luminal B

Luminal A

HER2 positive

Basal like / Triple negative



Breast_cancer group 8

Luminal B

Luminal A

HER2 positive

Basal like / Triple negative

