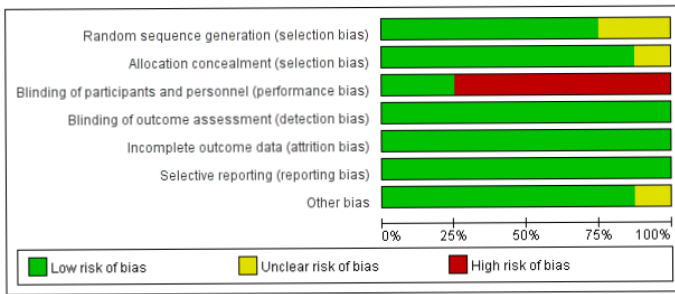
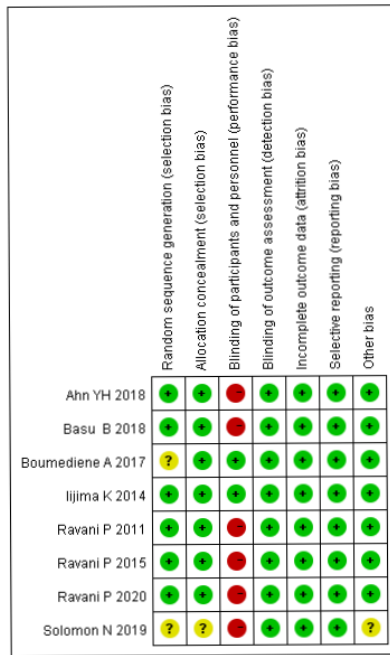


