Supporting Information to:

The Lipophilic Extract of *Hypericum perforatum* Exerts Significant Cytotoxic Activity Against T24 and NBT-II Urinary Bladder Tumor Cells

Dimitris Skalkos¹
Nikolaos E. Stavropoulos²
Ioannis Tsimaris²
Eleni Gioti³
Constantine D. Stalikas³
Unyime O. Nseyo⁴
Elli Ioachim⁵
Niki J. Agnantis⁵

Affiliation
1 Department of Materials Science & Engineering, University of Ioannina, Ioannina, Greece
2 Urology Department, ‘G. Hatzikosta’ General Hospital, Ioannina, Greece
3 Laboratory of Analytical Chemistry, Department of Chemistry, University of Ioannina, Ioannina, Greece
4 Division of Urology, Medical College of Virginia, Commonwealth University, Richmond, Virginia, USA
5 Department of Pathology, Medical School, University of Ioannina, Ioannina, Greece

Correspondence
Dimitris Skalkos
Department of Materials Science & Engineering
University of Ioannina
Ioannina GR-45110
Greece
Phone: +32-651-097-262
Fax: +32-651-097-056
E-mail: dskalkos@cc.uoi.gr
Hypericum perforatum L. from Epirus

"Boiled Tea" preparations

Aqueous solution (AS)  Methanolic solution (MS)

Extracts

Petroleum ether extract (PEE)  Methanolic extract (ME)

[Lipophilic extract]

Fractionation (column chromatography)  Extraction (with petr. ether)

PEE1 (1%)  PEE2 (30.7%)  NPMF  PMF

PEE3 (26.2%)  PEE4 (15%)  (non-polar – lipophilic frct.)  (polar frct.)

PEE5 (9.3%)  PEE6 (15.8%)

PEE7 (2%)

Fig. 1 Extraction procedures used for Epirus’ Hypericum perforatum L. Aqueous solution (AS); methanolic solution (MS); methanolic extract (ME); non polar methanolic fraction (NPMF); polar methanolic fraction (PMF); petroleum ether (lipophilic) extract (PEE); petroleum ether extract’s fractions[PEE (1,2,3,4,5,6,7)].
Fig. 2. Detection of apoptosis in the NBT-II cells by TUNEL assay. Apoptotic cells with brown nuclear staining (a, b) and normal cells with blue staining (a).