

I HART CGM Study<sup>1</sup>

Dexcom CGM Outperforms Abbott FreeStyle Libre FGM<sup>1</sup>

In this head-to-head study in the United Kingdom (UK) comparing the impact on hypoglycemia between the Dexcom G5® Mobile Continuous Glucose Monitoring (CGM) System and the Abbott FreeStyle Libre Flash Glucose Monitoring (FGM) System, the Dexcom G5 Mobile outperformed Libre FGM in reducing exposure to dangerously low hypoglycemia levels. In a 24-hour period and at night, Libre FGM users *increased* time spent in hypoglycemia, while Dexcom CGM users significantly *reduced* their time spent in hypoglycemia, benefitting from the alerts and hypo alarm of the Dexcom G5 Mobile.



Reduction of Overall Hypoglycemia



Reduction of Nighttime Hypoglycemia



Reduced Fear of Hypoglycemia

Study Objective & Methods

Objective:

Evaluate the impact on time spent in hypoglycemia in CGM and FGM users with impaired awareness of hypoglycemia (IAH).

Research Design/Methods:

- Randomized, controlled trial; 8-week treatment period
- Adults with type 1 diabetes on multiple daily injections of insulin (n=39); split into CGM use (n=19) or FGM use (n=20)
- Gold score\* ≥4 (impaired hypo awareness or recent severe hypoglycaemic event)

\*The Gold score measures hypoglycemia awareness, based on a response to, "Do you know when your hypos are beginning"; 7-point scale, with 1 representing "always aware" and 7 "never aware". Scores ≥4 indicate IAH.

Results



Overall Impact on Hypoglycemia

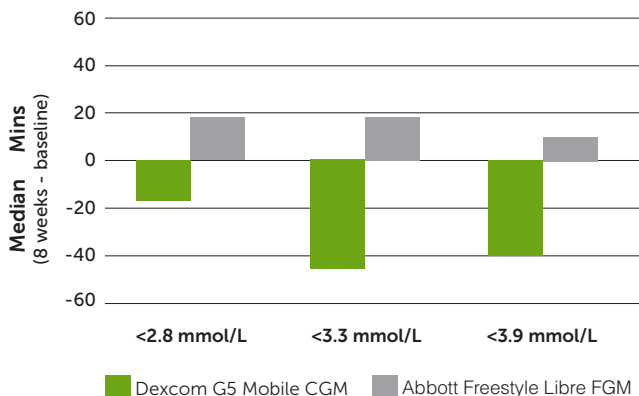
Primary Outcome:

Comparison of change in time spent in hypoglycemia (<3.3 mmol/L) of CGM users to FGM users:

- Dexcom G5 Mobile users **reduced** median time spent in hypoglycemia from baseline by 43 minutes.†
- Libre FGM users **increased** median time spent in hypoglycemia from baseline by 19 minutes.†

† Between-group p-value: .006; outcome calculated by converting median percentage point difference into minutes, based on 24-hour period.

Across Multiple Thresholds, Dexcom CGM Use Decreased Time in Hypo While Libre FGM Use Increased Time



RESULTS



REDUCED OVERALL HYPOGLYCEMIA

Dexcom CGM users *reduced* time spent in hypoglycemia, while Libre FGM users *increased* their exposure to hypoglycemia.



REDUCED NIGHTTIME HYPOGLYCEMIA

Dexcom CGM users decreased time in hypoglycemia at night, while Libre FGM users experienced worsening hypoglycemia.



REDUCED FEAR OF HYPOGLYCEMIA

Dexcom CGM users saw a significant reduction in hypoglycemia fear compared to Libre FGM users.

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## Dexcom CGM Outperforms Abbott Freestyle Libre FGM (cont.)

