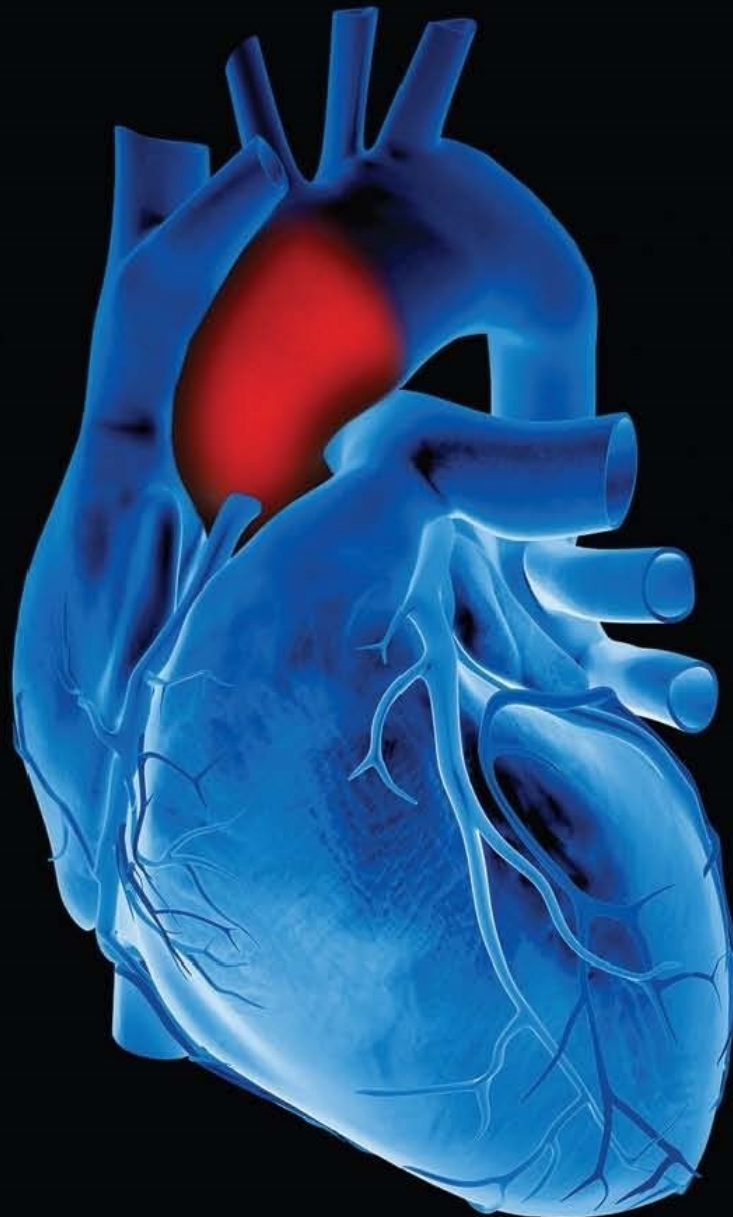




**OPERATOR'S MANUAL**  
**SphygmoCor XCEL System v1 – SD0**



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## Copyright

### SphygmoCor® XCEL

Pulse Wave Analysis Measurement

Pulse Wave Velocity Measurement

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Patents: <http://atcormedical.com/about/intellectual-property/>

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### Disclaimer

This manual has been validated and reviewed for accuracy. The instructions and descriptions this manual contains are accurate for the AtCor Medical product models at the time of this manual's

production. However, succeeding models and manuals are subject to change without notice. AtCor Medical assumes no liability for damages incurred directly or indirectly from errors, omissions or discrepancies between the product and the manual.

This Manual is produced on the assumption that the operator is an experienced user of Windows 10 Operating Systems.

If the operator is not familiar with the Windows environment, please refer to the Windows User Manual or Windows Online Help.

## Trademarks

“SphygmoCor®” is a registered trademark of AtCor Medical Pty Ltd.

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### **Caution**

Federal (USA) law restricts this device to sale by or on the order of a physician

## Introduction

SphygmoCor® XCEL Secure Data Option Software (XCEL SDO) is a version of the XCEL software that provides a number of secure data options. The basic functionality of the software remains unchanged, with the addition of features to allow clinical and research centres to implement a level of data security within their organisation. The associated hardware and accessories are the same as those used in existing SphygmoCor XCEL Systems.

This manual shall be read in conjunction with the SphygmoCor XCEL V1.3 Operator's Manual.

