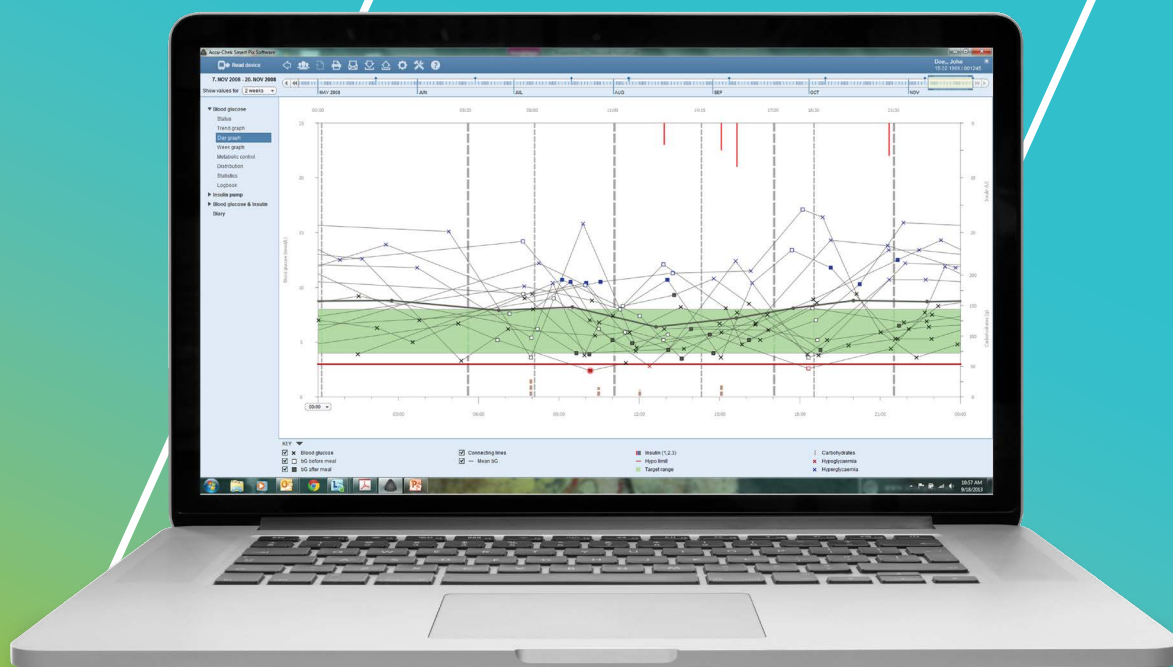


Practice Reference Guide



CONTENTS

This guide offers healthcare professionals and practice staff practical, applicable ways to use the Accu-Chek® Smart Pix software. Explore new and more effective ways to work with patient data.

Section 1: Optimising therapy.....	1
Structured testing and pattern management	
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How to install your Smart Pix software	15
Step-by-step instructions	

HEALTHCARE PROFESSIONALS NEED...

- < A faster path to **meaningful information**
- < An easy way to communicate and monitor **structured testing**
- < A stepwise approach to **pattern management**

INTRODUCING THE ACCU-CHEK SMART PIX SOFTWARE DESIGNED FOR DIABETES MANAGEMENT

- No internet required
- Easy to install
- Convenient & accessible tools that support quick assessment of glycaemic control and effective data visualisations.¹



DID YOU KNOW?

It is easy to download the Accu-Chek Smart Pix application from the Roche Diabetes Care Middle East and Africa website. Simply type the following address in your internet browser.

<https://www.rochediabetescaremea.com/en/download/file/fid/18526>

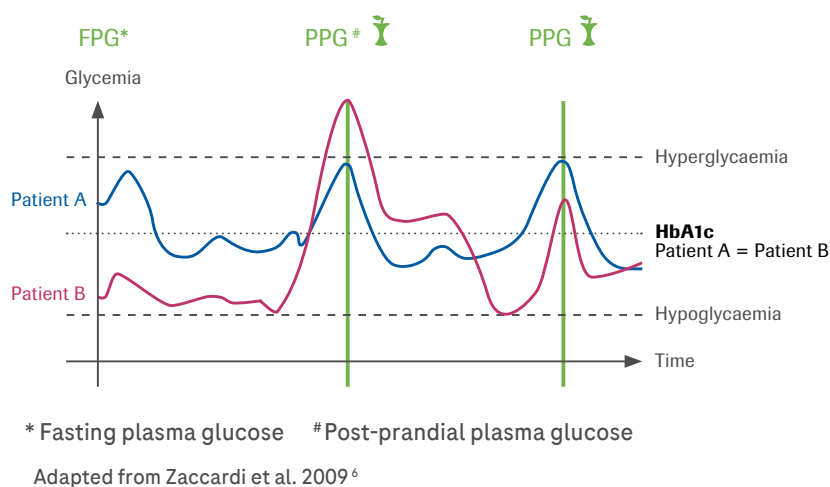
YOUR THERAPY CHOICES ARE NOT AN AVERAGE DECISION

Haemoglobin A1c (HbA1c) is considered the medical standard in determining overall glycaemic control, but HbA1c alone does not reveal short-term glycaemic exposure, episodes of low or high blood glucose (bG) levels or the risks of acute hypoglycaemia.^{2,3}

Self-monitored blood glucose (SMBG) values are an important adjunct to HbA1c, as a means to identify hypoglycaemia, frequency and severity of post-prandial hyperglycaemia and glycaemic variability.^{3,4,5}

i

Post-prandial hyperglycaemia is defined as excessive increases in post-prandial blood glucose (PPG) peaks following meals.



Type 2 diabetes patients with in-target HbA1c levels are often still prone to elevated PPG

Two patients with the same HbA1c level may experience differing glycaemic swings

Glycaemic variability, specifically when related to postprandial hyperglycaemia, has been associated with an increased risk of complications, including mortality, independent of HbA1c blood levels.^{7,8}

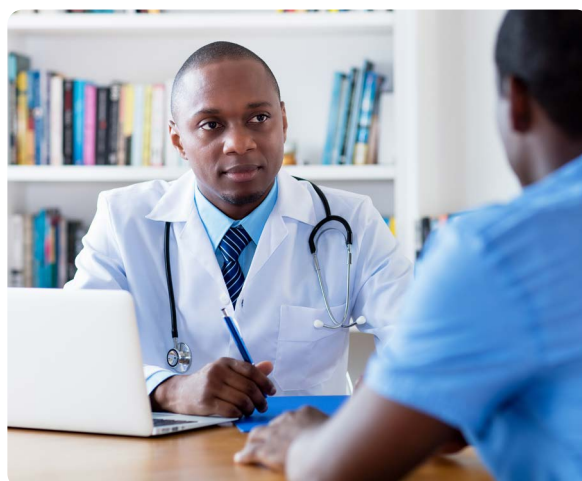
i

The American Diabetes Association (ADA) recommend a post-meal target of less than 10 mmol/L (180 mg/dL).²

TESTING WITH A PURPOSE

Structured SMBG provides insight beyond HbA1c, allowing you to investigate glycaemic problems and provide patients with guidance on specific behavior and therapy changes that may aid in resolving glycaemic problems.^{9,10}

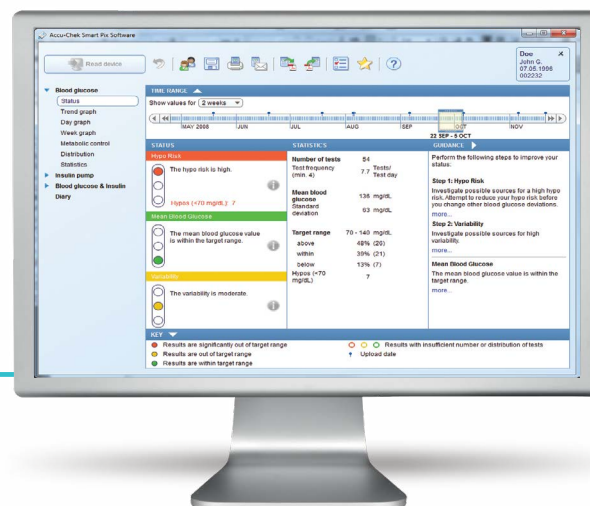
- › Patients who understand how bG test results will be used are more likely to comply with SMBG recommendations.
- › Structured testing involves testing at the right frequency, right times and in the right way to get the information you need to make the right decision.



REVIEWING RESULTS THE RIGHT WAY, WITH THE RIGHT SUPPORT

The Accu-Chek Smart Pix software can increase practice efficiencies and the effectiveness of diabetes consultations.¹

- Sophisticated yet simple reports support fast pattern analysis and a focus on optimising therapy
- The Status report offers a quick snapshot of glycaemic control, key statistics and guidance on next steps
- Customisable settings for automatic export to PDF enable smooth transfers into existing Electronic Medical Record (EMR) systems



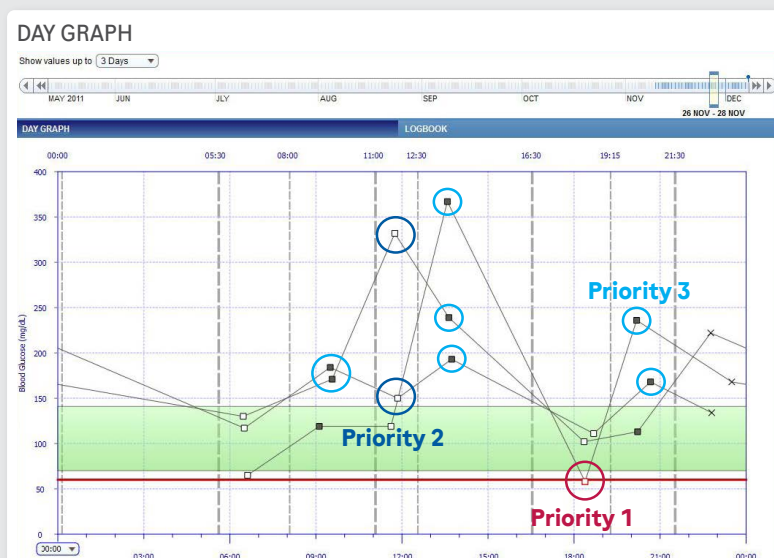
The Accu-Chek Smart Pix system, when used to analyse and optimise SMBG patterns, can help to improve diabetes self-management and glycaemic control.¹

A STEPWISE APPROACH TO MANAGING GLYCAEMIC PATTERNS

Pattern management is a systematic approach to identifying glycaemic patterns within structured testing data and taking appropriate action based upon those results. When used in collaboration with patients, pattern management can reduce post-prandial excursions and provide better overall glycaemic control.¹¹

