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Date: 14.09.2022	Radiotherapy treatment	LTK-RES-47-A-EN Version: A
This SOP replaces: Date: None		
Reason for Change: None		
Related SOPs: SOP-LTK-TRT-18 Injection anesthesia		
Indication of Use: Therapy of brain cancer with radiotherapy.		
Aim of SOP: This protocol describes how to perform mouse treatment with standard-of-care radiotherapy regimen.		
Distribution: 1. Server 2. Animal facility 3. Group vom Berg		
Attachments:		
Generated at: 14.09.2022	Checked and approved at: 14.09.2022	
by: Michal Beffinger	by: Johannes vom Berg	

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Responsible Persons:

- 1) The researcher mentioned on the respective scoring sheet.
- 2) Any person with Module 1 and registered on animal permit.

Method:

Use of radiotherapy to control tumor growth.

Principle of Method:

Radiotherapy is a non-invasive therapeutic treatment using ionizing radiation to produce free radicals, which damage the tumor cells. Radiotherapy is commonly locally applied in cancer therapy because of its ability to control cell growth.

Material to be used:

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Storage of Material:

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Machine:

RadSource RS2000

Safety:

1. General rules for working with sharp tools (scalpels, syringes, scissors) have to be followed.
2. Follow the rules of the animal house.
3. General rules of working with irradiation machine RadSource RS2000.

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Method Description:

1. Anesthetize the mice according to the SOP-LTK-TRT-18 Injection anesthesia.
2. Place the anesthetized mice in the irradiation machine and ensure that only the brain section is irradiated, sparing the throat using lead shields.
3. Perform irradiation at a maximum dose of 24 Gy in 1 to 3 fractions using the RadSource RS2000.
4. After the irradiation was finished, proceed with the wake up procedure according to the SOP-LTK-TRT-18 Injection anesthesia.

Documentation:

Server, appropriate project folder.

Problem management:

Report any adverse event to your supervisor