

RI Witness™ Work Area

User Manual

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+45 46 79 02 02 | sales@coopersurgical.com | coopersurgical.com

CONTENTS

SECTION 1 – PREFACE	1
SECTION 2 – INTRODUCTION TO RI WITNESS	2
Indication for Use for RI Witness System	2
Related Documents	2
Introduction to RI Witness WorkArea	2
Introduction to the Cryo Module	3
Introduction to the Traceability Module	3
Introduction to the Imaging Module	4
Introduction to the Data Collection Module	5
User Interface Icons	6
SECTION 3 – RI WITNESS WORKAREA BASIC OPERATION	7
How to Switch On	7
Logging In	8
AutoLogon	10
Logging Out	10
How to Shut Down a Work Area	10
SECTION 4 – RI WITNESS WORKAREA SETTINGS	11
WorkArea Status	11
Record Location of Items	12
How to Name a Work Area	13
To Rename the Work Area	13
To Change the Location of a Work Area	14
Windowed Work Area	14
Language and Keyboard Layout	14

CONTENTS

SECTION 5 – WITNESSING IN RI WITNESS WORKAREA 15

The WorkArea Interface	15
Performing A Procedure in RI Witness	16
Beginning a New Cycle in RI Witness	16
Starting a New Procedure	17
Witness Point Confirmation	18
Double Witness Points	18
Question Witness Points	19
Perform a Procedure	20
Unassigned Items	21
Unassigned RFID-Tagged Item Removal	21
Make Unassigned Tag Removal Alarm Sound Continuously	22
Item Mismatch	22
Double Witnessing of Admin Assigns	22
Admin Assign	23
Discards	23
Cycle Summary	24
Embryo Tracking	25
Daily Lists	25
Training Mode	25
Test Mode	26

SECTION 6 – CRYO WITNESSING 27

An Introduction to Cryo Witnessing	27
Scanning Barcodes	27
Legacy Barcodes (Barcodes Created Prior to RI Witness 4.0)	29

SECTION 7 – EMBRYO AND BIOPSY TRACKING 31

An Introduction to Embryo and Biopsy Tracking	31
Initiating Embryo Tracking	31
Assign Embryos	31
Initiating Biopsy Tracking	32
Track Biopsies	33

CONTENTS

Embryo and Biopsy Tracking as Part of a Witness Point	33
Embryo and Biopsy Movement	34
Embryo Transfer Approval Status	35
Thawing	36
Alerts	36

SECTION 8 – IMAGING 38

Exclude Cameras	38
How to View Live Images	38
How to Take a Picture	38
How to Record Video	38
How to Zoom & Pan the Image	39
How to Perform Measurements	39
How to Select Cameras	39
Camera Flipping	40
How to Set the Preset Zoom	40
How to Configure the Foot Pedal/Keyboard	40
How to Select Objectives	40
How to Add Objectives	40
How to Remove Objectives	41
How to Check Objective Calibration	41
Patient Display	41
Use of Saturn Laser Systems with RI Witness	42
How to Access Saturn Laser System Information from a Work Area	42

SECTION 9 – WARRANTY INFORMATION AND LIMITS ON LIABILITY 43

Customer Service Contact Details	44
Contact Details for Customers in the USA	44

Section 1

Preface

1

SECTION 1 – PREFACE

Thank you for choosing RI Witness.

This manual provides all necessary information to use the CooperSurgical, Inc RI Witness WorkArea Software and should be read in conjunction with any manuals provided with other RI Witness hardware or software components that are being used. The system should be operated by trained personnel only. All sections of this manual should be read and understood fully before any operation of the system.

If the operator is unsure of any of the information contained in this manual then they should contact customer service or an appointed representative before attempting to use this equipment.

In no event does CSI assume the liability for any technical or editorial errors of commission, or omission; nor is CSI liable for direct, indirect, incidental, or consequential damages arising out of the use or inability to use this manual.

The information in this manual is current at the time of publication. Our commitment to product improvement requires that we reserve the right to change equipment, procedures and specifications at any time. The latest version of the User Manual can be downloaded from software.research-instruments.com. This RI Witness manual belongs with the RI Witness WorkArea Software and should be passed on with the system if relocated to another clinic.

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Patents – please go to this web page to see the patents that protect this product: www.csipatents.com

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People/person's names used in this document are not actual patients or stories. For illustrative purposes only.



CAUTION: The system should be operated by qualified and trained personnel only.

SECTION 2 – INTRODUCTION TO RI WITNESS

RI Witness uses RFID technology to constantly monitor each working area in the IVF lab for the presence of patient materials and electronically identify them in order to help prevent mix-ups. Barcoded labels are used to track materials as they come in and out of cryopreservation, and to track biopsy samples. RI Witness also includes features that will help save time, allow for increased capture of cycle information and speed up the auditing process.

RI Witness includes three software components: RI Witness WorkArea application, RI Witness Manager application and RI Witness SQL database.

As well as the core electronic identification functions of RI Witness, there are four optional software modules that can be enabled to add extra functionality to the system: Cryo, Traceability, Imaging and Data Collection.

This document covers RI Witness WorkArea. For more information on RI Witness Manager see 6-70-122UM. For more information on the RI Witness database see 6-70-121IT and 6-70-122IT.

Indication for Use for RI Witness System

To identify and track human samples, using RFID technology, through the assisted reproduction (AR) cycle, including cryopreservation and biopsy.

