

# PANTHER<sup>TM</sup> for OMNIPOD<sup>®</sup> 5

## Automated Insulin Delivery System



### INSTRUCTIONS FOR USE

- 1 Download user's device to My.Glooko.com → Set report settings to Target Range 3.9-10.0 mmol/L
- 2 Create reports → 2 weeks → Select: a. CGM Summary; b. Week View; and c. Devices
- 3 Follow this worksheet for step-by-step guidance on clinical assessment, user education and insulin dose adjustments.

#### STEP 1 **BIG PICTURE** (PATTERNS)

→ STEP 2 **SMALL PICTURE** (REASONS)

→ STEP 3 **PLAN** (SOLUTIONS)

## OVERVIEW using C|A|R|E|S Framework

### C | How it **CALCULATES**

- Automated basal insulin delivery calculated from total daily insulin, which is updated with each Pod change (adaptive basal rate).
- Calculates dose of insulin every 5 min based on glucose levels predicted 60 minutes into future.

### A | What you can **ADJUST**

- Can adjust the algorithm's Target Glucose (6.1, 6.7, 7.2, 7.8, 8.3 mmol/L) for adaptive basal rate.
- Can adjust I:C ratios, correction factors, active insulin time for bolus settings.
- Cannot change basal rates (programmed basal rates are not used in Automated Mode).

### R | When it **REVERTS** to manual mode

- System may revert to Automated Mode: Limited (static basal rate determined by system; not based on CGM value/trend) for 2 reasons:
  1. If CGM stops communicating with Pod for 20 min. Will resume full automation when CGM returns.
  2. If an Automated Delivery Restriction alarm occurs (insulin delivery suspended or at max delivery too long). Alarm must be cleared by user and enter Manual Mode for 5 min. Can turn Automated Mode back on after 5 minutes.

### E | How to **EDUCATE**

- Bolus before eating, ideally 10-15 minutes prior.
- Tap Use CGM in bolus calculator to add glucose value and trend into bolus calculator.
- Treat mild hypoglycaemia with 5-10g carb to avoid rebound hyperglycaemia and WAIT 15 min before re-treating to give glucose time to rise.
- Infusion site failure: Check ketones and replace Pod if hyperglycaemia persists (e.g. 16.7 mmol/L for > 90 min) despite correction bolus. Give syringe injection for ketones.

### S | **SENSOR/SHARE** characteristics

- Dexcom G6 which requires no calibrations.
- Must use G6 mobile app on smartphone to start CGM sensor (cannot use Dexcom receiver or Omnipod 5 Controller).
- Can use Dexcom Share for remote monitoring of CGM data.

## PANTHER<sup>TM</sup> POINTERS<sup>TM</sup> FOR CLINICIANS

- 1 Focus on behavior: Wearing the CGM consistently, giving all boluses, etc.
- 2 When adjusting insulin pump settings, focus primarily on Target Glucose and I:C ratios.
- 3 To make system more aggressive: Lower the Target Glucose, encourage user to give more boluses and intensify bolus settings (e.g. I:C ratio) to increase total daily insulin (which drives the automation calculation).
- 4 Avoid overthinking the automated basal delivery. Focus on the overall Time in Range (TIR), and optimising system use, bolus behaviors and bolus doses.



Insulet

This **PANTHER Program<sup>®</sup>** tool for Omnipod<sup>®</sup> 5 was created with the support of **Insulet**.

## STEP 1 BIG PICTURE (PATTERNS)

CGM Summary Report to assess system use, glycemic metrics, and identify glucose patterns.

