

## **Effect of using additional readers for flash glucose monitoring system on metabolic control, safety and the incidence of complications in patients with diabetes mellitus.**

\*In case of filling out the questionnaire by supervisor (parent), the questions relate to the diabetic. If you are under 18, ask an adult to help complete the survey.

By completing the survey, you agree to the use of your data for research purposes while maintaining anonymity.

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1. The survey is completed by (in case a person other than a diabetic answers, the questions refer to a diabetic)
  - FGM user (diabetic)
  - Parent of a diabetic
  - Other:
2. User gender
  - female
  - male
3. FGM user birth year
  - your answer – numer
4. Type of diabetes
  - 1
  - 2
  - Other
5. Country of residence:
  - Your answer
6. Duration of diabetes in years
  - less than a year
  - numer selection
7. Do you use the FGM system with an additional reader?
  - no (do not answer questions: 11,12,14,15,19,20,21,23,25,28,30,34)
  - yes - I use the Blucon reader
  - yes – I use the MiaoMiao reader
  - I do not use FGM at all
  - Other
8. Have you used the FGM system in the standard way before using additional reader?
  - Yes, first I have used Libre in a standard way, then with an additional reader.
  - No, from the beginning I use Libre in combination with an additional reader.
  - First I have used Libre in combination with an additional reader, and then in a standard way – Explain in “Other” why.

- Other:

9. How long have you been using FGM system?

- Selection from 1 month to 72 months = 6 years

10. Specify how you use FGM system?

- continuously - I finish 1 sensor, immediately start the next one

- after finishing the sensor I activate another one the next day

- I use Freestyle Libre occasionally - describe in "Other" how often you use it

- Other:

11. How long have you been using the additional reader? [If you do not use, do not answer]

- Selection from 1 month to 72 months = 6 years

12. How much time a day do you use an additional reader [if you do not use, do not answer]

- almost the whole day (23-24 hours)

- at night (about 8 hours)

- at work / at school (about 8 hours)

- in free time (about 4-5 hours)

- it is difficult to specify, enter in the "Other" when you use and specify the number of hours per day

- Other

13. What was the level of your last glycated hemoglobin test before you started using the additional reader? If you do not use an additional reader, enter the current level of glycated hemoglobin:

- selection of levels from  $\leq 4.9\%$  (30 mmol / mol) to  $\geq 14.0\%$  (130 mmol / mol)

- I do not remember, but it was higher than today.

- I do not remember, but it was lower than today.

14. During the use of an additional reader for FGM system, the level of glycated hemoglobin is: [if you do not use the additional reader - do not answer]

- selection of levels from  $\leq 4.9\%$  (30 mmol / mol) to  $\geq 14.0\%$  (130 mmol / mol)

- I do not remember, but it was higher than today.

- I do not remember, but it was lower than today.

15. During the use of an additional reader for FGM system, episodes of hypoglycaemia ( $<70\text{mg} / \text{dl}$  or  $<3.9\text{ mmol} / \text{l}$ ) happens ..... compared to the standard use of FGM system [if you do not use the additional reader, do not answer]

- more often

- less often

- comparatively often

- they do not occur at all, previously occurred

- they do not occur at all, they also did not occur before

- Other:

16. Did/do you take blood glucose measurements during the use of FGM system in a standard way?

- yes, but sporadically (1-2 measurements per day)
- yes, before meals (3-4 measurements per day)
- yes, before insulin administration (bolus, injection) (3-4 measurements per day)
- yes, at different times (5-7 measurements per day)
- yes, more often than before each meal and administration of insulin (more than 8 measurements per day)
- no, I do not take any blood measurements (0 measurements per day)
- Other:

17. Were/Are the results of the above measurements used for calibration?

- no, because I use standard Libre software
- yes, I add/added blood measurements
- Other:

18. Specify what software do/did you use during the standard use of FGM system. If you remember, enter what was the estimated HbA1c level calculated in this program.

