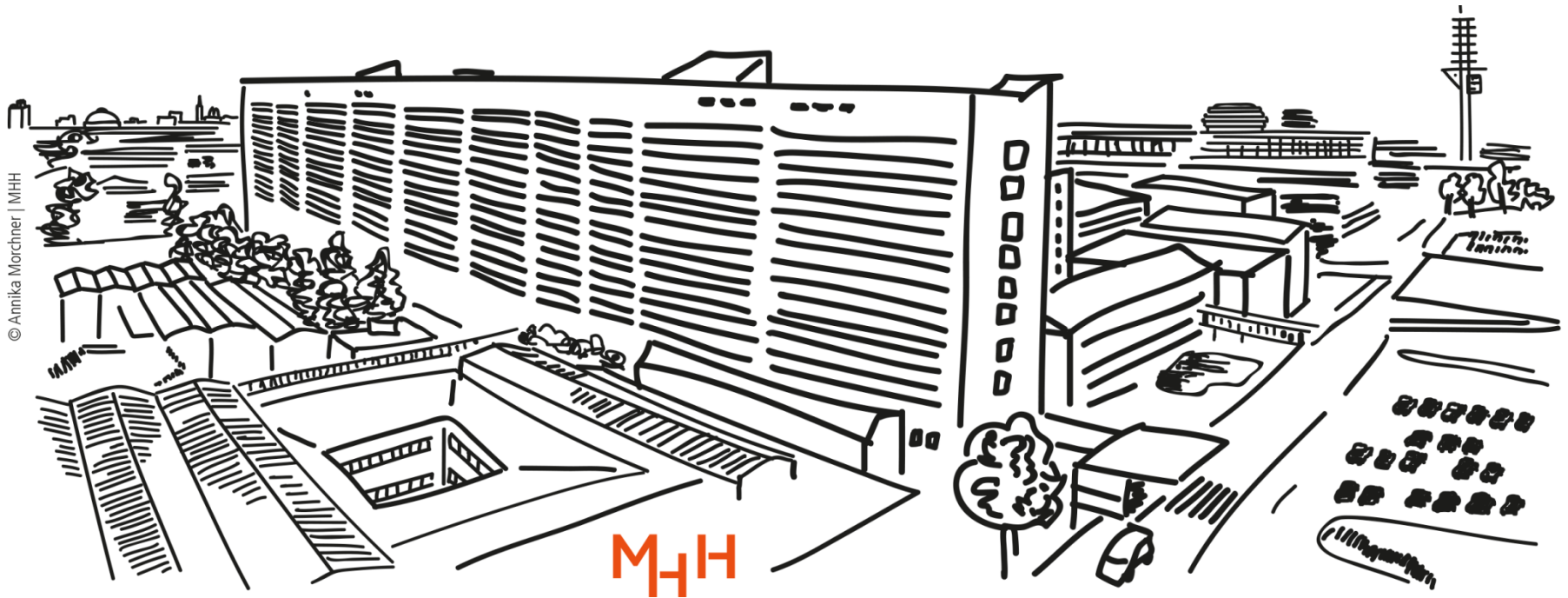


Computed tomography for rejection monitoring in a murine orthotopic lung transplantation model

T. Nakagiri, Linda Ahrens, Stefan Lienenklaus , Ann-Kathrin Knöfel ,
Danny Jonigk , Nodir Madrahimov , K. Jansson, A. Haverich, G. Warnecke

