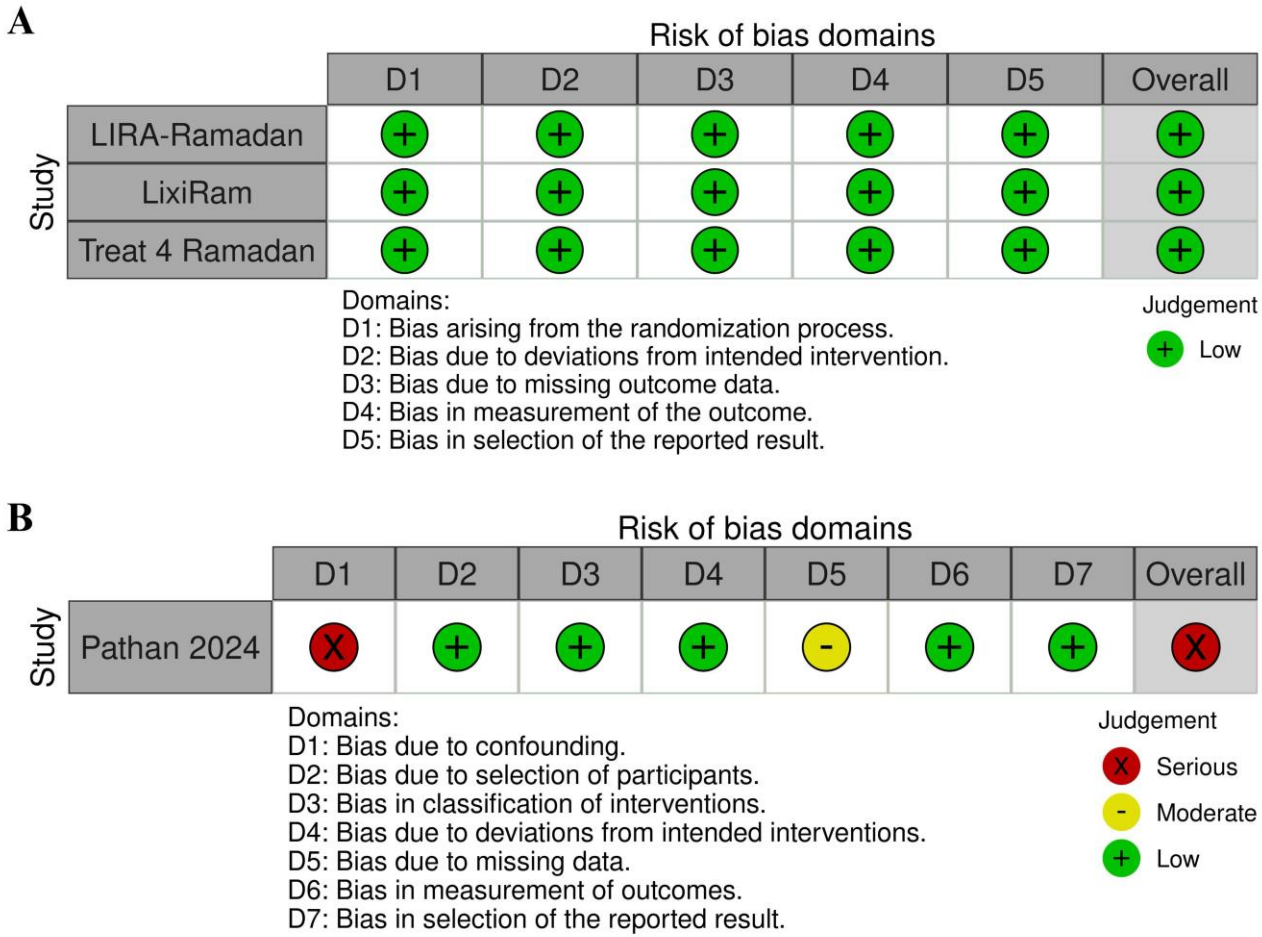

Supplementary Figure 1 Risk of bias summary. A: Review authors' judgments about each risk of bias item for each included randomized controlled trial using risk of bias 2; B: Review authors' judgments about each risk of bias item for each included non-randomized trial using ROBINS-I.

Supplementary Table 1 Characteristics of the excluded studies and study participants

Ref.	Type of study	Reason of exclusion	Study subjects	*n*	Study findings
Hassanein *et al*[21], 2024, Multicenter across nine countries	Prospective, real-world, observational study	No non-glucagon-like peptide-1 receptor agonist control group	Adults (≥ 18 years of age) with T2DM treated with iGlarLixi for ≥ 3 months at study entry	420	Concomitant iGlarLixi and sodium-glucose cotransporter-2 inhibitors therapy with or without other OADs was demonstrated to be safe in adults with T2DM during Ramadan fast, with a low risk of hypoglycemia and improvements in glycemic outcomes
Sahay *et al*[22], 2020, Multicenter across five countries	Phase IV, randomized, multicenter, open-label, two-arm parallel-group clinical trial	A post hoc analysis of the LixiRam trial	Uncontrolled T2DM on SU + basal insulin ± one OAD	150	The risk of any hypoglycemia was lower with lixisenatide + basal insulin *vs* SU + basal insulin (OR = 0.09; 95%CI: 0.01–0.69). The 1.3% participant with lixisenatide + basal insulin *vs* 6.8% participants with SU + basal insulin experienced ≥ 1 documented symptomatic hypoglycemic event (OR = 0.22; 95%CI: 0.02–1.93)

OAD: Oral antidiabetic drugs; OR: Odds ratio; SGLT2i,; T2DM: Type 2 diabetes mellitus; SU: Sulfonylurea.