

Objects



gene product, mostly protein but including RNA



other molecule, mostly chemical compound



another map

Arrows



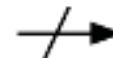
molecular interaction or relation



link to another map

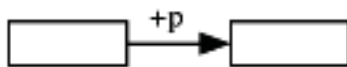


pointer used in legend

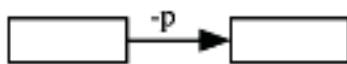


missing interaction (eg., by mutation)

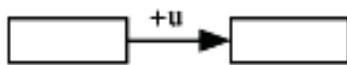
Protein-protein interactions



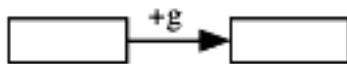
phosphorylation



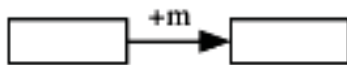
dephosphorylation



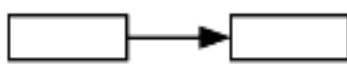
ubiquitination



glycosylation



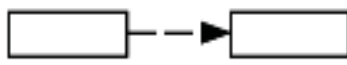
methylation



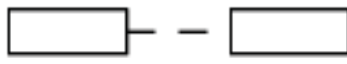
activation



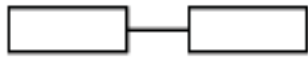
inhibition



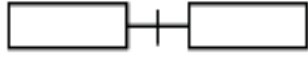
indirect effect



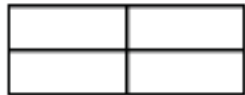
state change



binding / association

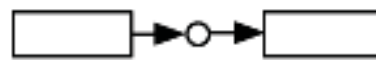


dissociation