Related Documents

6-70-122UM	RI Witness Manager User Manual
6-70-121IT	RI Witness IT Requirements
6-70-122IT	RI Witness Database & Software Installation Guide
6-70-807UM	RI Witness Embryology Heated Plate User Manual
6-70-854UM	RI Witness Sperm Preparation Reader User Manual
6-70-808UM	RI Witness Admin & Card Reader User Manual

Introduction to RI Witness WorkArea

RI Witness WorkArea is used on tablet or touch-screen computers inside the IVF lab; it connects to one or more RI Witness RFID readers, optionally a barcode scanner and the RI Witness SQL database. It provides the following functions:

- Electronically identify the patient materials (with attached RFID tags or barcoded labels) in the work area.
- Alert the operator immediately if any patient materials are brought together which should not be, e.g. oocyte and sperm from two patients who are not part of the same IVF cycle.
- Record the IVF procedures carried out, with an optional second human witness and optional data collection.
- Monitor the temperature of any attached RI Witness heated readers, e.g. RI Witness Embryology Heated Plate.
- Change the operating parameters of any attached RI devices, e.g. temperature setpoint and calibration, RF tuning, etc.
- Optionally record the initial location and movement of each embryo and biopsy sample, with the added ability to track which individual droplets they have occupied within a dish.

See Figure 2-1 for an example of the RI Witness WorkArea user interface and how the application is used in an IVF work area.

Section 2

Introduction to RI Witness

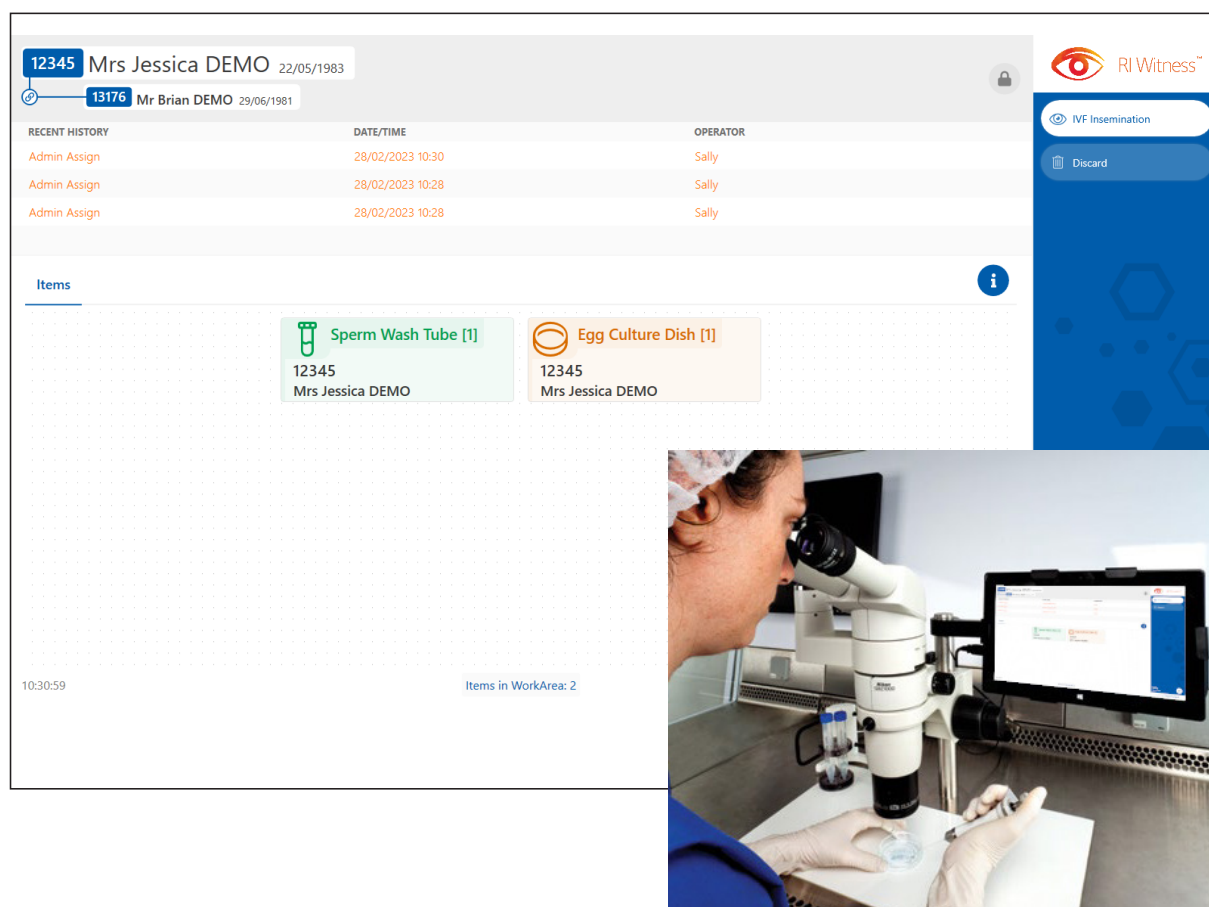


Figure 2-1 For An Example Of The RI Witness WorkArea User Interface And How The Application Is Used In An IVF Work Area.

Introduction to the Cryo Module

The Cryo module extends the security of the RI Witness system by enabling barcodes on printed labels to be scanned. This allows tracking of patient materials as they enter and leave cryo storage, and tracking of Biopsy samples for PGT cycles.

With the Cryo module enabled, the following extra functions are available in RI Witness WorkArea:

- Using a barcode reader attached to the tablet, barcodes printed on cryo carrier or PCR tube labels can be scanned and electronically identified.
- Barcodes can be used in conjunction with RFID tags in electronic witnessing steps.

Introduction to the Traceability Module

It is often necessary for IVF clinics to demonstrate the ability to review what batches of materials have been used for each treatment cycle.

