

Supplementary Material

Figure S1. Cohort creation.

Table S1. STROBE checklist.

Table S2. Age, sex, and delayed graft function-adjusted associations of recipient and transplant characteristics with dual induction therapy compared to basiliximab alone.

Table S3. P values of log rank test for the difference of Kaplan-Meier failure functions for 2 by 2 comparisons.

Figure S2. Cumulative incidence functions (unadjusted competing risk models) by type of induction therapy used for A) Death-censored graft failure (graft failure with competing event of death with a functioning graft) and B) Death with a functioning graft (death with competing event of graft failure before death).

Figure S1. Cohort creation.

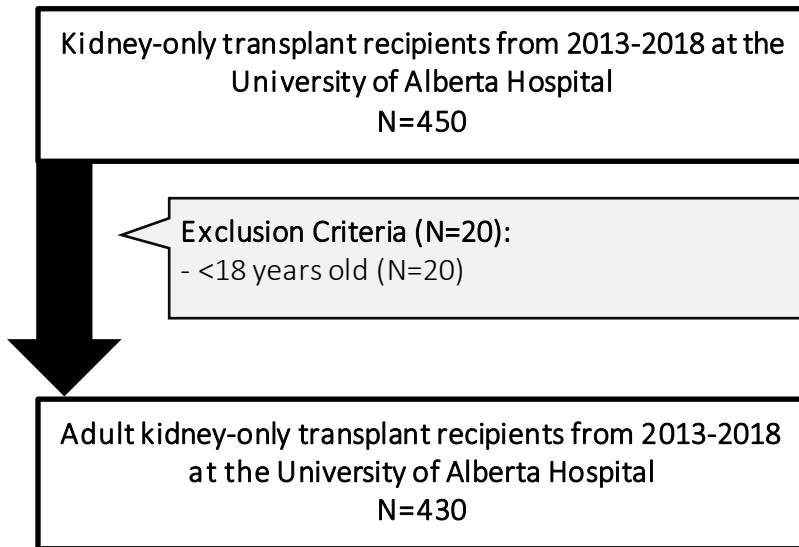


Table S1. STROBE checklist ⁸			
	Item	Recommendation	Section
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	Title Page
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Abstract
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Introduction
Objectives	3	State specific objectives, including any prespecified hypotheses	Introduction
Methods			
Study design	4	Present key elements of study design early in the paper	Methods
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Methods
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	Methods
		(b) For matched studies, give matching criteria and number of exposed and unexposed	Not applicable
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Methods
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	Methods
Bias	9	Describe any efforts to address potential sources of bias	Methods
Study size	10	Explain how the study size was arrived at	Methods Figure S1
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Methods
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	Methods
		(b) Describe any methods used to examine subgroups and interactions	Methods
		(c) Explain how missing data were addressed	Methods
		(d) If applicable, explain how loss to follow-up was addressed	Methods
		(e) Describe any sensitivity analyses	Methods

Table S1. STROBE checklist (continued).			
	Item	Recommendation	Section
Results			
Participants	13	(a) Report numbers of individuals at each stage of study—e.g. numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	Figure S1
		(b) Give reasons for non-participation at each stage	Figure S1
		(c) Consider use of a flow diagram	Figure S1
Descriptive data	14	(a) Give characteristics of study participants (e.g. demographic, clinical, social) and information on exposures and potential confounders	Results Table 1
		(b) Indicate number of participants with missing data for each variable of interest	Table 1
		(c) Summarise follow-up time (e.g. average and total amount)	Results
Outcome data	15	Report numbers of outcome events or summary measures over time	Results Table 3 Figure 1
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g. 95% confidence interval). Make clear which confounders were adjusted for and why they were included	Results Table 1-3
		(b) Report category boundaries when continuous variables were categorized	Table 1-3
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Table 1-3 Figure 1
Other analyses	17	Report other analyses done—e.g. analyses of subgroups and interactions, and sensitivity analyses	Table S2 Table S3 Figure S2
Discussion			
Key results	18	Summarise key results with reference to study objectives	Discussion
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	Discussion
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Discussion
Generalisability	21	Discuss the generalisability (external validity) of the study results	Discussion
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Funding