### A Is the person using the CGM and Automated Mode?

% Time CGM Active:

If <90%, discuss why:

- Problems accessing supplies/sensors not lasting 10 days?  
→Contact Dexcom for replacement sensors
- Skin problems or difficulty keeping sensor on?  
→Rotate sensor insertion sites (arms, hips, buttocks, abdomen)  
→Use barrier products, tackifiers, over tapes and/or adhesive remover to protect skin



SCAN TO VIEW:  
[pantherprogram.org/skin-solutions](http://pantherprogram.org/skin-solutions)

Automated Mode %:

If <90%, assess why:

Emphasise goal is to use Automated Mode as much as possible

Automated:Limited %:

If >5%, assess why:

- Due to gaps in CGM data?  
→Review device placement: wear Pod and CGM on same side of body / in "line of sight" to optimise Pod-CGM communication
- Due to automated delivery restriction (min/max delivery) alarms?  
→Educate user to clear alarm, check BG as needed, and after 5 minutes switch mode back to Automated Mode (will not return to Automated Mode automatically)

### B Is the user giving meal boluses?

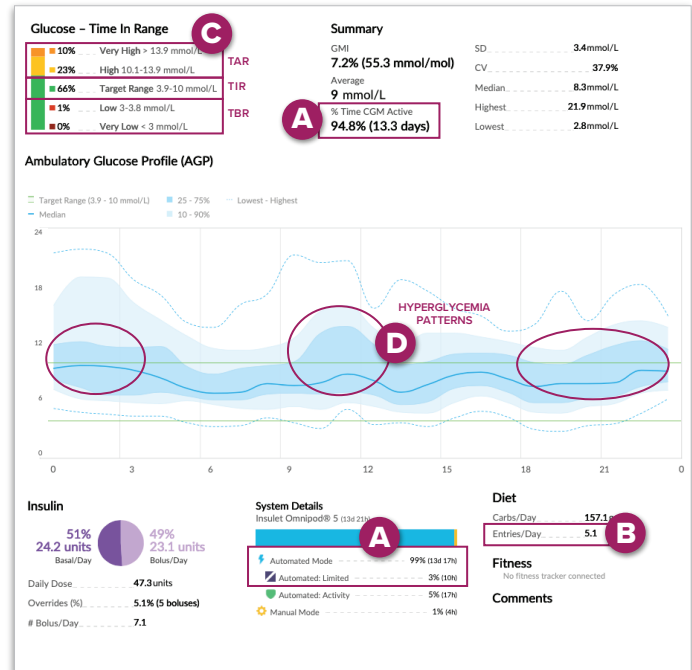
Number of Diet Entries/Day?

Is the user giving at least 3 "Diet Entries/Day" (boluses with CHO added)?

→If not, ASSESS for missed meal boluses

## PANTHERPOINTERS™ FOR CLINICIANS

- The goal of this therapy review is to increase Time in Range (3.9-10.0 mmol/L) while minimising Time Below Range (<3.9 mmol/L)
- Is the Time Below Range **more** than 4%?  
If **YES**, focus on reducing patterns of **hypoglycaemia**  
If **NO**, focus on reducing patterns of **hyperglycaemia**



### C Is the user meeting Glycemic Targets?

Time in Range (TIR)  Goal is >70%

3.9-10.0 mmol/L "Target Range"

Time Below Range (TBR)  Goal is <4%

<3.9 mmol/L "Low" + "Very Low"

Time Above Range (TAR)  Goal is <25%

>10.0 mmol/L "High" + "Very High"

### D What are their patterns of hyperglycaemia and/or hypoglycaemia?

Ambulatory Glucose Profile compiles all data from reporting period into one day; shows median glucose with the blue line, and variability around the median with the shaded ribbons. Wider ribbon = more glycaemic variability.

