

American Society for Histocompatibility and Immunogenetics: 51st Annual Meeting

Assessing the Impact of Induction Regimen on Graft Function in HLA-A, HLA-B, HLA- DR Mismatch Renal Transplant: A Retrospective Study

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INTRODUCTION

Background

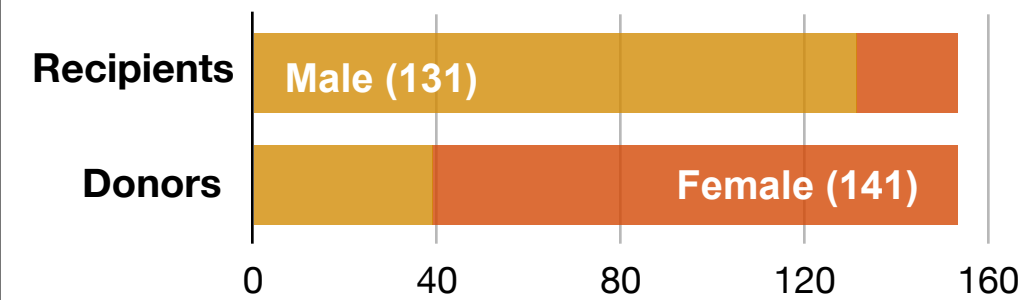
HLA mismatch adversely affects graft survival, necessitating the use of immunosuppressive induction regimens to improve outcomes. Evaluation of these regimens is essential to optimise graft survival, as tailored approaches may increase long-term transplant success and minimise complications.

Objectives

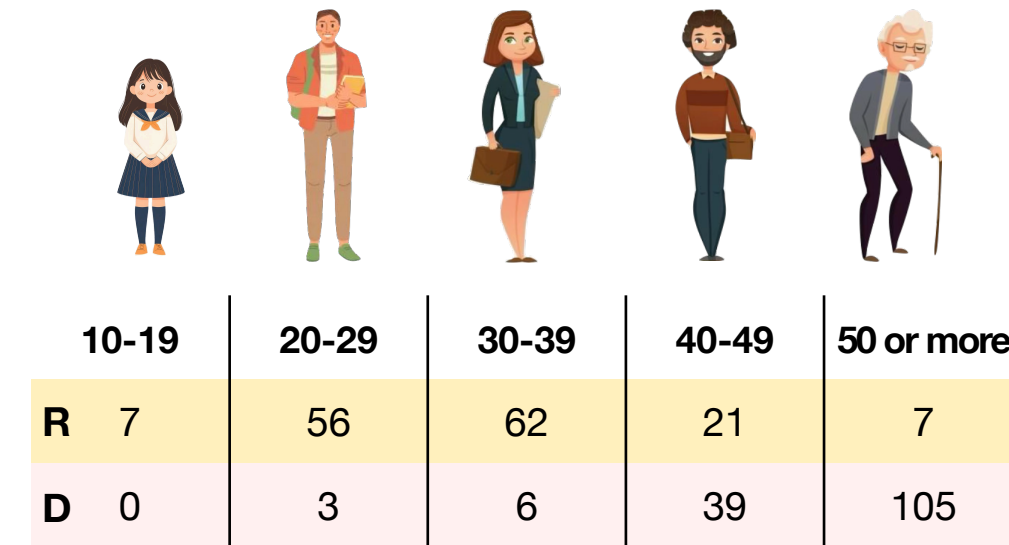
- To evaluate the effectiveness of different induction regimens on graft function.
- To explore the relationship between HLA mismatch types and the induction regimens used for immunosuppression.

