Plan Overview

A Data Management Plan created using DMP Tool

DMP ID: https://doi.org/10.48321/D1GW3D

Title: Diagnostic, prognostic and therapeutic approach of HER2 overexpression in canine mammary neoplasms

Creator: Antonio fernando Leis filho - **ORCID:** 0000-0001-5605-169X

Affiliation: São Paulo State University (unesp.br)

Funder: São Paulo Research Foundation (fapesp.br)

Grant: 2021/00678-3

Template: Digital Curation Centre (português)

Project abstract:

Mammary gland neoplasms are the most common type of cancer in female dogs with half of these being malignant. The life expectancy of animals diagnosed with this disease is generally low. Due to the difficulty in treatment and the high prevalence of mammary gland cancer, the identification of diagnostic, prognostic and therapeutic factors is very important. HER2 is a tyrosine kinase receptor with great relevance in human breast neoplasms, and its overexpression is linked to shorter disease-free time, shorter survival, greater cell proliferation and migration, tumor invasion, frequency of metastases, angiogenesis and decrease of apoptosis. In dogs, the relevance of HER2 in these neoplasms is still debated, however, overexpression of HER2 has already been related to increased cell pleomorphism and a greater number of mitosis figures in these animals. Taking this into account, this project aims to validate the use in canine samples of the anti-HER2 antibody used in the immunohistochemistry of human samples by Western blotting and mass spectrometry; correlate the expression of HER2 with the survival of dogs diagnosed with mammary gland cancer; propose and test in vitro a therapy for animals with neoplasms with high HER2 expression using lapatinib in combination with a chemotherapeutic agent to be determined after proteomics of cultured canine mammary carcinoma cell samples treated with lapatinib, in order to complement its effects.

Start date: 03-10-2021

End date: 06-03-2025

Last modified: 07-08-2024

Copyright information:

Diagnostic, prognostic and therapeutic approach of HER2 overexpression in canine mammary neoplasms

Coleta de Dados

Que dados serão coletados ou criados?

Data from survival time of dogs with mammary gland tumors
Data from western blotting and mass spectrometry
Data from immunoistochemistry of canine mammary gland tumors
Data from proteomics of cells cultured in vitro

Como os dados serão coletados ou criados?

The data collected and generated will come from laboratory analyzes. The quantitative data of the analyzes will produce numerical data that will be arranged in electronic spreadsheets.
Qualitative analyzes will produce textual and image data, such as western blotting. Biological samples will be properly identified and stored in liquid nitrogen or freezer - 80°C.

Documentação e Metadados

Que documentação e metadados acompanharão os dados?

The formats and software chosen will allow for long-term data sharing and access.The data will be obtained following standards and methodologies already described in the literature, in addition all experiments will be carried out in triplicates. The information will be divided and identified by experiments, date of completion, cell group and treatment, or by the identification of the banking platform used.
The collection of experimental data will be performed by the same person, who already has laboratory experience, generating consistency and quality of the data generated. All data generated will be documented in writing, providing information to other members of the research group. Data will be recorded in its raw form for future analysis, with proper identification of who performed the experiment, when, which experiment was performed, and stored in folders. In addition, all procedures to be carried out will have their methodology described in detail and stored in folders, properly identified, so that other people can reproduce the experiment if necessary and for future consultations.

Ética e Conformidade Legal

Como você administrará qualquer questão ética?

The project was submitted to the Ethics Committee on the Use of Animals (CEUA) - UNESP/Botucatu and was accepted with the norms published by the National Council for the Control of Animal Experimentation (CONCEA) under CEUA,
All stages of the research will follow ethical protocols in accordance with existing regulations.

Como você vai gerenciar os direitos autorais e os direitos de propriedade intelectual (IP / IPR)?

The data will be kept confidential until publication in indexed journals.
The issues of copyright and intellectual property of the data collected and generated will be discussed among the members of the group, but the data obtained initially will belong to the student who will be developing the research and his advisor. Data sharing will be restricted or limited until after the data publication.

Armazenamento e Backup

Como os dados serão armazenados e terão backup durante a pesquisa?

The data will be stored in the Google Drive cloud and access will be through institutional access to the Unesp VPN (Virtual Private Network). In addition, backups are already configured as a security measure and on this platform there is enough capacity for all data.
All data will also be stored in external hard drives, with frequently backups, and with restricted access to others researchers involved in the project.
The main researcher will be responsible for data storage and backup, which will also be carried out on an external hard drive.
In addition, data and metadata will be published through a platform made available by UNESP, available at:
https://repositorio.unesp.br/.

Como você vai gerenciar o acesso e a segurança?

UNESP will be responsible for your safety for a specific period. UNESP will provide the platform: https://repositorio.unesp.br/.
The data will be kept confidential until publication in indexed journals.
Only the metadata will be shared with project collaborators, only for consultation and not with the possibility of editing the data. Only the principal investigator and advisor will be able to edit this information.

Seleção e Preservação

Quais dados são de valor a longo prazo e devem ser mantidos, compartilhados e / ou preservados?

Raw data from proteomics

Qual é o plano de preservação a longo prazo do conjunto de dados?

Raw data will be considered relevant for contribution to future projects, consultations or scientific publications and will be preserved and stored in the cloud and external hard drive, for at least 10 years. The data will be partially shared after the PhD defense, being completely released after 2 years. They will be available in the institutional repository with free access and due citation.

Compartilhamento de Dados

Como você vai compartilhar os dados?

It is intended to partially share data in scientific events. Restrictions on sharing the collected data will remain until the time of publication, with access restricted to the public.
Data will be shared with the scientific community through publication in indexed journals.

Existem restrições ao compartilhamento de dados requeridos?

Restrictions on sharing the collected data will remain until the time of publication, with access restricted to the public. In addition, after the publication of these data, the sharing of the material will only be carried out with the proper citation and appointment of the main authors/researchers of the project and the institution where it was developed.
There are no legal or ethical restrictions. However, the data will be kept confidential until publication in indexed journals.

Responsabilidades e Recursos

Quem será responsável pelo gerenciamento de dados?

Those responsible for data management will be the principal investigator, advisor and UNESP. Collaborators will have responsibilities for the specific collection and organization of data, but only the principal investigators will carry out the official editing and storage of the data.

Quais recursos você precisará para entregar seu plano?

Collaborators (undergraduate, master's and/or doctoral students) may need training to perform data collection, which may be assisted by the principal investigator.
The principal investigator will keep all data updates, as well as backups, and may request technical assistance from UNESP's IT sector.
Raw data, after publication, will also be available in online databases.