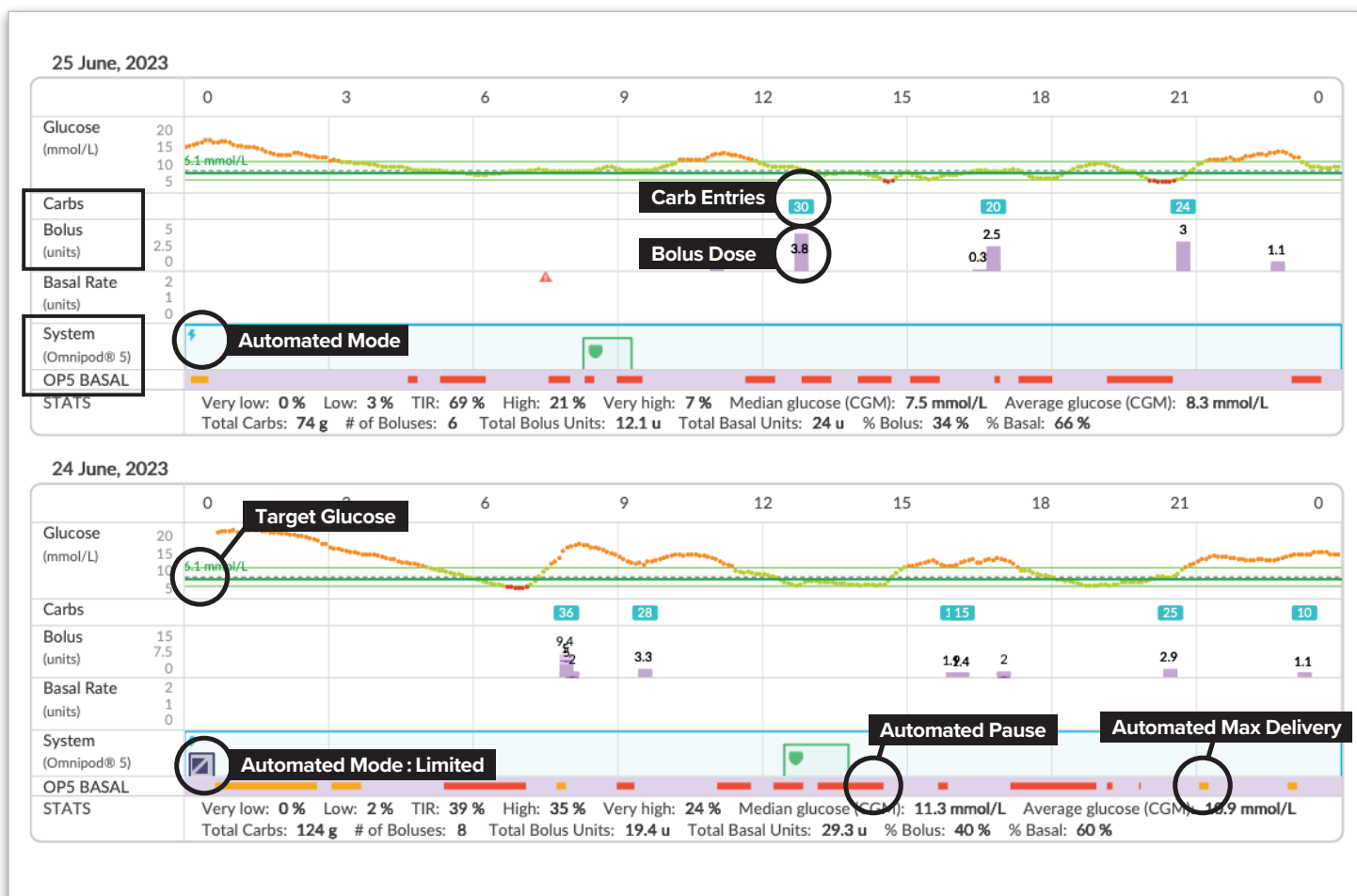
Identify the overall patterns by primarily focusing on the dark blue shaded area.

Hyperglycaemia patterns: (eg: high glycaemia at bedtime)

Hypoglycaemia patterns:

## STEP 2 SMALL PICTURE (REASONS)

Use the **Week View** and discussion with the user to identify causes of the glycaemic patterns identified in STEP 1 (hypoglycaemia or hyperglycaemia).



Identify the predominant 1-2 causes of the hypo- or hyperglycaemia pattern.

Is the **hypoglycaemia** pattern occurring:

- ☐ Fasting / Overnight?
- ☐ Around mealtime?  
(1-3 hours after meals)
- ☐ Where low glucose levels follow high glucose levels?
- ☐ Around or after exercise?