The features of Traceability allow batches of materials to be entered into the RI Witness database as they are delivered to the clinic or prepared for use in the lab, using a barcode scanner. Using the treatment cycle records entered into the RI Witness database, the links between treatment cycles and material batches can be explored to generate various reports, for example a report showing all patients that have been exposed to a material batch, see Figure 2-2.

The Traceability module does not enable any extra functionality in RI Witness WorkArea, see the RI Witness Manager User Manual (6-70-122UM).

Material Type	Received	Lot	Expiry Date	Opened	Closed	Notes
EZ Strip 131	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
EZ Strip 290	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
EZ Tip 135	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
Falcon 10ml Pipette	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
Falcon 14ml Tubes	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
Falcon 2ml Pipette	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
Falcon 5ml Pipette	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
Falcon 5ml Tubes	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
Falcon Conical Tubes	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
Fertisafe Wipes	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
G IVF	01/01/2022	54433	20/03/2022	18/01/2022 08:18	23/01/2022 08:40	
G IVF	01/01/2022	54432	20/03/2022	23/01/2022 08:40	28/01/2022 08:40	
G Mops	01/01/2022	13345	20/03/2022	18/01/2022 08:18	23/01/2022 08:40	
G Mops	01/01/2022	13346/1	20/03/2022	23/01/2022 08:40	28/01/2022 08:40	
G1 Plus	01/01/2022	25643	20/03/2022	23/01/2022 08:40	28/01/2022 08:40	
G1 Plus	01/01/2022	25641	20/03/2022	18/01/2022 08:18	23/01/2022 08:40	
G2 Plus	01/01/2022	13345	20/03/2022	18/01/2022 08:18	23/01/2022 08:40	
G2 Plus	01/01/2022	13346/1	20/03/2022	23/01/2022 08:40	28/01/2022 08:40	
Glass Pipettes	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
Holding Pipette	30/12/2021		22/05/2022	18/01/2022 09:38	29/01/2022 09:38	
HSA	01/01/2022	13345	20/03/2022	18/01/2022 08:18	23/01/2022 08:40	
HSA	01/01/2022	13346/1	20/03/2022	23/01/2022 08:40	28/01/2022 08:40	
Hyase	01/01/2022	25643	20/03/2022	23/01/2022 08:40	28/01/2022 08:40	
Hyase	01/01/2022	25641	20/03/2022	18/01/2022 08:18	23/01/2022 08:40	

Figure 2-2 RI Witness Manager Traceability Report

Introduction to the Imaging Module

The features of Imaging enable images and videos to be captured from every microscope equipped with a camera, throughout the treatment cycle, in real time. All the latest information on a cycle can be accessed immediately from any networked computer. Images can also be streamed to the embryo transfer room to show the patient prior to embryo transfer, see Figure 2-3.

The Imaging module enables compatibility between RI Witness WorkArea and the RI Integra 3™ micro-manipulator.

With the Imaging module enabled, the following extra functions are available in RI Witness WorkArea:



Figure 2-3 Example Of Patient View Shown In Embryo Room

Section 2

Introduction to RI Witness

- Show the live image from the microscope camera, on a monitor in the work area connected to the computer
- Capture images and videos from the microscope camera, store them in a network location and relate them to the active treatment cycle in the RI Witness database
- Capture images and videos using the controls on the RI Integra 3 micro-manipulator
- Show the live (or paused) image from the microscope camera, plus the electronic identity of the patient materials in the work area, on a monitor in the embryo transfer room

Introduction to the Data Collection Module

Hand-written notes are often taken whilst performing laboratory procedures, for example embryo scores and sperm volumes may be recorded on a paper sheet and later manually transcribed into a fertility database.

The features of Data Collection allow electronic data sheets to be designed in RI Witness Manager and then filled out in the laboratory using the tablet/touch-screen computer running RI Witness WorkArea. See Figure 2-4. Data entry may also be performed in RI Witness Manager.

With the Data Collection module enabled, the following extra functions are available in RI Witness WorkArea:

- Fill out electronic data sheets, recording data for the current treatment cycle, using the touchscreen
- See a customised cycle summary sheet