A 4-step process to assess structured SMBG in a prioritised manner:

- 1 Identify the glycaemic abnormality
 - Priority 1: Hypoglycaemia
 - Priority 2: Fasting hyperglycaemia
 - Priority 3: Post-prandial hyperglycaemia
- 2 Determine timing and frequency
- 3 Investigate potential causes
- 4 Take action

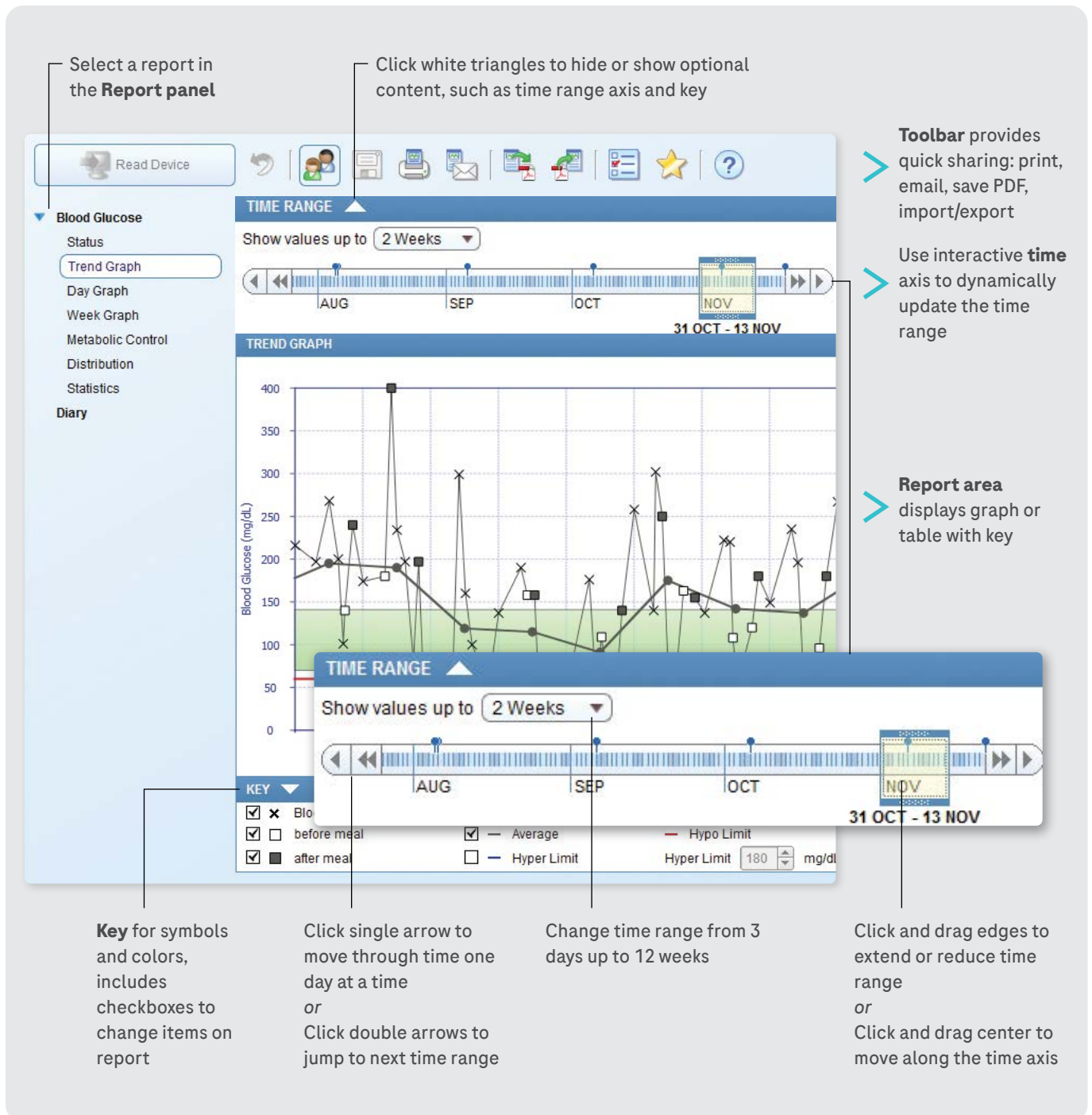


■ Hypo ■ Fasting/Pre-prandial hyper ■ Post-prandial hyper

GETTING STARTED

UNDERSTANDING THE WORKSPACE

The main features of the Accu-Chek Smart Pix software are located on a single screen. You can transfer patient data, choose a report to view and adjust settings for displaying and handling data.



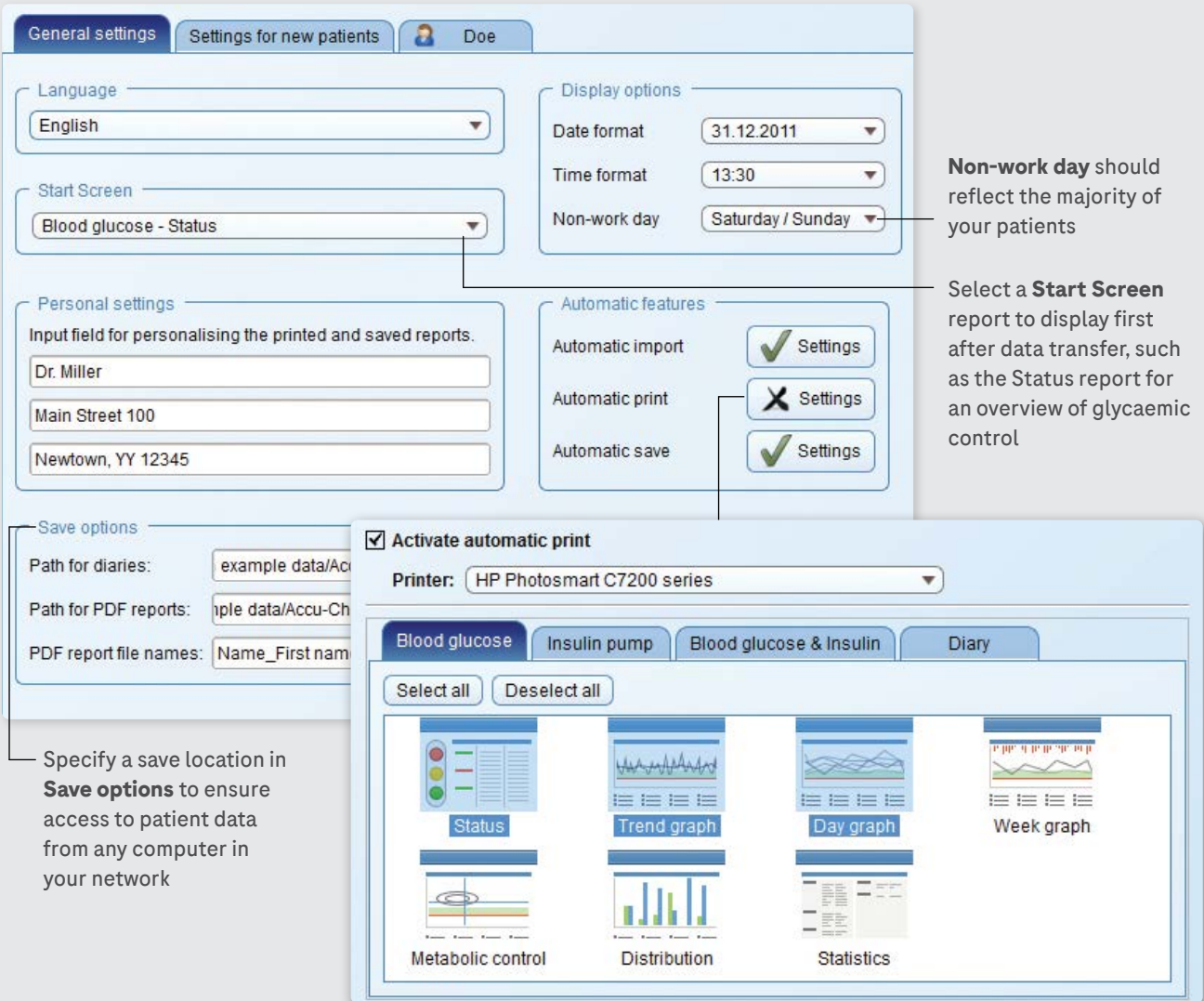
TRANSFERRING PATIENT DATA

If Automatic Import is enabled, insert the micro USB cable into the meter and open Accu-Chek Smart Pix to start the download. In the first data transfer for each patient device, select or create a patient to assign. For subsequent data transfers, the software automatically retrieves and displays patient settings and the imported data.

CUSTOMISING SETTINGS

Click  in the toolbar to access settings for the Accu-Chek Smart Pix software. See "Beyond the Basics" for more details on Automatic features.

> Tabs allow you to select **General Settings**, default **Settings for new patients** or display settings for a specific **Patient** (labeled with patient name)



The screenshot shows the 'Settings for new patients' tab. It includes sections for Language, Start Screen, Display options, Personal settings, Automatic features, and Save options. Annotations highlight specific settings: 'Non-work day' is set to 'Saturday / Sunday'; 'Start Screen' is set to 'Blood glucose - Status'; 'Automatic print' is checked; and 'Save options' are configured for diaries and PDF reports.