Is the **hyperglycaemia** pattern occurring:

- ☐ Fasting / Overnight?
- ☐ Around mealtime?  
(1-3 hours after meals)
- ☐ Where high glucose levels follow low glucose levels?
- ☐ After a correction bolus was given?  
(1-3 hours after correction bolus)

| Hypoglycaemia                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                        | Hyperglycaemia                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SOLUTION                                                                                                                                                                                                                                                                                                                                                                                                              | PATTERN                                                                                                                                | SOLUTION                                                                                                                                                                                                                |
| Raise Target Glucose (algorithm target) overnight (highest is 8.3 mmol/L)                                                                                                                                                                                                                                                                                                                                             | <b>Fasting / Overnight</b><br>                        | Lower Target Glucose overnight (lowest is 6.1 mmol/L)                                                                                                                                                                   |
| Assess carb counting accuracy, bolus timing, and meal composition. Weaken I:C Ratios by 10-20% (e.g. if 1:10g, change to 1:12g)                                                                                                                                                                                                                                                                                       | <b>Around mealtime</b><br>(1-3 hours after meals)<br> | Assess if meal bolus was missed. If yes, educate to give all meal boluses prior to eating. Assess carb counting accuracy, bolus timing, and meal composition. Strengthen I:C Ratios by 10-20% (e.g. from 1:10g to 1:8g) |
| If due to bolus calculator overrides, educate user to follow the bolus calculator and avoid overriding to give more than recommended. There may be a lot of IOB from AID that user is not aware of. Bolus calculator factors in IOB from increased AID when calculating correction bolus dose.<br><br>Weaken correction factor by 10-20% (e.g. from 3mmol/L to 3.5 mmol/L) if hypos 2-3 hours after correction bolus. | <b>Where low glucose follows high glucose</b><br>    |                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Where high glucose follows low glucose</b><br>   | Educate to treat mild hypoglycaemia with fewer grams of carbs (5-10g)                                                                                                                                                   |
| Use the Activity feature 1-2 hours before exercise begins. Activity feature will temporarily reduce insulin delivery. It can be used during times of increased risk of hypoglycaemia.<br><br>To use Activity feature, go to Main Menu → Activity                                                                                                                                                                      | <b>Around or after exercise</b><br>                 |                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>After a correction bolus was given</b><br>(1-3 hours after correction bolus)                                                        | Strengthen correction factor (e.g. from 3 mmol/L to 2.5 mmol/L)                                                                                                                                                         |

**ADJUST insulin pump settings\*\* and EDUCATE.****Most impactful insulin dose settings to change:**

1. **Target Glucose (for adaptive basal rate)** Options: 6.1, 6.7, 7.2, 7.8, 8.3 mmol/L  
Can program different targets for different times of day
2. **I:C Ratios** It is common to need stronger I:C Ratios with AID
3. **Correction Factor & Active Insulin Time**  
These will only influence bolus calculator doses; has no impact on automated insulin

**\*\*BEFORE making changes to insulin delivery settings, please confirm insulin settings within the user's Omnipod 5 controller.**

To change settings, tap the main menu icon  in top-left corner of **Omnipod 5** controller: → **Settings** → **Bolus**

### Insulet Omnipod® 5 System

#### General

Active Insulin Time 2.5 hours

#### Basal

Max Basal Rate 2.5 U/hour

Temporary Basal Enabled ON

Active basal program Basal 1

**Basal Rates and Max Basal settings are NOT USED and NOT relevant to Automated Mode**

#### Bolus

Min BG for Bolus Calc 3.9 mmol/L

Extended Bolus ON

Reverse Correction OFF

Max Bolus 14 U

#### Basal

Basal 1 Active

00:00 (24 hr) 0.75 Units/hr

Total 18 Units

#### Sensitivity (ISF, correction)

Profile Active

00:00 (5 hr) 2.3 mmol/L

05:00 (6 hr) 2.3 mmol/L

11:00 (4 hr) 2.3 mmol/L

15:00 (9 hr) 2.3 mmol/L

#### BG target range

Profile Active

00:00 (24 hr) 6.1 mmol/L (+0/-0)