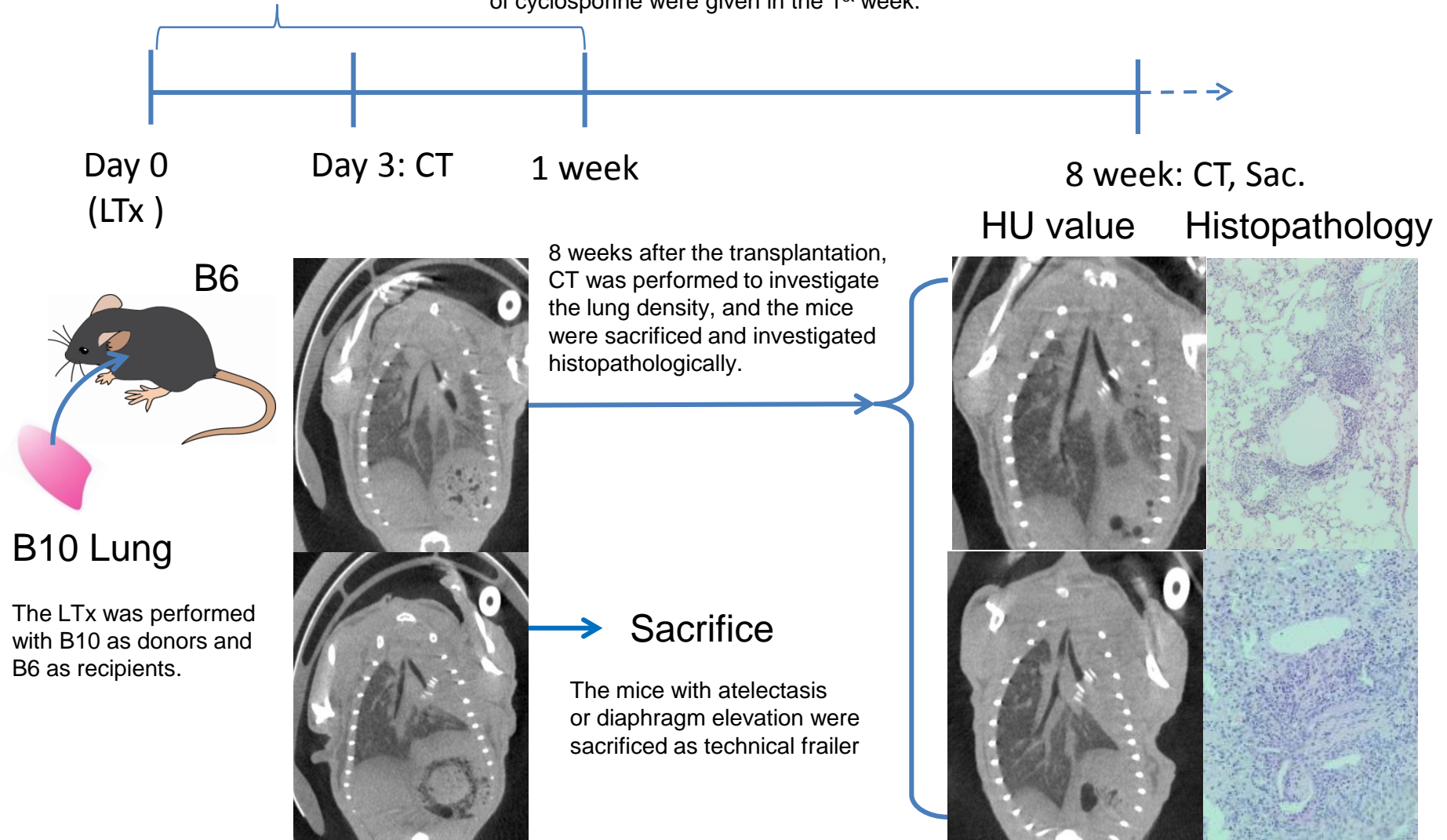


Methods

Cyclosporine

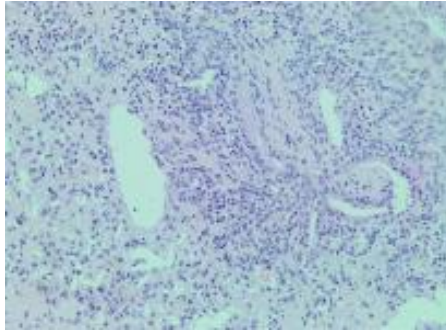
0, 5, 15 or 25mg/kg daily

After the transplantation, several doses of cyclosporine were given in the 1st week.

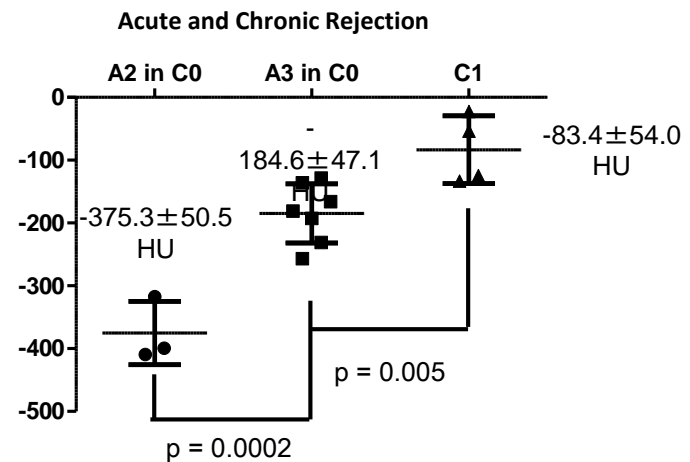
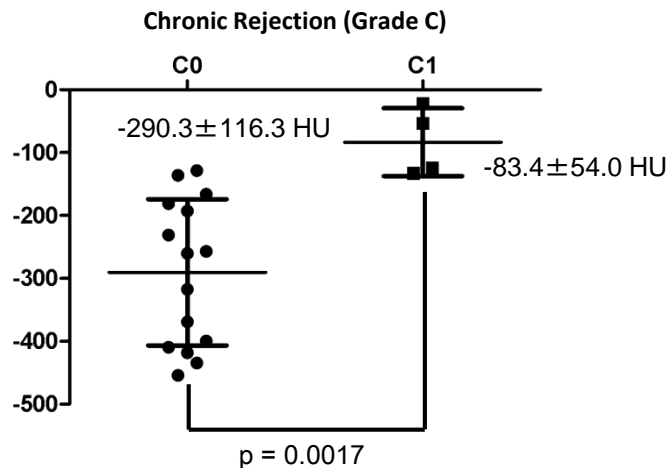


Microscopic findings

From the 15mg/kg cyclosporine group, the histology of chronic lung rejection was seen. Its findings of the CT were mostly atelectasis.



The HU values of the lung with chronic rejection was significantly higher than that of acute rejection. The moderate acute rejection had higher HU value than that of non chronic rejection. In addition, the HU value of severer acute rejection lung was significantly higher than that with milder acute rejection.



Conclusions

- A chronic rejection model after mouse orthotopic lung transplantation (OLTx) was established.
- CT findings after mouse OLTx can be used as a non-invasive rejection monitoring method.