



HAL
open science

p16INK4A inactivation mechanisms in non-small-cell lung cancer patients occupationally exposed to asbestos.

Pascal Andujar, Jinhui Wang, Alexis Descatha, Françoise Galateau-Sallé, Issam Abd-Alsamad, Marie-Annick Billon-Galland, Hélène Blons, Bénédicte Clin, Claire Danel, Bruno Housset, et al.

► To cite this version:

Pascal Andujar, Jinhui Wang, Alexis Descatha, Françoise Galateau-Sallé, Issam Abd-Alsamad, et al.. p16INK4A inactivation mechanisms in non-small-cell lung cancer patients occupationally exposed to asbestos.. Lung Cancer, 2010, 67 (1), pp.23-30. 10.1016/j.lungcan.2009.03.018 . inserm-00388198

HAL Id: inserm-00388198

<https://inserm.hal.science/inserm-00388198>

Submitted on 28 May 2009

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

LEGEND TO FIGURES

Figure 1. Immunodetection of p16^{INK4A} by immunohistochemistry in NSCLC patients

A: Positive control of p16^{INK4A}

B: Positive immunostaining of p16^{INK4A} in a lung adenocarcinoma case (× 200)

C: Lack of p16^{INK4A} expression in a lung adenocarcinoma case (× 200)

Figure 2. Representative patterns of aberrant methylation promoter of *P16/CDKN2A* gene in NSCLC patients.

Primer sets used for amplification are designated as unmethylated (UM) or methylated (M). Twenty µl of PCR product were run on 2.5% agarose gel stained with ethidium bromide, and visualized under UV illumination. T: tumor tissue; N: normal lung tissue; M: DNA 50 bp ladder; N_M: negative control with methylated sequence specific primer; N_{UM}: negative control with unmethylated sequence specific primer.

Figure 3. FISH hybridization. Dual-color FISH with PONC0921 probe. (*P16/CDKN2A* specific DNA probe is direct-labeled with rhodamine and the chromosome 9 classical satellite probe is direct-labeled with fluorescein).

A: Normal lung tissue used as positive control showed two red signals and two green signals.

B: NSCLC case showing two green signals and one red signal indicating a loss of heterozygosity of *P16/CDKN2A* gene.

C: NSCLC case showing two green signals and no red signal, indicating a

homozygous deletion of *P16/CDKN2A* gene.