

## Experimental report exp MD4 (30 january- 6 february 2003)

### **In-vivo experimentation**

The objective of this experiment was to attempt to cure the rats by optimising the CDDP concentration into rat brains and radiation doses. Rats were inoculated intracerebrally with 5 µg of CDDP, which seems to be the maximum tolerable dose, and treated with 15 and 20 Gy. Irradiations were performed above the platinum K-edge. Other groups receiving the same treatment have been irradiated at 40 keV (where difference in absorption between Pt and tissue is optimal). The survival study is in progress. However, we have a non-negligible percentage of rats, which did not tolerate the chemotherapy treatment (~30%). Nevertheless most of the survivors to the treatment, which received an optimal dose of x-rays, are still alive after 200 days.

#### paper :

Corde, S., Balosso, J., Elleaume, H., Renier, M., Joubert, A., Biston, M. C., Adam, J. F., Charvet, A. M., Brochard, T., Le\_Bas, J. F., Esteve, F., and Foray, N. Synchrotron photoactivation of cisplatin elicits an extra number of DNA breaks that stimulate RAD51-mediated repair pathways., *Cancer Research*. 63: 3221-7, 2003.