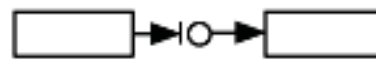


complex

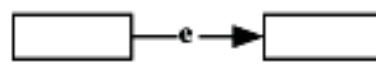
Gene expression relations



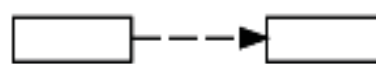
expression



repression

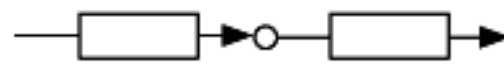


expression



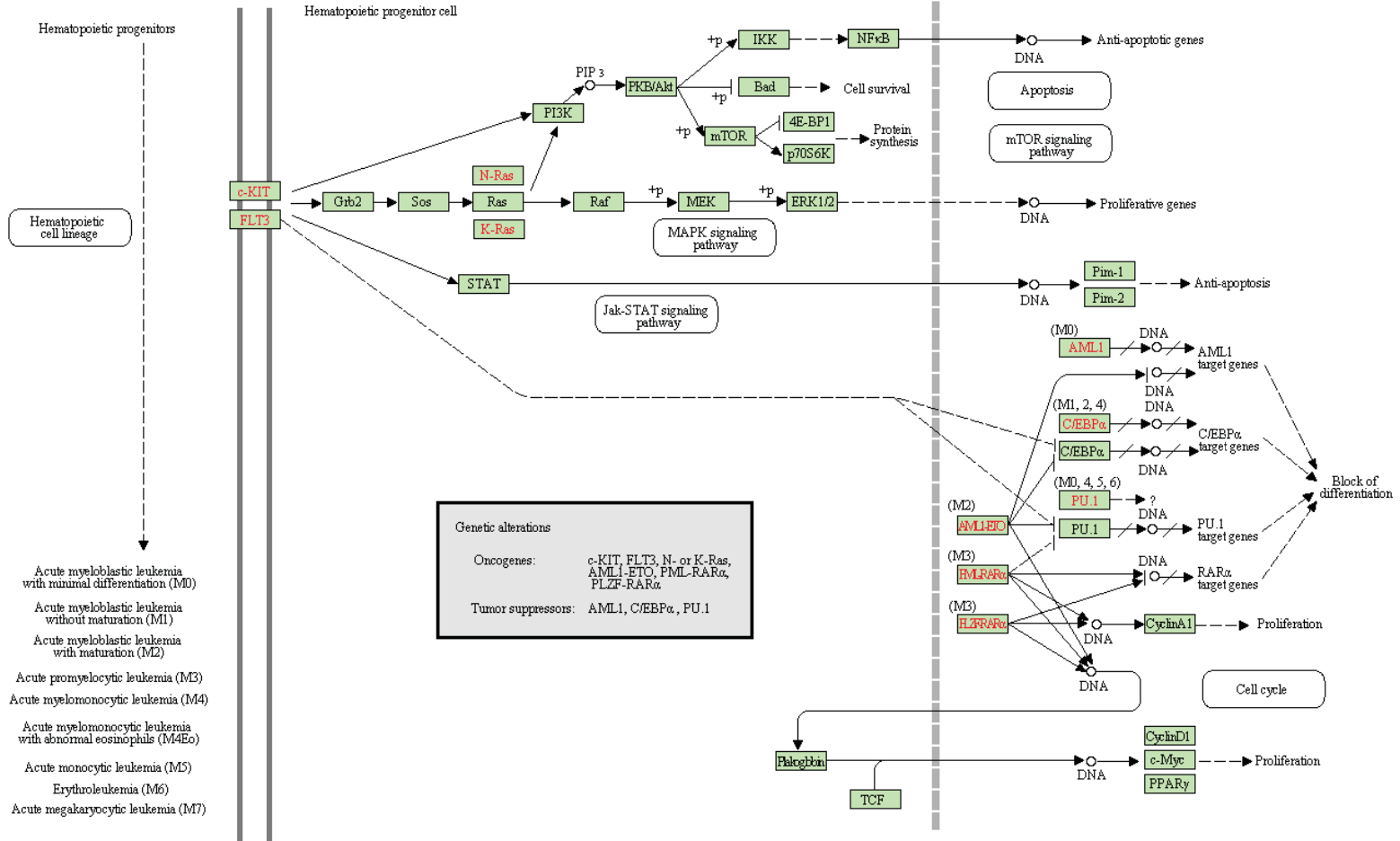
indirect effect

Enzyme-enzyme relations

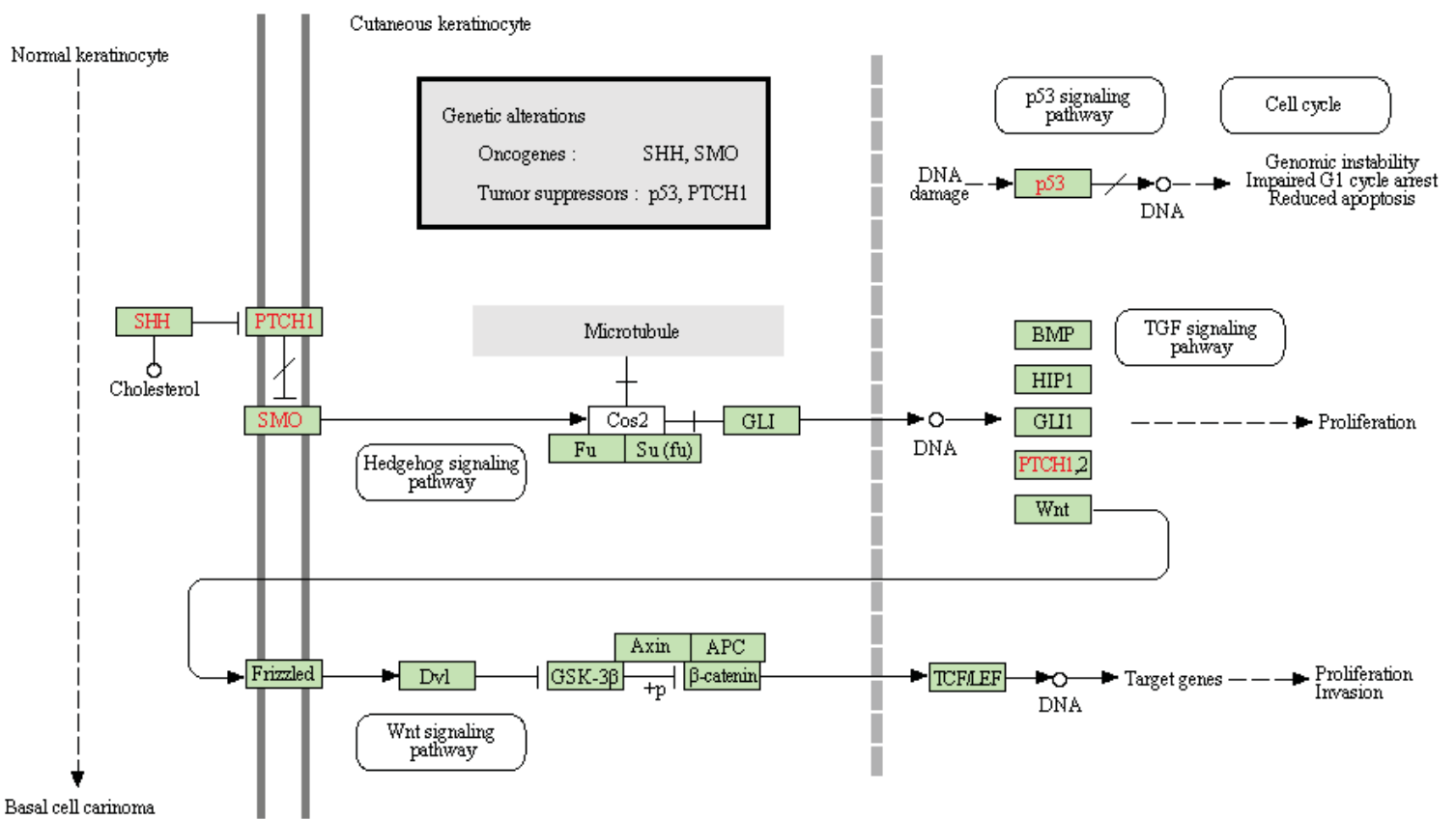