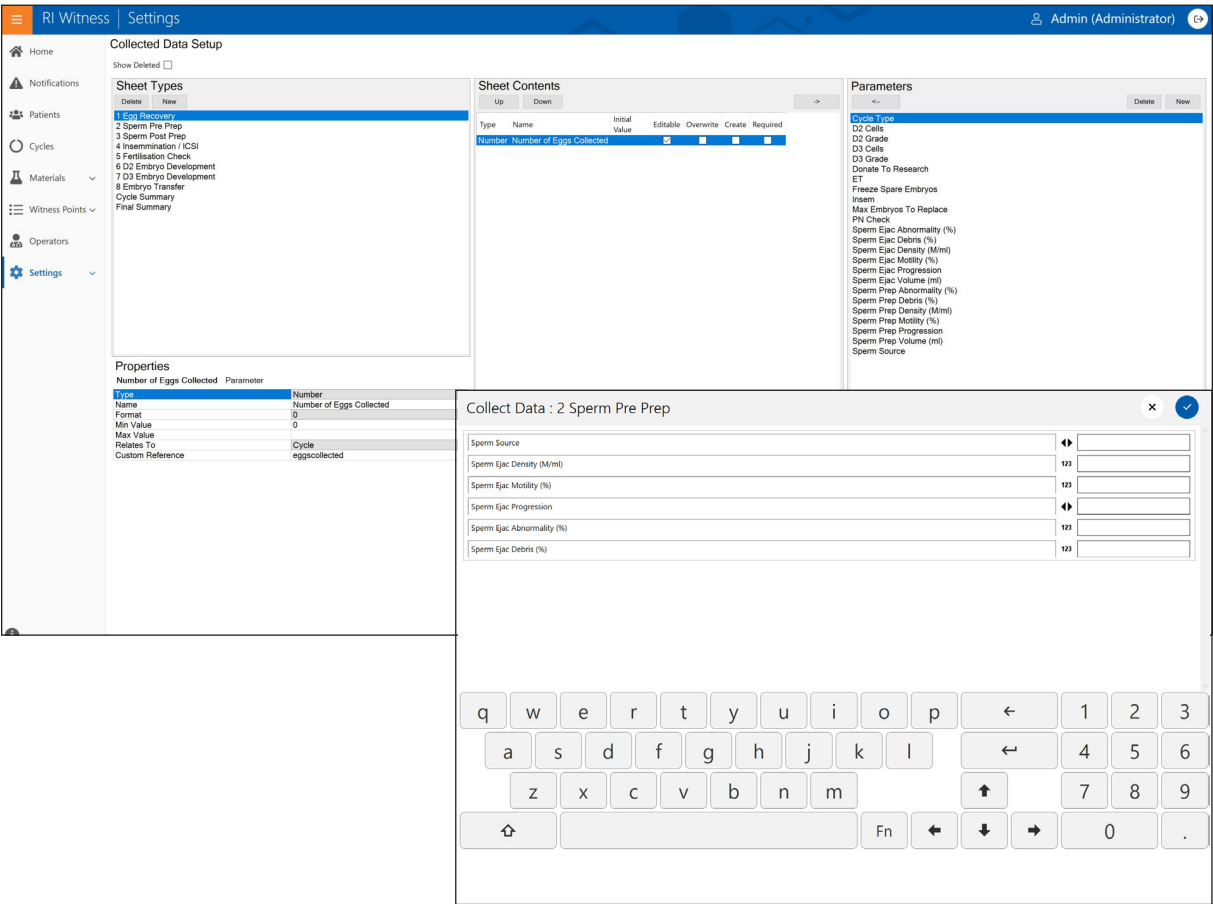
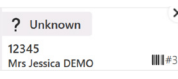
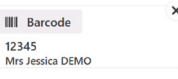
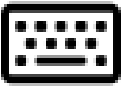


Figure 2-4 Lower: Data Entry Using RI Witness WorkArea
Upper: Data Sheet Design Using RI Witness Manager

User Interface Icons

Icon	Meaning
	Confirm
	Close Window / Cancel
	Patient Unknown Choose Patient
	Patient Identity Can be Changed
	Patient Details Locked
	Unassigned RFID Tag
	Unassigned Barcode
	Legacy Barcode

Icon	Meaning
	Biopsy/Embryo Assigned to Item
	WorkArea Status
	Scan Barcode
	Onscreen Keyboard
	Take Image
	Record Video
	Stop Video Recording

Section 3

RI Witness WorkArea Basic Operation

SECTION 3 – RI WITNESS WORKAREA BASIC OPERATION

RI Witness uses one or more readers to monitor RFID tagged containers in a work area.

The WorkArea interface is presented on a touch screen. See Figure 3-1. The operator uses the touchscreen to log in and select Witness Points.



Figure 3-1 The RI Witness WorkArea Interface Is Presented On A Touchscreen

How to Switch On

Keep the RI Witness computers and work areas switched on to keep the heating and monitoring constant.

If a heated RI Witness work area, has been switched off, allow 45 minutes for the work area to return to the required temperature. Check there is power at the wall socket, and tablet (or PC and touchscreen).

Check the work area temperature calibration before commencing work. See the RI Witness Embryology Heated Plate User Manual (6-70-807UM).

Logging In

The RI Witness software may be opened automatically when the computer is started. If not, double click the RI Witness WorkArea desktop icon. 

To login either press Login then users name, or scan the operator ID tag and enter the 4 digit PIN if requested.

Initially the user is presented with a list of all operators, with a Filter option available, for when there are a large number of operators.

Pressing the Filter button will present the user with a list of filters, which is based on the first letter of the operators' names.

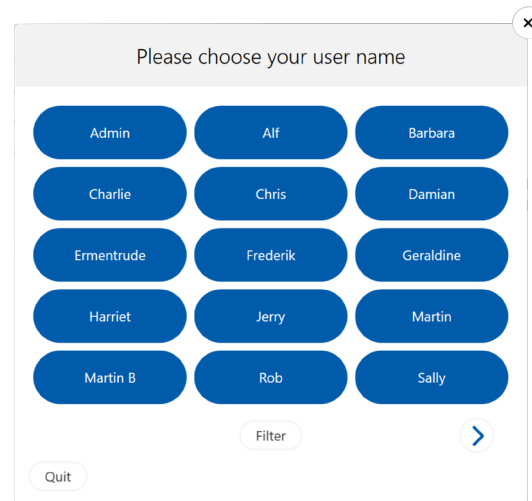


Figure 3-2 Choose A User Name

Pressing any of the Filters will then display all operators associated with that filter, pressing the name will then continue with the normal login/PIN process.

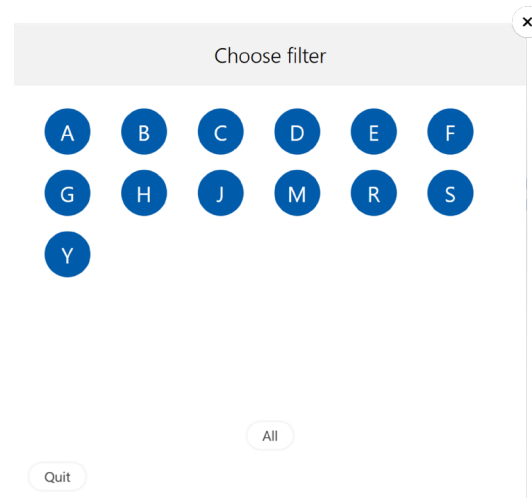


Figure 3-3 Choose Filter

Section 3

Press All to return the list of all operators.

