

P038 Analysis of eIF4E overexpression in skin cancers

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A key regulatory step in translation is initiation. The 5' terminus of most mRNAs is demarcated by a m⁷GpppN cap (where N is any nucleotide). Among the initiation translation factors, the most important is eIF4F which is a heterotrimeric factor and its eIF4A (ATP dependent RNA helicase) and eIF4E subunits and eIF4G 550-1090 fragment of its 1560 amino acid eIF4G subunit constitute the core of eIF4F sufficient for efficient ribosomal attachment to capped mRNA. Because eIF4E is the rate limiting initiation factor in most cells, it plays a principle role in determining global translation rates. Consistent with this role, eIF4E exhibits anti-apoptotic activity and when over expressed, transformed cells. eIF4E over expression has been demonstrated in human tumours of the breast, head and neck, colon, prostate, bladder, cervix and lung and has been related to disease progression, proliferation, cellular transformation, tumorigenesis and metastasis, so the aim of this study was the analysis of eIF4E over expression in malignant tumours of skin cancer. Here first we collected 10 specimens from malignant and normal histological tissues, after pathological agreement, we prepare the cell extract with different buffers with sonication, then the protein concentration were determined. Finally the proteins were analyzed on 12.5% poly acryl amide gel using the SDS-PAGE technique. Then the gel was stained with silver-nitrate and western blot. Our results shows that the expression of eIF4E in skin cancers is higher than normal tissues. These findings suggest a key role for eIF4E in tumorigenesis especially in skin cancers.