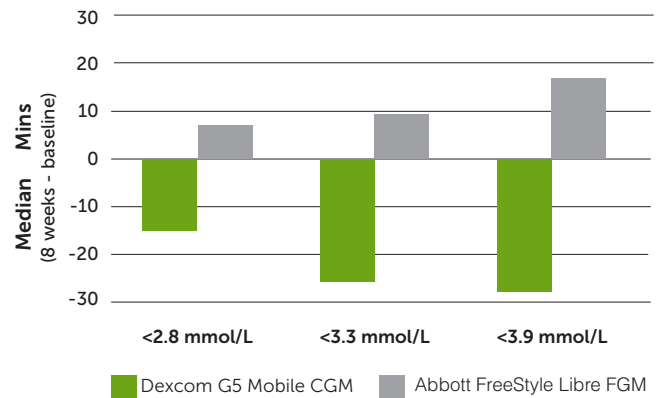


### Dexcom CGM Use Reduced Time in Hypoglycemia at Night; Increased Time Spent with Libre FGM Use

Dexcom CGM use reduced median time spent in hypoglycemia (<3.3 mmol/L) by 24 minutes from baseline while subjects using the Libre FGM increased exposure by 9 minutes.

- The audible alerts and alarm of the Dexcom G5 Mobile—which Libre FGM does not have—are especially helpful to patients with IAH at night, when they are most vulnerable to potentially dangerous hypoglycaemic incidents.<sup>1</sup>

### Dexcom CGM Offers Added Protection at Night<sup>‡</sup>



<sup>‡</sup> Nighttime hypoglycemia measured from 10:00pm - 7:00am.



### Reduced Fear of Hypoglycemia

- Participants in the Dexcom CGM group reported less fear of hypoglycemia, a major barrier to good glucose control.
- No change in hypoglycemia fear was reported in the Libre FGM group. (Between-group p-value: .02)

## Dexcom CGM First™

Professional societies, including the ADA, AACE and the Endocrine Society now recognize CGM as a standard of care.<sup>2-4</sup> Dexcom CGM use has been proven to **both reduce A1C and decrease risk of hypoglycemia regardless of insulin delivery method.**<sup>5</sup> When initiating or adjusting insulin regimens for your patients, Dexcom CGM provides real-time insights for better glycemic outcomes. Optimize your patients' diabetes treatment plans and recommend a Dexcom CGM System today.

For more information about adding Dexcom CGM to your patient's diabetes treatment plan, visit [dexcom.com](https://dexcom.com)

#### References

1 Reddy M, Jugnee N, El Labuoudi A, Spanudakis E, Anantharaja S, Oliver N. A Randomized Controlled Pilot Study of Continuous Glucose Monitoring in People with Type 1 Diabetes and Impaired Awareness of Hypoglycemia. *Diabet Med*. In press (Originally registered as Impact on Hypoglycemia Awareness of Real Time CGM and Intermittent Continuous Glucose Data (I HART CGM); ClinicalTrials.gov NCT03028220). 2 American Diabetes Association. Glycemic targets. Sec. 6. In *Standards of Medical Care in Diabetes—2017*. *Diabetes Care*. 2017;40(Suppl 1):S48-S56. 3 Bailey TS, Grunberger G, Bode BW, et al. American Association of Clinical Endocrinologists and American College of Endocrinology 2016 Outpatient Glucose Monitoring Consensus Statement. *Endocr Pract*. 2016;22(2):231-261. 4 Peters A, Ahmann A, Battelino T et al. Diabetes Technology—Continuous Subcutaneous Insulin Infusion Therapy and Continuous Glucose Monitoring in Adults: An Endocrine Society Clinical Practice Guideline. *The Journal of Clinical Endocrinology & Metabolism*. 2016;jc.2016-2534. 5 Šoupal J, Petruželková L, Fleka M et al. Comparison of Different Treatment Modalities for Type 1 Diabetes, Including Sensor-Augmented Insulin Regimens, in 52 Weeks of Follow-Up: A COMISAIR Study. *Diabetes Technology & Therapeutics*. 2016;18(9):532-538.