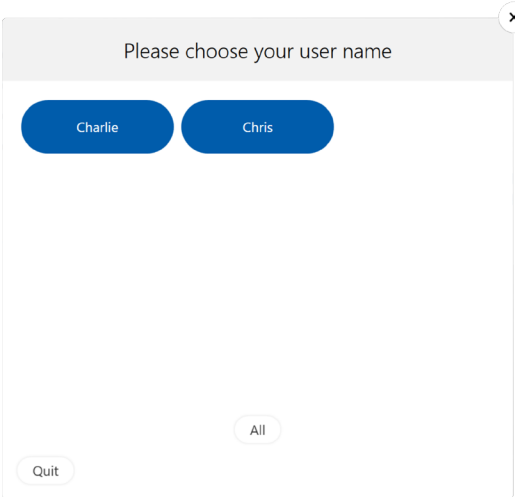


Figure 3-4 Operators Associated With Filter

To change a PIN, press Login then users name. Before entering the PIN press the Change PIN button. The Enter PIN window will appear, see Figure 3-5. Enter the current PIN in the PIN box. Next enter the new PIN into the first New PIN box, then re-enter it in the second New PIN box to confirm it. Press OK. If the PIN has successfully changed the user will be logged into WorkArea.

To assign an ID tag to a user, press Login then the user name. Before entering the PIN press the Assign ID Tag button. The Assign ID Tag window will appear, see Figure 3-6. Enter the PIN into the PIN box then place the ID tag required onto/ against the RFID reader. A message will appear to confirm that the tag has been scanned. The tag can then be removed. Press OK. If the tag has been assigned successfully the user will be logged into WorkArea.

Note: If a tag assigned was previously assigned to another operator, it will be unassigned from them and assigned to a new user only once the OK button is pressed.

To login to WorkArea using an assigned ID tag, simply place it onto/against the RFID reader.

Note: No other operator should be logged in when doing this.

As soon as the tag is read the user will be logged in automatically and the tag can then be removed.

It is possible, through Witness Manager, to also require Operators to enter their PIN after scanning their ID tag in order to log in to WorkArea. This is controlled by ticking or unticking the 'Require PIN on login with ID tag' setting on the General Settings page, see Figure 3-7.

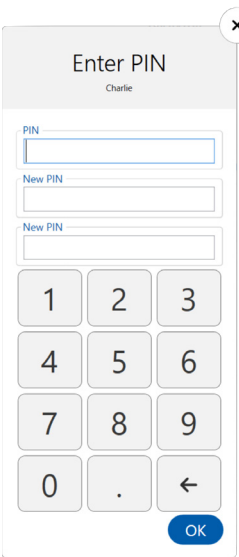


Figure 3-5 Change Pin

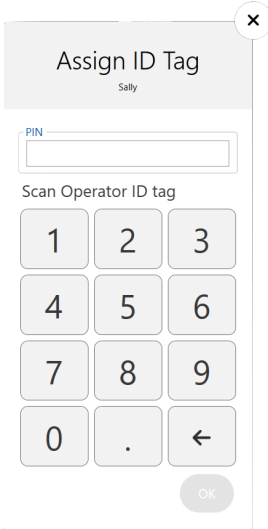


Figure 3-6 Assign ID Tag

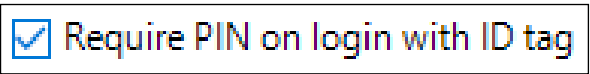


Figure 3-7 Require PIN Setting

AutoLogon

RI Witness WorkArea can be used to make the work area computer automatically log in to Windows when it is turned on. From the WorkArea status screen press WorkArea Settings then AutoLogon. The Windows username and password can then be set up to automatically log on when the computer starts up.

1. Click the WorkArea Status icon ⓘ
2. Click WorkArea Settings
3. Click AutoLogon
4. Click Yes to the user Account Control message
5. Enter the details required (contact IT department if unsure)
6. Click Save to Registry
7. Tick AutoLogon
8. Click the close window icon ✕

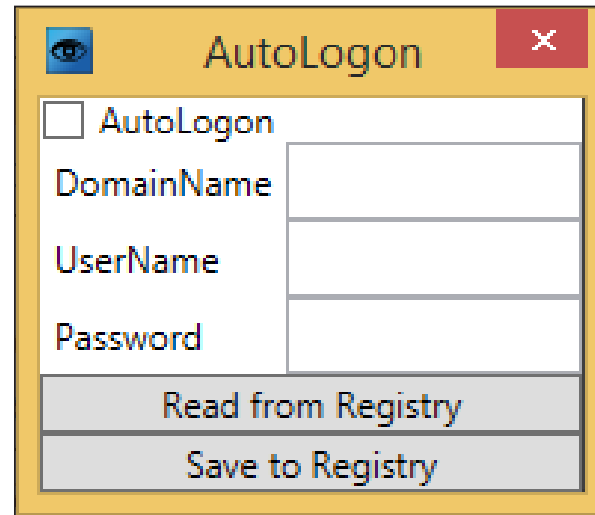


Figure 3-8 AutoLogon

Logging Out

Log out of the work area when procedures are complete by pressing the username in the bottom right corner, then the cancel icon ✕.

An automatic logout may be programmed after a period of inactivity. This is set for all work areas in RI Witness Manager General Settings or can be set for just the current work area through the WorkArea Admin Settings.