All sections of the SphygmoCor XCEL V1.3 Operator's Manual are applicable, except where stated in this manual, to address differences as a result of the implementation of data security features.

XCEL SDO is only available in English.

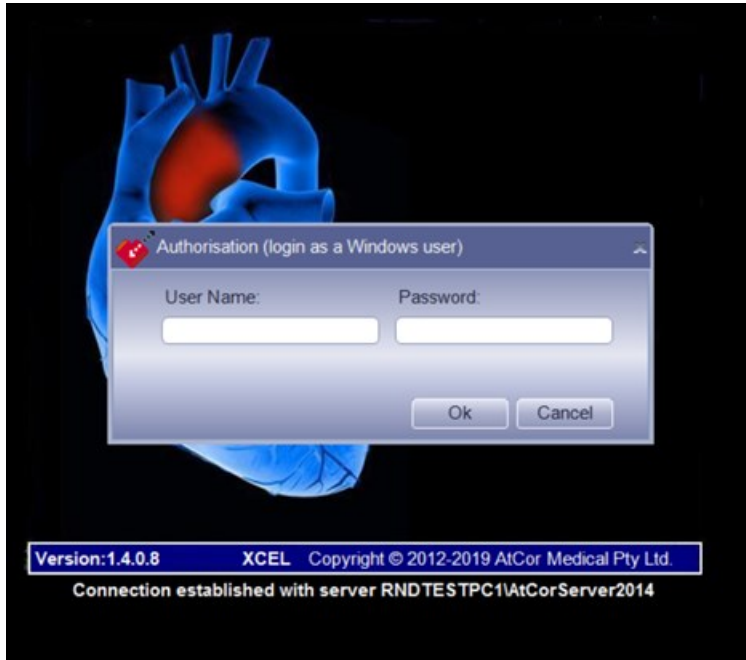
## Guidelines for the System Administrator

1. It is recommended that the User Password be changed at regular intervals.
2. It is recommended that the User should be automatically logged off when the computer is idle for long periods.
3. It is recommended that appropriate data security measures should be taken by the system administrator.



## Actions that require User Name and Password

### 1. Starting XCEL SDO



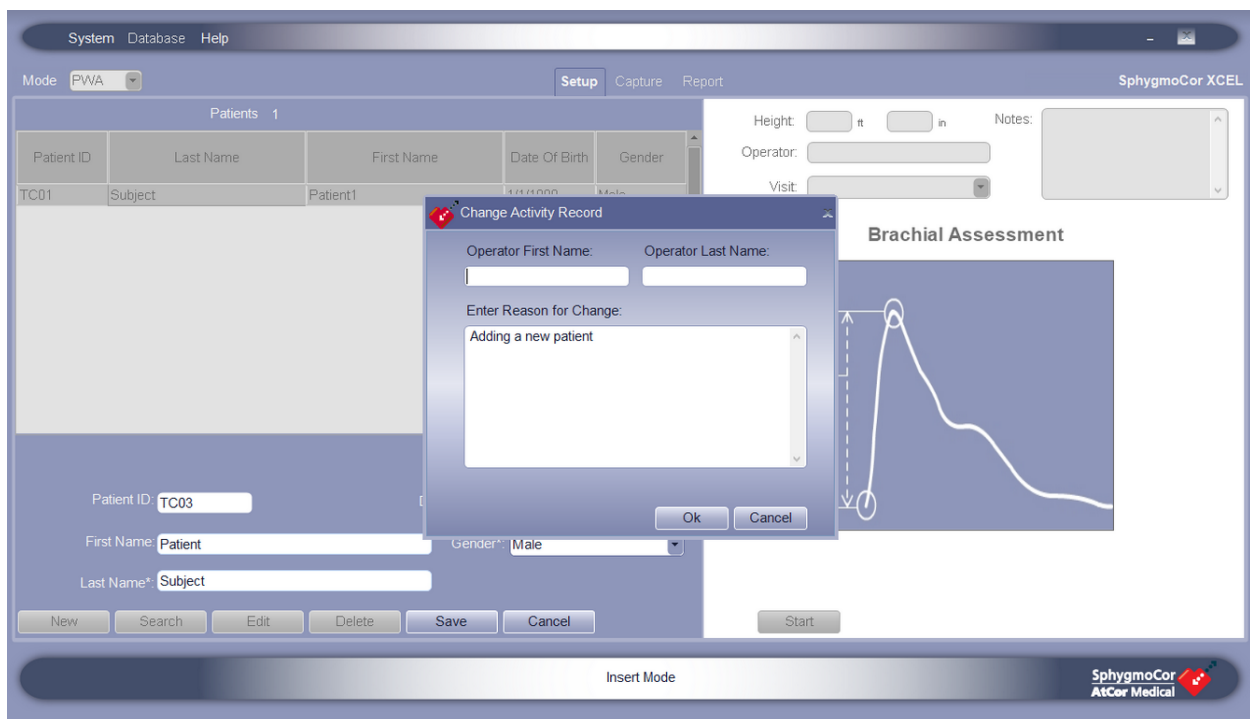
For the purpose of security, the user will be required to enter their User Name and Password every time XCEL SDO is launched.

