To investigate whether there is any change in PTEN gene expression profile and tumor aggressiveness in endometrial carcinoma patients who lived in (DU) polluted area with those patients who lived in unpolluted area. An elevation in the PTEN gene expression profile was recorded in patients who lived in (DU) polluted area in comparison with the patients who have had the tumor though they lived in unpolluted area. The increase in gene expression was highly significant (P=0.001). No difference was noticed in the PTEN gene expression with regard to different grades of endometriosis carcinoma (P=0.286). Likewise, no significant PTEN gene expression changes were observed between the two groups when the age of the patients was introduced for comparison (P=0.45). Similarly, no significant differences in PTEN gene expression between the potentially exposed and unexposed subjects with regard to different stages of the tumor (P=0.98), to cervix involvement (P=0.532), or to ovarian involvement (P=0.518). PTEN genetic alteration plays an important role in pathogenesis of endometrial carcinoma. An obvious and significant increase in PTEN gene expression profile was spotted between the alleged exposed and unexposed patients. This observation urges the need for further molecular study to unfold the extent of DNA damages caused most probably by the use of DU on the Iraqi population and the types of damages that DU may cause. The results may conclude the most disputed arguments about the reasons behind the high incidence of all types of cancer in the middle and southern part of Iraq.

Biography
Akeel A.Yaseen, M.Sc(UK),PhD(UK) M.Sc and Ph.D. from Queens University of Belfast and University of Ulster (United Kingdom) in cytogenetics, molecular genetics and cancer research. Research fellow at the International Centre for Genetic Engineering and Biotechnology (United Nation, UNEDO), Trieste, Italy (1989). Research fellow at the Italian National Research Centre (CNR) and at the Instituto Superiores Di Sanita in Rome (1990). Visiting Professor at the University of Ulster School of Biomedical Sciences. (2005). Honorary Appointing Visiting Professor at the school of Biomedical Science, University of Ulster (2006 – 2010). Deputy president of the University of Kufa (1991-2001) and President of the University of Kufa (2011-2017). Patent holder on the Lymphocytes stimulation of peripheral blood culture by He-Ne Laser. Currently, Emeritus professor of Medical and Molecular Genetics at the Department of Pathology and Forensic Medicine, Faculty of Medicine, University of Kufa, Iraq. Substantial publication record in peer reviewing journals and skilled in delivering oral presentations; 50 peer reviewed papers; 53 National and International Presentations; 2 books Widely ranging research expertise in: molecular genetics, medical genetics and genetic counseling, clinical cytogenetics, cell and tissue culture, DNA repair.

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