two successive reaction steps

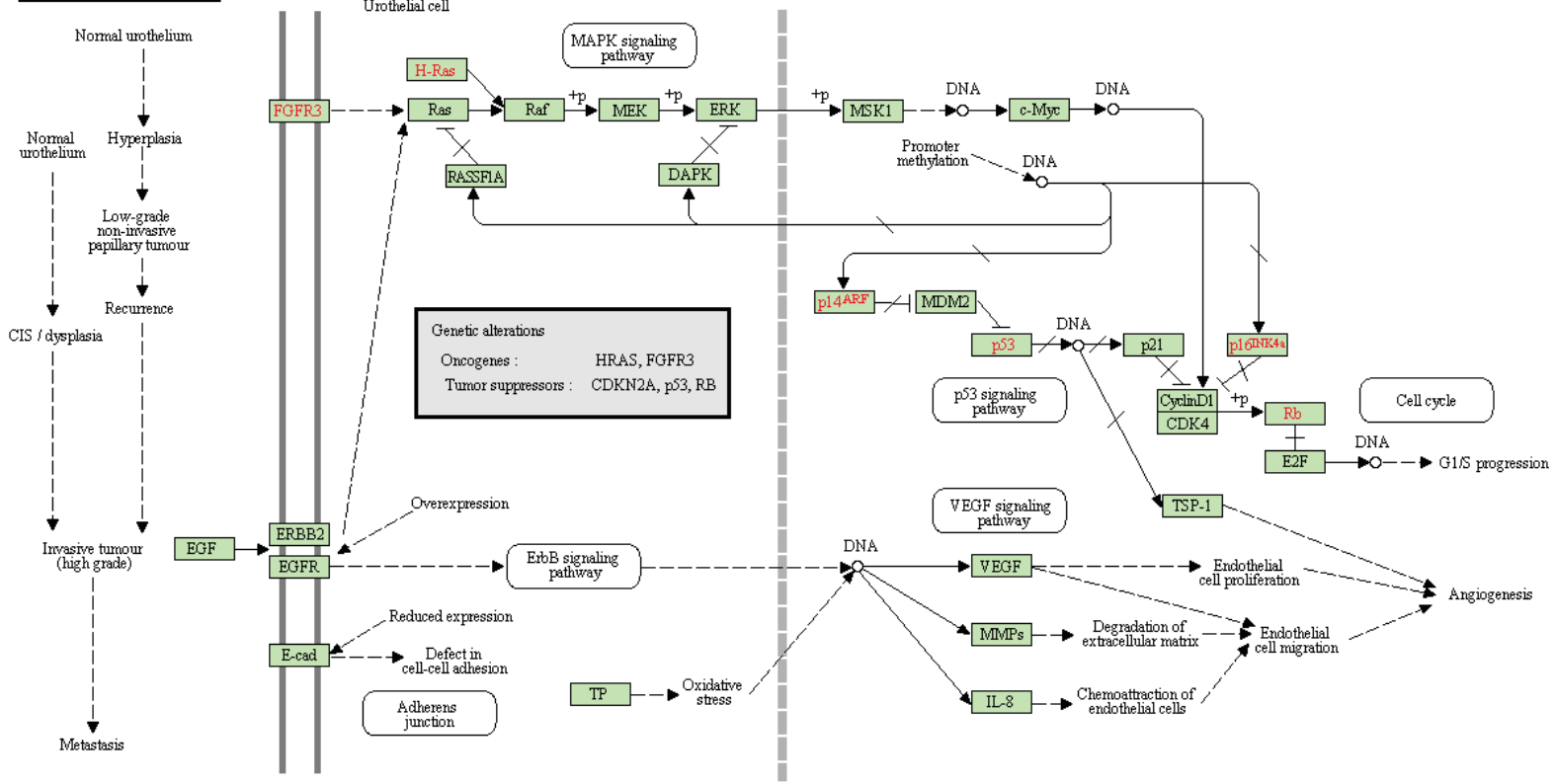
ACUTE MYELOID LEUKEMIA



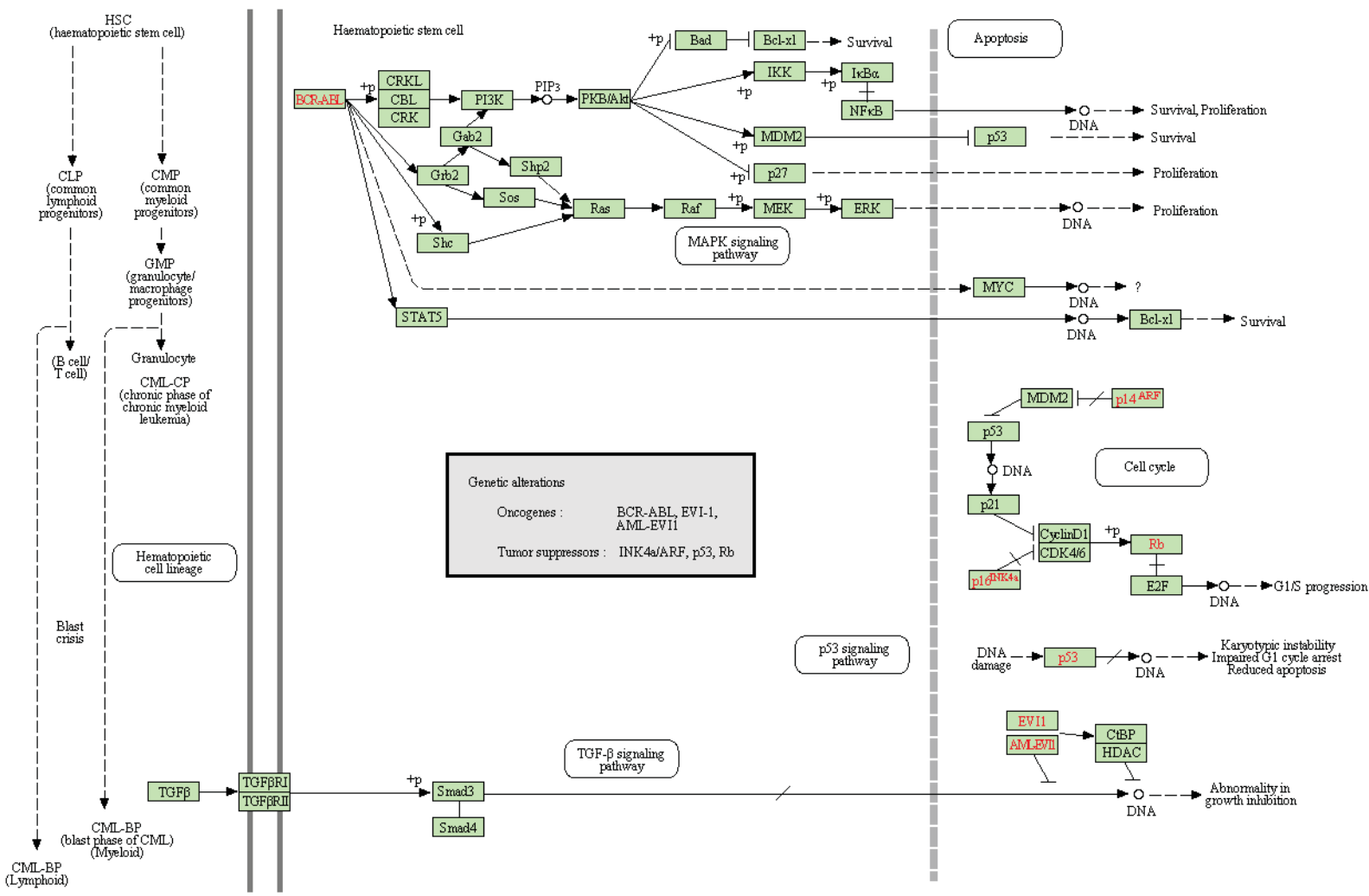
BASAL CELL CARCINOMA



BLADDER CANCER



CHRONIC MYELOID LEUKEMIA



COLORECTAL CANCER

**Chromosome Unstable (CIN) pathway
Microsatellite Unstable (MSI) pathway**

Normal epithelium

Dysplastic ACF

