

Experimental report exp MD18 (2-8 July 2003)

***In vivo* experimentation**

The first *in vivo* results we obtained, demonstrate that a synergetic effect exists between platinum atoms and low energy photons. Although this difference in toxicity was not discernable *in vivo* on survival curves, we observe the same exceptional cure rates above or below the platinum K-edge. Such synergy of treatments, associating cisplatinum and radiotherapy, has never been reported in the literature, with high-energy beams, where the Compton effect is the main interaction process. This experiment has consisted in treating a third group of (CDDP (3 μ g)+15Gy) rats to validate our previous results, and to compare this group with a similar group which have been irradiated in the same time with a 6 MeV high energy beam of the LINAC Sli (Electa) of the hospital. The survival study is still in progress however we had for the first time a doubling time of survival of the non treated controls demonstrating that the cell line used is less proliferating / less aggressive as a tumor than is the previous experimentation. This fact will make the interpretation difficult if ever possible...