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Nota di contenuto	About the Special Issue Editors -- Preface to "Chemically-Induced DNA Damage, Mutagenesis, and Cancer" -- DNA Damage, Mutagenesis and Cancer -- The Future of DNA Adductomic Analysis -- Every OGT Is Illuminated ... by Fluorescent and Synchrotron Lights -- Enhanced Susceptibility of Ogg1 Mutant Mice to Multiorgan Carcinogenesis -- DNA Damage Tolerance by Eukaryotic DNA Polymerase and Primase PrimPol -- Exposure to Engineered Nanomaterials: Impact on DNA Repair Pathways -- Magnetic Hyperthermia and Oxidative Damage to DNA of Human Hepatocarcinoma Cells -- The Role of Resveratrol in Cancer Therapy -- Supercritical-Carbon Dioxide Fluid Extract from Chrysanthemum indicum Enhances Anti-Tumor Effect and Reduces Toxicity of Bleomycin in Tumor-Bearing Mice -- Significance of Wild-Type p53 Signaling in Suppressing Apoptosis in Response to Chemical Genotoxic Agents: Impact on Chemotherapy Outcome -- A Case-Control Study of the Genetic Variability in Reactive Oxygen Species-Metabolizing Enzymes in Melanoma Risk -- CoQ10 Deficiency May Indicate Mitochondrial Dysfunction in Cr(VI) Toxicity -- The Effect of VPA on Increasing Radiosensitivity in Osteosarcoma Cells and Primary-Culture Cells from Chemical Carcinogen-Induced Breast Cancer in Rats -- High NOTCH1 mRNA Expression Is Associated with Better Survival in HNSCC -- Dynamic Reorganization of the Cytoskeleton during Apoptosis: The Two Coffins Hypothesis.
Sommario/riassunto	Human cancers frequently arise from exposure to chemicals, although radiation, oxidation, and genetic factors play critical roles as well. DNA

damage by these agents in a cell is an important first step in the process of carcinogenesis. DNA repair processes have evolved to repair these damages. However, the replication of damaged DNA may occur frequently prior to repair, resulting in gene mutations and the generation of altered proteins. Mutations in an oncogene, a tumor-suppressor gene, or a gene that controls the cell cycle give rise to a clonal cell population with an advantage in proliferation. The complex process of carcinogenesis includes many such events, but has been generally considered to be comprised of the three main stages known as initiation, promotion, and progression, which ultimately give rise to the induction of human cancer. The articles published in this book entitled "Chemically-Induced DNA Damage, Mutagenesis, and Cancer" provide an overview on the topic of the "consequence of DNA damage" in the context of human cancer with their challenges and highlights.