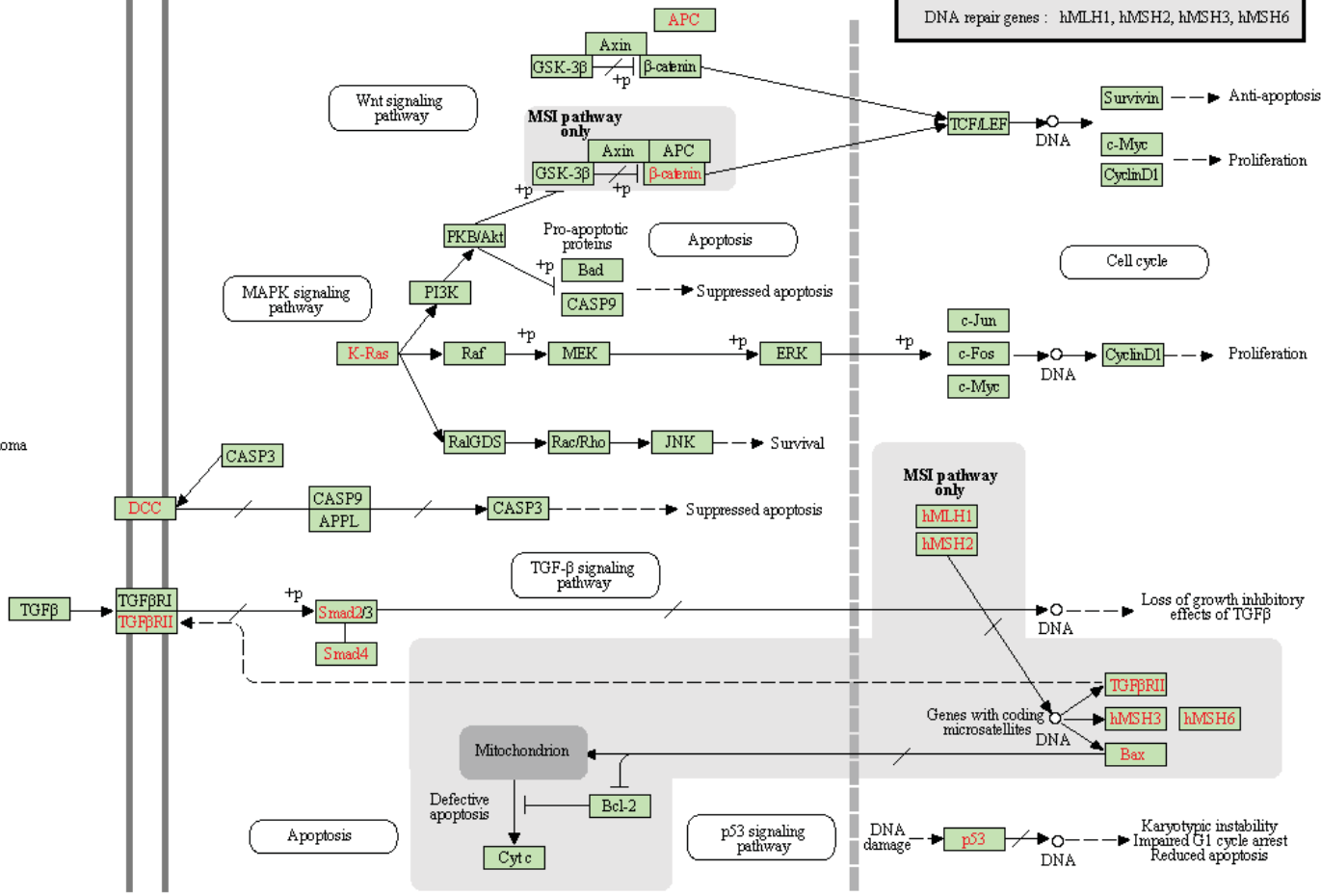
Early adenoma

Intermediate adenoma

Late adenoma

Carcinoma

Colorectal epithelial cell



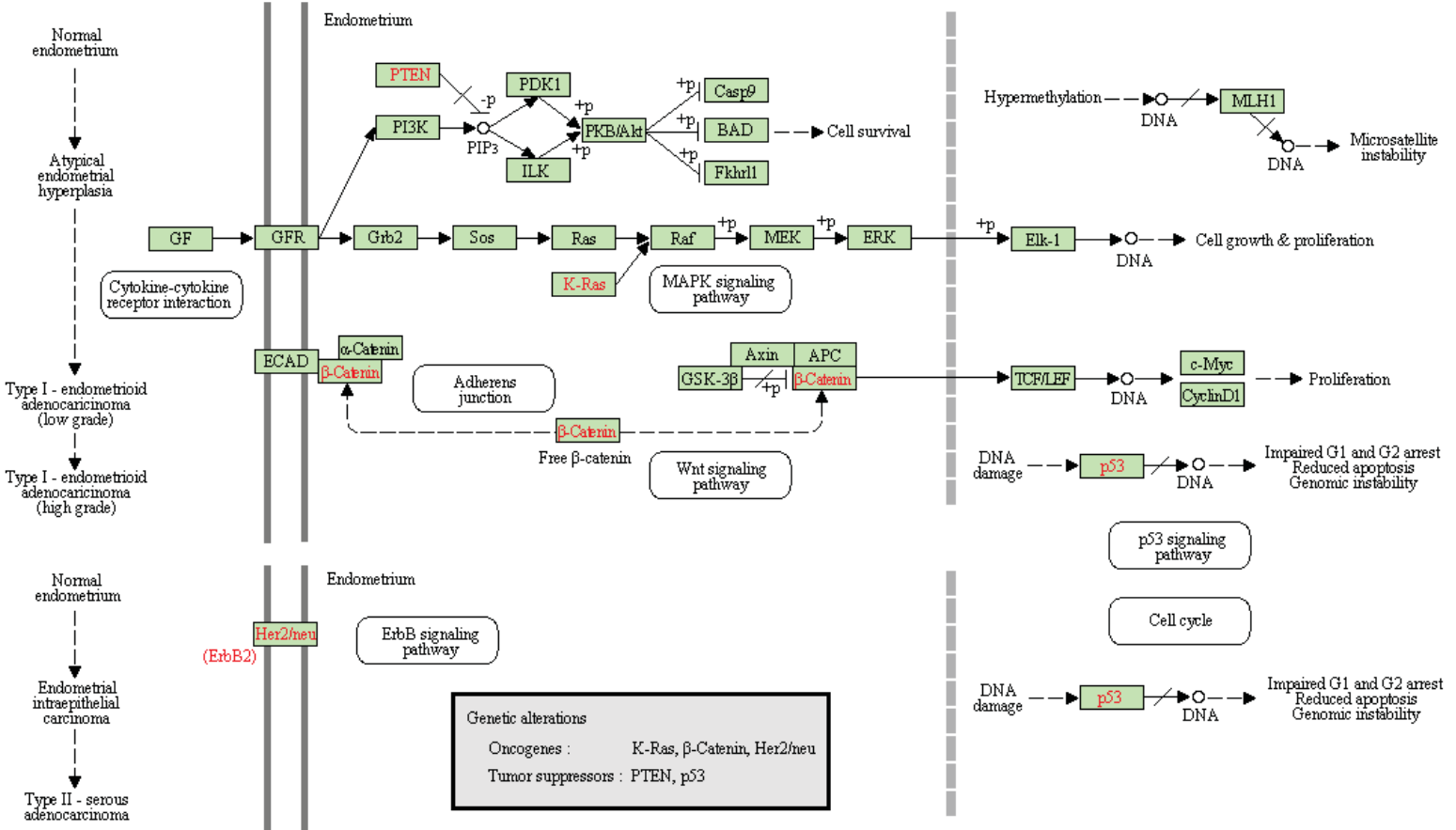
Genetic alterations

Oncogenes : β-catenin, K-Ras

Tumor suppressors : APC, DCC, TGFβRII, Smad2, Smad4, Bax, p53

DNA repair genes : hMLH1, hMSH2, hMSH3, hMSH6

