### **AGP Report**

6 November 2024 - 19 November 2024 (14 Days)



#### **GLUCOSE STATISTICS AND TARGETS**

6 November 2024 - 19 November 2024

14 Days

Time sensor active:

100%

Ranges And Targets For	Type 1 or Type 2 Diabetes

Glucose Ranges	Targets % of Readings (Time/Day)
Target Range 3.9-10.0 mmol/L	Greater than 70% (16h 48min)
Below 3.9 mmol/L	Less than 4% (58min)
Below 3.0 mmol/L	Less than 1% (14min)
Above 10.0 mmol/L	Less than 25% (6h)
Above 13.9 mmol/L	Less than 5% (1h 12min)
Each 5% increase in time in range (3.9	i-10.0 mmol/L) is clinically beneficial.

**Average Glucose** 

9.8 mmoVL

Glucose Management Indicator (GMI)

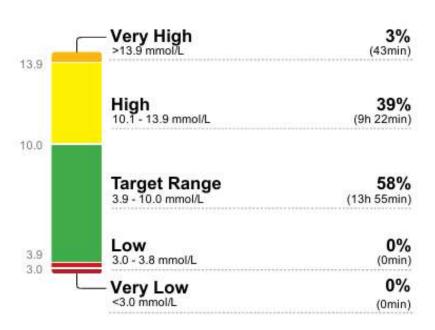
7.5% or 59 mmol/mol

**Glucose Variability** 

20.3%

Defined as percent coefficient of variation (%CV); target ≤36%





# Changes

Started Novorapid

Increased Lantus dose

Tried to get funded CGM- test negative for MODY

Tina Langston

DEVICE: FreeStyle LibreLink

Waitemata DHB Diabetes Service PHONE: 094861491

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**AGP Report** 

6 February 2025 - 19 February 2025 (14 Days)

#### LibreView

#### **GLUCOSE STATISTICS AND TARGETS**

6 February 2025 - 19 February 2025

14 Days

Time sensor active:

90%

Ranges And Targets For	Type 1 or Type 2 Diabetes	
Glucose Ranges	Targets % of Readings (Time/Day)	
Target Range 3.9-10.0 mmol/L	Greater than 70% (16h 48min)	
Below 3.9 mmol/L	Less than 4% (58min)	
Below 3.0 mmol/L	Less than 1% (14min)	
Above 10.0 mmol/L	Less than 25% (6h)	

Less than 5% (1h 12min)

**Average Glucose** 

Above 13.9 mmol/L

9.1 mmoVL

Glucose Management Indicator (GMI)

7.2% or 56 mmol/mol

Glucose Variability

16.4%

Defined as percent coefficient of variation (%CV); target ≤36%

Each 5% increase in time in range (3.9-10.0 mmol/L) is clinically beneficial.



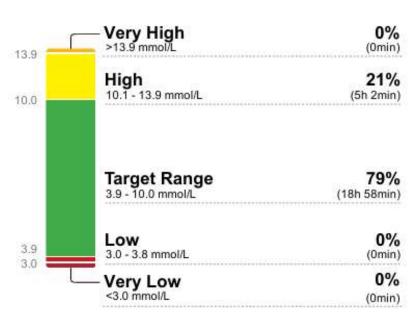


Table 2 | Proposed use of CGM throughout the natural history of T2DM

Group	At diagnosis and early disease	Management of stable disease	Long duration of disease*
All people with T2DM	Utilize CGM for 14 days after T2DM diagnosis Establish a baseline glucometric profile Provide education on the glycaemic response to diet and exercise in T2DM Decide on the initial treatment plan and therapy Evaluate the patient's early (14-day)	Predict risk of microvascular complications Adjust therapy Manage glycaemic goals for time in range, time below range, time above range, glycaemic variability and glucose management indicator (CGM-defined HbA <sub>1c</sub> correlate)	Facilitate T2DM therapy de-escalation in older and/o people with T2DM Prevent hypoglycaemia Reduce risk of cardiorenal complications (for example, chronic kidney disease) Reduce incidence and progr of microvascular disease Allow care workers to more effectively manage the care people with T2DM
Partie Propaga wood	response to T2DM treatment		
People with T2DM on:	Continuous access to CGM for daily use		people with 12DM
Multiple daily injections Basal insulin Premixed insulin Insulinotropic drugs <sup>b</sup> Prevent hypoglycaemia Manage hyperglycaemia Support self-management		Prevention of hypoglycaemia Manage hyperglycaemia	-^
	Facilitate periods of therapy escalation or de-escalation		
	Support self-management	_	
People with T2DM on	Intermittent use of CGM at least even	ery 3 months, with HCP review	
Reinforce education on glucose profiles, diet, physical activity and the effects of medication	Can be combined with a coincident HbA <sub>1c</sub> test HCP can make decisions on whether to change therapy or not		
		Predict changes in risk of microvascular complications	
	People with T2DM can re-establish the behaviours of good self-management with support from CGM		

CGM, continuous glucose monitoring; HCP, health-care professional; T2DM, type 2 diabetes mellitus. "People with long-standing T2DM, with risk of consequent comorbid microvascular disease. "People with T2DM at increased risk of frequent hypoglycaemia confirmed during a CGM-led medical review. "Can include people on insulinotropic oral drugs tick of hypoglycaemia confirmed during a CGM-led medical review."