1. In RI Witness WorkArea click the WorkArea Status icon ⓘ
2. Click WorkArea Settings
3. Click Admin Settings
4. Select number of seconds, using the plus and minus keys. See Figure 3-9
5. Click the close icon ✕ to save and close the window

How to Shut Down a Work Area

Do not switch off any RI hardware whilst the WorkArea software is running. To log out, select the user name, and then select Quit in the user name window. The system will then shut down.

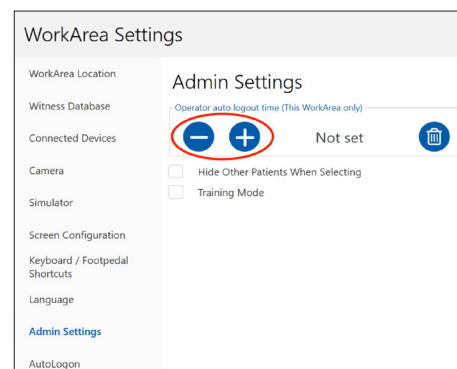


Figure 3-9 Admin Settings

Section 4

SECTION 4 – RI WITNESS WORKAREA SETTINGS

WorkArea Status

The WorkArea status screen is displayed when the system first starts up, the information icon is pressed or the warning triangle is pressed.

WorkArea status not only shows the current state and information about the system it is also the screen that has access to the WorkArea Settings. WorkArea Settings also has access to an onscreen keyboard (press the keyboard icon bottom right) to make interaction with touch screens easier.

To change the various settings that relate to the RI Witness Work area press the WorkArea Settings button.

1. **WorkArea Location.** On initial setup a WorkArea location must be chosen, this may be altered by Admin users. Press 'Rename' to rename the current location or 'Change Location' to change the location of the work area to a name that is already in existence
2. **Witness Database.** Allows the user to a view or alter database settings
3. **Connected Devices.** Shows the RI devices currently connected to the RI Witness system and allows the device settings to be altered and device details, such as Serial Number and Firmware Version, to be viewed. Note: some devices do not store Serial Number and/or Firmware Version electronically, in which case "--" will be shown
4. **Camera.** Shows the currently connected camera and allows the user to choose another image device. Also allows the image to be flipped horizontally and vertically
5. **Simulator.** Allows the user to turn the Saturn 5 simulator on and off
6. **Screen Configuration.** Allows configuration of the touch screen and also the selection of display modes for multiple monitor RI Witness Work Area set ups. WorkArea display scaling can also be configured here.
7. **Keyboard.** Allows the user to set up and amend the various keyboard and foot pedal configurations that can be achieved
8. **Language.** Allows the displayed language and also the on screen keyboard configuration to be altered
9. **Admin Settings.** These settings require an Admin to be logged in at the work area, they control data privacy, operator timed log out and also give the ability to place the system in Training Mode or Test Mode. When there are unpublished Witness Point Diagram changes and Training Mode is enabled, the "Test Mode" option will be available
10. **AutoLogon.** Allows the setting of AutoLogon for the system enabling RI Witness to start when the computer is switched on

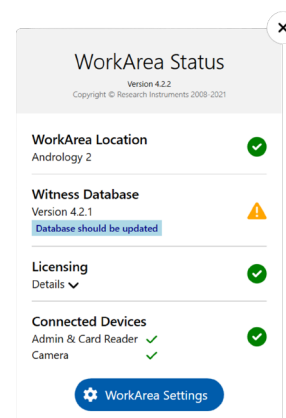


Figure 4-1 WorkArea Status

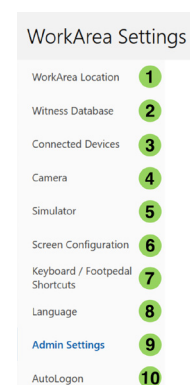


Figure 4-2 WorkArea Settings

Record Location of Items

At each work area, a location name can be set through the WorkArea Settings window that uniquely identifies that work area. In RI Witness Manager a list of all the configured locations can be viewed.

When a tag is placed or a barcode scanned into a work area, the location will be stored with the item's details; then when the items associated with a patient are displayed, their last known location will also be displayed. See Figure 4-3.

The screenshot displays the 'RI Witness | Patients' interface. The top navigation bar includes 'Home', 'Choose Patient', 'New Patient', and 'Merge Patient'. The main content area shows patient details for '12345 Mrs Jessica DEMO' (DOB: 22/05/1983) and '13176 Mr Brian DEMO' (DOB: 29/06/1981). Below this, there are buttons for 'Label Printing', 'Barcode Printing', and 'Fingerprint'. The 'Items' tab is selected, showing a list of items with columns: Item, Last seen, Location, Operator, and Embryo #. The list includes various items like 'Embryo Culture Dish', 'Cryo Dish', 'Embryo Transfer Dish', 'Patient ID', 'Inseminated Dish', and several barcodes, each with a timestamp, location, and operator.

Item	Last seen	Location	Operator	Embryo #
Embryo Culture Dish [2]	25/01/2022 13:16	Cryo	Yujin	
Cryo Dish [1]	25/01/2022 13:16	Cryo	Yujin	
Barcode [015628299]	25/01/2022 13:10		Yujin	
Embryo Transfer Dish [1]	24/01/2022 10:21	Embryology 1	Admin	
Patient ID [1]	24/01/2022 10:20	Embryology 1	Admin	
Embryo Culture Dish [1]	23/01/2022 12:10	Embryology 1	Chris	
Embryo Culture Dish [3]	23/01/2022 12:10	Embryology 1	Chris	
Inseminated Dish [1]	21/01/2022 09:05	Embryology 2	Emily	
Barcode [015628302]			Admin	
Barcode [015628303]			Admin	
Barcode [015628304]			Admin	
Barcode [01266115326000]			Admin	
Barcode [01266115326001]			Admin	

Figure 4-3 RI Witness Manager Patient Tag Details

The name of each work area can be configured initially by any user. An administrator can modify any location name. A list of locations can be seen in RI Witness Manager from where they can be disabled and enabled. Disabling a location will cause the related work area's name to be reset to Unknown so it can then be renamed by a user. Any disabled location can be re-enabled. This will set its name back to the previous value.

