

**Supplementary Table 1: Systematic review of studies included in the study**

S.No.	Author and year of publication	Study design	No. of participants with methods	Objective	Variable	Conclusion
1	Anders L. Carlsson and others (2017)	Meta analysis, single-arm, open-label study	1) 100 TD2 patients were taken who were not on insulin. Observation study done for 12 weeks 2) 367 patients being studied using observational trials. 22 randomized clinical trials been analyzed	1) Studies of Efficacy and HbA1c Reduction.  2) Studies of Hypoglycemia	HbA1c, SMBG	CGM offers patients with T2DM additional information about their glycemic control beyond the HbA1c.
2	David Rodbard (2017)	Meta analysis	300 patients using randomized control trials.	can improve quality of glycemic control, reduce risk of hypoglycemia, and permit selection of lower target levels for mean glucose and HbA1c. To determine the effectiveness of additional use of masked CGM in pregnancies complicated by insulin requiring diabetes compared to using traditional methods such as SMBG	HbA1c  CGM, SMBG	CGM (including flash glucose monitoring) systems are safe and effective in both type 1 and type 2 diabetes and  In insulin-requiring diabetes in pregnancy, use of intermittent masked CGM every 6 weeks did not reduce the risk of macrosomia or other pregnancy outcomes. HbA1c also did not change.
3	Bruce W. Bode and Tadej Battelino (2019)	open-label, parallel, randomized controlled trial/retrospective	compiled a list of general guidelines for matching patients with the CGM system that may best meet their needs.	Explores the strengths and limitations of each approach (either real-time CGM or intermittently scanned CGM) and provides guidance to healthcare professionals in selecting the CGM type that is most appropriate to the individual needs of their patients.	HbA1c, CV, CGM, SMBG	Both isCGM and rtCGM offer clear advantages over SMBG by providing considerably more robust and useable information.
4	Peter Adolffsson and others (2018)	Case-control study	515 adult patients were taken using prospective observational study	To observe the safety and efficacy of CGM in routine day-to-day home	HbA1c, CGM	As expected, HbA1c, at 4, 8, and 12 months, CGM, continuous glucose monitoring; Hb, hemoglobin; RCT, randomized controlled trial; T2DM, type 2 diabetes.

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6	Thomas Danne and others (2017)	Consensus/ Recommendations.	(ATTD) Congress convened an international panel of physicians, researchers, and individuals with diabetes who are expert in CGM technologies to discuss how CGM results can affect outcomes.	Use CGM to overcome the limitations of HbA1c	HbA1c, CGM, SMBG, eA1C	CGM should be used in clinical trials of new drugs and devices for diabetes treatment because HbA1c alone is insufficient and does not consider intra- and interday glycemic excursions that may lead to acute events (such as hypoglycemia) or postprandial hyperglycemia,
7	Richard M. Bergenstal and others. (2018)	Prospective study	387 individuals divided in two groups. 315 patients with type 1 diabetes and 72 with type 2 diabetes Prospective method is used	This Prospective address why a new name for eA1C was needed, why GMI was selected as the new name, how GMI is calculated, how to understand and explain GMI if one chooses to use GMI as a tool in diabetes education or management.	eA1c. Mean glucose concentration	CGM used in TD1>TD2, those using insulin, and pregnant women. changing the name from eA1C to GMI provides a useful measure for connecting CGM. metrics to laboratory A1C and reinforces the need for ongoing diabetes management and patient and health care professional engagement.
8	David L. Levitt and others. (2017)	Observational study	124 medical ICU patients (24 DM, 100 non-DM) using observational study method.	Studies have not focused on hospitalized patients with type 1 diabetes mellitus, the population most likely to benefit from inpatient CGM. This article reviews inpatient CGM glycemic outcomes in the non-ICU and ICU setting.	CGM, ICU CGM and non-ICU CGM	CGM detects hypoglycemia at a greater frequency than capillary BG testing. The studies discussed in this review do not evaluate glycemic variability in the context of inpatient CGM. In the ICU, CGM may not improve glycemic outcomes when patients are receiving intravenous insulin administration, which already requires frequent glucose monitoring.
9	Martina Vettorett and others. (2018)	Prospective study	No clinical trials conducted	extend CGM utilization beyond diabetes patients, for example, to subjects with prediabetes or even healthy individuals.	HBA1c	use of CGM sensors will certainly grow significantly in the next years when accuracy is improved, approval from regulatory bodies. the need to provide evidence of their clinical safety and utility, must be carefully addressed.

