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Canine osteosarcoma positioning and dosimetry study

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Appendicular osteosarcoma is a highly destructive malignant primary bone tumour occurring in both canine and human patients. Clinically, amputation is the most common outcome, however, Synchrotron generated radiotherapy may provide a preferable alternative.

Building from a body of knowledge acquired in small animal models, client-owned dogs with spontaneously developing tumours would be an excellent translational model to assess novel radiation therapies, moving toward the ultimate goal of human patients.

This work presents a positioning and dosimetry study using a canine cadaver as a proof-of-concept for veterinary trials at the imaging and medical beamline of the Australian Synchrotron. This included x-ray imaging, alignment to the treatment beam, simulation and prescription of a therapeutic dose and finally the delivery of said prescription.

Presenter Gender

Man

Do you wish to take part in the Student Poster Slam

Yes

Condition of submission

Yes

Students Only - Are you interested in AINSE student funding

Yes

Level of Expertise

Student

Pronouns

He/Him

Which facility did you use for your research

Australian Synchrotron

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