Section 4

RI Witness Workarea Settings

How to Name a Work Area

When the work area is started initially the user will be required to give the work area location a name. Any user can initially set the name of a work area. A red cross icon will appear as well as the System Information icon as a warning triangle.

1. Click the Warning Triangle to open WorkArea Status
2. Click WorkArea Settings
3. Click WorkArea Location
4. Enter a location description/name
5. Click the Save Button

When a witness point is completed, the location at which it took place will be recorded.

Note: PCs connected to the RI Witness database must have unique computer names. Please check with the IT department.

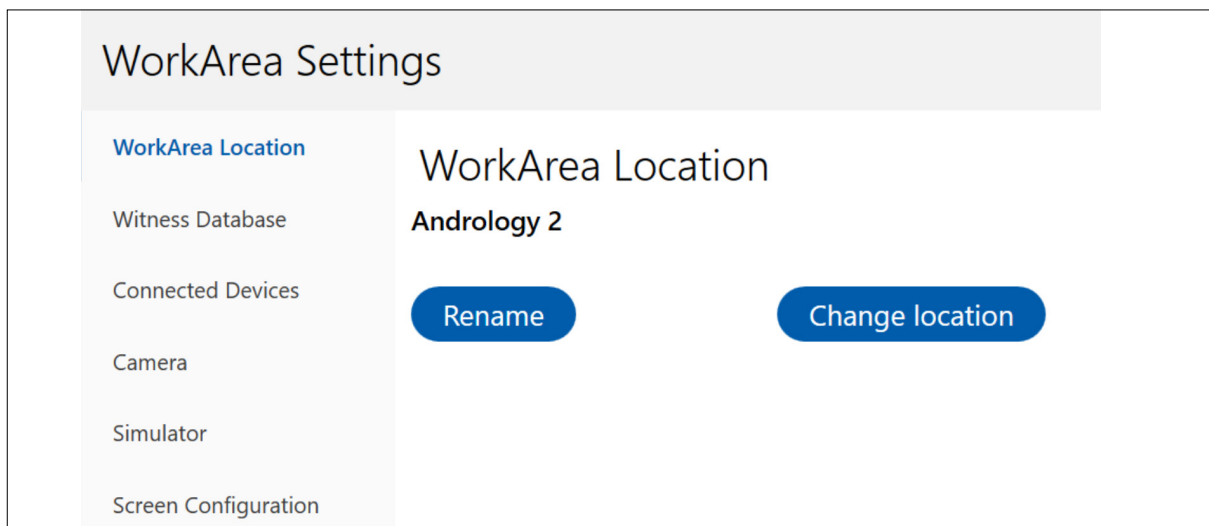


Figure 4-4 WorkArea Location

To Rename the Work Area

1. Log in as an Admin user
2. Open WorkArea Status 
3. Click WorkArea Settings
4. Click WorkArea Location
5. Click Rename
6. Type the name of the work area using the on-screen keyboard
7. Click the Save Button

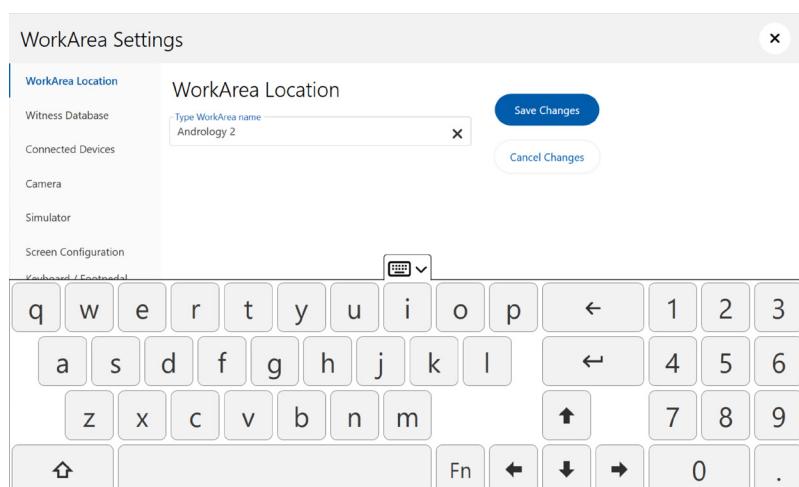


Figure 4-5 Renaming The Workstation

To Change the Location of a Work Area

If a computer/tablet has to be replaced or moved to a different location that has already been configured, then the change location function should be used.

1. Log in as an Admin user
2. Open WorkArea Status ⓘ
3. Click WorkArea Settings
4. Click WorkArea Location
5. Click Change Location
6. Choose the location required from the list or click Create New Location to set another location name
7. Click the Save Button to accept the change

Windowed Work Area

For admin stations with admin readers, the WorkArea application can be windowed to allow easy access to the tag reading functionality.

1. Open WorkArea Status ⓘ
2. Click WorkArea Setting
3. Click Screen Configuration
4. Tick Windowed WorkArea
5. Click the Save Button
6. If there are multiple screens set up, the work area will now revert to one single work area screen

Language and Keyboard Layout

RI Witness offers a range of languages and onscreen keyboard styles.