- Your answer

19. Did/do you take blood glucose measurements during the use of the additional reader?

[if you do not use an additional reader, do not reply]

- yes, but sporadically (1-2 measurements per day)
- yes, before meals (3-4 measurements per day)
- yes, before insulin administration (bolus, injection) (3-4 measurements per day)
- yes, at different times (5-7 measurements per day)
- yes, more often than before each meal and administration of insulin (more than 8 measurements per day)
- no, I do not take any blood measurements (0 measurements per day)
- Other:

20. Were/Are the results of the above measurements used for calibration? [if you do not use an additional reader, do not reply]

- no
- yes, I add the results of above measurements
- Other:

21. Enter the estimated level of HbA1c calculated in the program during the use of the additional reader. Specify what program you use [if you do not use an additional reader, do not reply]

- Your answer

22. What was the average weekly number of hypoglycemia episodes (<70mg / dl or <3.9 mmol / l) during the standard use of FGM system in the last week before using the additional reader? Enter the current average number of episodes of hypoglycaemia per week if you do not use the additional reader:

- Selection of numbers from 0 to => 99

23. The average weekly number of hypoglycaemic episodes (<70mg / dl or <3.9 mmol / l) in the last week when you used the additional reader for FGM system was: [if you do not use the additional reader - do not answer]

- Selection of numbers from 0 to => 99

24. Have you had any severe hypoglycaemia with loss of consciousness and the need to administer medications before using an additional reader for FGM system, please provide the number of incidents? If you do not use an additional reader, state whether there was severe hypoglycemia with loss of consciousness and the need for medication?

- no
- yes, selection of numbers from 1 to => 50

25. Have you had any severe hypoglycaemia with loss of consciousness and the need to administer medications while using the additional reader for FGM system? Enter the number of incidents. [if you do not use an additional reader, do not reply]

- no
- yes, selection of numbers from 1 to => 50

26. Have you had any unaware hypoglycemia incidents i.e. when you do not feel your blood glucose level fall below 70 mg / dL (3.9 mmol / L), before you started using the additional reader for FGM system? If you do not use additional reader, answer if there have been any unaware hypoglycemia incidents?

- no
- no, but they currently occur
- yes and they are still occur
- yes, but they are not currently occur
- Other:

27. Have you had any diabetes complications before using the additional reader for FGM system? If you do not use an additional reader, answer if you have diabetes complications:

- no complications have been identified
- ketoacidosis;
- hyperosmotic acidosis;
- lactic acid;
- diabetic retinopathy;
- cataracts;
- diabetic kidney disease;
- neuropathy;
- heart attack;
- stroke;
- diabetic foot syndrome;
- Other:

28. Have you been diagnosed with diabetes complications when you use additional reader for FGM system: [don't answer if you don't use the additional reader]

- no complications have been identified
- ketoacidosis;
- hyperosmotic acidosis;
- lactic acid;
- diabetic retinopathy;
- cataracts;
- diabetic kidney disease;

- neuropathy;
- heart attack;
- stroke;
- diabetic foot syndrome;
- Other:

29. During standard use of FGM system, diabetes therapy is/was carried out by:

- a personal insulin pump
- pens (intensive insulin therapy - minimum 4 injections per day)
- treatment only with oral anti-diabetic drugs
- Other:

30. Has the method of therapy changed during the use of the additional reader in comparison with the period of using FGM system in the standard way? [if you do not use an additional reader, do not reply]

- no, the therapy is still carried out in the same way
- I am using a personal insulin pump now, previously I used pens
- I am using pens now (intensive insulin therapy - minimum 4 injections per day), previously I used a personal insulin pump
- current treatment only with oral anti-diabetic drugs, previously insulin therapy with pens
- Other:

31. In the additional reader for FGM system, I value the most (you can choose more than one answer):

- functionality and convenience
- impact on security
- the possibility of better control of glycaemia and metabolic control of diabetes
- greater participation in the treatment of diabetes
- price competitiveness of the created CGM system
- the possibility of using Nightscout
- Other:

32. In the additional reader for FGM system does not suit me most (you can choose more than one answer):

- the presence of an additional device on the FGM sensor
- periodic technical problems
- battery replacement (Blucon)
- battery charging (MiaoMiao)
- lack of support from scientific societies
- high cost of the method
- Other:

33. How often during the standard use of FGM system did/does diabetes stop you from: (Single selection table)

Rows: 1-daily life activities 2-contacts with friends 3-work / school 4-practicing sport

Columns: - never - rarely - sometimes - often - all the time

34. How often during the use of the additional reader for FGM system diabetes prevents you from [if you do not use the additional reader, do not answer]

(Single selection table)

Rows: 1-daily life activities 2-contacts with friends 3-work / school 4-practicing sport  
Columns: - never - rarely - sometimes - often - all the time

35. This is the last question. Please provide the information that you consider important and was not mentioned in the survey. Thank you for your time.