SDC 1 – Study Quality Assessment

Study (Year)	Question																										Rep (11)	EV (3)	IV-B (7)	IV-C (6)	Pow (5)	Total (32)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27						
Ashimine (2014)	1	0	1	1	2	1	1	1	1	0	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	1	0	9	3	4	3	0	19
Ejaz (2013)	1	1	1	1	2	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	11	3	5	6	0	25
Gloor (2005)	1	1	1	0	1	1	1	0	1	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	0	8	3	3	2	0	16
Grim (2007)	1	1	1	1	2	1	0	1	1	0	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	1	0	9	3	4	3	0	19
Hirai (2012) [a]	1	0	1	1	2	1	1	0	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	1	0	9	3	4	3	0	19
Loupy (2010)	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	0	8	3	3	2	0	16
Montgomery (2009)	1	1	1	0	2	1	1	0	1	0	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	0	8	3	3	2	0	16
Nishida (2009)	1	1	1	1	2	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	0	11	3	3	2	0	19
Song (2012)	1	0	1	0	2	1	1	0	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	0	1	0	8	3	4	2	0	17
Stegall (2006)	1	1	1	1	2	1	1	0	1	0	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	1	0	9	3	4	3	0	19
Tanabe (2007) [b]	1	1	1	1	2	1	1	1	1	0	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	1	0	10	3	4	3	0	20
Waigankar (2013)	1	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	1	1	1	1	0	0	0	1	0	2	3	2	3	0	10

[a] Score based on Ishida et al. (2014) (27)
[b] Score based on Kohei et al. (2012) (17)
EV – external validity; IV-B – internal validity (bias); IV-C – internal validity (confounding); Pow – power; Rep – reporting

SDC 2 – Search Strategies

'The Cochrane Library

The population – renal transplant recipients	
1	TRANSPLANTATION (MeSH term, this term only)
2	ORGAN TRANSPLANTATION (MeSH term, this term only)
3	exp KIDNEY TRANSPLANTATION (MeSH term, this term only)
4	((kidney* or renal* or organ* or viscera*) NEAR/5 transplant*):ti,ab
5	((kidney* or renal* or organ* or viscera*) NEAR/5 graft*):ti,ab
6	((kidney* or renal* or organ* or viscera*) NEAR/5 allograft*):ti,ab
7	**#1 OR #2 OR #3 OR #4 OR #5 OR #6**
The intervention – rituximab	
8	(rituximab or mabthera or rituxan or CD20 or C2B8):ti,ab
9	**#7 AND #8**

OVID Embase

The population – renal transplant recipients	
1	TRANSPLANTATION/
2	ORGAN TRANSPLANTATION/
3	exp KIDNEY TRANSPLANTATION/
4	((kidney$1 or renal$1 or organ$1 or viscera$) adj5 transplant$).ti,ab.
5	((kidney$1 or renal$1 or organ$1 or viscera$) adj5 graft$).ti,ab.
6	((kidney$1 or renal$1 or organ$1 or viscera$) adj5 allograft$).ti,ab.
7	**or/1-6**
The intervention – rituximab	

8	RITUXIMAB/
9	(rituximab or mabthera or rituxan or CD20 or C2B8).ti,ab.
10	**or/8-9**
11	**7 AND 10**

OVID MEDLINE

The population – renal transplant recipients	
1	TRANSPLANTATION/
2	ORGAN TRANSPLANTATION/
3	exp KIDNEY TRANSPLANTATION/
4	((kidney$1 or renal$1 or organ$1 or viscera$) adj5 transplant$).ti,ab.
5	((kidney$1 or renal$1 or organ$1 or viscera$) adj5 graft$).ti,ab.
6	((kidney$1 or renal$1 or organ$1 or viscera$) adj5 allograft$).ti,ab.
7	**or/1-6**
The intervention – rituximab	
8	(rituximab or mabthera or rituxan or CD20 or C2B8).ti,ab.
9	**7 and 8**

The Transplant Library

The intervention – rituximab	
1	(rituximab or mabthera or rituxan or CD20 or C2B8).ti,ab.