Non-work day should reflect the majority of your patients

Select a **Start Screen** report to display first after data transfer, such as the Status report for an overview of glycaemic control

Specify a save location in **Save options** to ensure access to patient data from any computer in your network

Activate automatic print

Printer: HP Photosmart C7200 series

Blood glucose | **Insulin pump** | **Blood glucose & Insulin** | **Diary**

Select all | Deselect all

Status | Trend graph | Day graph | Week graph

Metabolic control | Distribution | Statistics

- > Use **Automatic features** to:
- › Import data into patient diaries, in the location you specify
 - › Print a selection of reports following data transfers
 - › Save reports in a PDF; specify the location and naming format in **Save options**



Additional report settings are described in the following section

WORKING WITH REPORTS

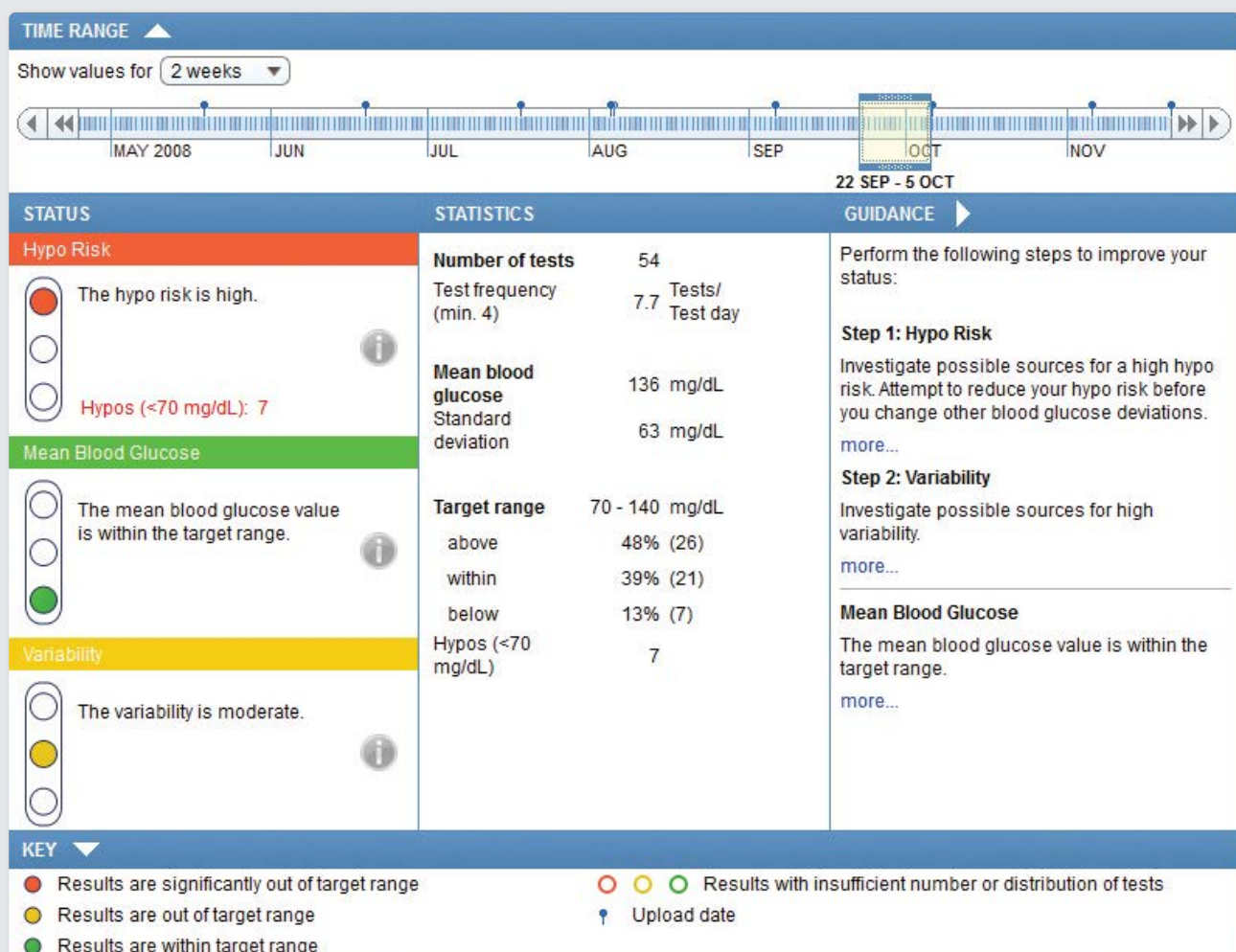
STATUS REPORT

The information and guidance on the Status report supports a stepwise pattern analysis approach of identifying glycaemic abnormalities, determining causes and taking therapeutic action to optimise diabetes therapy (see page 2).

> **Status.** Traffic light colors indicate the status of key glycaemic parameters; the limits can be adjusted in Settings

> **Statistics.** Main statistical numbers, including the number of bG tests and test frequency used to calculate Status signals

> **Guidance.** Recommendations for optimising therapy for the glycaemic parameters displayed in Status: hypo risk, mean bG and glycaemic variability



The Status report relies upon the availability of SMBG results: bG status is available only if the minimum number of tests per day has been provided and tests are distributed throughout the day. Additionally, at least 10 test results must be available for the selected time period.



Consider providing patients with a take-home printout of the Status report to aid with understanding and motivation.

CUSTOMISING REPORTS

Click  in the toolbar. To save time, adjust settings on the **Settings for new patients** tab to reflect the majority of your patients. Adjust individual settings as needed to address specific cases or questions.



Adjust some settings directly in graphs. Drag the edge of a meal segment column on the Day Graph to adjust the patient's meal segments, or use the report key to hide or show flagged results or set a hyper limit.

Time range sets the default time range initially used for reports

Select a default **Report style** for Trend, Day and Week graphs



Change default **Meal segments** to support the Day Graph and Distribution

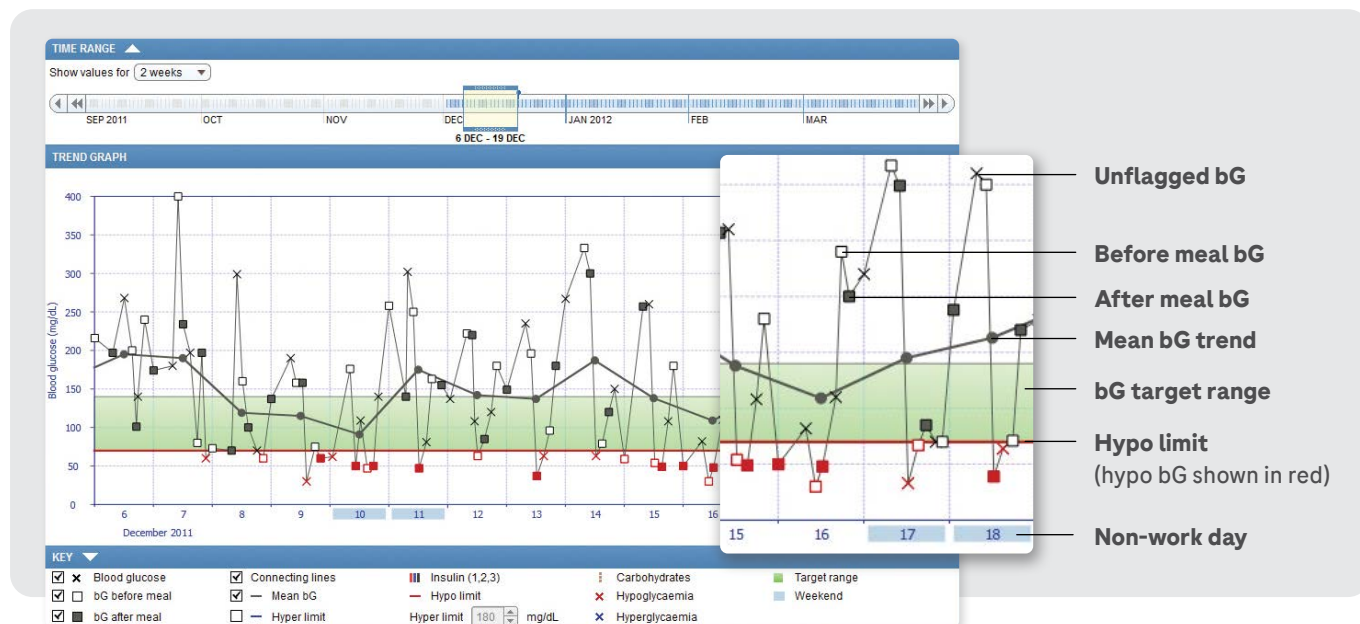
Use **Status** settings to select the bG unit and to edit target ranges and thresholds for results and statistics shown on the Status report



Refer to "Terms and abbreviations" on page 14 for LBG1 and other terms used in this guide

TREND GRAPH

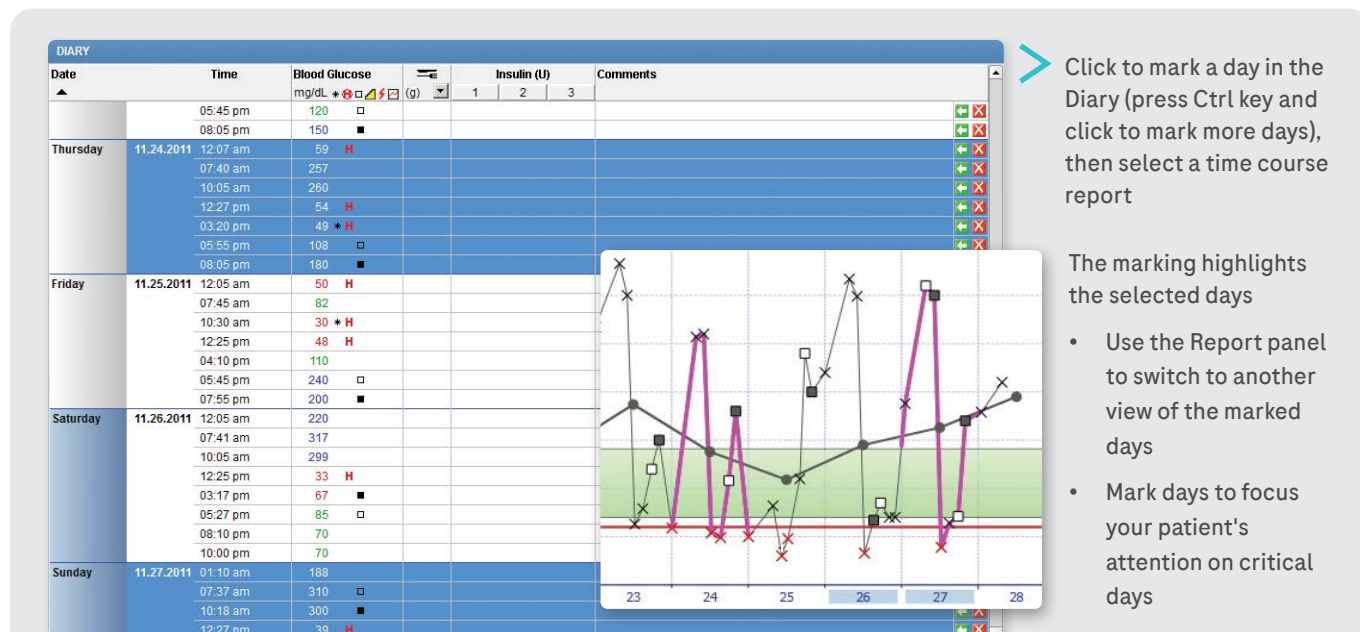
The Trend Graph displays the dynamics of bG results and diabetes data in chronological order, supporting a view of changes in bG levels over time.



Adjust bG target ranges and hypo limit in Settings and set the hyper limit in the Key to reflect each patient's goals.

