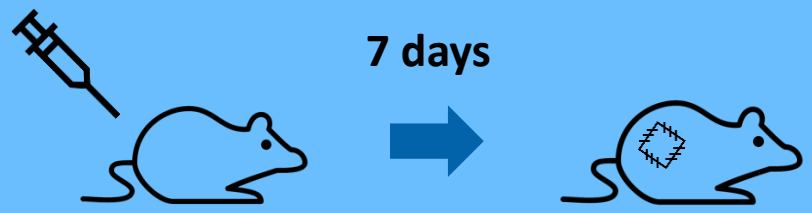
Indirectly Activated Treg Allow Dominant Tolerance to Murine Skin-grafts Across an MHC Class I Mismatch After a Single Donor Specific Transfusion

AIM

The role of nTregs was studied a stringent model of skin graft tolerance using donor specific transfusion without immunosuppression.

METHODS

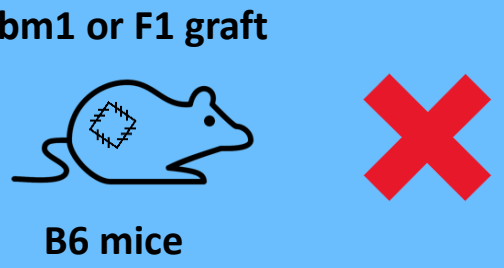


B6 mice injected with splenocytes from bm1 or F1 mice

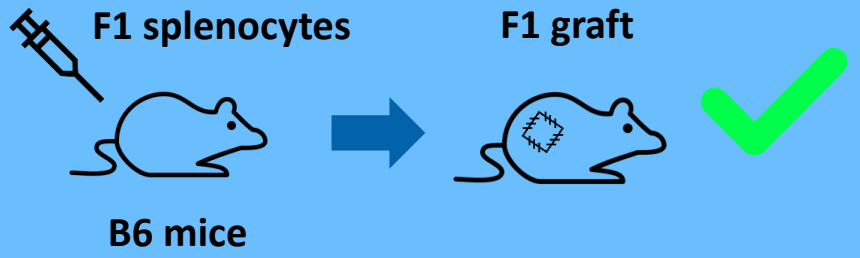
Transplanted with donor (bm1 or F1) or third party (H-2k) skin grafts

RESULTS

B6 hosts acutely rejected skin-grafts from bm1 and F1 mice



Single F1 splenocyte transfusion without additional immune modulation led to permanent acceptance of F1 skin grafts



CONCLUSION

Persistence of transfused semi-allogeneic donor cells mismatched at MHC Class I can enhance tolerance to subsequent skin allografts through indirectly expanded nTregs leading to dominant tolerance without additional immunological manipulation.

Zhang GY et al. *Transplantation*. July 2020

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