



Pharmacological days in Marseille 2002

(The Five Days of R.E.M., 27th November 2002)

The seminar of *Réseau d'Etude sur le Médicaments* was organised by the Postgraduate School of Life and Medical Sciences and the College for Molecular Chemistry of the Mediterranean University. It was moderated by Prof Brian, Head of the Department of Biophysics at the Faculty of Pharmacy in Marseille. She introduced first of all Prof Susan Band Horowitz, president of the American Society of Cancer Research, from the Albert Einstein College of Medicine in New York and briefly outlined the significance of Prof. Horowitz's results in the area of pharmacological influences on the structure and function of tumour cells.

The opening lecture presented by Prof. Horowitz concerned the effects of taxol, a tubulin stabilising drug, which induces microtubule formation and blocks cells in G₂/M transition. She explained three potential mechanisms of acquired taxol resistance: tubulin mutations (nucleus), over-expression of P-

glycoprotein (plasma membrane), alternations in MAPs and isotope over-expression/switching (microtubules). Taxol also induces programmed cell death but the mechanism of this effect is still unclear, it might alter intracellular signalling in the proapoptotic way.

In the second part of the seminar Dr Erwann Loret from CNRS in Marseille described the structure and explained the role of Tat protein which is induced by HIV-1 and which inhibits the immune system. Vaccine targeting Tat expresses binding specificity, high affinity and low toxicity. A project was described involving clinical trials with TatOyiVaccine.

Dr Georges Massioti from Toulouse gave a lecture on the role of natural products in modern pharmacological research which was followed by a lengthy discussion on this topic.

The five days of R.E.M. were closed by informal discussion with refreshment.

Josef Berger