Note that entering the incorrect authorization details (User Name and/or Password) three consecutive times, will close your XCEL SDO application.

You may restart XCEL SDO, and enter the correct User Name and Password.

## Actions that require Operator First Name, Last Name, and Reason for Change

1. Starting a PWA measurement
2. Starting a PWV measurement
3. Creating or editing a patient
4. Editing an assessment



When prompted, all fields in the Change Activity Record dialog must be completed.

The full name (First Name and Last Name) of the Operator who initiated a new assessment is always shown in the on-screen and printed reports of the assessment as the first “Operator”, regardless of subsequent changes completed by a different Operator(s) on the assessment.

The user may overwrite the given default text in the “Reason for Change” field of the Change Activity Record, if desired, before clicking Ok to proceed with the Change Activity Record.

## Installation

### Prerequisites

1. Installation of the XCEL 1.3 Software Suite
2. Backup of the existing AtCor Database

### Steps

1. Uninstall the XCEL 1.3 software (see Prerequisites section).  
Use the installation media provided with the XCEL 1.3 software.
2. Uninstall any previous installation of the XCEL SDO software.
3. Run the provided SDO setup.exe file, to install the XCEL SDO software.  
Take note of the installation directory.  
See below section "Installation screens", for the expected installation screen sequence.

The following steps are required, ONLY when the XCEL SDO Software is installed for the first time, to install the AtCor SDO database.

4. After the XCEL SDO software is successfully installed, open a Windows Command window.  
In the Windows Task Bar, type "Command Prompt", and select the Command Prompt App.
5. Use the "cd" command (or equivalent) to change the directory, to the installation directory of the XCEL SDO software in step 3.  
E.g. if the installation directory in step 3 was "C:\Atcor\XCEL 1.4", then in the Command Prompt type the command "cd C:\Atcor\XCEL 1.4".
6. Type "Create-Drop-Database.exe -r" in the command line window, then press enter to run the command to install the new AtCor SDO database.

### Warning

Installation step 6 (type "Create-Drop-Database.exe -r" in the command line window, then press enter), will overwrite any existing SDO database and the existing data will be lost. If an existing SDO database exists, ensure it is backed up.

7. When the Available Database Servers dialog is ready, select the target PC name (database server) to install the AtCor SDO database.