DIARY

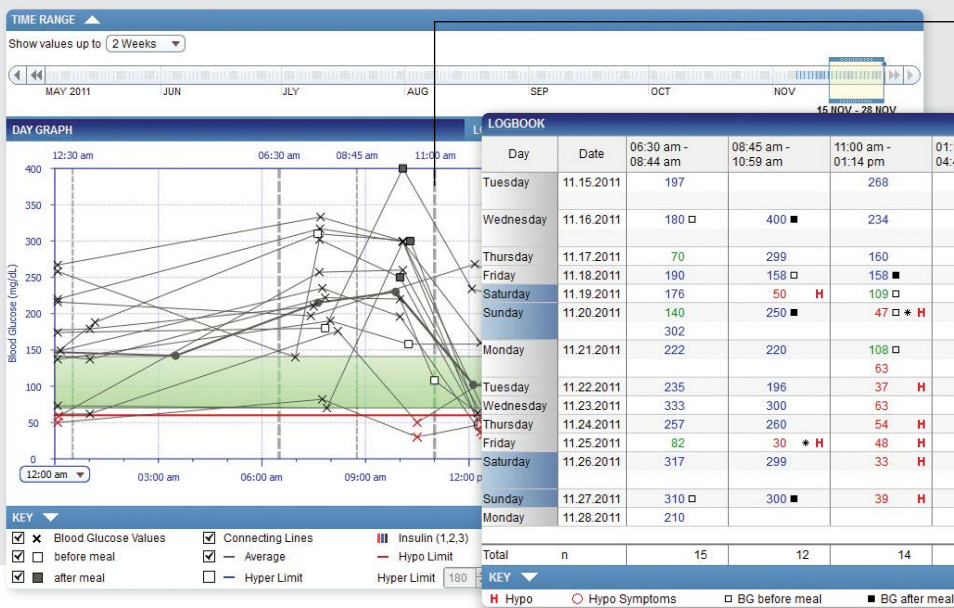
The Diary provides a tabular display of bG results and entries for insulin, carbs and exercise, if available. To cross-reference a graphical view of results, mark dates in the diary and select a graph.



You can import patient data directly into the Accu-Chek Smart Pix software. See "Beyond the Basics" for details.

DAY GRAPH

The Day Graph overlays bG results in meal segments to allow you to identify patterns repeated daily. This layout supports pattern analysis for changes related to meals or other daily events.



Click and drag to change patient's meal segments

Click Logbook tab to toggle view

Look for patterns and related events:

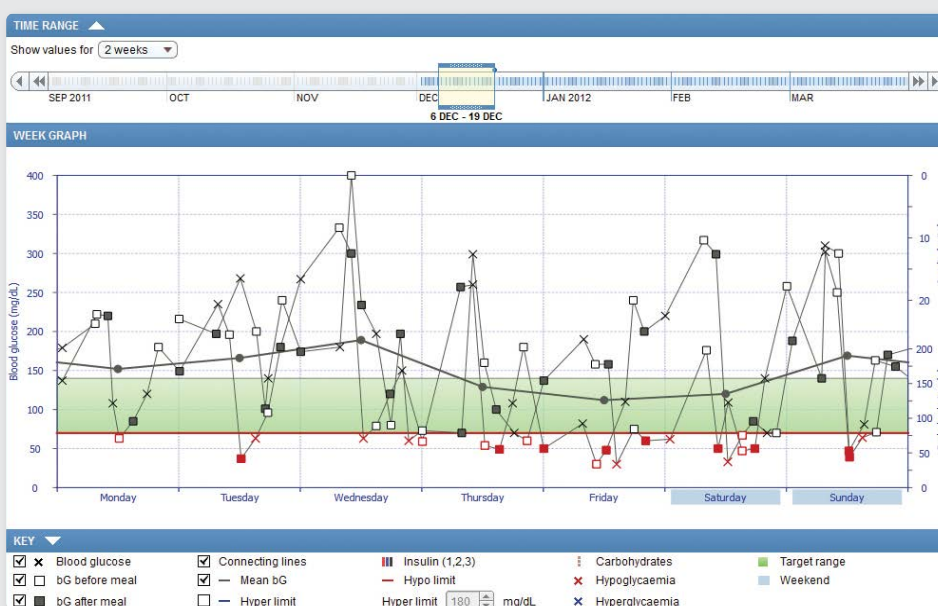
- Do hypos tend to occur during a particular meal segment?
- Are fasting/pre-meal results (□) often high?
- Are post-meal results (■) consistently high?



Assessing SMBG before and after specific meals helps patients understand the effects of meal and lifestyle choices on glucose levels and assists clinicians in identifying and tracking post-prandial hyperglycaemia.¹⁷

WEEK GRAPH

The Week Graph plots bG results across a standard week and supports pattern analysis for changes in glycaemic control on specific days.



- Look for significant differences in bG levels on a particular day of the week
- Compare bG levels on work days and non-work days (weekends) to determine if therapy adjustments need to account for consistent variations in activity or diet
- Discuss behaviour or medication to promote patient involvement in optimising therapy

bG levels that are significantly out of target range or are inconsistent with average levels during a particular day of the week may prompt a patient discussion on developing methods for diabetes self-management.

ABOUT BG INDEX

Blood glucose index (BGI) values provide risk indicators for hypoglycaemia and hyperglycaemia, facilitating proactive therapeutic actions to address a patient's potential for at-risk bG levels.^{12,13}

In most cases, the farther the BGI is from the safe area, the higher the risk potential for unsafe glycaemic levels.

- **Low BGI** (LBGI) indicates patient's risk potential for hypoglycaemia
- **High BGI** (HBGI) indicates patient's risk potential for hyperglycaemia

Risk	LBGI	HBGI
low	<1.1	<5.0
moderate	>1.1–≤2.5	≥5.0–≤10.0
high	>2.5	>10.0

References: 18,19



Feedback on the Status report requires a minimum of 2 tests a day, with at least 10 tests total and distribution over the times of day.



STATISTICS

The Statistics report lists frequently-used bG statistics and summary values to provide a complete overview of the patient's glycaemic control and device information.

Check **bG test frequency** for the average number of bG tests per day for each day in the time range; in addition, the average of only those days with at least one test result is also displayed (in brackets)

Additional information shows operational issues with read devices, such as expired test strips

Mean bG difference shows average post-meal rise

STATISTICS

Data

Number of tests	272
bG test frequency	9.7 (9.7)
Mean bG	6.8 mmol/L
Standard deviation (SD)	3.7 mmol/L
Highest value	19.7 mmol/L
Lowest value	2.4 mmol/L
Target range	3.9 - 7.8 mmol/L
above	55% (150)
within	38% (104)
below	7% (18)
Hypo / hyper limit	3.9/10 mmol/L
Hypos	18
Mean bG	
before meal	8.38 mmol/L
after meal	8.44 mmol/L
difference	0.05 mmol/L

Device

Device name	Accu-Chek Go
Serial number	36
Last data upload	invalid

Additional information

Device with invalid date/time set	1
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A photograph of a woman with dark hair, wearing a blue and white striped shirt, sitting at a wooden table. She is looking down at a smartphone in her hands. On the table in front of her is a large knife with a wooden handle, a glass of orange juice, and a small bowl of green salad. The background is a bright, out-of-focus indoor setting.

10

BEYOND THE BASICS

This section describes features intended to help integrate valuable patient data into practice tasks. For more information, refer to online help or contact your sales representative.

TIME-SAVING AUTOMATIC FEATURES

Automatic features can save an extra step during office visits by automatically processing or saving reports according to your specifications. To use Automatic features:

1. Click  to access settings.
2. In the **General settings** tab, select the Automatic feature you wish to set up:
 - **Automatic import.** Automatically import data from connected device into the corresponding patient diary
 - **Automatic print.** Designate a printer and select report(s) to automatically print following data transfer
 - **Automatic save.** Select report(s) to automatically save as a PDF following data transfer
3. Click the checkbox to activate the feature and select report(s), if applicable

Automatic Import:

Device data will be assigned to the corresponding record after reading out the device. At the first read out you need to assign a patient by hand. At any following read out you just need to confirm the patient.

☒ **Activate automatic Import**

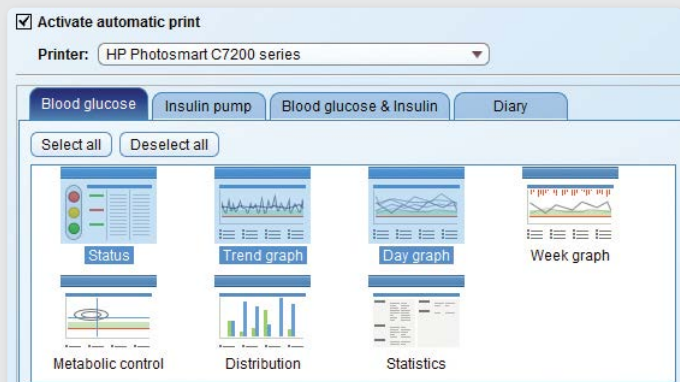


➤ For automatic import:

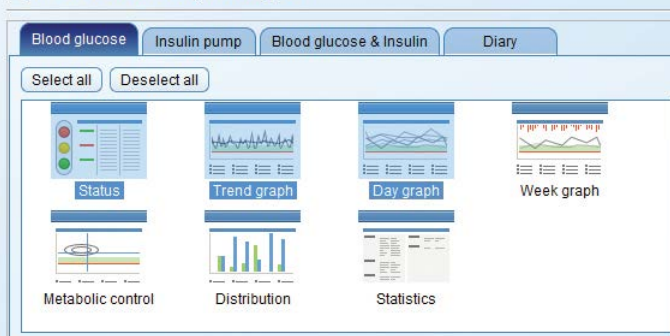
- Click checkbox to activate
- Data from devices already assigned to a patient will be transferred automatically when the device is placed in data transfer mode

For automatic printing:

- Click checkbox to activate
- Select a local or network printer
- Select one or more reports to print automatically upon data transfer



☒ Activate automatic saving of PDF reports



➤ For automatic saving:

- Click checkbox to activate
- Select one or more reports to save as a PDF
- Use file saving options on **General settings** tab to specify save location



In Settings, specify meaningful PDF report file names to automatically save reports in a format used in your office, for example, using the patient ID.