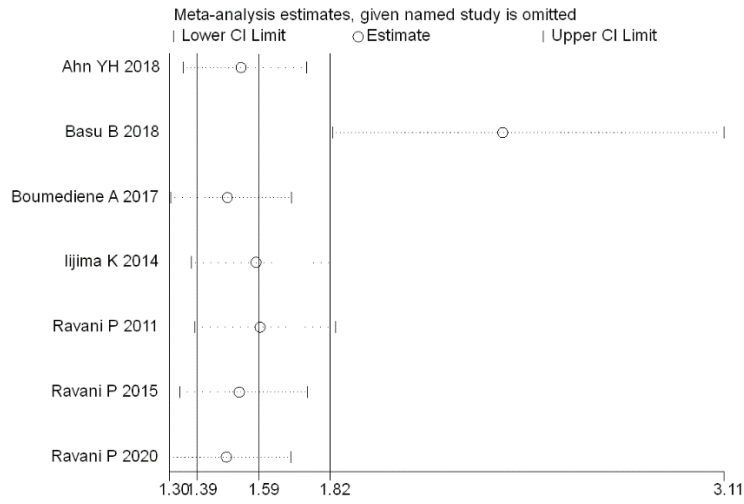
A



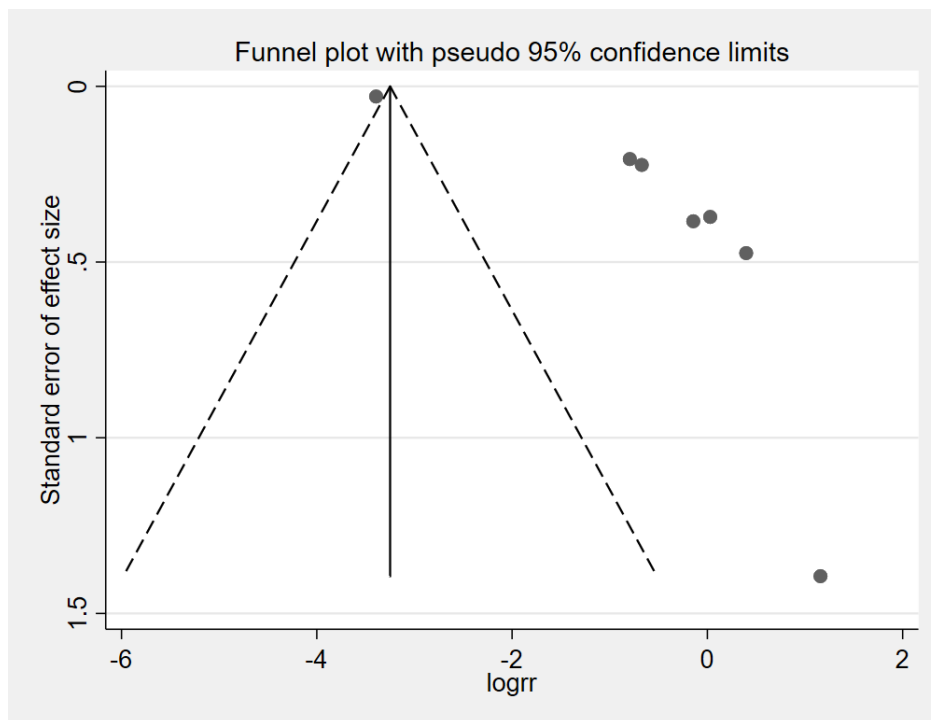
B



Supplementary Figure S1. Quality assessment with the ‘Risk of bias’ tool of the Cochrane Collaboration. **A** – Risk of bias graph; **B** – Risk of bias summary. Red indicates high risk of a particular bias, yellow indicates unclear risk of bias, and green indicates low risk of bias

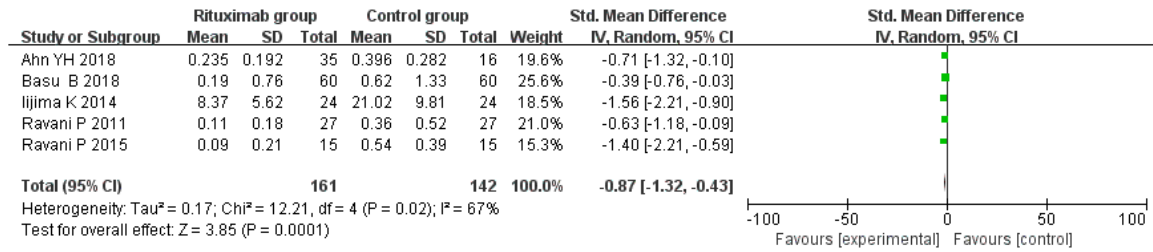


Supplementary Figure S2. Sensitivity analysis for the RTX group vs. control group on short-term complete remission rate

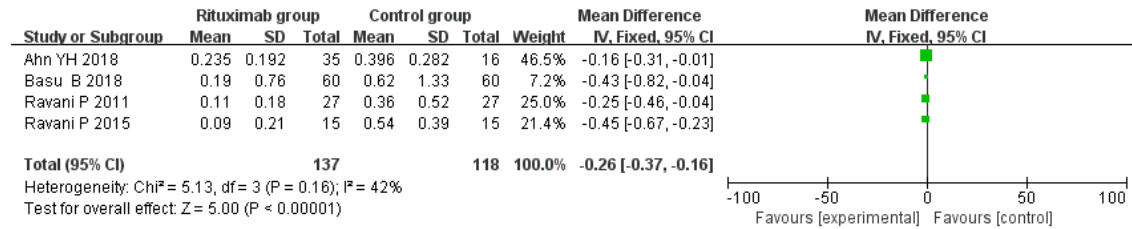


Supplementary Figure S3. Funnel plot estimating publication bias ($p < 0.001$ for Egger's test)

