INTRODUCTION

MULTI-DRUG RESISTANCE (MDR) phenomenon associated with expression of ATP-binding cassette transporters (ABC), such as P-glycoprotein/MDR1 (Pgp) and multi-drug resistance-associated proteins (MRP), is a major factor contributing to chemotherapeutic failure in malignancies. These cell surface proteins eliminate chemotherapeutic agents from tumor cells, thus neutralizing their cytotoxic effects. Numerous approaches have been evaluated in an attempt to overcome tumoral MDR functions. Chemical modulators of ABC transporters have been intensively investigated with respect to inhibition of pumping function. In order to regulate upstream regions of transporter production, translational inhibition of mRNA coding ABC transporters with antisense oligodeoxynucleotide