SAVING REPORTS AS PDFs

The Accu-Chek Smart Pix software offers a bridging solution to allow you to transfer reports to EMR systems. To automatically save patient data as a PDF file, use Automatic save, where a PDF file containing a set of reports you specify is saved to the location you select. To create a case-specific PDF:

1. Click  in the toolbar
2. Select one or more reports to save as a PDF
3. Use the field at the top of the window to change the file name or location

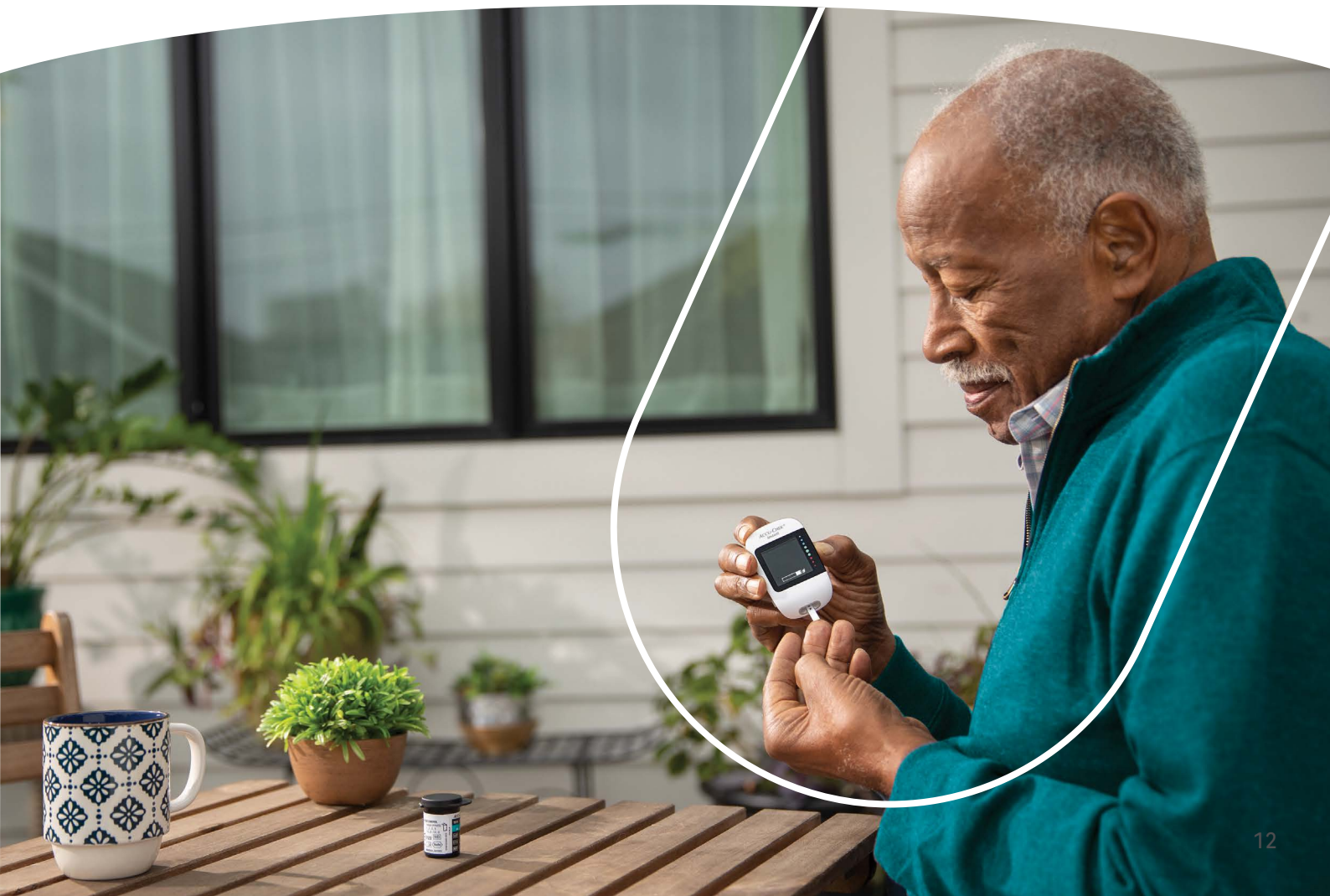
CUSTOMISING FILE SAVING OPTIONS

Settings for Save options provides a quick look-up of file locations. To change the default save location for diary data and PDFs or to change report file names:

1. Click  to access Settings
2. View **Save options** on the **General settings** tab
3. Click to edit settings for save locations or report names
4. Save option:

Option 1: Path for records (diaries)

Option 2: Path for PDFs



ADDITIONAL SUPPORT

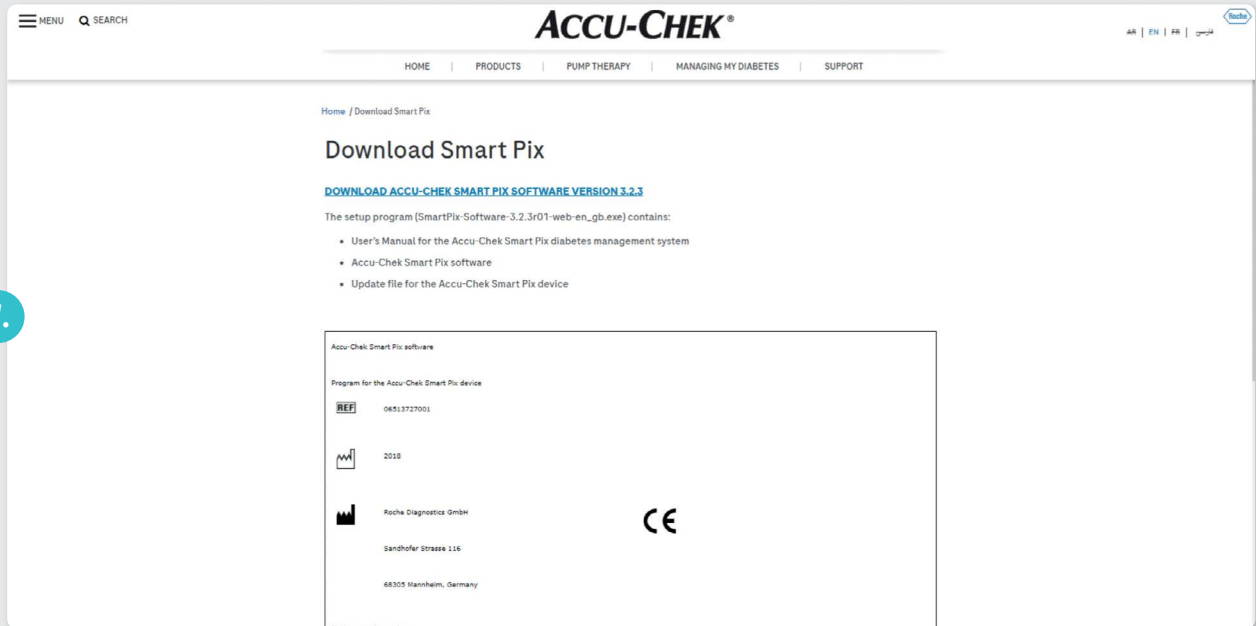
CHOOSING THE RIGHT REPORT

FOR ASSESSING...		TRY THIS GRAPH
bG testing frequency	Does the patient have enough bG results within a meal segment for meaningful statistics?	Day Graph
	Is the patient testing consistently at a certain time of day—such as before and after meals and at bedtime?	Day Graph
	On average, how often is the patient testing each day?	Status and Logbook
Glycaemic control	Have there been recent changes in glycaemic control?	Trend Graph
	What is the overall bG situation? What is the main glycaemic problem? (look for red Status signal)	Status
	Are postprandial bG results within target range?	Day Graph
	Do patterns of glycaemic control vary between specific days?	Week Graph
	Do bG results tend to be out of target at specific times of day or overnight?	Day Graph or Distribution
	What are the bG values and mean bG values at specific times of the day, e.g., before and after meal?	Logbook
	What are the before and after meal values for each meal and what is the meal excursion?	Day Graph and Logbook
	Did bG results change when the patient changed medication?	Trend Graph
	How did the metabolic situation change since last visit? (Compare last visit to today)	Metabolic Control and Status
Hypoglycaemia	Have hypo events occurred?	Status
	What are the patient's High/Low blood glucose index values?	Status
	At what time of day do hypoglycaemic events typically occur?	Day Graph and Distribution
Glycaemic variability	Do patterns in glycaemic variability occur at certain times of day?	Day Graph
	How do meals impact glycaemic variability?	Day Graph
	Can I assess the glycaemic exposure and glycaemic variability?	Metabolic Control
Insulin	What is the average total daily insulin dose and shares of bolus and basal insulin doses?	Basal Bolus
	Is the patient changing the infusion set as recommended?	Insulin Pump Trend
	Does the patient experience elevated bG results the day before changing an infusion set? Do bG levels return to the target range after changing the infusion set?	bG & Insulin Trend and Insulin Pump Trend
	How often is the patient delivering a bolus per day?	bG & Insulin Statistics
	Is the patient taking the right amount of basal insulin?	Day Graph or bG & Insulin Day Graph
	Is the patient taking enough insulin for carbohydrates in the meal?	Day Graph or bG & Insulin Day Graph