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10	Laure de Decker and others. (2017)	Cross-sectional cohort study	A total of 1552 elderly (age > 80 years old) patients with T2DM were recruited in a Nationwide cross-sectional study.	Aimed to determine whether a high burden of comorbidities is associated with hypoglycemia in very old patients with T2DM.	SMBG, CCI	The occurrence of hypoglycemic events is very common in older patients with diabetes. real-life study is that a high burden of comorbidities, measured by CCI, is an independent predictor of hypoglycemia in this population. Daily SMBG was positively associated with hypoglycemia.
11	Ramzi A. and others (2017)	Systematic review	1441 patients with T1DM selected randomly and observational study was being conducted.	The advantages and limitation of HbA1c are discussed together with the clinical importance of hypoglycemia and glycemic variability.	HbA1c, SMBG, CGM, GV	Development of an algorithm for data analysis will further help in interpreting glucose data and make CGM/ FCGM more user friendly for both patients and HCP. The type of diabetes patient likely to benefit from CGM/ FCGM has not been fully characterized with current evidence.
12	John R. Petrie and others (2017)	RCT	322 adults and children (8 years of age) were randomized to receive one of three different CGM devices.	To compare the effectiveness of CGM with SBGM and to discuss the limitations of CGM	HbA1c, CGM, SMBG, HbA1c (in iCGM)	Great progress has been made in CGM technology in recent years (10), but several barriers remain that prevent it from reaching its full potential either as a method for improving glycemic control in diabetes. Geriatric population exceeding 62 with diabetes type 2, higher glucose variability and lower average glucose levels indicate a greater risk of hypoglycemia.
13	Takahiro Ishikawa, Masaya Koshizaka and many others. January 2018	retrospective study	170 patients aged ≥65 years with type 2 diabetes using univariate analysis	incidence of type 2 diabetes is higher in elderly patients relationship between hypoglycemia and diabetes treatments to identify risk factors for hypoglycemia	Hypoglycemia	
14	Jothydev Kesavadev and others 2017	Ambulatory glucose profile (AGP)	Retrospective analysis been done with type 1 and type 2 diabetic patients	development of more and more advanced technologies such as continuous glucose monitoring and flash glucose monitoring	CGM	At the end of the article, they concluded that the new technologies need improvement

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15	Ana María Gómez and others 2017	REAL-Time System (Medtronic) vs multiple daily injection (MDI) hence this was a comparative study	54 T1DM patients with baseline A1c of $(8.0\% \pm 1.3\%)$ , observational study	latest-generation sensors are more accurate and sensitive for hypoglycemia, improving adherence to self-monitoring	Flash CGM	They are talking about new developments in association with technologies whereas SAPT being the best one except it is very expensive
16	J. Lawton and many others 2018	comprehensive study	The sample comprised 12 participants aged 16+ years, three participants aged 13–15 years and nine parents were interviewed which were then analyzed.	direction and rate of change of blood glucose levels	Problems with CGM	Users are encouraged to use these sensors while they made sure that it is well known to them how to use, tune, optimize it on their own without any external help.
17	James S. Krinsley and his colleagues 2017	Randomized controlled trial	63 patients with isolated brain injury using prospective trails	Glucose management in intensive care unit (ICU)	Glucose monitoring and CGM	Hyperglycemia and hypoglycemia

\*ATTD the Advanced Technologies & Treatments for Diabetes

\*CCI Charlson Comorbidity Index