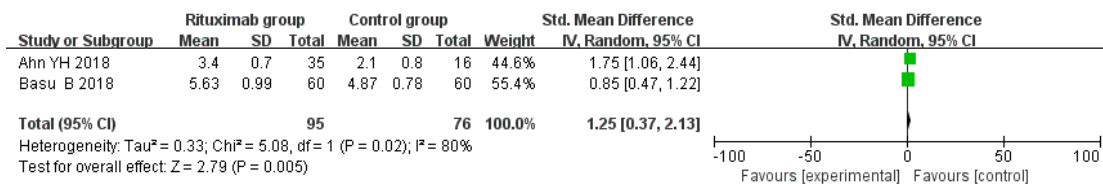
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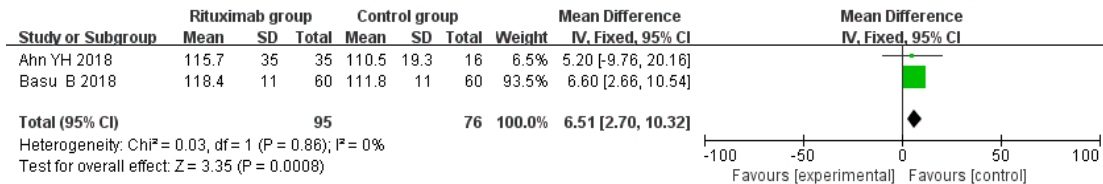
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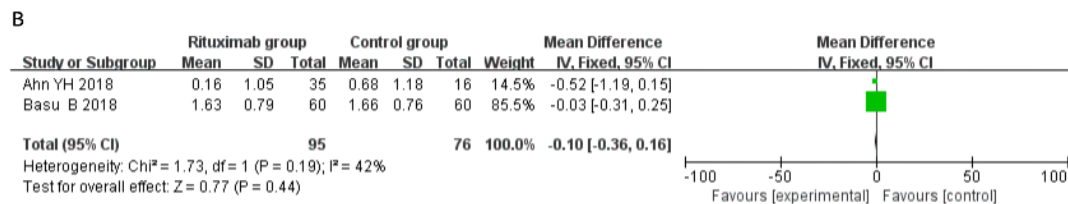
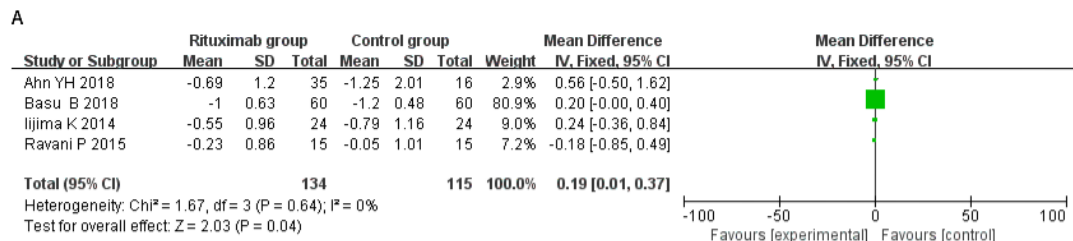
Supplementary Figure S4. Forest plot of prednisolone dose after treatment. **A** – 5 studies included; **B** – 4 studies included (Iijima’s study excluded because of discordance of the unit of steroid dosage)



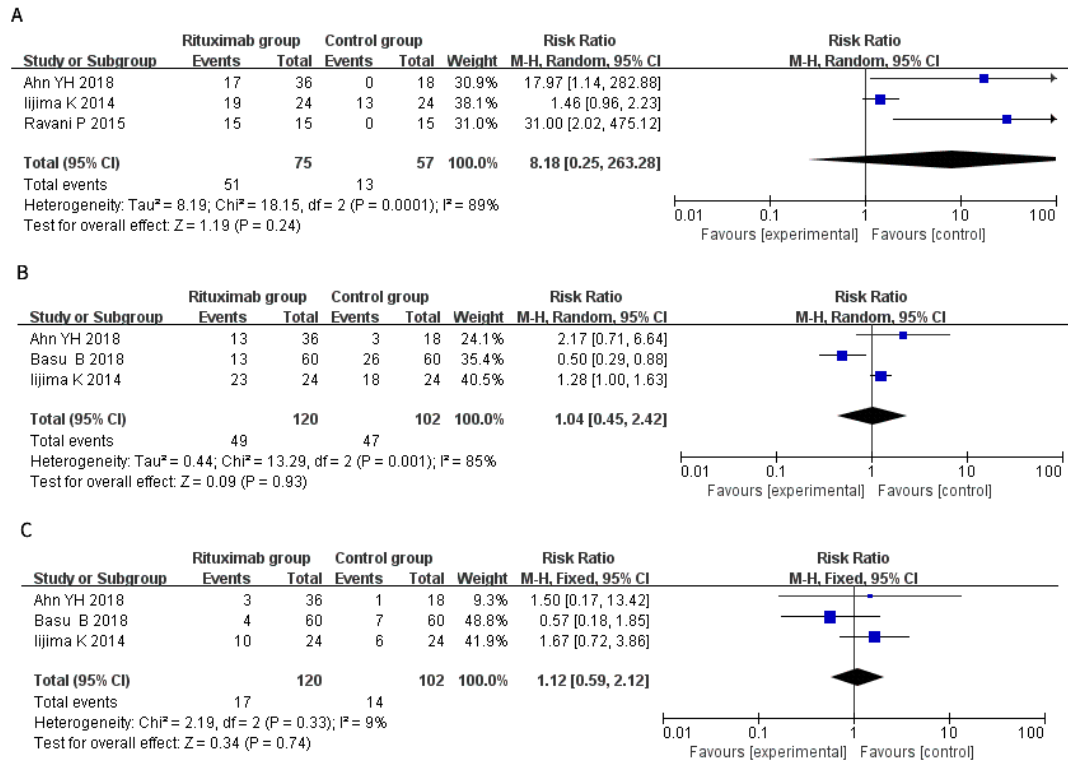
Supplementary Figure S5. Forest plot of serum albumin



