

Experimental report exp MD 35 (19-27 November 2003)

***In vivo and in vitro* experimentation**

In vivo experimentation aimed at comparing the PAT-Plat (15 Gy) treatment made at ESRF (ID17) on Fisher rat with F98 glioma as described previously and the same treatment with the irradiation made with the high energy X ray (6 MeV, 15 Gy) and broad spectrum of the LINAC Sli (Electa) of the Radiation Oncology department of the Grenoble University Hospital. With a large X-ray spectrum, the Auger effect does not occur and the treatment should be less effective than PAT-Plat. This way the second experimentation of this kind. At the present time all the animals treated with the high energy beam are dead, some animales treated with PAT-Plat are still alive...

We introduced also a more extensive study of another platinum compound: the carboplatinum able to be administered at higher dose in human patient. 5 µg has been used as a dose injected in-situ in F98 glioma.

In vitro, we continued to gather cellular data on F98 by measuring double strand break yield, comparing carboplatinum and cisplatinum, immunofluorescence study of DNA repair pathways, H2AX histone labelling to study damage repair and repair kinetics... No results are available yet.