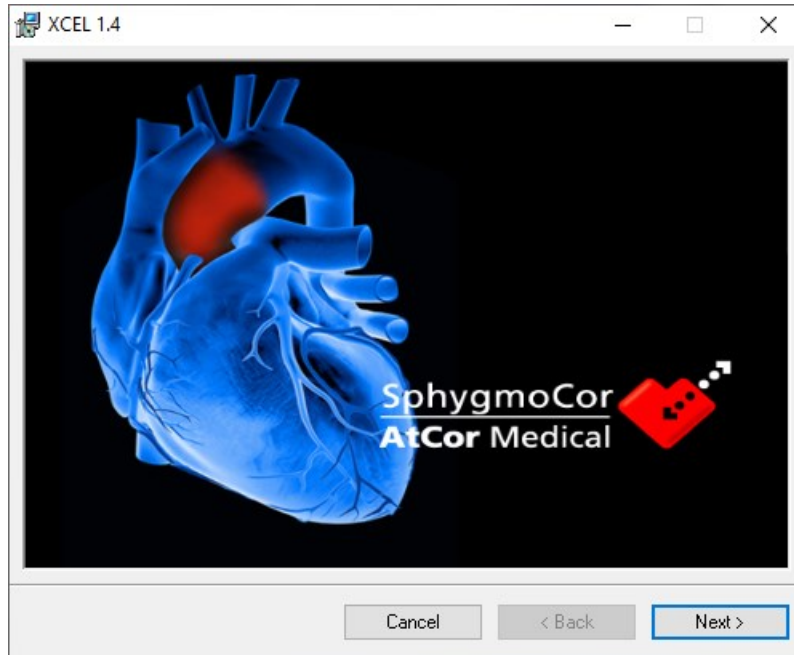




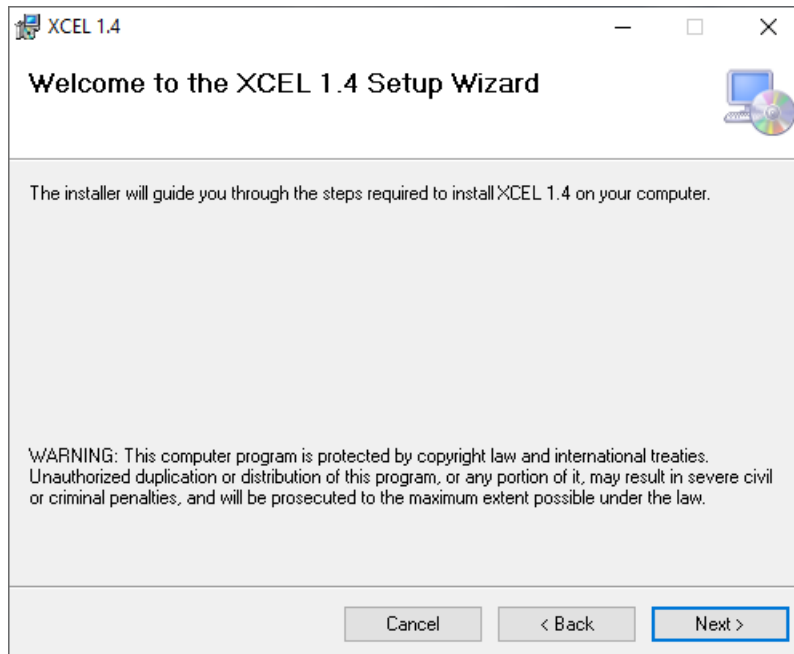
## Installation screens

XCEL SDO Installer takes the user through the below screens when the installer is started.

The initial screen is first displayed.

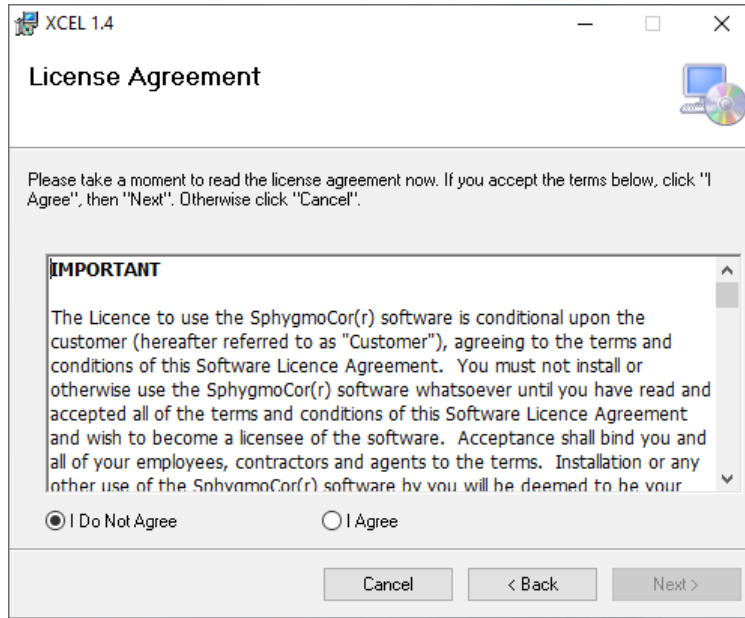


The welcome banner and copyright warning message are displayed.