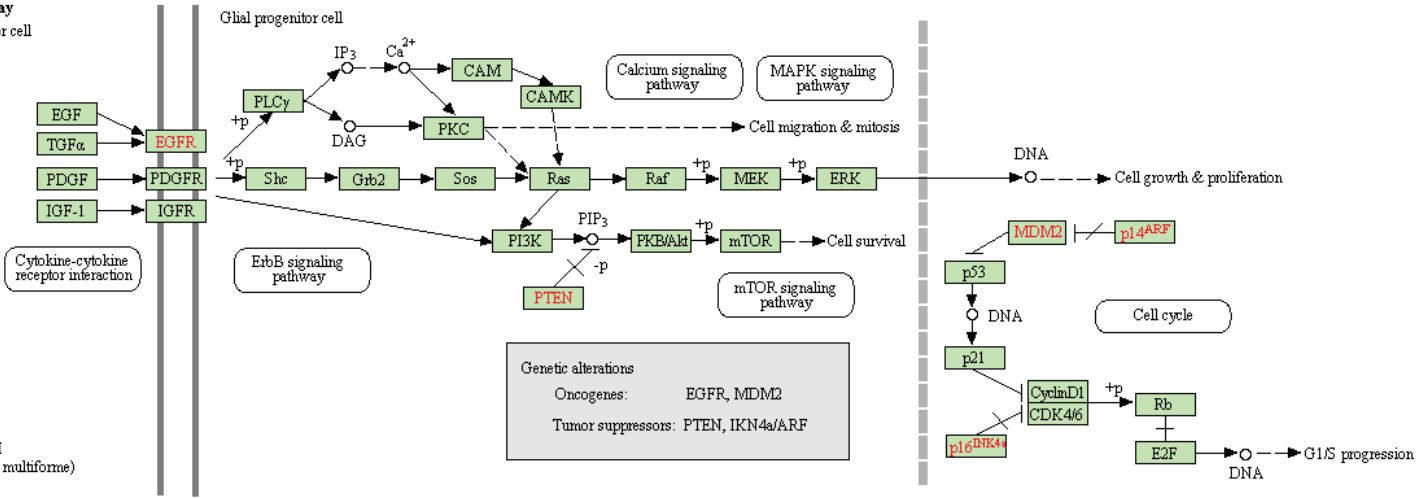
ENDOMETRIAL CANCER



GLIOMA

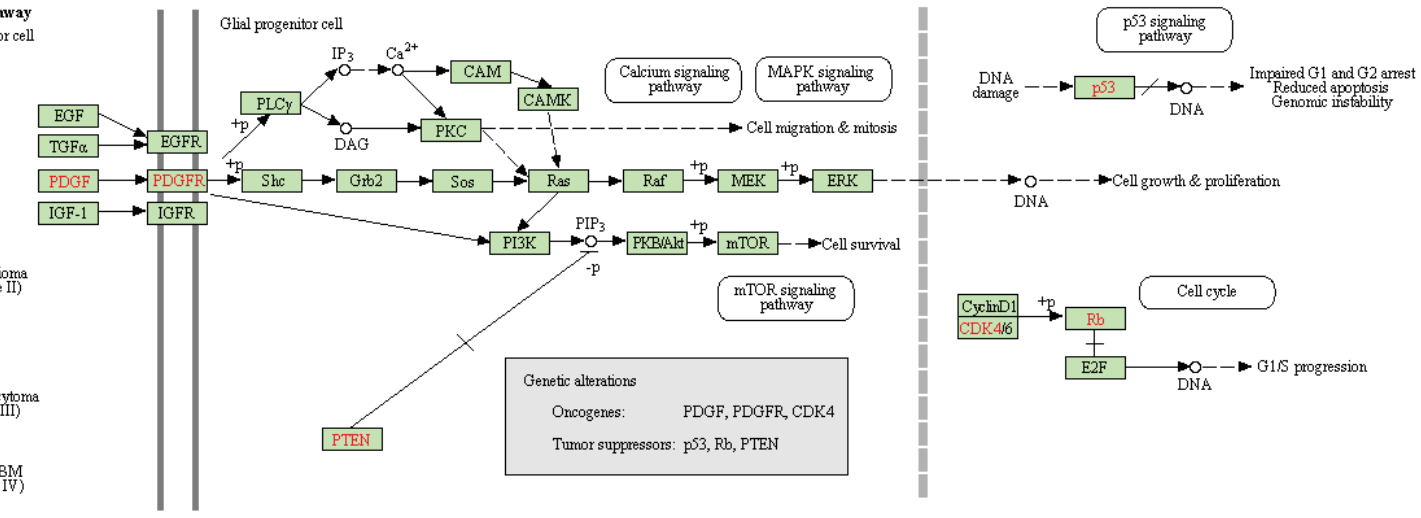
De Novo pathway

Glial progenitor cell

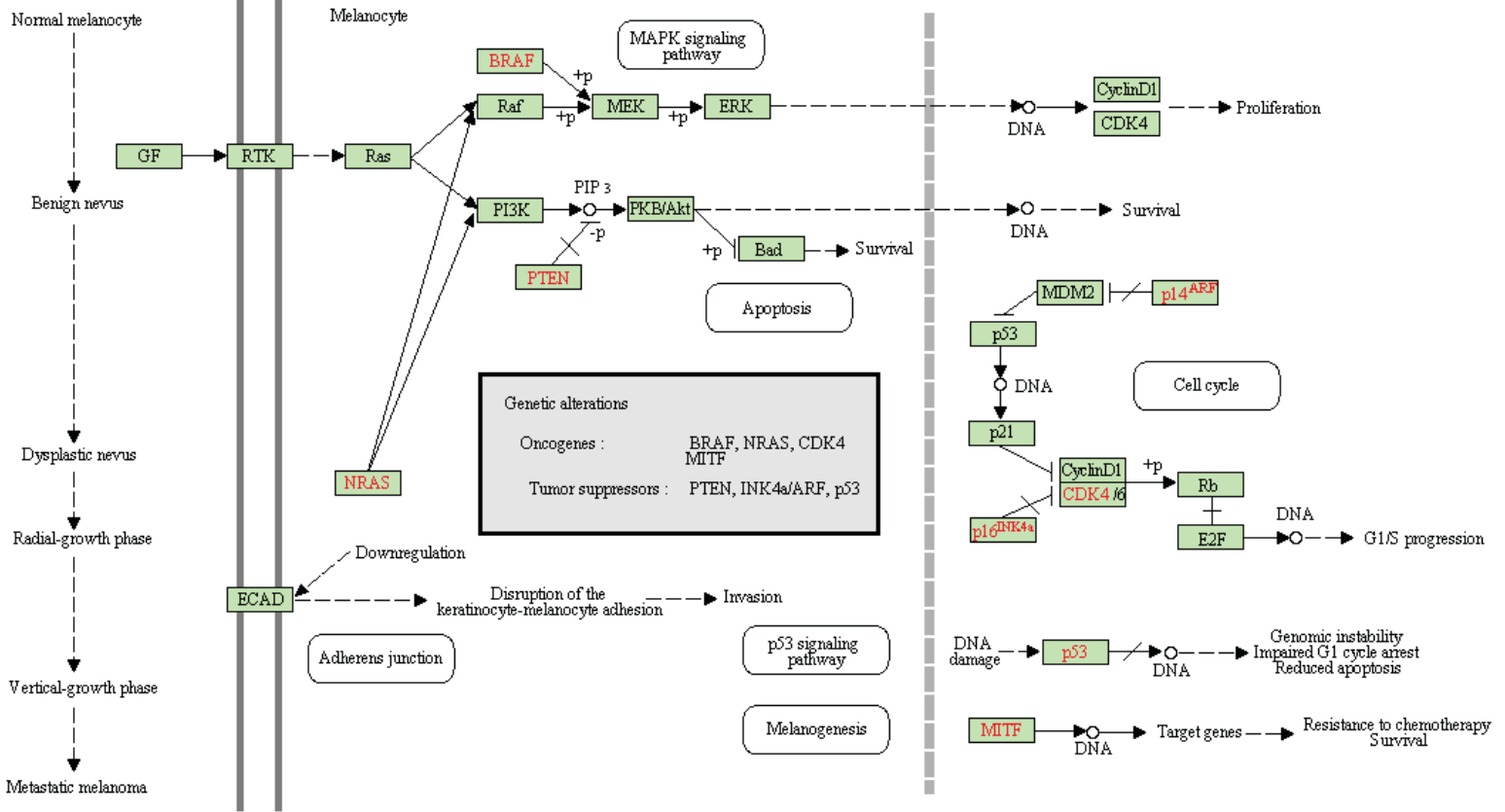


Secondary pathway

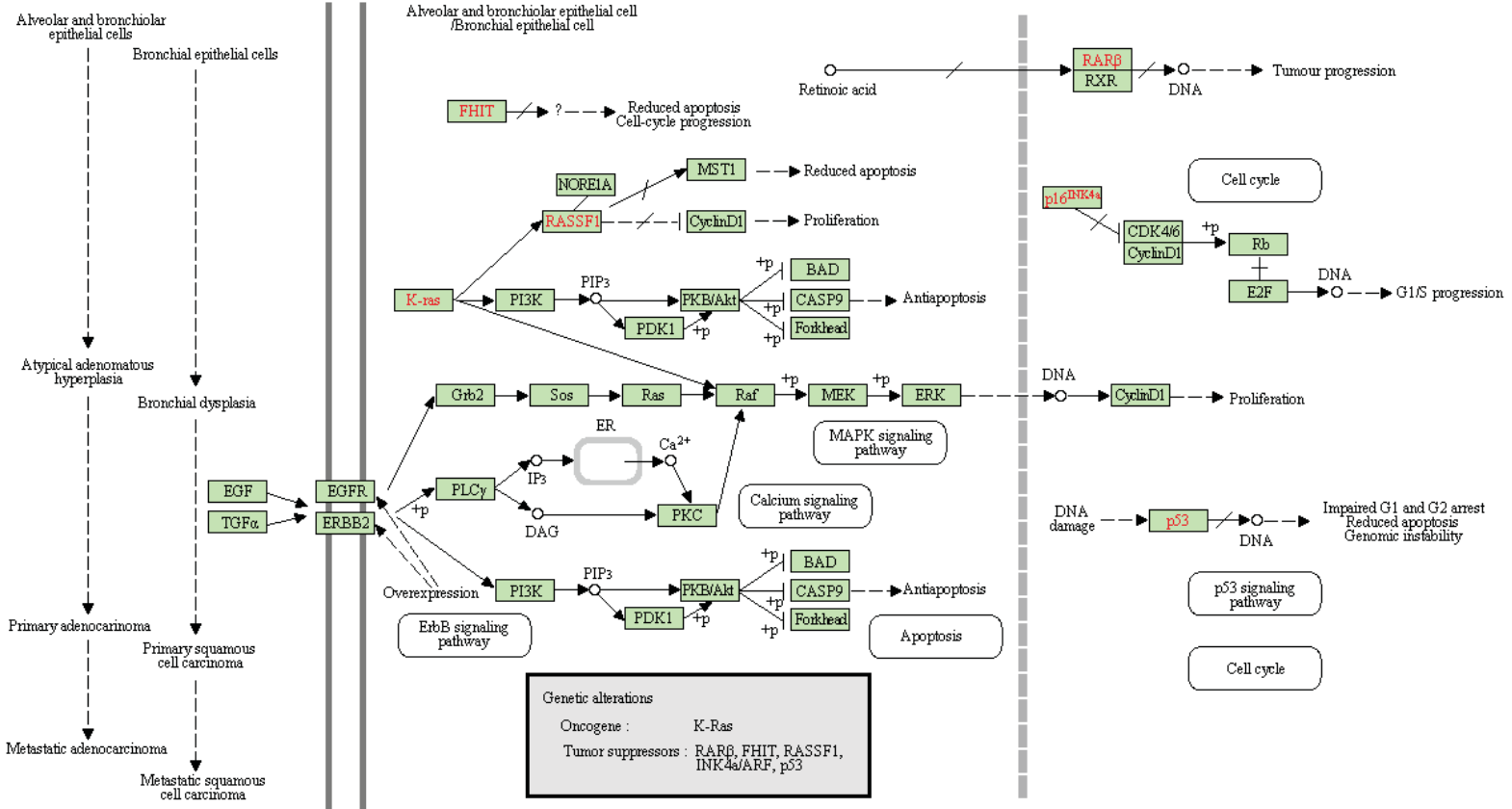
Glial progenitor cell



MELANOMA

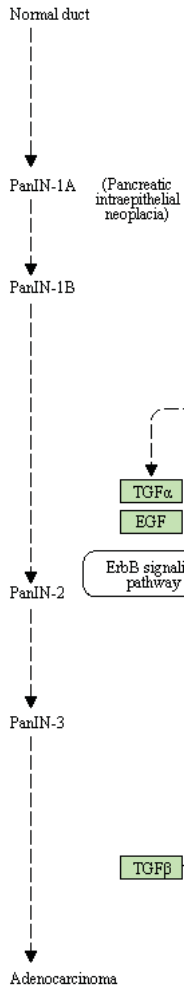


NON-SMALL CELL LUNG CANCER