RESULTS

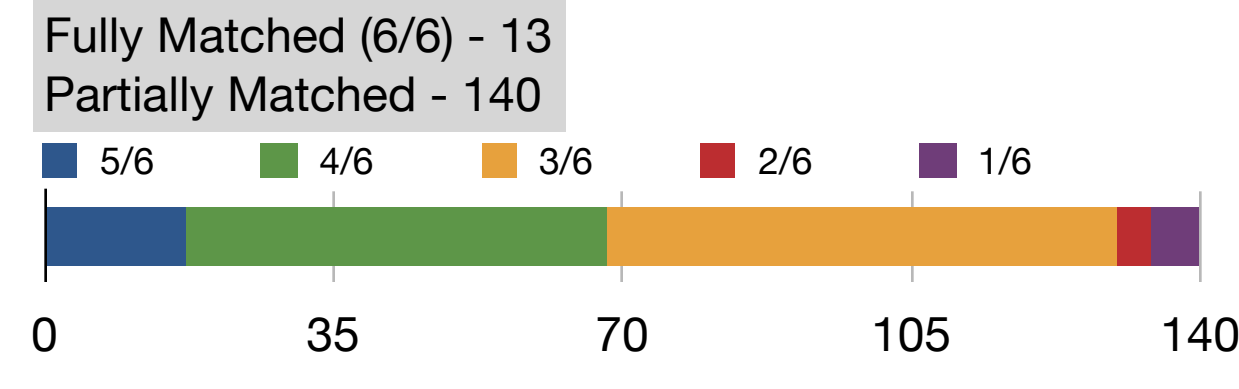
Gender Distribution



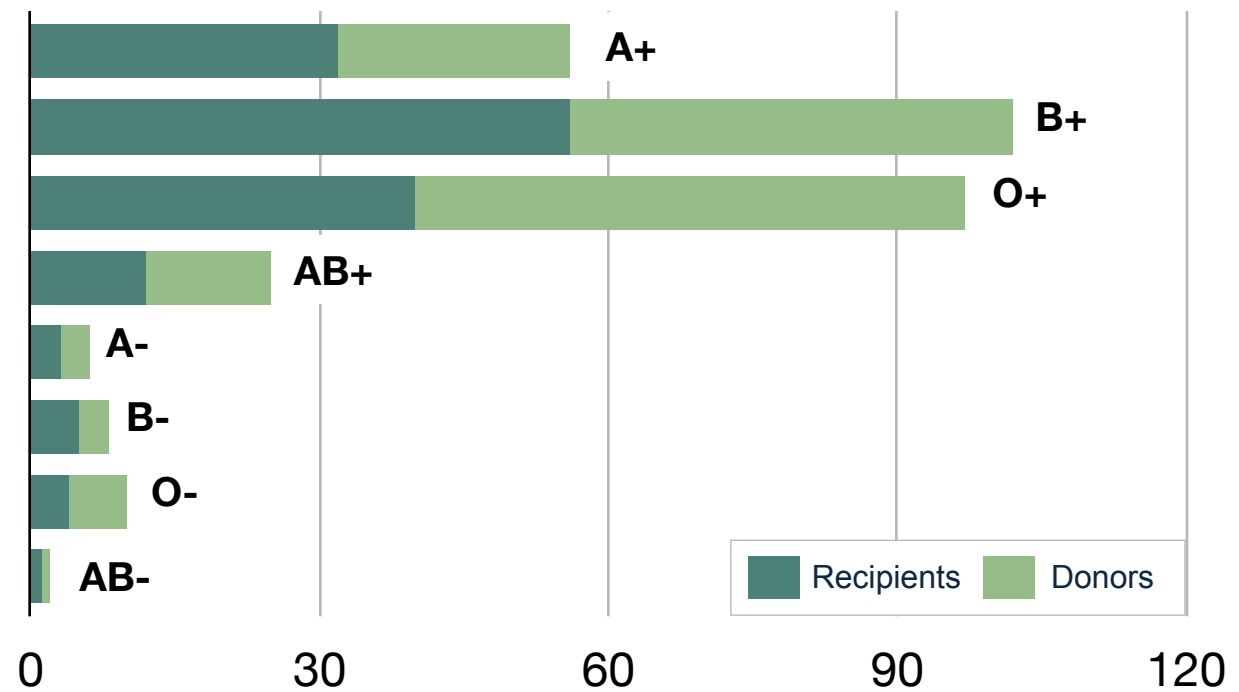
Age Distribution



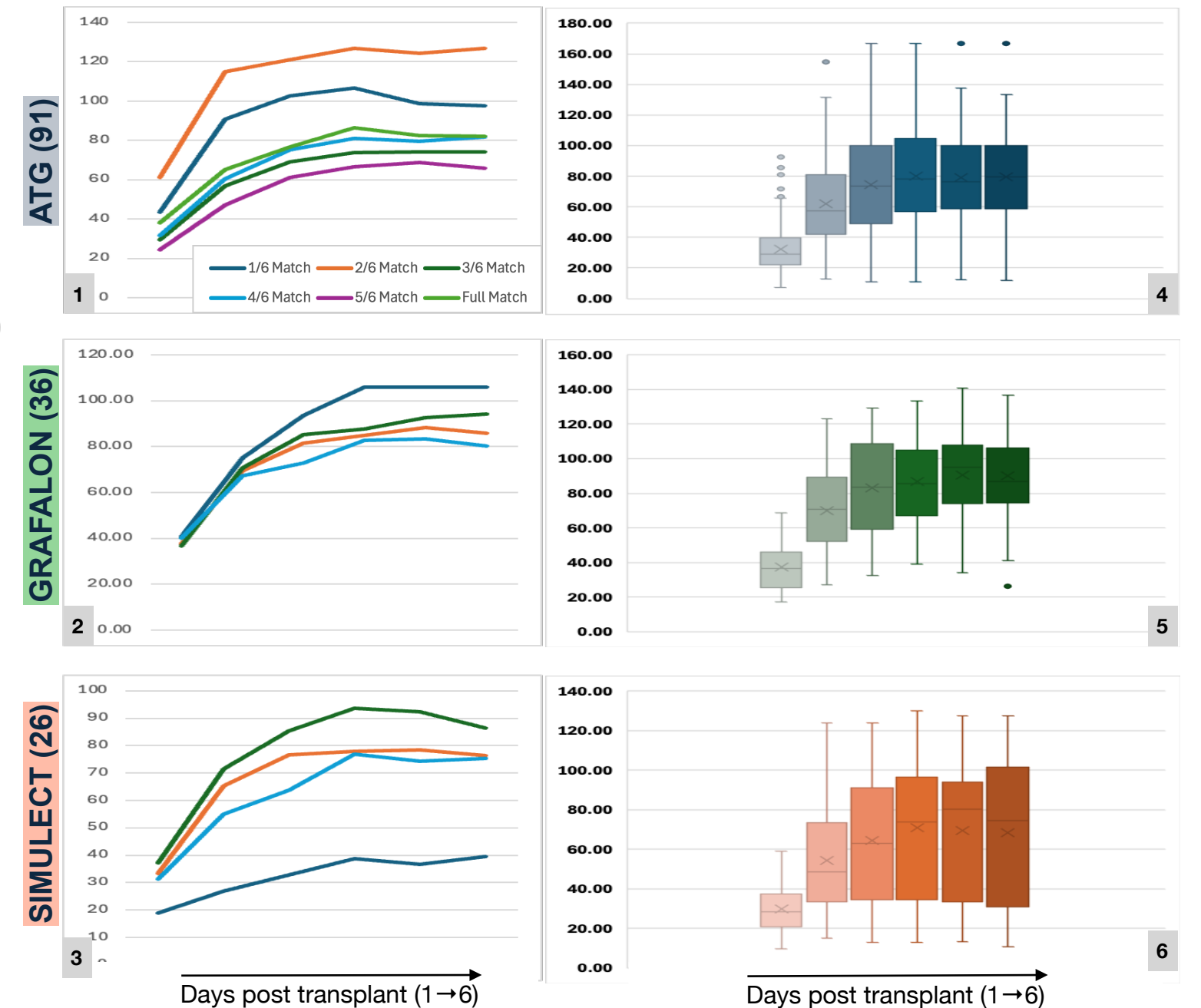
HLA Matching



Blood Grouping



eGFR Comparison Across Different Immunosuppressants



STUDY DETAILS

Study Design

Retrospective, Case-Control, Observational Study.

Sample Size - 153

Study Population

Data between July 2019 to July 2024 of patients with end-stage renal disease (ESRD) and individuals serving as living kidney donor.

Inclusion Criteria

Consent



Complete data

Exclusion Criteria



Incomplete data

DISCUSSION

Year	Authors	Result
2024	Hod T. et al.	Combination of ATG with Basiliximab significantly reduced acute cellular rejections in HLA mismatch transplants.
2020	Rana A. et al	Grafalon was associated with higher rates of Acute graft rejection in HLA mismatch transplants when compared with ATG.

CONCLUSION

Grafalon showed better outcomes in cases with high HLA mismatch (1/6), while Simulect was more effective in well-matched cases, with higher eGFR observed. ATG also performed well in high HLA mismatch transplants. However, due to the small sample size, the findings are limited. A larger, more comprehensive study is needed to draw practical and reliable conclusions.