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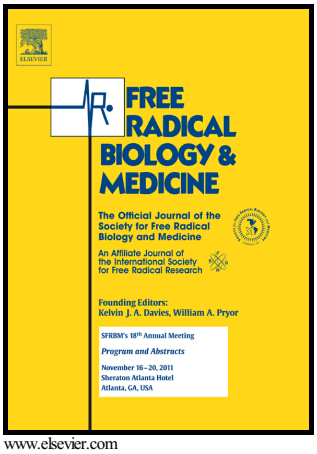

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Specific point mutations in key redox enzymes are associated with chemoresistance in epithelial ovarian cancer

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Abbreviations

EOC, epithelial ovarian cancer; SNP, single nucleotide polymorphisms; $O_2^{\bullet -}$, superoxide; H_2O_2, hydrogen peroxide; NAD(P)H, nicotinamide adenine dinucleotide phosphate; iNOS, inducible nitric oxide synthase; MPO, myeloperoxidase; SOD, superoxide dismutase; CAT, catalase; GPX, glutathione peroxidase; GSR, glutathione reductase; GSH, glutathione; NO, nitric oxide; TRAIL, tumor necrosis factor receptor apoptosis-inducing ligand; CSC, cancer stem cells; ATCC, American Type Culture Collection; RT-PCR, Real-Time Reverse Transcription Polymerase Chain Reaction; AGTC, Applied Genomics Technology Center

Abstract

Oxidative stress plays an important role in the pathophysiology of ovarian cancer. Resistance to chemotherapy presents a significant challenge for ovarian cancer treatment. Specific single nucleotide polymorphisms (SNPs) in key redox enzymes have been associated with ovarian cancer survival and