Supplementary Table S1: Participating Centers Practice Patterns (* number of occurrences in the first 12 months post kidney transplant)

Center	Viral PCR surveillance*	DSA Surveillance*	Surveillance Biopsy*	Tacrolimus trough target level (ng/ml)	MMF target daily dose
1	For indication	For indication	No	0-1 mo: 8-12 6 mo: 6-10 12 mo: 6-8 24 mo: 4-8	800 mg/m2/day
2	3	2	No	0-1 mo: 10-12 6 mo: 6-8 12 mo: 4-6 24 mo: 4-6	0-2 wks: 1200 mg/m2/day 6-24 mo: 900 mg/m2/day
3	5	5	No	0-1 mo: 10-12 6 mo: 6-8 12 mo: 4-6 24 mo: 4-6	800 mg/m2/day
4	8	2	No	0-1 mo: 6-9 6 mo: 5-7 12 mo: 4-6 24 mo: 4-6	600 mg/m2/day
5	8	5	No	0-1 mo: 10-15 6 mo: 6-8 12 mo: 3-5 24 mo: 3-5	0-1 mo: 1200 mg/m2/day 6-24 mo: 800 mg/m2/day
6	8	For indication	No	0-1 mo: 10-12 6 -24 mo: 5-9	1200 mg/m2/day
7	12	2	2	0-1 mo: 8-10 6 mo: 6-8 12 mo: 3.5-6 24 mo: 3.5-6	0-1 mo: 1200 mg/m2/day 6-24 mo: 600 mg/m2/day
8	12	For indication	3	0-1 mo: 8-10 6 mo: 6-9 12 mo: 5-7 24 mo: 5-7	1200 mg/m2/day
9	15	For indication	2	0-1 mo: 10-12 6 mo: 6-8 12 mo: 4-6 24 mo: 4-6	600 mg/m2/day

Supplementary Table S2: rATG dosing range in study participants stratified by exposure group

rATG dosing range in study participants stratified by exposure group						
Study Group	**N**	**Mean**	**Std Dev**	**Median**	**Minimum**	**Maximum**
< or =4.5 mg/kg	83	3.9	0.58	4.11	2.17	4.49
>4.5 mg/kg	152	6.2	1.48	5.96	4.52	14.85

STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No.	Recommendation	Page No.	Relevant text from manuscript
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	5	Retrospective multi-center study of all isolated first-time kidney transplant recipients <21-year-old who received rATG induction between 1-1-2010 and 12-31-2014 at 9 pediatric centers.
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	5 & 6	Abstract
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	7	Introduction
Objectives	3	State specific objectives, including any prespecified hypotheses	7	In this study, we sought to determine whether a lower rATG induction dosing regimen is effective and safe in a multi-center US cohort of pediatric kidney transplant recipients.
Methods				
Study design	4	Present key elements of study design early in the paper	8	This is a retrospective multi-center study that collected data from 9 member institutions within the Pediatric Nephrology Research Consortium (PNRC).
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	8 & 9	Inclusion criteria, exclusion criteria, exposure variable, outcomes and data collection
Participants	6	(*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of	8	Inclusion & exclusion criteria

		participants. Describe methods of follow-up *Case-control study*—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls *Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants		
		(*b*) *Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed *Case-control study*—For matched studies, give matching criteria and the number of controls per case	N/A	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	8 & 9	***Exposure Variable:*** Based on a single rATG dose of 1.5 mg per kg of body weight, rATG cumulative exposure threshold was set *a priori* at 3 doses or less (≤ 4.5 mg/kg) for the low dose exposure group and at greater than 3 doses (> 4 ***Outcomes:*** We compared 12-month outcome measures of graft function (eGFR), acute rejection, donor specific antibody (DSA) development, neutropenia, and occurrence of viral infection (CMV, EBV, BKV), as well as 24-month outcome measures of post-transplant lymphoproliferative disorder (PTLD) occurrence, patient and graft survival.
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	9	Baseline demographic and clinical data were collected at

				the time of admission and discharge from index kidney transplant hospitalization, and subsequently at 6, 12, and 24 months post kidney transplantation. Estimated GFR was calculated using the modified Schwartz formula. Acute rejection episodes captured all biopsy proven acute rejection events, including borderline cellular rejection, acute cellular rejection, and antibody mediated rejection. Neutropenia was defined as an absolute neutrophil count < 1500/ mm3. Viral infections included both symptomatic infections and asymptomatic viremia on surveillance monitoring as measured by polymerase chain reaction (PCR) testing at each individual center.
Bias	9	Describe any efforts to address potential sources of bias	10	Potential co-variates considered for the model included baseline characteristics (age, gender, race, ESKD etiology, transplant type, panel reactive antibody (PRA), CMV and EBV risk category), center effect, and immunosuppression at

				discharge. A sensitivity analysis at the 5.0 mg/kg, 5.5 mg/kg, and 6.0 mg/kg rATG cumulative dose thresholds was completed for the outcomes of acute rejection, neutropenia occurrence, and graft survival.
Study size	10	Explain how the study size was arrived at	20	our study was not sufficiently powered to examine all the outcome measures described and our findings should be viewed as an exploratory analysis laying the groundwork for future studies.