Table S2. Age, sex, and delayed graft function-adjusted associations of recipient and transplant characteristics with dual induction therapy compared to basiliximab alone.	
Characteristic	Odds ratio (95% CI)
Recipients Factors	
Age (years)	0.99 (0.96, 1.02)
>65 years	0.71 (0.18, 2.76)
Female sex	1.06 (0.36, 3.14)
Race	
Caucasian	Reference
Black	1.01 (0.15, 6.68)
Asian	N/A
Other ^a	0.76 (0.24, 2.43)
Missing	N/A
BMI (kg/m²)	1.04 (0.95, 1.13)
Underweight (<18.5)	Reference
Normal (18.5-24.9)	0.95 (0.21, 4.44)
Overweight (25.0-29.9)	0.48 (0.07, 3.33)
Obese (≥30)	1.48 (0.23, 9.41)
Missing	N/A
Primary cause of ESRD	
Glomerulonephritis	0.18 (0.05, 0.63)*
Diabetes mellitus	Reference
Polycystic kidney disease	0.67 (0.14, 3.15)
Hypertension	2.25 (0.21, 24.66)
Other	0.34 (0.10, 1.09)
Missing	1.22 (0.27, 5.56)
Pretransplant dialysis modality	
Hemodialysis	Reference
Peritoneal dialysis	0.71 (0.24, 2.11)
Pre-emptive	0.80 (0.09, 6.76)
Missing	4.19 (0.41, 43.09)
Dialysis duration (years)	1.12 (0.89, 1.41)
ABO blood group	
A	Reference
B	0.48 (0.09, 2.52)
O	0.88 (0.34, 2.27)
AB	0.49 (0.06, 3.65)
cPRA (%)	1.01 (1.00, 1.03)
0	Reference
1-9	1.87 (0.60, 5.80)
10-79	1.08 (0.38, 3.05)
≥80	5.90 (1.44, 24.10)*
Missing	2.51 (0.26, 24.65)

Table S2. Age, sex, and delayed graft function-adjusted associations of recipient and transplant characteristics with dual induction therapy compared to basiliximab alone.	
Characteristic	Odds ratio (95% CI)
Co-morbidities	
Previous organ transplant	0.93 (0.11, 7.66)
Hypertension	0.79 (0.19, 3.25)
Diabetes mellitus	1.52 (0.58, 3.99)
Myocardial infarction	0.79 (0.20, 3.11)
Cerebrovascular accident	0.66 (0.08, 5.55)
Peripheral vascular disease	5.14 (0.99, 26.69)
COPD	0.56 (0.09, 3.35)
Malignancy	1.52 (0.46, 4.96)
Maintenance Immunosuppression^b	
Tac + MPA/MMF/AZA + Pred	Reference
Tac + MPA/MMF/AZA	1.54 (0.37, 6.31)
Tac or Tac + Pred	N/A
Other	N/A
Missing	N/A
Transplant Factors	
Transplant era	
2013 – 2015	Reference
2016 – 2018	0.17 (0.06, 0.49) [†]
Donor type	
Neurological Determination of Death	Reference
Donation After Cardiac Death	2.69 (0.58, 12.40)
Live Donor	2.61 (0.39, 17.69)
HLA mismatches	
Zero A, B, DR, DQ	N/A
Zero DR	0.92 (0.29, 2.87)
Zero DQ	0.85 (0.25, 2.85)
DSA	
None	Reference
Class I only	N/A
Class II only	N/A
Class I and II	N/A
Missing	6.97 (2.27, 21.42) [†]

