

Supplementary Appendix

Supplementary Table 1: Summary of Excluded Studies

Supplementary Table 2: Risk of bias summary of RCTs.

Supplementary Table 3: New Castle Ottawa Scale For Assessment of Bias of Non-RCT Studies

Supplementary Table 1: Summary of Excluded Studies

Study	Reason
Murray 2024 [1]	Early vs Delayed
Lim 2022 [2]	Non DKA
Mohamed 2021 [3]	Single Arm
Rappaport 2019 [4]	Early vs Delayed
Harrison 2017 [5]	Overlapping

Supplementary Table 2: Risk of bias summary of RCTs.

Studies	Random sequence generation (selection bias)	Allocation Concealme nts (selection bias)	Binding of participants and personnel (performan ce bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Thammakosol 2023	Low	Low	High	Low	Low	Unclear
Doshi 2015	Low	Low	High	Unclear	Low	Unclear
Houshyar 2015	High	Low	High	Low	Low	Low
Hsia 2012	High	Low	High	Low	Low	Low
Assaad-Khalil 2011	High	Low	High	Unclear	Unclear	Low

Supplementary Table 3: New Castle Ottawa Scale For Assessment of Bias of Non-RCT Studies

Study	Selection	Comparability	Exposure	Total
Shanker 2007	2	2	2	6

References

1. Murray DS, Gilbert BW, Cox TR. Pilot Study on the Impact of Early Subcutaneous Basal Insulin Administration in Diabetic Ketoacidosis. *J Intensive Care Med.* 2024 Apr 17;8850666241247516. doi: 10.1177/08850666241247516. Epub ahead of print. PMID: 38629164.
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3. Mohamed A, Ploetz J, Hamarshi MS. Evaluation of Early Administration of Insulin Glargine in the Acute Management of Diabetic Ketoacidosis. *Curr Diabetes Rev.* 2021;17(8):e030221191986. doi: 10.2174/1573399817666210303095633. PMID: 33655870.
4. Rappaport SH, Endicott JA, Gilbert MP, Farkas JD, Clouser RD, McMillian WD. A Retrospective Study of Early vs Delayed Home Dose Basal Insulin in the Acute Management of Diabetic Ketoacidosis. *J Endocr Soc.* 2019 Apr 11;3(5):1079-1086. doi: 10.1210/js.2018-00400. PMID: 31069278; PMCID: PMC6500796.
5. Harrison VS, Rustico S, Palladino AA, Ferrara C, Hawkes CP. Glargine co-administration with intravenous insulin in pediatric diabetic ketoacidosis is safe and facilitates transition to a subcutaneous regimen. *Pediatr Diabetes.* 2017 Dec;18(8):742-748. doi: 10.1111/pedi.12462. Epub 2016 Nov 3. PMID: 27807910; PMCID: PMC5415439.