

**THE LOCALIZATION OF THE PHOTSENSITIZING DYES
PHOTOFRIN II AND HYPERICIN IN MALIGNANT CELLS**

AGNIESZKA CHWIŁKOWSKA, JOLANTA SACZKO, JULITA
BIELEWICZ, DOROTA PATALAS and TERESA BANAS
Department of Medical Biochemistry, Academy of Medicine,
Chałubińskiego 10, 50-368 Wrocław, Poland

In photodynamic therapy (PDT), visible light activates a photosensitizing drug accumulated in tumor cells and leads to the generation of reactive oxygen species (ROS) causing cell death and tumor ablation. In this study, we investigated the localization of two photosensitizers: Photofrin II and Hypericin. Fluorescence microscopy studies of PC 12 and MCF 7 malignant cells were undertaken, after different times of exposure to Photofrin II and Hypericin. This study showed a diffuse distribution of the photosensitizing drugs in the cells. As to be expected from other nucleated cells, this study confirms the specific and time-dependent accumulation of fluorescent dyes.