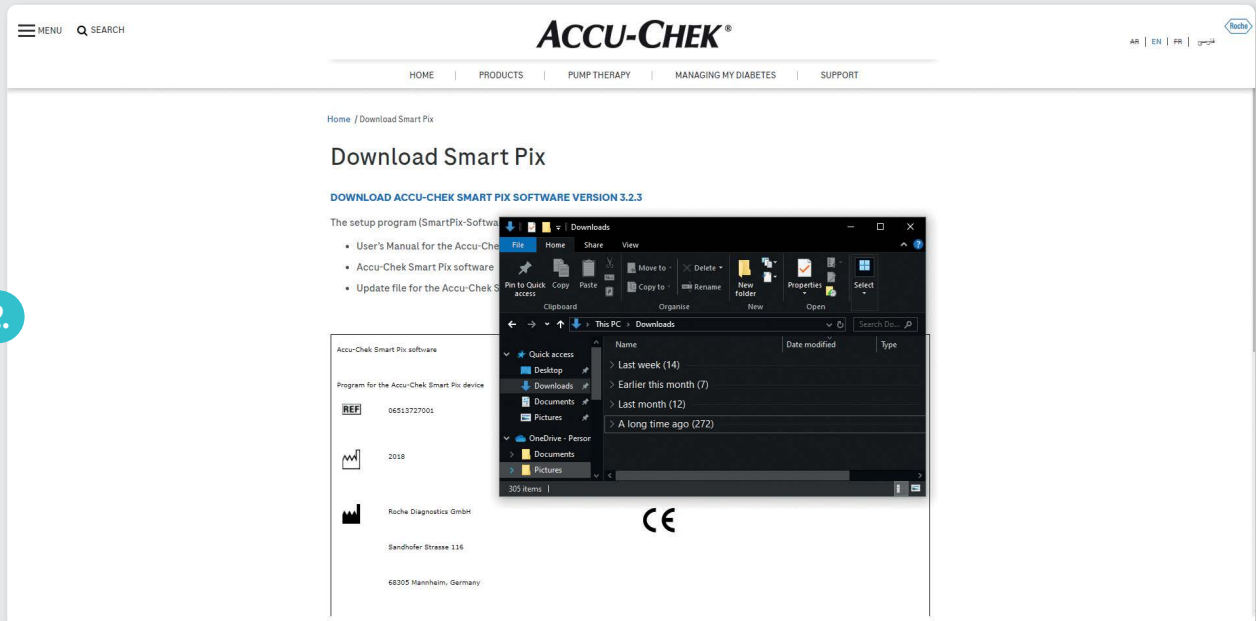
TERMS & ABBREVIATIONS

bG	Blood glucose
blood glucose index (BGI)	Risk indicators for hyperglycemia and hypoglycaemia presented as high blood glucose index (HBGI) and low blood glucose index (LBGI)
glycaemic variability	The degree to which blood glucose fluctuates from high to low
hyperglycaemia	A condition in which the blood contains an abnormally high level of glucose, characteristic of diabetes mellitus
hypoglycaemia	Too low level of glucose in the blood
mean bG	Average blood glucose level, abbreviated MBG
pattern analysis	A systematic approach to identifying glycaemic patterns within SMBG data and taking appropriate action based upon those results
post-prandial glucose (PPG)	Level of glucose in the blood following a meal; also post-meal or after-meal glucose
post-prandial hyperglycaemia	Excessive increases in post-prandial glucose; post-prandial levels above the target range
SD	Standard deviation
SMBG	Self-monitoring of blood glucose; allows people with diabetes to test their blood glucose at home
standard deviation	How distributed data relates to the mean (average); a smaller deviation indicates closely-grouped data nearer to the average; a higher deviation indicates a wide variation in the data with entries that are much higher or lower than the average
structured testing	A planned testing approach that involves SMBG at the right frequency, right times and situations, in order to generate useful information to support optimal therapy decisions

HOW TO INSTALL YOUR SMART PIX SOFTWARE

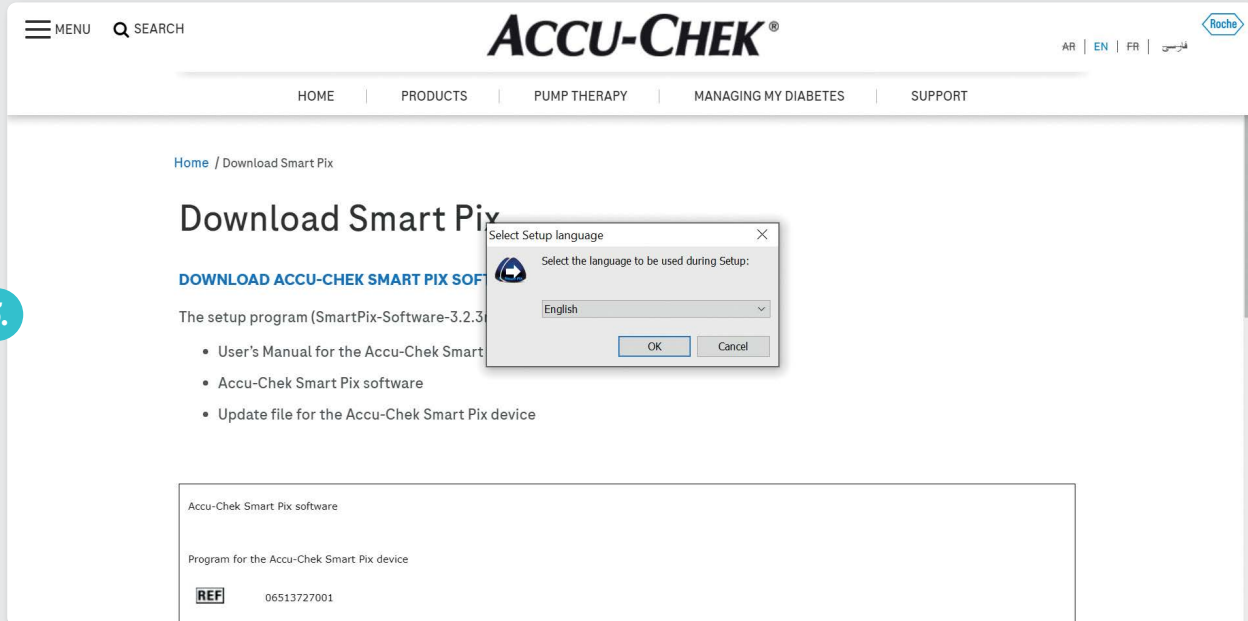


Visit <https://www.rochediabetescaremea.com/en/download-smart-pix> and click on “DOWNLOAD ACCU-CHEK SMART PIX SOFTWARE VERSION 3.2.3”



Choose a destination folder and click “Save” (E.g. Downloads).

3.



Home / Download Smart Pix

Download Smart Pix

DOWNLOAD ACCU-CHEK SMART PIX SOFTWARE

The setup program (SmartPix-Software-3.2.3) includes:

- User's Manual for the Accu-Chek Smart Pix
- Accu-Chek Smart Pix software
- Update file for the Accu-Chek Smart Pix device

Accu-Chek Smart Pix software
Program for the Accu-Chek Smart Pix device
REF 06513727001



Double click on the .exe file and follow the prompts.

4.



Home / Download Smart Pix

Download Smart Pix

DOWNLOAD ACCU-CHEK SMART PIX SOFTWARE

The setup program (SmartPix-Software-3.2.3) includes:

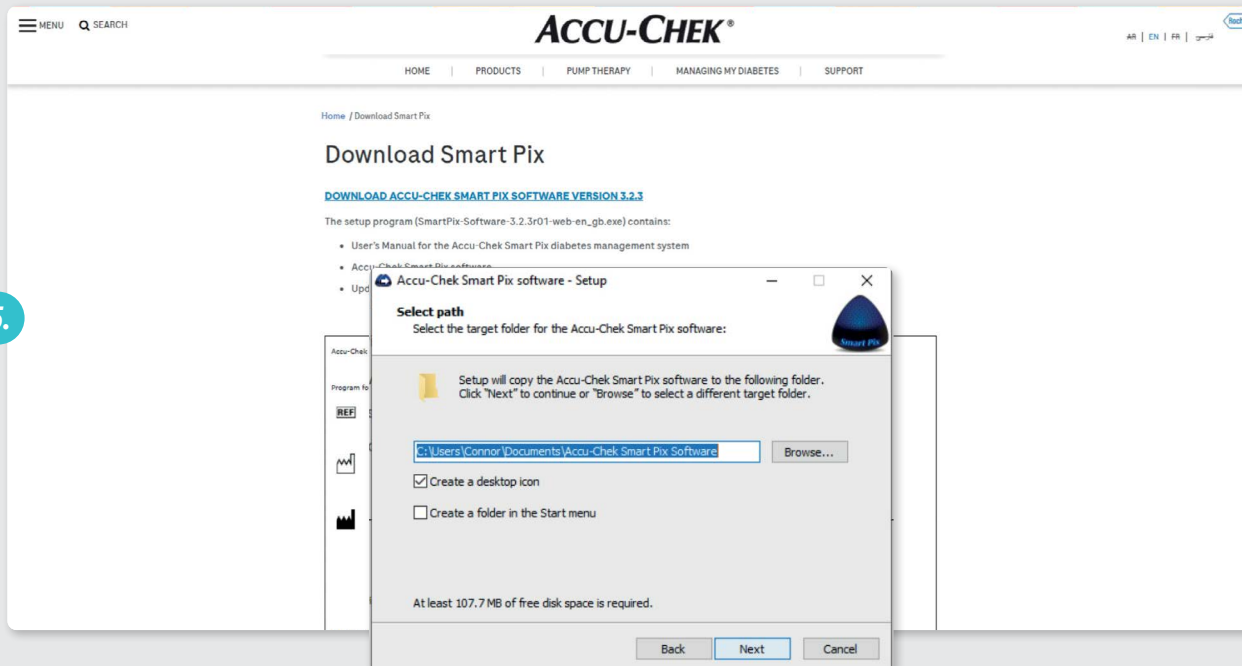
- User's Manual for the Accu-Chek Smart Pix
- Accu-Chek Smart Pix software
- Update file for the Accu-Chek Smart Pix device

Accu-Chek Smart Pix software
Program for the Accu-Chek Smart Pix device
REF 06513727001
2018
Roche Diagnostics GmbH
Sandhofer Strasse 116



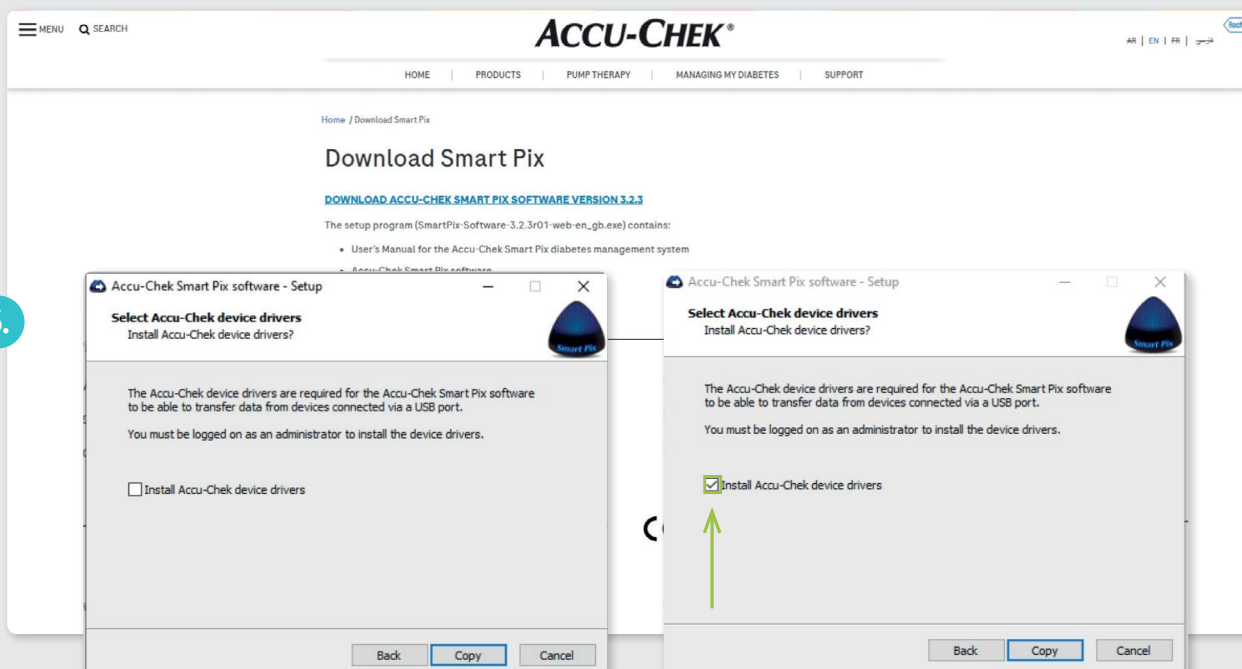
Accept the terms of use.