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Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	9 & 10	Continuous variables were summarized as means with standard deviation (SD) and medians with interquartile ranges (IQRs). The cumulative rATG induction dose was summarized numerically by exposure group. T-tests based on linear models were used to test for group differences for continuous outcomes. Categorical variables were summarized as frequencies and tests of association between them were conducted using chi-squared tests. Graft survival was calculated using Kaplan-meier estimates. A generalized logistic regression model was used to test odds of event occurring over time including patient survival, acute rejection, occurrence of donor specific antibody, neutropenia, or positive viral PCR testing.
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	9 & 10	Statistical analysis
		(*b*) Describe any methods used to examine subgroups and interactions	N/A	
		(*c*) Explain how missing data were addressed	10	Two-hundred and eighty-two kidney transplant recipients were included from 9 member centers of the PNRC. Complete data on rATG dosing was available for 235 recipients who were included in the final analysis

		(*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed *Case-control study*—If applicable, explain how matching of cases and controls was addressed *Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy	N/A	
		(*e*) Describe any sensitivity analyses	10	A sensitivity analysis at the 5.0 mg/kg, 5.5 mg/kg, and 6.0 mg/kg rATG cumulative dose thresholds was completed for the outcomes of acute rejection, neutropenia occurrence, and graft survival.
Results				
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	10	Two-hundred and eighty-two kidney transplant recipients were included from 9 member centers of the PNRC. Complete data on rATG dosing was available for 235 recipients who were included in the final analysis
		(b) Give reasons for non-participation at each stage	N/A	
		(c) Consider use of a flow diagram	N/A	
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	27-29	Tables 1 & 2
		(b) Indicate number of participants with missing data for each variable of interest	10	Two-hundred and eighty-two kidney transplant recipients were included from 9 member centers of the PNRC. Complete data on rATG dosing was available for 235 recipients who were included in the final analysis
		(c) *Cohort study*—Summarise follow-up time (eg, average and total amount)	9	Baseline demographic and clinical data were collected at the time of

				admission and discharge from index kidney transplant hospitalization, and subsequently at 6, 12, and 24 months post kidney transplantation.
Outcome data	15*	*Cohort study*—Report numbers of outcome events or summary measures over time	26	Figures 1-4
		Case-control study—Report numbers in each exposure category, or summary measures of exposure	N/A	
		Cross-sectional study—Report numbers of outcome events or summary measures	N/A	
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	11-14 & 26	Results & Figures 1-4
		(*b*) Report category boundaries when continuous variables were categorized	27-29	Tables 1 & 2
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A	

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Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	14	Finally, to address the issue of unequal group sizes and improve the balance of participants within each group, a sensitivity analysis for the outcomes of acute rejection, neutropenia occurrence, and graft survival was performed. Using the rATG cumulative dose cutoffs of 5.0 mg/kg (n=118 vs 117), 5.5mg/kg (n=137 vs 98), and 6.0 mg/kg (n=162 vs 73) produced similar results as 4.5 mg/kg (n=83 vs 152), all showing no significant differences between dosage and outcome.
Discussion				
Key results	18	Summarise key results with reference to study objectives	15-18	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	19 & 20	Discussion
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	20	we have demonstrated that a low rATG cumulative induction dose equal to or less than 4.5 mg/kg provides safe and effective short-term patient and graft outcomes in this multi-center low immunologic risk pediatric kidney transplant cohort.
Generalisability	21	Discuss the generalisability (external validity) of the study results	20	Also, despite the large number of patients for a pediatric focused study, our study was not sufficiently powered to examine all the outcome

				measures described and our findings should be viewed as an exploratory analysis laying the groundwork for future studies. In addition, while the PNRC offers a platform to conduct large scale collaborative research across its member institutions, we were limited to data from 9 participating member sites which can limit the generalizability of our findings to the larger pediatric transplant community. However, our findings complement the growing body of literature available from larger adult focused or database only studies with a wide range of outcomes linked to granular dosing information and exclusively focused on a pediatric population.
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	21	Supported in part by U54 GM104940 from the National Institute of General Medical Sciences of the National Institutes of Health which funds the Louisiana Clinical and Translational Science Center. VRD is supported in part by NIH grant R01DK102981. The content is solely the responsibility of the

	authors and does not necessarily represent the official views of the National Institutes of Health.

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.