# CONCLUSION



- CGM in T2DM presents multiple opportunities
- Already pregnant women at risk of GDM-> beneficial
- Effective as an education tool in early T2DM
- Glycaemic Benefits even in intermittent CGM use
- Mixed Impact on Weight /Lipids/other parameters
- Strong metanalysis evidence /local trial evidence of efficacy T2DM on SGLT-2 and GLP-1
- Should have continuous use in any patient with insulin/SGLT-2/GLP-1 treated T2DM.
- Equity- Ethnic minorities?

ID 2991631



## References

- 1.Ajjan RA, Battelino T, Cos X, Del Prato S, Philips JC, Meyer L, Seufert J, Seidu S. Continuous glucose monitoring for the routine care of type 2 diabetes mellitus. Nature Reviews Endocrinology. 2024 Jul;20(7):426-40.
- 2.Nemlekar PM, Hannah KL, Green CR, Norman GJ. Association between adherence, A1C improvement, and type of continuous glucose monitoring system in people with type 1 diabetes or type 2 diabetes treated with intensive insulin therapy. Diabetes Therapy. 2024 Mar;15(3):639-48.
- 3. Price DA, Deng Q, Kipnes M, Beck SE. Episodic real-time CGM use in adults with type 2 diabetes: results of a pilot randomized controlled trial. Diabetes Therapy. 2021 Jul;12(7):2089-99
- 4. Martens TW, Willis HJ, Bergenstal RM, Kruger DF, Karslioglu-French E, Steenkamp DW. A Randomized Controlled Trial Using Continuous Glucose Monitoring to Guide Food Choices and Diabetes Self-Care in People with Type 2 Diabetes not Taking Insulin. Diabetes Technology & Therapeutics. 2025 Jan 6
- 5.Li Z, Beck R, Durnwald C, Carlson A, Norton E, Bergenstal R, Johnson M, Dunnigan S, Banfield M, Krumwiede K, Sibayan J. Continuous glucose monitoring prediction of gestational diabetes mellitus and perinatal complications. Diabetes Technology & Therapeutics. 2024 Nov 1;26(11):787-96.
- 6.Lever CS, Williman JA, Boucsein A, Watson A, Sampson RS, Sergel-Stringer OT, Keesing C, Chepulis L, Wheeler BJ, de Bock MI, Paul RG. Study protocol: glycaemic outcomes in people with type 2 diabetes initiating continuous glucose monitoring: the 2GO-CGM study. Journal of Diabetes & Metabolic Disorders. 2023 Dec;22(2):1779-92.
- 7. Sergel-Stringer OT, Wheeler BJ, Styles SE, Boucsein A, Lever CS, Paul RG, Sampson R, Watson A, de Bock MI. Acceptability and experiences of real-time continuous glucose monitoring in adults with type 2 diabetes using insulin: a qualitative study. Journal of Diabetes & Metabolic Disorders. 2024 Mar 5:1-9.
- 8.García-Moreno RM, Benítez-Valderrama P, Barquiel B, González Pérez-de-Villar N, Hillman N, Lora Pablos D, Herranz L. Efficacy of continuous glucose monitoring on maternal and neonatal outcomes in gestational diabetes mellitus: a systematic review and meta-analysis of randomized clinical trials. Diabetic Medicine. 2022 Jan;39(1):e14703.
- 9. Ehrhardt N, Al Zaghal E. Continuous glucose monitoring as a behavior modification tool. Clinical diabetes: a publication of the American Diabetes Association. 2020 Apr;38(2):126
- 10..Jancev M, Vissers TA, Visseren FL, van Bon AC, Serné EH, DeVries JH, de Valk HW, van Sloten TT. Continuous glucose monitoring in adults with type 2 diabetes: a systematic review and meta-analysis. Diabetologia. 2024 May:67(5):798-810.
- 11. Seidu S, Kunutsor SK, Ajjan RA, Choudhary P. Efficacy and safety of continuous glucose monitoring and intermittently scanned continuous glucose monitoring in patients with type 2 diabetes: A systematic review and meta-analysis of interventional evidence. Diabetes Care. 2024 Jan 1;47(1):169-79.
- 12. Del Prato S, Giorgino F, Szafranski K, Poon Y. Cost—utility analysis of a flash continuous glucose monitoring system in the management of people with type 2 diabetes mellitus on basal insulin therapy—An Italian healthcare system perspective. Diabetes, 13. Obesity and Metabolism. 2024 Jun 10.
- Blackwell M, Wheeler BJ. Clinical review: the misreporting of logbook, download, and verbal self-measured blood glucose in adults and children with type I diabetes. Acta diabetologica. 2017 Jan;54:1-8.