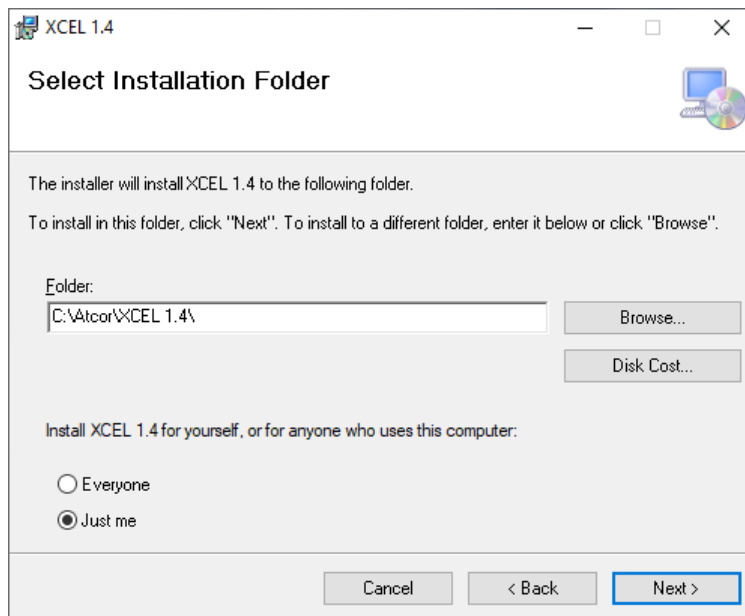
The EULA licence agreement screen is displayed.





The user is then given the opportunity to select the installation directory, and also an option to install the XCEL SDO software for either the particular user or for everyone.

The default installation folder is "C:\AtCor\XCEL 1.4", and the default installation option is "Just me".

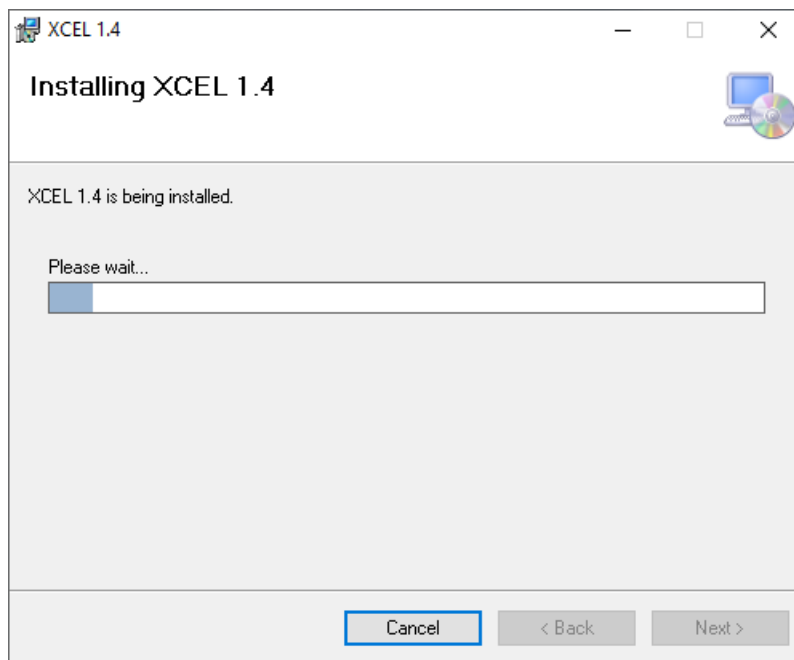


The user shall not use the below directories when installing the XCEL SDO software:

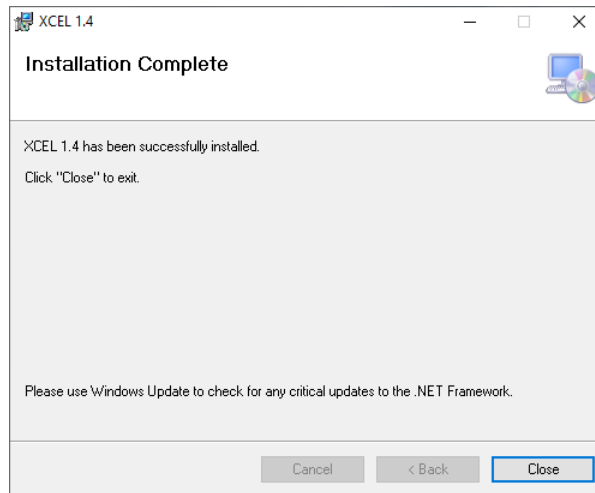
- C:\Program Files\...
- C:\Program Files (x86)\...

- C:\Windows\...
- C:\Users\...
- C:\AtCor\XCEL\...
- A remote disk, e.g. a network drive
- A removable disk
- Root level on the local disk (e.g. C:\)

During the installation, a screen with a progress bar will be displayed to the user, as a feedback of the installation status.

