Supplementary Table 1 Meta-analyses of randomized controlled trials with Teplizumab till date

Authors	Year of	No of	No	Main outcomes	Adverse effects
	publication	participants	of		
			RCTs		
Nourelden et	2021	866	8	Lower insulin	Teplizumab
al[52]				use than placebo	associated with
				at 6 months	adverse effects
				((MD = -0.17,	like
				95% CI [-0.24,	lymphopenia,
				-0.09]), 12	skin and
				months, 18	subcutaneous
				months and 24	tissue
				months (MD =	disorders.
				-0.17, 95% CI	
				[-0.28, -0.06], P =	
				0.003	
				AUC of	
				C-peptide	
				significantly	
				increased in	
				teplizumab	
				group at 12	
				months, 18	
				months and 24	
				months (MD =	
				0.13, 95% CI	
				[0.01, 0.24], P =	
				0.03).	

				No significant	
				effect on HbA1c	
Ashraf et	2023	908	11	Increased	Lesser adverse
al[53]				C-peptide	effects with
				concentration in	teplizumab
				the area under	
				the curve at	
				shorter	
				timeframes (MD	
				= 0.114, 95% CI:	
				0.069 to 0.159, p	
				= .000).	
				Reduced insulin	
				intake across all	
				timeframes (MD	
				= -0.123, 95%	
				CI: -0.151 to	
				-0.094, p < .001).	
				No significant	
				effect on	
				HbA1c%	
Kamrul-Hasan	2024	834	6	Greater	Higher risks of
et al[54]				reductions in	grade 3 or
				AUC of	higher adverse
				C-peptide after	events leading
				six months (MD	to medication
				0.07 nmol/L,	discontinuation,
				P=0.02), 12	nausea,
				months, 18	rash, and

				months and 24	lymphopenia
				months (MD 0.07	
				nmol/L, P=0.03)	
				Fewer patients	
				on teplizumab	
				had a decreased	
				C-peptide	
				response after six	
				months (OR	
				0.21),12 months,	
				18 months and	
				after 24 months	
				(OR 0.12)	
				Reduced use of	
				exogenous	
				insulin with	
				maintenance of	
				comparable	
				glycemic control	
				for up to 18	
				months	
				post-treatment.	
Ma et al[4]	2024	1361	8	Decrease in	Lesser
				insulin	susceptibility to
				consumption	experiencing
				(OR: 4.13, 95%	unfavourable
				CI: 1.72 to 9.90).	outcomes with
					teplizumab
				Improved	(RR: 0.71, 95%

	C-peptide	CI: 0.53 to 0.95).
	response (OR:	
	2.49; 95% CI: 1.62	
	to 3.81)	
	Significant	
	change in HbA1c	
	[RR of 0.71, 95%	
	CI: 0.53 to 0.95]	

RCT = Randomised controlled trials, MD = Mean difference, CI = Confidence Interval, AUC = Area under curve, OR = Odds ratio, RR = relative risk.