Table S2. Age, sex, and delayed graft function-adjusted associations of recipient and transplant characteristics with dual induction therapy compared to basiliximab alone.	
Characteristic	Odds ratio (95% CI)
CMV status	
Donor (-)/Recipient (-)	Reference
Donor (+)/Recipient (-)	1.71 (0.40, 7.37)
Donor (-/+)/Recipient (+)	0.66 (0.18, 2.49)
EBV status	
Donor (-)/Recipient (-)	N/A
Donor (+)/Recipient (-)	N/A
Donor (-/+)/Recipient (+)	N/A
Cold ischemia time, hours	
0-12	Reference
13-24	1.17 (0.48, 2.84)
>24	10.30 (0.97, 109.83)
Missing	N/A
Delayed graft function^c	37.16 (14.39, 95.97)‡
N/A: Unable to estimate odds ratio due to 0 values in the cells.	
^a Included Aboriginal, Asian Indian, Filipino, Inuit, Latin American, Metis, Middle Eastern/Arabian, Other/Multiracial, and Pacific Islander.	
^b Maintenance immunosuppression is defined as any of those drugs with an initiation date within 7 days of the transplant.	
^c Defined as receipt of dialysis within the first week of transplant.	
Abbreviations: AZA, azathioprine; BMI, body mass index; CI, confidence interval; CMV, cytomegalovirus; COPD, chronic obstructive pulmonary disease; cPRA, calculated panel reactive antibody; DSA, donor specific antibody; EBV, Epstein-Barr virus; ESRD, end-stage renal disease; HLA, human leukocyte antigen; MMF, mycophenolate mofetil; MPA, mycophenolic acid; N/A, not available; Pred, prednisone; Tac, tacrolimus.	
P-values (reference to basiliximab alone): *P<0.05–0.002; †P=0.001–0.0001; ‡P<0.0001.	

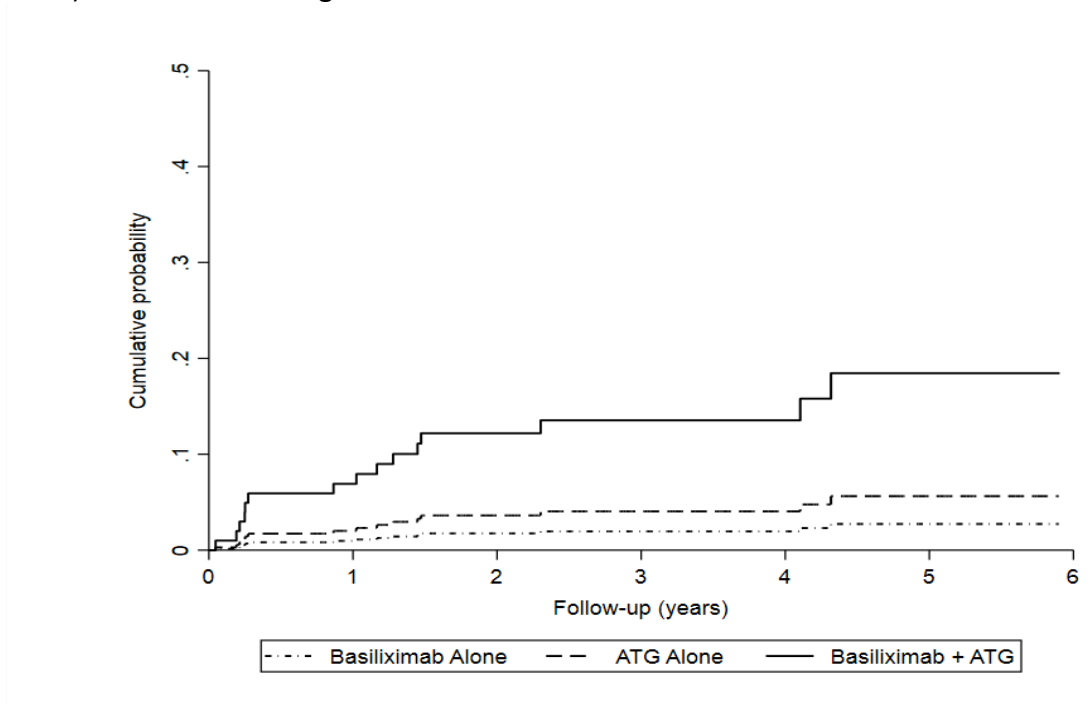
Table S3. P values of log rank test for the difference of Kaplan-Meier failure functions for 2 by 2 comparisons.

Outcomes	Basiliximab Alone vs. ATG Alone	Dual vs. Basiliximab Alone	Dual vs. ATG Alone.
All-cause graft failure	0.08	0.0001	0.03
Death-censored graft failure	0.2	0.0001	0.03
All-cause death	0.09	0.005	0.2
Death with a functioning graft	0.2	0.04	0.3

Abbreviation: ATG, anti-thymocyte globulin.

Figure S2. Cumulative incidence functions (unadjusted competing risk models) by type of induction therapy used for A) Death-censored graft failure (graft failure with competing event of death with a functioning graft) and B) Death with a functioning graft (death with competing event of graft failure before death).

A) Death-censored graft failure



B) Death with a functioning graft

