

**Name of Journal:** *World Journal of Clinical Oncology*

**Manuscript NO:** 59442

**Manuscript Type:** FRONTIER

**Tumor-specific lytic path 'hyperploid progression mediated death': Resolving side effects through targeting retinoblastoma or p53 mutant**

Frank-Un Hong, Miguel Castro, Klaus Linse

### Abstract

A major advance was made to reduce the side effects of cancer therapy *via* the elucidation of the tumor-specific lytic path 'hyperploid progression-mediated death' targeting retinoblastoma (RB) or p53-mutants defective in G1 DNA damage checkpoint. The genetic basis of human cancers was uncovered through the cloning of the tumor suppressor RB gene. It encodes a nuclear DNA-binding protein whose self-

### Match Overview

1	<b>Crossref</b> 30 words W. K. Hong. "Recent Advances in Chemoprevention of Cancer", Science, 1997	<1%
2	<b>Internet</b> 13 words crawled on 10-Sep-2020 <a href="http://www.hindawi.com">www.hindawi.com</a>	<1%
3	<b>Crossref</b> 13 words Gauri A. Patwardhan, Qian-Jin Zhang, Dongmei Yin, Vineet Gupta et al. "A New Mixed-Backbone Oligonucleotide against G..."	<1%
4	<b>Crossref</b> 12 words Umberto Veronesi. "Delayed Node Dissection in Stage One ...alignant Melanoma: Justification and Advantages", Cancer Inv	<1%
5	<b>Internet</b> 12 words crawled on 19-Jun-2010 <a href="http://www.lawyershop.com">www.lawyershop.com</a>	<1%
6	<b>Internet</b> 12 words crawled on 06-Aug-2014 <a href="http://www.mersana.com">www.mersana.com</a>	<1%



国内版

国际版

Tumor-Specific Lytic Path 'Hyperploid Progression-Mediated Death': Res



Chat with Bing



Sign in



Microsoft Bing

ALL

IMAGES

VIDEOS

6,120 Results

Any time ▾

## Defining the Molecular Signature of Chemotherapy ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3277927>

Introduction. Lung cancer is the leading cause of cancer **death** worldwide. 1 Standard-of-care therapies for these patients include a combination of surgery, chemotherapy, and/or radiation therapy. The treatment of choice for patients with early stage disease is surgical resection in combination with adjuvant chemotherapy. 2 Cisplatin-based adjuvant chemotherapy, in particular, has been shown to ...

**Cited by:** 24

**Author:** Sofia R. Gameiro, Jorge A. Caballero, Ja...

**Publish Year:** 2012

## Oncolytic virotherapy: Challenges and solutions ...

<https://www.sciencedirect.com/science/article/pii/S0147027220301343>

Aug 15, 2020 · The second mechanism of action of OV is the enhancement of immune responses ( ). Following infection of tumor cells with OV, cell **death**, and releasing tumor-associated antigens, **tumor-specific** immune responses increase which leads to the elimination of distant and uninfected tumor cells. 26 Tumor cell lysis also leads to release of cytokines (such as type I interferons [IFNs], ...

## Search Tools

[Turn off Hover Translation \(关闭取词\)](#)



Tumor-specific lytic path 'hyperploid progression mediated death': I



ALL

IMAGES

VIDEOS

8,340 Results

Any time ▼

## Modulation of DNA Damage and Repair Pathways by Human ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4452920>

May 22, 2015 · The key transcriptional target following **p53** stabilization is p21, which can impede G1/S transition **through** inhibition of the cyclin E/Cdk2 complex. The **retinoblastoma** protein (Rb) also has a key role in cell cycle **progression** by binding the E2F transcription factors and inhibiting **progression** ...

**Cited by:** 82**Author:** Robert Hollingworth, Roger J Grand**Publish Year:** 2015

## Frontiers | Protein Glycosylation and Tumor ...

<https://www.frontiersin.org/articles/10.3389/fonc.2019.00380/full> ▼

Moreover, tumor hypoxia selects clones expressing **mutant p53**, facilitating the clonal expansion of cells that have a dominant-negative effect on the wild-type cells, thus evading growth suppression . Interestingly, the two canonical suppressors of cell proliferation, **p53** and RB, are regulated by O-GlcNAcylation (149, 150) .

**Cited by:** 23**Author:** Andreia Peixoto, Marta Relvas-Santos, Ri...**Publish Year:** 2019

## 7157 - Gene ResultTP53 tumor protein p53 [ (human)]

<https://www.ncbi.nlm.nih.gov/gene/7157>

Oct 04, 2020 · This gene encodes a tumor suppressor protein containing transcriptional activation, DNA binding, and oligomerization domains. The encoded protein responds to diverse cellular stresses to regulate expression of target genes, thereby inducing cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. Mutations in this gene are associated with a variety of human ...

## Oncolytic virotherapy: Challenges and solutions ...



ALL

IMAGES

VIDEOS

MAPS

NEWS

SHOPPING

5,450 Results

Any time ▾

## 7157 - Gene ResultTP53 tumor protein p53 [ (human)]

<https://www.ncbi.nlm.nih.gov/gene/7157>

Oct 11, 2020 · This gene encodes a tumor suppressor protein containing transcriptional activation, DNA binding, and oligomerization domains. The encoded protein responds to diverse cellular stresses to regulate expression of **target** genes, thereby inducing cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. Mutations in this gene are associated with a variety of human ...

## Frontiers | Protein Glycosylation and Tumor ...

<https://www.frontiersin.org/articles/10.3389/fonc.2019.00380/full> ▾

Moreover, tumor hypoxia selects clones expressing **mutant p53**, facilitating the clonal expansion of cells that have a dominant-negative effect on the wild-type cells, thus evading growth suppression . Interestingly, the two canonical suppressors of cell proliferation, **p53** and RB, are regulated by O - GlcNAcylation ( 149 , 150 ) ( Figure 2D ).

Cited by: 25

Author: Andreia Peixoto, Marta Relvas-Santos, Ri...

Publish Year: 2019

## Oncolytic adenoviruses: A thorny path to glioma cure ...

<https://www.sciencedirect.com/science/article/pii/S2352304214000336>

Dec 01, 2014 · The glioma-specific oncolytic vector, referred to as ONYX105 or dl1520, was designed to replicate in the **p53** deficient tumor cells with functional defects in **p53** tumor suppressor signaling 21 and induce non-apoptotic cell death during viral infection. 22 However, over the past several decades, multiple scientific reports have evidenced that ...

Cited by: 8

Author: I.V. Ulasov, A.V. Borovjagin, B.A. Schroed...

Publish Year: 2014

## Oncolytic virotherapy: Challenges and solutions ...

<https://www.sciencedirect.com/science/article/pii/S0147027220301343>

Aug 15, 2020 · Various strategies have been used to avoid off-**target side effects** and re-direct MeV specifically to cancer cells, including insertion of **tumor-specific** ligands, insertion of integrin-binding peptides, insertion of single-chain T-cell receptors, and modifications on the envelope fusion properties. 83 Moreover, defects in type 1 interferon ...