Complement inhibition as potential novel therapy for antibody-mediated rejection after lung transplantation in murine antibody-mediated rejection model.

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Relevant Financial Relationship Disclosure Statement

[Development of novel murine antibody mediated rejection model after orthotopic lung transplant.] [Yuki Shiina]

I will not discuss off label use and investigational use of the any drugs/devices

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Anti-C5 (anti-complement 5)

- ✓ Antibody that binds to the C5 complement protein and blocks the terminal complement
- Anti-C5 had a potential benefit compared with standard of care in preventing acute AMR in recipients sensitized to their living-donor kidney transplants





Am J Transplant. 2018

William H, Am J Transplant, 2019

There are few reports which show the effectiveness of anti-C5 to AMR after lung transplant.

Method



Anti-C5 (40mg/kg), CyA:Cyclosporin A (10mg/kg), mPSL:Methylprednisolone (1.6mg/kg)

Pathological findings of graft left lung



CyA: Cyclospolin, mPSL:Methylprednisolone

Rejection scores (A) of left lung

DSA in serum



* : P value < 0.05, ** : P value < 0.01, CyA : Cyclospolin, mPSL:Methylprednisolone

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Conclusion

 Anti-C5 therapy could be effective to prevent AMR among the mice orthotopic lung transplant model which was pre-sensitized by skin transplant.