#### BG correction

Profile Active

00:00 (24 hr) 6.1 mmol/L

#### Insulin:Carb ratios

Profile Active

00:00 (11 hr) 8 g/Unit

11:00 (4 hr) 8 g/Unit

15:00 (9 hr) 8 g/Unit

## AFTER VISIT SUMMARY

# Great job using **Omnipod® 5!**

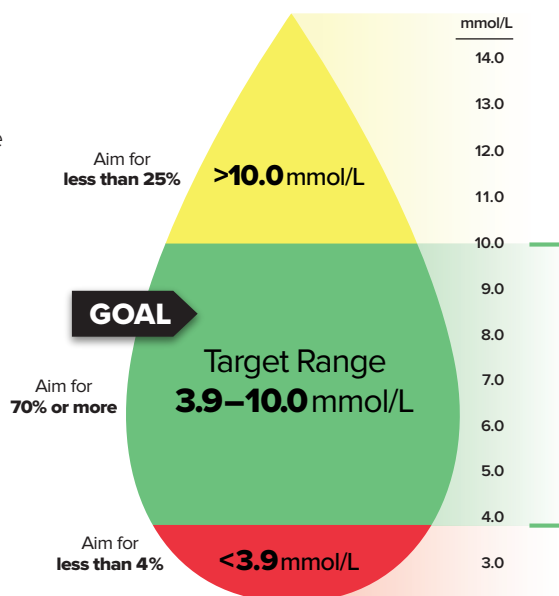
### Using this system may help you achieve your diabetes goals.

The American Diabetes Association suggests aiming for **70%** of your glucose levels to be between **3.9–10.0 mmol/L**, called **Time in Range** or **TIR**. If you are not currently able to reach 70% TIR, don't be discouraged! Start from where you are and set smaller goals to increase your TIR. Any increase in your TIR is beneficial to your lifelong health!



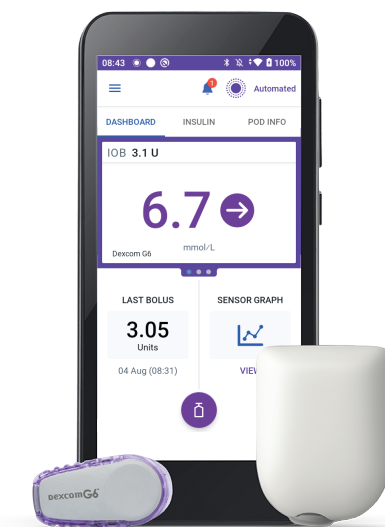
### REMEMBER...

Don't overthink what the Omnipod 5 is doing in the background.  
**Focus on what you can do.** See helpful tips below...



## TIPS for Omnipod 5

- **HYPERGLYCAEMIA >16.7 mmol/L for 1-2 hours?** Check ketones first! If ketones, give syringe injection of insulin and replace Pod.
- **Bolus before eating**, ideally 10-15 minutes before all meals and snacks.
- **Do not override the bolus calculator:** Correction bolus doses may be smaller than expected due to insulin on board from the adaptive basal rate.
- **Give correction boluses for hyperglycaemia:** Tap Use CGM in bolus calculator to add glucose value and trend into bolus calculator.
- **Treat mild hypoglycaemia with 5-10g carb** to avoid rebound hyperglycaemia and WAIT 15 min before re-treating to give glucose time to rise. System will have likely suspended insulin, resulting in little insulin on board when hypoglycaemia occurs.
- **Wear Pod and CGM on same side of body** so they don't lose connection.
- **Clear Delivery Restriction alarms immediately**, troubleshoot hyper/hypo, confirm CGM accuracy and switch back to Automated Mode.



Pod and Dexcom G6 shown without the necessary adhesive.



◀ SCAN TO VISIT  
PANTHERprogram.org

Have questions about the Omnipod 5?

[omnipod.com](http://omnipod.com)

Omnipod customer support  
**0800 011 6132**

Have questions about your CGM?

[dexcom-intl.custhelp.com](http://dexcom-intl.custhelp.com)

Dexcom customer support  
**0800 031 5761**

Dexcom technical support  
**0800 031 5763**