## TWIMC, who are interested in non-clinical testing using a mouse model of lymph node metastasis

Experimental animals with appropriate similarities to humans are crucial for a wide range of basic and clinical studies of the diagnosis and treatment of lymph node metastasis. We cannot contribute to advances in medicine without these animal models.

A useful model of lymph node metastasis is the MXH10/Mo-*lpr/lpr* mouse, an inbred mouse that develops systemic swelling of lymph nodes that reach up to 10 mm in diameter (similar in size to human lymph nodes). Since all lymph nodes become enlarged, these mice will be useful for the development of novel diagnostic techniques and treatments for lymph node metastasis, and for the development of drug delivery systems.



It is expected that the use of this mouse model will lead to advances in the early diagnosis and treatment of lymph node metastasis (Cancer Res 2013;73:2082-2092; PloS One 2013;8(2):e55797; J Immunol Methods 2013; 389(1-2):69-78).

## We are looking for Collaborative Work

## Characteristics of MXH10/Mo-*lpr/lpr* mice

MXH10/Mo-*lpr/lpr* (MXH10/Mo/lpr) inbred mice develop systemic swelling of lymph nodes that reach up to 10 mm in diameter (similar in size to human lymph nodes). MXH10/Mo/lpr mice do not express the Fas gene involved in apoptosis. However, the basic structures of the lymph nodes (including the medulla, paracortex and cortex) and lymphatic channels are preserved. Furthermore, these mice do not develop severe glomerulonephritis and vasculitis compared with MRL/MpJ-*lpr/lpr* mice, an MRL/lpr strain used for studies of connective tissue disease.

♦ Click here for details www.ecei.tohoku.ac.jp/kodama/jointresearch/

## **Quarantine inspection**

Microbial monitoring, based on the ICLAS (International Council for Laboratory Animal Science) Monitoring Center, Central Institute for Experimental Animals, is conducted four times a year at the Institute for Animal Experimentation, Tohoku University Graduate School of Medicine.

If there is any further information you require, please contact us.



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