

DNA Damage Response

Extracellular Matrix Reorganization

A Result of Lge T Ag or of 3MC?

Neovascularization/Angiogenesis Expression
Pro-metastatic expression

Response to Lge T Antigen integration
or need to repair in face of (-) p53

Signal Transduction

MAPK pathway activation
JAK/STAT pathway activation
ras signalling activation (why?)

AntiViral Responses

multiple caspase activation
2'-5' OAS
Cleave viral proteins
Apoptotic
Prevents viral replic'n

TRICK2A
IAP3
HSIAH2
IRRCP + DAP1
TRAIL3

PKR
Block tx, tl'n
of viral mRNA's
& proteins
Apoptotic

MXA, MXAB
Block tx, tl'n
of viral mRNA's
& proteins

Increased/Enhanced Antigen Presentation

Recruitment of B-, T-cells ("SOS")

Pro-Viral Responses

Large T Antigen-mediated

Blockage of Anti-Proliferative Signals

pRB binding blocks cell cycle arrest, enables tx of cell prolif. genes

PML Bodies: SP100
ND10
function??

Initiation of viral tx, tl'n.

IFN γ Desensitization
↓ Jak2
↓ IFN γ receptor

Viral Oncogenesis & 3MC Tumorigenesis

Activation of Oncogenes
Inactivation of tsg's
Increased GF expression

Blockage of Apoptosis Response

via p53 binding & inactivation

Result:

- Immortalized: balance of birth/death shifted in favor of proliferation
- tumorigenic/metastatic
- vacuolation & vacuolating pathogenesis sometimes observed