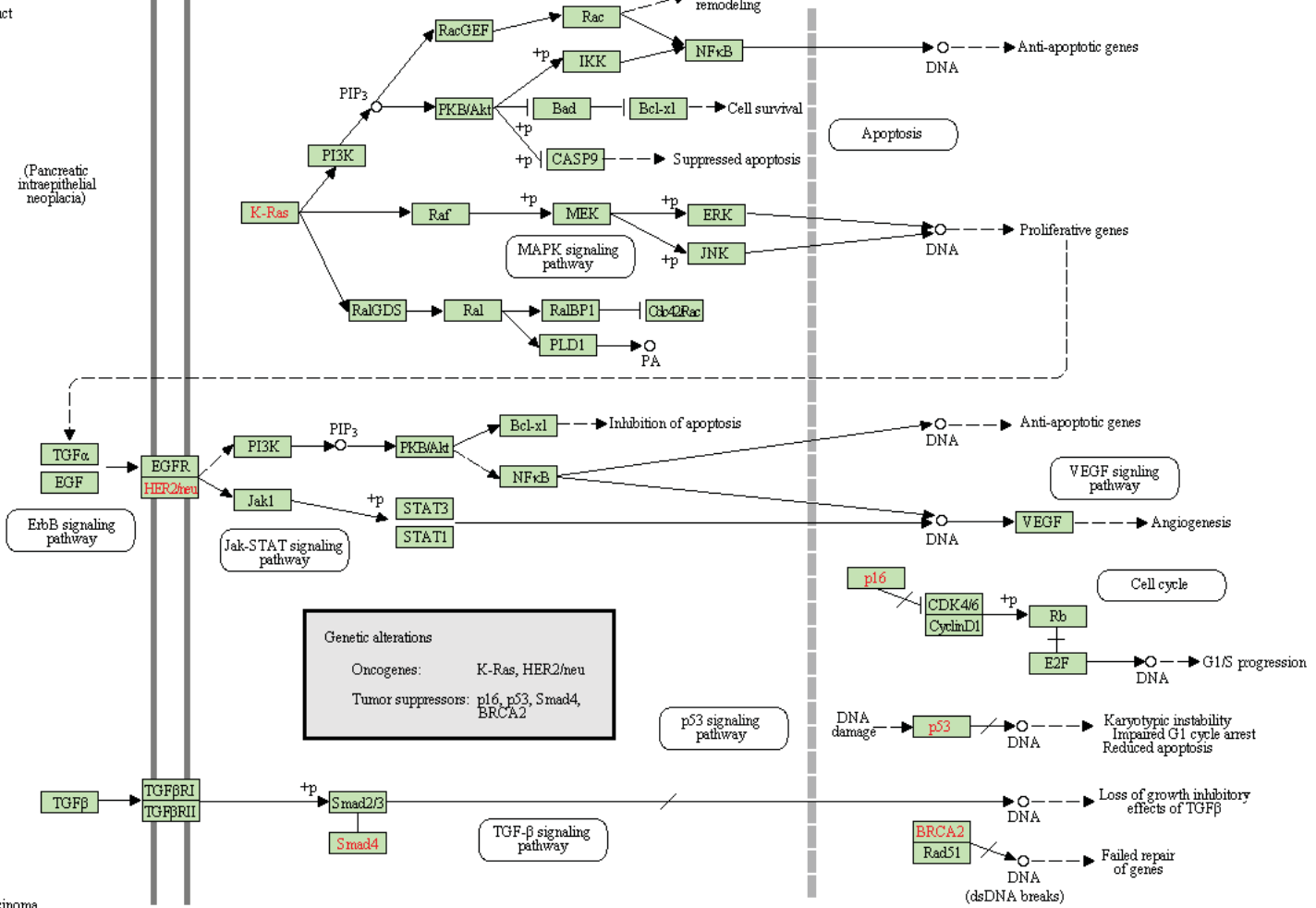


PANCREATIC CANCER

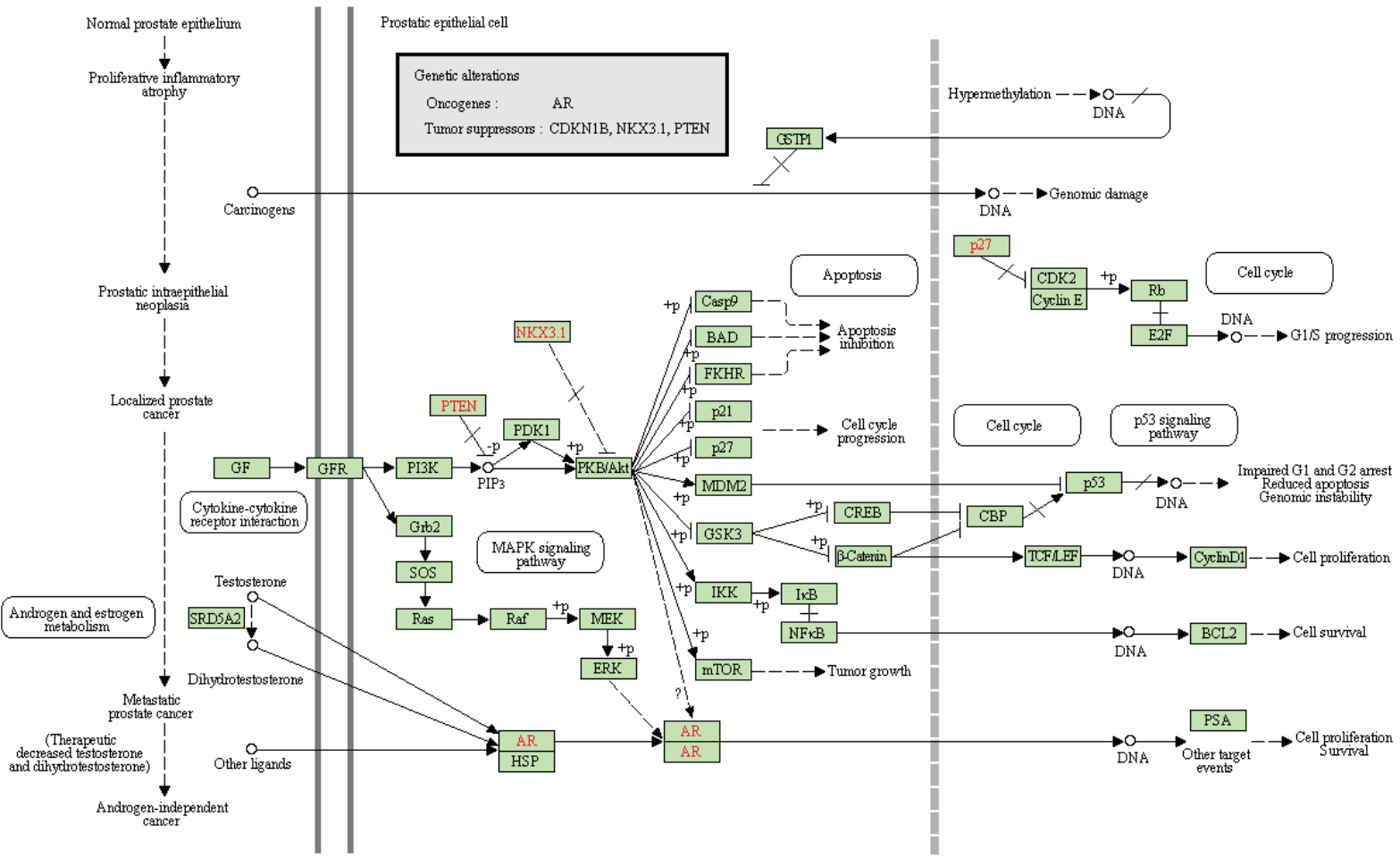
Chromosome Unstable (CIN) pathway



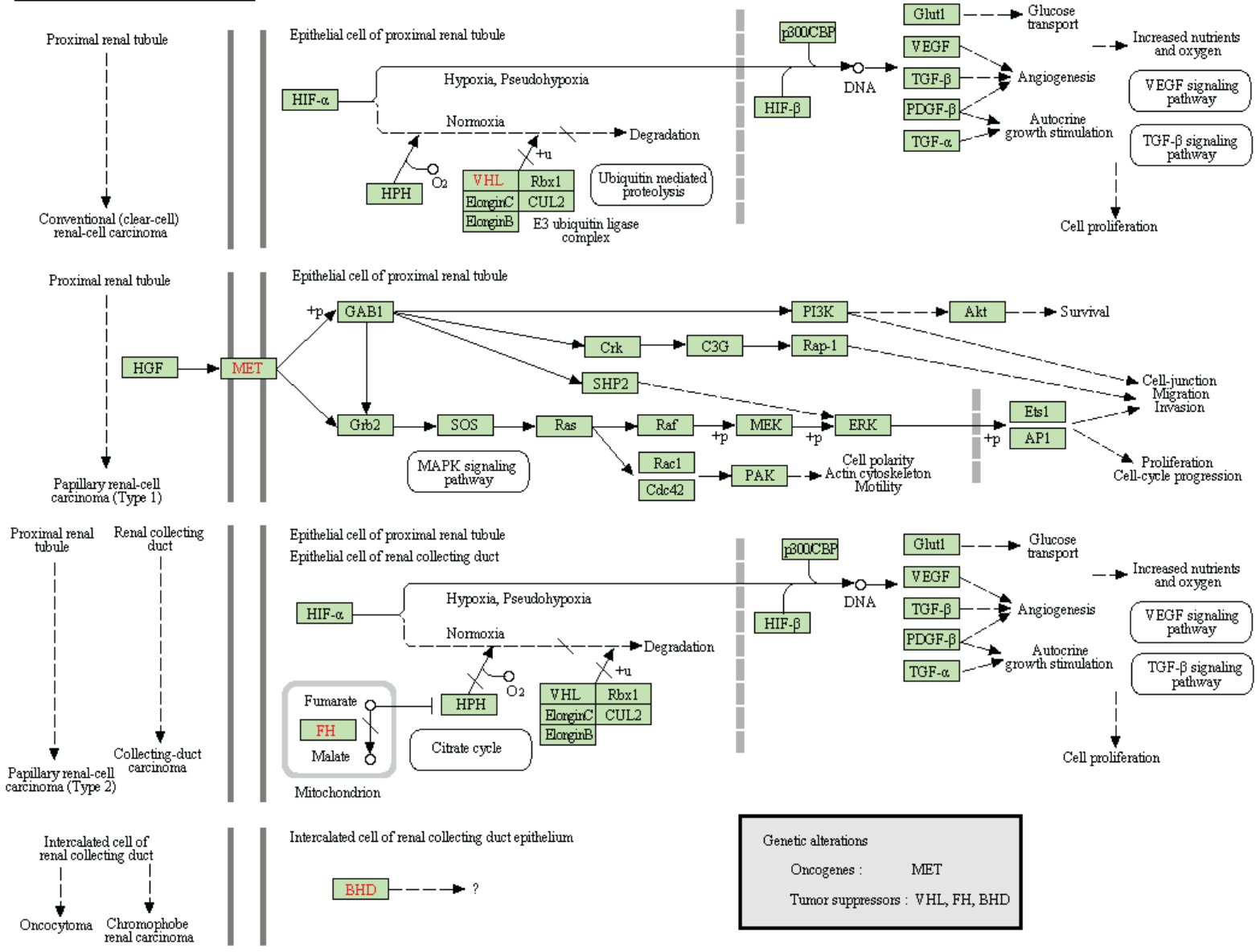
Pancreatic ductal cell



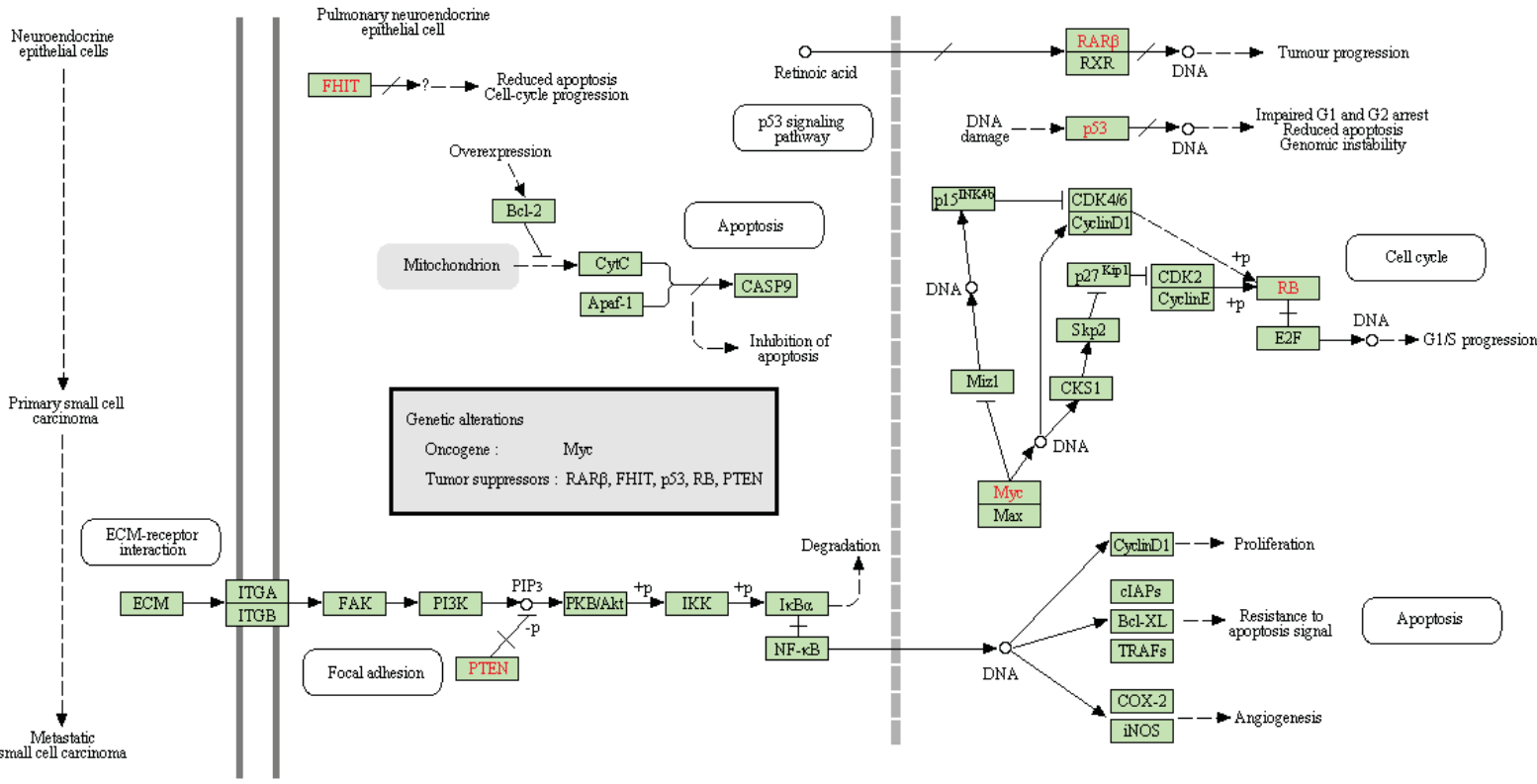
PROSTATE CANCER



RENAL CELL CARCINOMA



SMALL CELL LUNG CANCER



THYROID CANCER