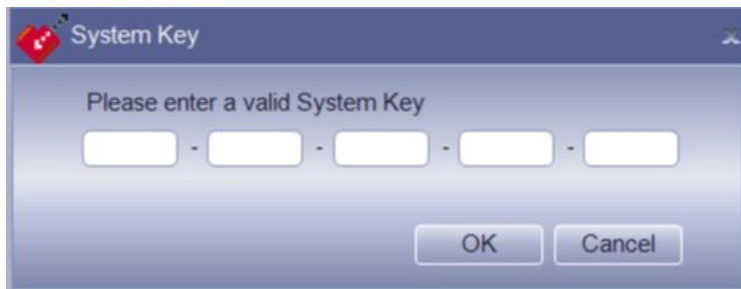


At the end of the installation, a screen will be displayed to confirm that the installation has been completed.



## Launching XCEL SDO

Upon launching XCEL SDO, the user will be prompted to enter the provided System Key. Enter the System Key, and press OK.



1. On the top menu bar click on **System**, then click **Find Module**.
2. The message *Electronic Module Found* shall appear at the bottom of the **Setup** screen indicating that the PC has identified the connection to the SphygmoCor XCEL device.

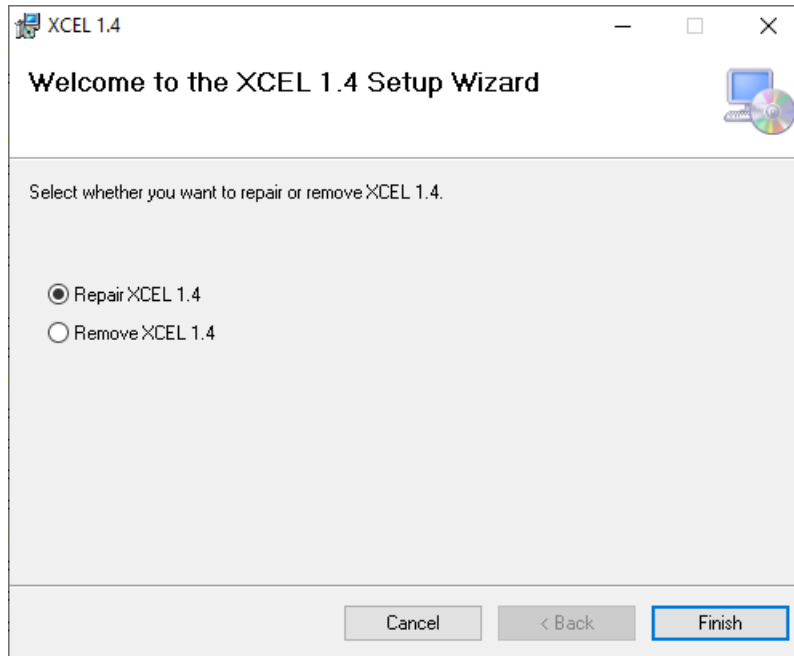
**Note:** If the message does not appear, check the USB connection and confirm that the SphygmoCor XCEL device is powered ON. Re-enter the System Key. If the problem persists, please contact AtCor Medical for technical support.

The SphygmoCor XCEL SDO system is ready.



## Maintenance modes

If XCEL SDO Installer is launched with an existing installation of SphygmoCor XCEL SDO already installed on the computer, the user will have the option to either Repair or Remove the installation.



### Repair Mode

In Repair mode, XCEL SDO Installer will attempt to repair the installation of the previously installed instance. This involves replacing missing files and resolving any incorrect registry entries.

Repair mode will always replace the user's xcel.config file with the one provided on the installation medium. This allows a user to restore their XCEL configuration to default settings including resetting of any password used for the Clinical Trials Option.

### Remove Mode

Remove mode only uninstalls the SphygmoCor XCEL SDO software.



## Simulation Mode

Simulation Mode is not available in the XCEL SDO software.

## Clinical Trials Option

The Clinical Trials Option is permanently enabled.

## Deleting patient or assessment details

The deletion of either patients, or assessments, is not permitted in the XCEL SDO software, the relevant buttons are disabled.

## Database

The database contains the records of patients, and their performed assessments.

The Restore database function is not permitted in the XCEL SDO software.

If during XCEL SDO installation, an existing non XCEL SDO database is available, the software will not allow for database migration or upgrade.

XCEL SDO databases are not backwards compatible with other XCEL versions, i.e. can't be imported back into non SDO XCEL versions.

See Warning in section Installation, Step 6, related to installing a new AtCor SDO database.

## Operating System

It is recommended to install the XCEL SDO software only on machines fitted with Windows 10 Professional.