5.



Click "Next". If you want to add Smart Pix to your Start menu in addition to a desktop icon, please make sure to check the box provided.

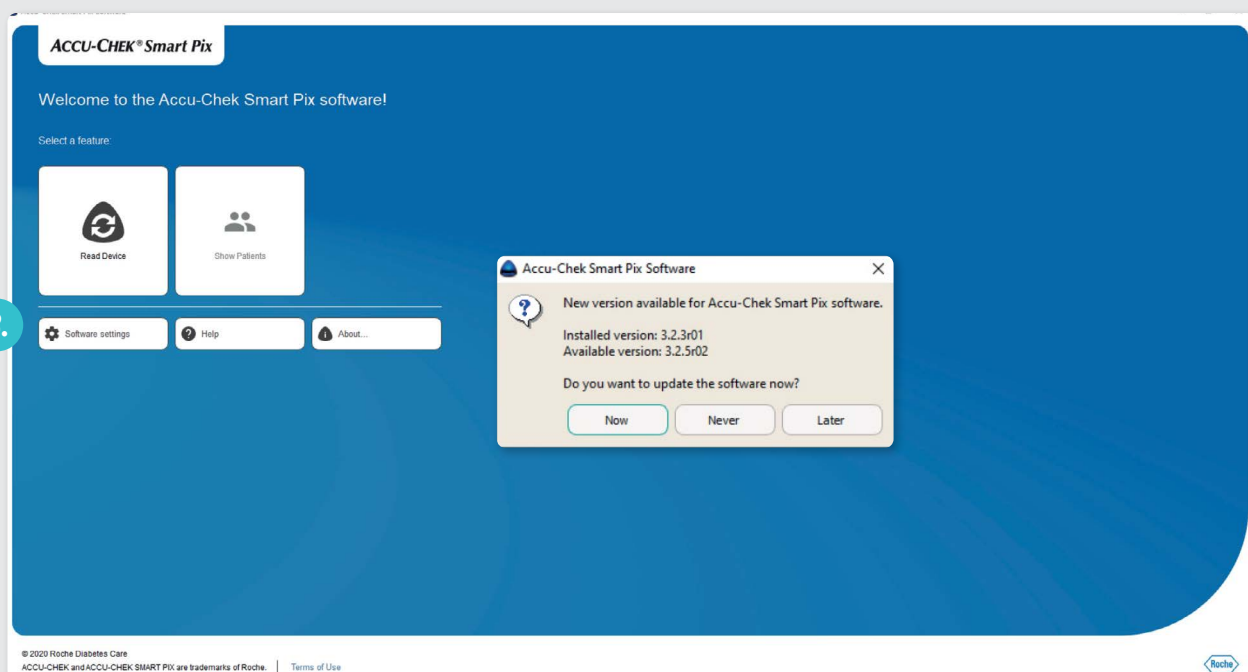
6.



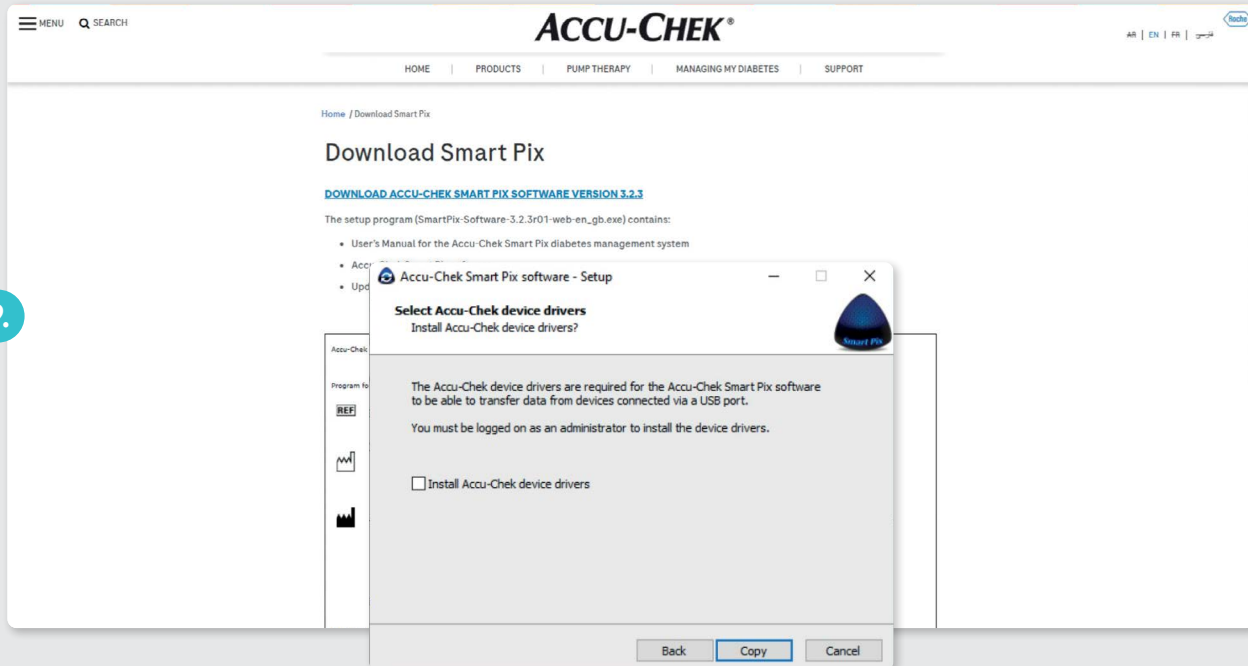
VERY IMPORTANT: Please make sure to check the box to install the Accu-Chek drivers. This will facilitate the communication between the Accu-Chek meter and your PC.



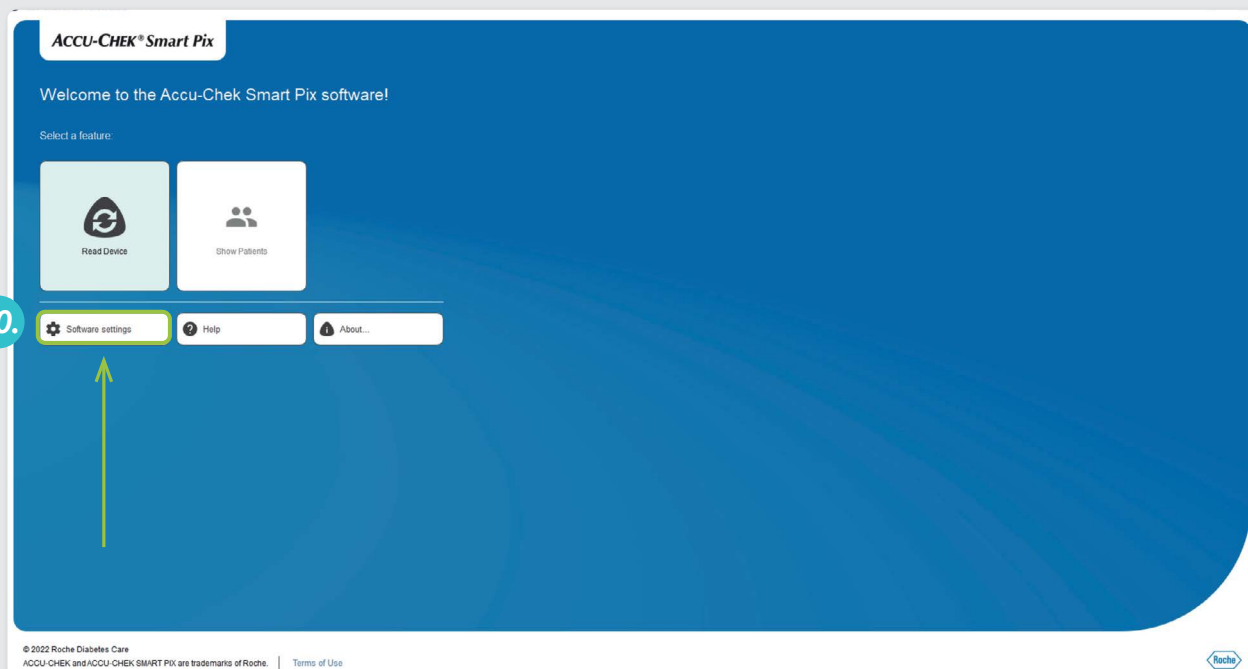
Click "Finish" to complete the installation.



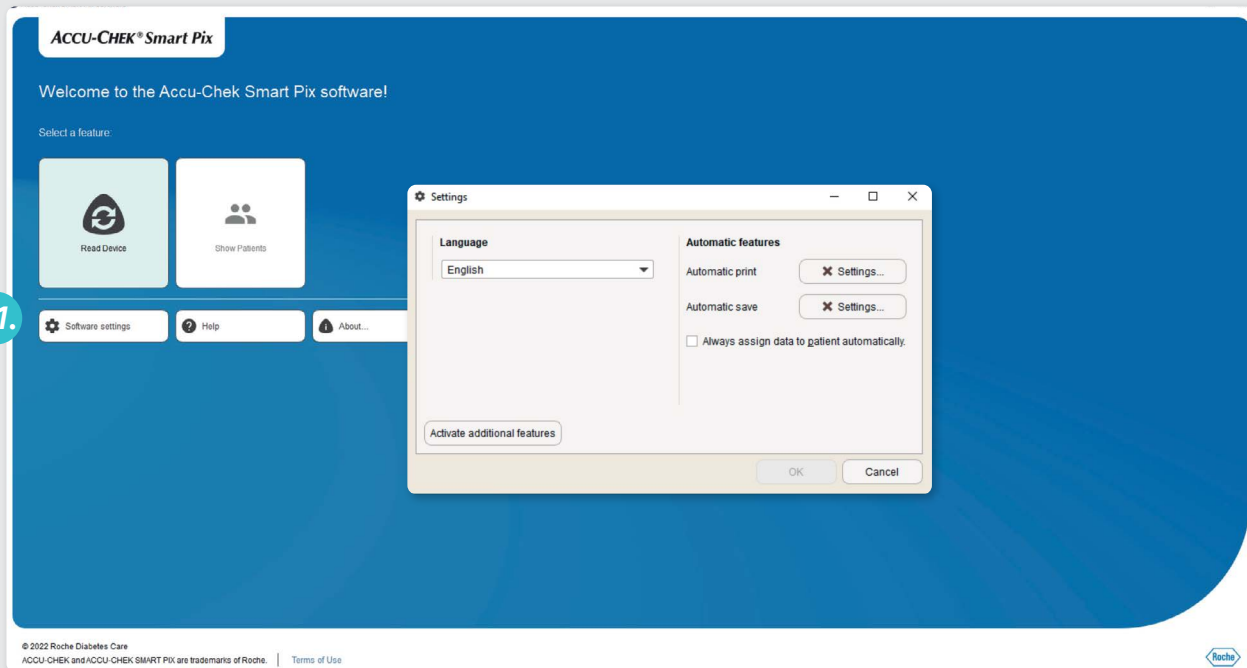
Once launched, the program will ask to upgrade to the latest version. Click "Now".



