



# Mouse-Mammary

# Summary

## Redirection Notice

This page will redirect to <https://www.cancerimagingarchive.net/collection/mouse-mammary/> in about 5 seconds.

This collection consists of magnetic resonance images (MRI) of genetically engineered mouse models (GEMMs) of breast cancer. These images were acquired as part of a Department of Defense (DOD) Breast Cancer Research Program (BCRP) Postdoctoral Award W81XWH-12-1-0307 entitled “*Investigating Ductal Carcinoma in Situ Using Noninvasive Imaging of Genetically Engineered Mouse Models*”

A particular emphasis of this project was to study the earliest stages of breast cancer—preinvasive ductal carcinoma *in situ* (DCIS)—and to interrogate the underlying genetic events that influence progression into invasive disease. In particular, we focused on the role of perturbed Rb, p53 and BRCA1 functionality and how these pathways, acting alone and in combination, can influence the development and progression of DCIS. GEMMs serve as an excellent model system wherein genetic changes can be controlled and manipulated over time. *In vivo* MRI is a superb technique for noninvasively tracking and characterizing these microscopic early stage cancers as they develop, change and transition into lethal invasive disease.

For scientific or other inquiries about this dataset, please [contact TCIA's Helpdesk](#).

## Acknowledgements

We would like to acknowledge the individuals and institutions that have provided data for this collection:

- **National Cancer Institute (Frederick, Maryland)** - Special thanks to **Sunny Jansen, PhD** from the Department of **Mouse Cancer Genetics Program**.

## Data Access

### Data Access

Data Type	Download all or Query/Filter	License
Images (DICOM, 8.6 GB)	<a href="#">Download</a> <a href="#">Search</a> (Download requires the <a href="#">NBIA Data Retriever</a> )	CC BY 3.0

Click the Versions tab for more info about data releases.

## Additional Resources for this Dataset

The NCI Cancer Research Data Commons (CRDC) provides access to additional data and a cloud-based data science infrastructure that connects data sets with analytics tools to allow users to share, integrate, analyze, and visualize cancer research data.

- [Imaging Data Commons \(IDC\)](#) (Imaging Data)

### Detailed Description

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Collection Statistics	
Modalities	MR
Number of Patients	32
Number of Studies	149
Number of Series	205
Number of Images	23,487
Images Size (GB)	8.6

A presentation about a related Mouse GBM data set can be found at: [Sunny\\_jansen\\_NBIA\\_mouseGBM\\_update\\_ICR\\_508.ppt](#).

### Citations & Data Usage Policy

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Users must abide by the [TCIA Data Usage Policy and Restrictions](#). Attribution should include references to the following citations:

#### Data Citation

Jansen, S., Ileva, L., Lu, L., & Van Dyke, T. (2015). **TCIA Mouse-Mammary Collection (Mouse-Mammary) [Data set]**. The Cancer Imaging Archive. <https://doi.org/10.7937/K9/TCIA.2015.9P42KSE6>

#### TCIA Citation

Clark K, Vendt B, Smith K, Freymann J, Kirby J, Koppel P, Moore S, Phillips S, Maffitt D, Pringle M, Tarbox L, Prior F. (2013) **The Cancer Imaging Archive (TCIA): Maintaining and Operating a Public Information Repository**, Journal of Digital Imaging, Volume 26, Number 6, pp 1045-1057. DOI: <https://doi.org/10.1007/s10278-013-9622-7>

## Other Publications Using This Data

TCIA maintains [a list of publications](#) which leverage TCIA data. If you have a manuscript you'd like to add please [contact TCIA's Helpdesk](#).

### Versions

#### **Version 1 (Current): Updated 2015/03/18**

Data Type	Download all or Query/Filter
Images (8.6GB)	<a href="#">Download</a> <a href="#">Search</a> (Download requires the <a href="#">NBIA Data Retriever</a> )