SDC 3 –Downs and Black Quality Index

Reporting

1. Is the hypothesis/aim/objective of the study clearly described?

   Yes = 1; No = 0

2. Are the main outcomes to be measured clearly described in the Introduction or Methods section?

   Yes = 1; No = 0

3. Are the characteristics of the patients included in the study clearly described?

   Yes = 1; No = 0

4. Are the interventions of interest clearly described?

   Yes = 1; No = 0

5. Are the distributions of principal confounders in each group of subjects to be compared clearly described?

   Yes = 2; Partially =1; No = 0

6. Are the main findings of the study clearly described?

   Yes = 1; No = 0

7. Does the study provide estimates of the random variability in the data for the main outcomes?

   Yes = 1; No = 0

8. Have all important adverse events that may be a consequence of the intervention been reported?

   Yes = 1; No = 0

9. Have the characteristics of patients lost to follow-up been described?

   Yes = 1; No = 0

10. Have actual probability values been reported (e.g. 0.035 rather than <0.05) for the main outcomes except when the probability value is less than 0.001?

    Yes = 1; No = 0

External validity

11. Were the subjects asked to participate in the study representative of the entire population from which they were recruited?

    Yes = 1; No = 0

12. Were those subjects who were prepared to participate representative of the entire population from which they were recruited?

    Yes = 1; No = 0; Unable to determine = 0

13. Were the staff, places and facilities where the patients were treated representative of the treatment the majority of patients receive?

    Yes = 1; No = 0; Unable to determine = 0

Internal validity – bias

14. Was an attempt made to blind study subjects to the intervention they have received?

    Yes = 1; No = 0; Unable to determine = 0

15. Was an attempt made to blind those measuring the main outcomes of the intervention?

    Yes = 1; No = 0; Unable to determine = 0

16. If any of the results of the study were based on 'data dredging', was this made clear?

    Yes = 1; No = 0; Unable to determine = 0

17. In trials and cohort studies, do the analyses adjust for different lengths of follow-up of patients, or in case-control studies, is the time period between the interventions and outcome the same for cases and controls?

    Yes = 1; No = 0; Unable to determine = 0

18. Were the statistical tests used to assess the main outcomes appropriate?

    Yes = 1; No = 0; Unable to determine = 0

19. Was compliance with the intervention/s reliable?

    Yes = 1; No = 0; Unable to determine = 0

20. Were the main outcome measures used accurate (valid and reliable)?

    Yes = 1; No = 0; Unable to determine = 0

Internal validity – confounding (selection bias)

21. Were the patients in different intervention groups (trials and cohort studies) or were the case and controls (case-control studies) recruited from the same population?

    Yes = 1; No = 0; Unable to determine = 0

22. Were study subjects in different intervention groups (trials and cohort studies) or were the case and controls (case-control studies) recruited over the same period of time?

    Yes = 1; No = 0; Unable to determine = 0

23. Were study subjects randomised to intervention groups?

    Yes = 1; No = 0; Unable to determine = 0

24. Was the randomised intervention assignment concealed from both patients and health care staff until recruitment was complete and irrevocable?

    Yes = 1; No = 0; Unable to determine = 0

25. Was there adequate adjustment for confounding in the analyses from which the main findings were drawn?

    Yes = 1; No = 0; Unable to determine = 0

26. Were losses of patients to follow-up taken into account?

    Yes = 1; No = 0; Unable to determine = 0

Power

27. Did the study have sufficient power to detect a clinically important effect where the probability value for a difference being due to chance is less than 5%?

    Size of smallest intervention group:

    $<n_1$ = 0

    n_1-n_2 = 1

    n_3-n_4 = 2

    n_5-n_6 = 3

    n_7-n_8 = 4

    n_8 + = 5