Check the box to install the drivers.



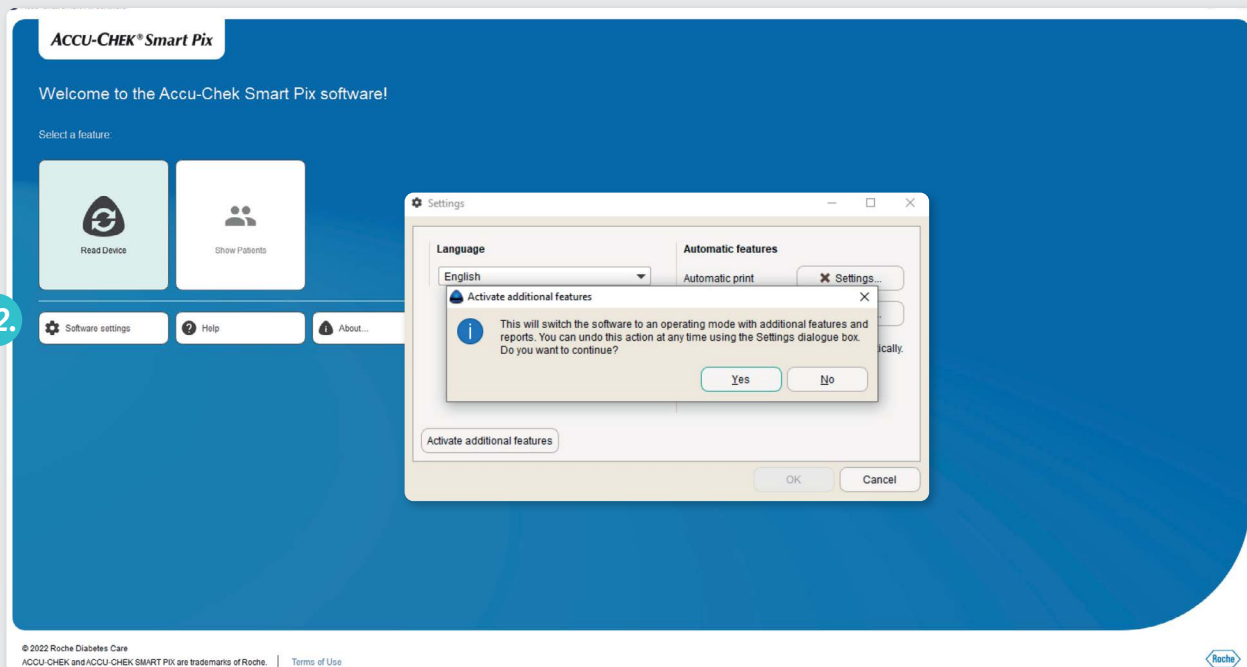
Once the program has launched, click on "Software Settings".



11.



When the "Settings" tab opens, click on "Activate additional features".

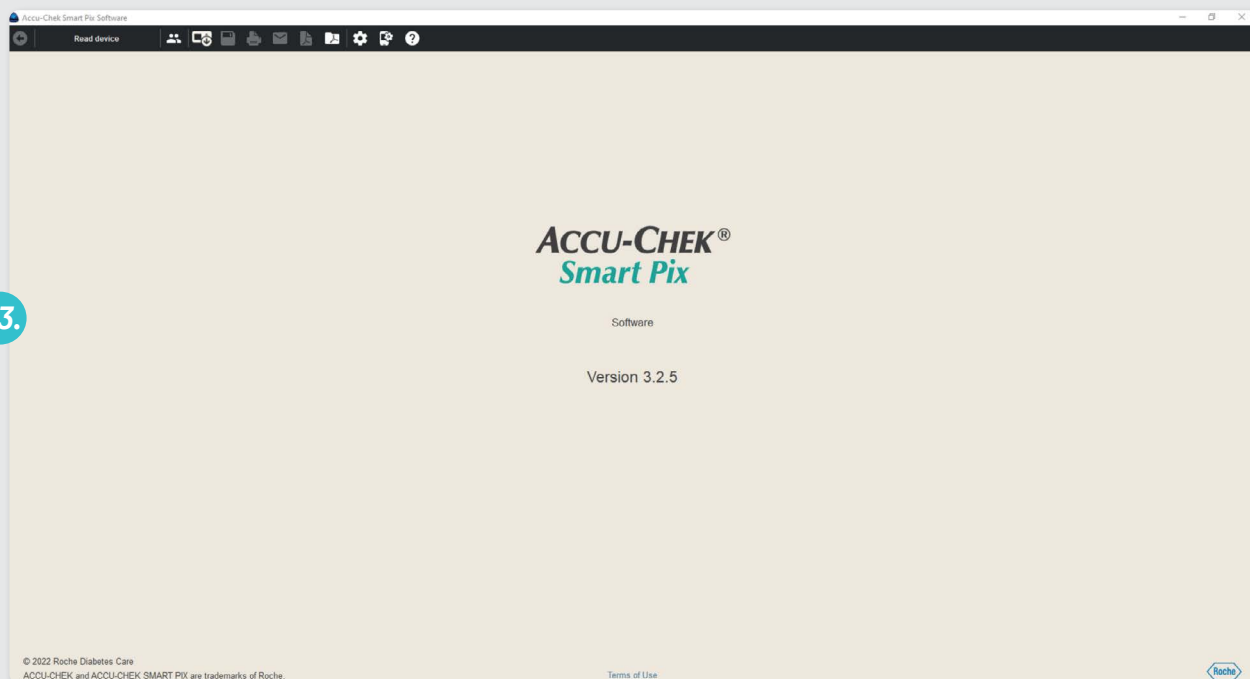


12.



Confirm the switch by clicking "Yes".

13.



The set up is now complete and you can begin using Accu-Chek Smart Pix by connecting an Accu-Chek meter via a USB cable. Click “Read device” in the upper left hand corner and the download will begin.



ACCU-CHEK®

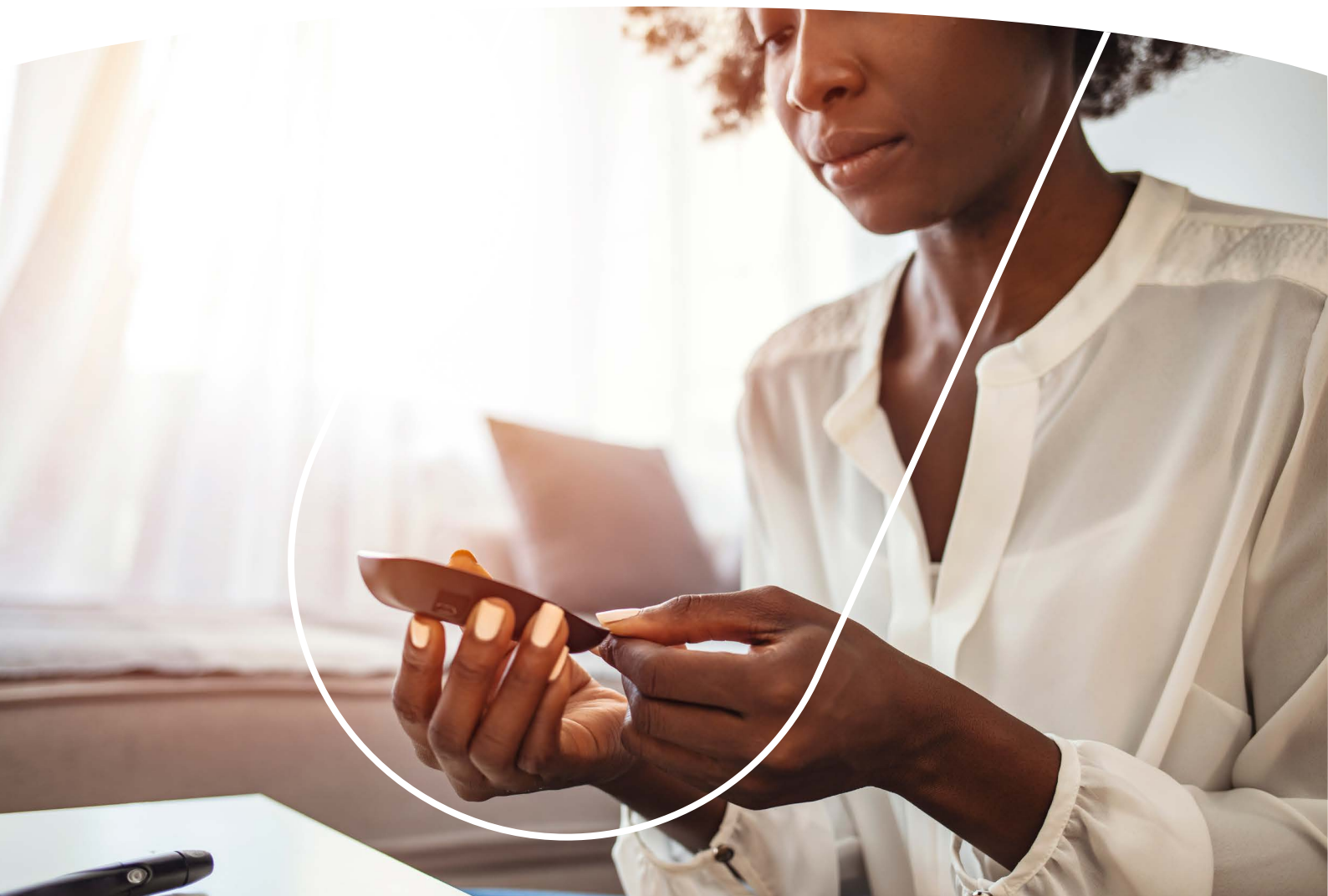
SmartPix

Roche



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NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