Supplementary Figure S6. Forest plot of eGFR



Supplementary Figure S7. Forest plot of height and BMI Z-score. **A** – Height Z-score; **B** – BMI Z-score



Supplementary Figure S8. Forest plot of adverse events. **A** – Infusion reactions; **B** – Infections; **C** – Severe adverse events

Supplementary Table SI. Interventions of studies included

Studies	Group	Interventions
Ahn 2018 [13]	YH RTX	A single dose of intravenous RTX (375 mg/m ² ; maximum of 500 mg); steroids and/or CNIs
	Control	Steroids (60 mg/m ² /day; maximum daily dose of 60 mg, reduced to 40 mg/m ² administered every other day for 4 weeks and then tapered by 25% every 4 weeks for 3 months) and/or CNIs (tapering by 25% every 4 weeks)
Basu 2018 [14]	B RTX	RTX (375 mg/m ² ; 2 to 4 infusions at weekly intervals; maximum dose 500 mg); prednisolone
	Control	Tacrolimus (0.2 mg/kg/d) targeting trough levels of 5 to 7 ng/ml along with tapering doses of alternate-day prednisolone
Boumediene A 2017 [15]	RTX	RTX (375 mg/m ² , 2 infusions at one week-interval); steroids; CNIs; MMF
	Control	Steroids (tapered every 2 weeks by 25% until a minimal dose ranging from 5 to 7 mg every other day. Steroid tapering began 2 weeks after CNI discontinued); CNIs (tapered by 25%); MMF; 2 infusions at one week-interval of isotonic serum saline
Iijima 2014 [16]	K RTX	RTX (375 mg/m ² ; maximum 500 mg) once weekly for 4 weeks; prednisolone;
	Control	Intravenous injections of a matched placebo at the same frequency; prednisolone 60 mg/m ² /day (maximum of 80 mg/day) for 4 weeks, 60 mg/m ² on alternate days for 2 weeks, 30 mg/m ² on alternate days (maximum 40 mg/day) for 2 weeks, and 15 mg/m ² on alternate days (maximum 20 mg/day) for 2 weeks; cyclosporine tapered at day 85 with discontinuation by day 169; other immunosuppressive drugs discontinued by day 85
Ravani 2011 [17]	P RTX	RTX (375 mg/m ²) was given intravenously once or twice; prednisolone; CNIs
	Control	Prednisone tapered at day 30 by 0.3 mg/kg per week if proteinuria was < 1 g/day; CNIs were decreased by 50% and withdrawn after 2 additional weeks
Ravani 2015 [18]	P RTX	A single intravenous infusion of RTX (375 mg/m ²); prednisone; CNIs; MMF; cyclophosphamide
	Control	Prednisone treatment continued for 1 month and then tapered as tolerated; CNIs; MMF;
Ravani 2020 [19]	P RTX	RTX (a single intravenous infusion of 375 mg/m ²); prednisone
	Control	Prednisone (tapered by 0.3 mg/kg per week starting at day 30) and withdrawn if proteinuria levels were still < 1 g/m ² per day at the end of the taper
Solomon 2019 [20]	N RTX	RTX 2 to 4 infusions (once per week, 375 mg/m ² , maximum 500 mg) until B cell depletion; prednisolone
	Control	Tacrolimus (0.2 mg/kg/day, target trough levels of 5–7 ng/ml); prednisolone (tapering doses of alternate-day prednisolone over 12 months)

CNIs – calcineurin inhibitors (cyclosporine or tacrolimus), MMF – mycophenolate mofetil.