

Foreword:

ET-743: a novel marine-derived anti-tumor agent

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Ecteinascidin-743 (ET-743) is a new anti-tumor agent of marine origin, derived from the colonial tunicate (sea squirt) *Ecteinascidia turbinata*, which is found in the Mediterranean and Caribbean seas. The compound has a unique and complex mechanism of anti-tumor action that has yet to be fully elucidated. Among its multiple effects are: promoter-selective inhibition of transcriptional activation of key genes, including oncogenes involved in cell proliferation and drug resistance; inhibition of transcription-dependent nucleotide excision repair pathways; inhibition of cell cycle progression, resulting in p53-independent apoptosis. ET-743 displays anti-proliferative activity against a variety of human solid-tumor cell lines, including soft-tissue sarcoma, breast, ovarian, non-small-cell lung, prostate and renal cancers and melanomas. Of these, soft-tissue sarcoma cell lines appear to be particularly sensitive to the cytotoxic action of the drug. In

agreement with these in-vitro findings, promising results have been obtained with ET-743 in the treatment of soft-tissue sarcomas, one of the human tumor types most refractory to chemotherapy.

This supplement to *Anti-Cancer Drugs* is based on a series of presentations given at a satellite symposium, sponsored by PharmaMar, that was held at the 11th European Cancer Conference (ECCO) in Lisbon in October 2001. The papers included provide a brief but comprehensive overview of the latest research into ET-743. A brief overview of the mechanism of action of ET-743 sets the scene for a series of reports summarizing the results of recent French and American clinical trials of ET-743 in soft-tissue sarcoma. Finally, the supplement concludes with a description of other marine-derived anti-tumor compounds, including aplidine and kahalalide-F, which are currently studied in the clinic by PharmaMar.

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