

Fig. 1 Evaluation of radiosensitizing activity of TX2244

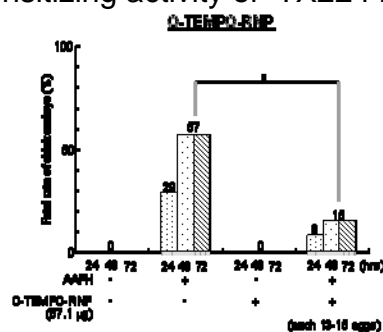
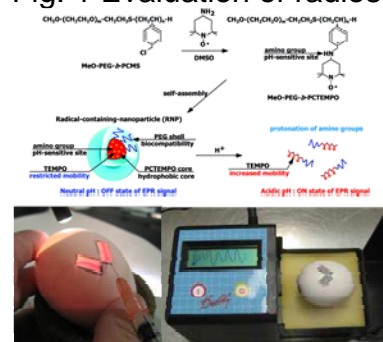


Fig. 2 Evaluation of antioxidative activity of redox nanoparticle

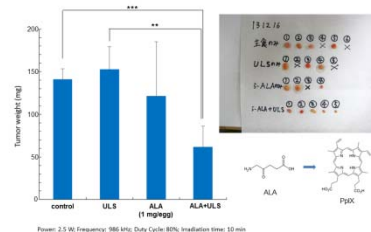
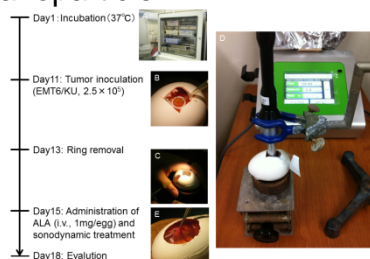


Fig. 3 Evaluation of sonosensitizing activity of 5-ALA

Content:

Although the animal experiments which used the mouse and the rat is indispensable to drug discovery, the use has been restricted for an ethical problem. The zebra fish is developed as alternative experimental animal in recent years. However, only a drug with comparatively high lipophilicity is absorbed and hard to control the amount of absorption using zebra fish. Therefore, development of other experimental animals is strongly required.

Then, we have tried to develop the drug evaluation method which used the developing chicken egg. The developing chicken eggs are the next-generation experimental animal which has many advantages that it is cheap, controllable only at temperature and humidity, individual specificity is small, allergic nature is low, and a special experimental institution is unnecessary. Until now, we have succeeded in the pharmacokinetic analysis and evaluation of biological activity of our designed radiosensitizer / radioprotector, an antiangiogenic / antimetastatic agent, a sonosensitizer, and an antioxidant using the developing chicken egg.

Keywords : developing chicken egg, radiosensitizer/radioprotector, antiangiogenic/antimetastatic agent, sonosensitizer, antioxidant

E-mail: uto@bio.tokushima-u.ac.jp

Tel. +81-88-656-7522

Fax: +81-88-656-7522

HP : <http://www.bio.tokushima-u.ac.jp/A2/>