1. Open WorkArea Status ⓘ
2. Click WorkArea Setting
3. Click Language
4. Select language and keyboard format from the drop down lists. See Figure 4-6
5. Click the close icon ✕ to save and close the window

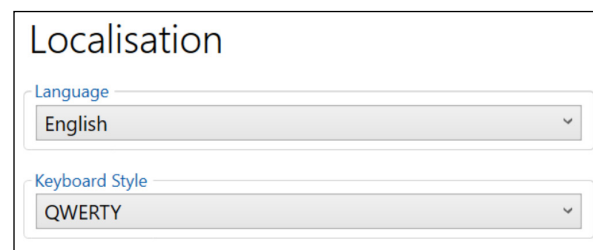


Figure 4-6 Language Selection

Section 5

Witnessing in RI Witness WorkArea

SECTION 5 – WITNESSING IN RI WITNESS WORKAREA

The WorkArea Interface

The WorkArea interface screen is divided into 7 regions. See Figure 5-1.

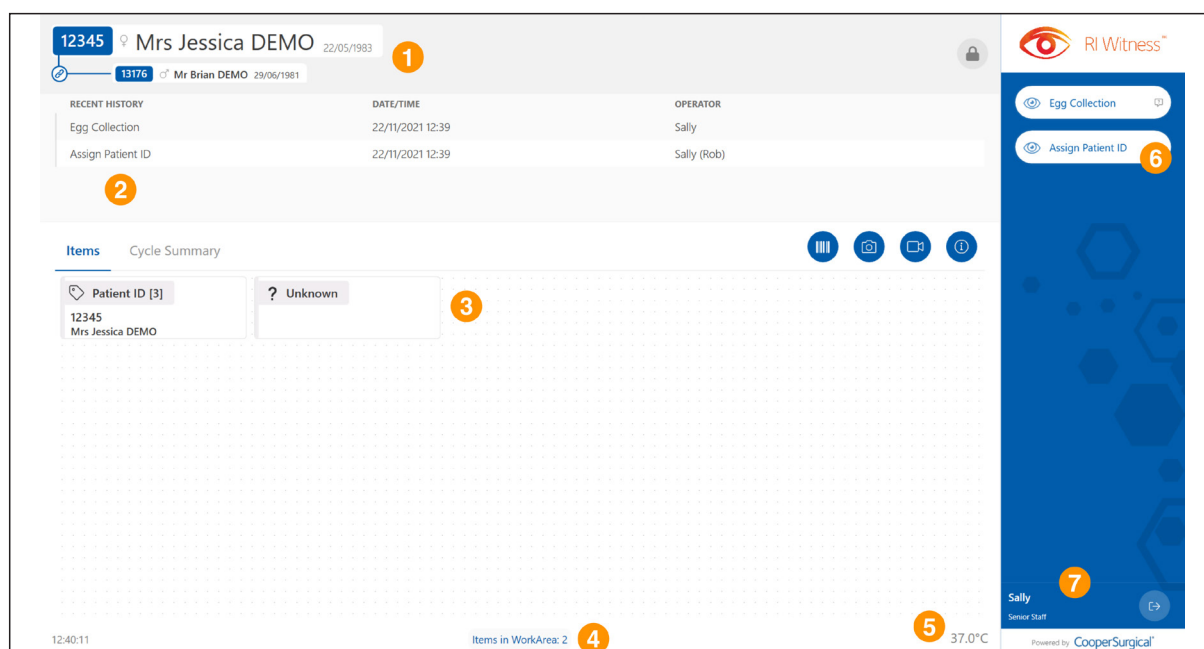


Figure 5-1 The WorkArea Interface

- 1. Current patient.** This region shows the current patient name, date of birth and ID. When items from both partners are present the name shown will be the female patient. The partner's name will appear in brackets
- 2. Recent history.** The recent history region presents the four most recent actions that have been recorded against the current patient, e.g. witness points (action/protocol step), operator mismatches, etc. A timestamp and operator name are also shown. Actions older than 7 days will not be displayed
- 3. Work area.** The work area region displays an icon for each RFID tag or barcoded item detected by the work area. As items progress through the witness points of a procedure, they are assigned and reassigned appropriately. A question mark icon will be shown for any items that have yet to be assigned an identity by the RI Witness system. Barcoded items are annotated with a barcode icon
- 4. Status.** The status region summarises the work area contents. It is recommended that the number of items displayed in the status area is visually confirmed at each stage of a procedure to verify that each item has been detected
- 5. Temperature.** For heated systems this region displays the temperature of the work area. Click the temperature readout to show a Temperature Control window from where the temperature may be set
- 6. Witness Points.** The witness points region displays options available for the next step as specified by the lab defined protocol. The top one is the preceding action and the current contents of the work area determine what next steps are possible. An administrator will also see an Admin Assign option to assign or reassign dishes outside of the prescribed protocol
- 7. Current operator.** The current operator region shows who is logged on. A suffix (Admin) is added for operators who belong to the administrator group. All witness points performed will be attributed to the operator who is logged in at that time

There may be icons along the right-hand side of the Witness Points, these highlight which points require a Double Witness or will prompt the operator with a Question.

Double Witness  Question 

The witness point may also be coloured differently to indicate that it is a Donor point.

Donor 

Performing A Procedure in RI Witness

Bring the dish or tube into the work area. If the item has been identified by RI Witness the patient and the history will be shown on the screen. The options for the next actions will be shown in yellow on the witness point region.

In the example shown below, a “Sperm Wash Tube” and an “Egg Culture Dish” have been placed into the work area and RI Witness has determined that the only appropriate procedure is represented by the IVF Insemination witness point. See Figure 5-2.

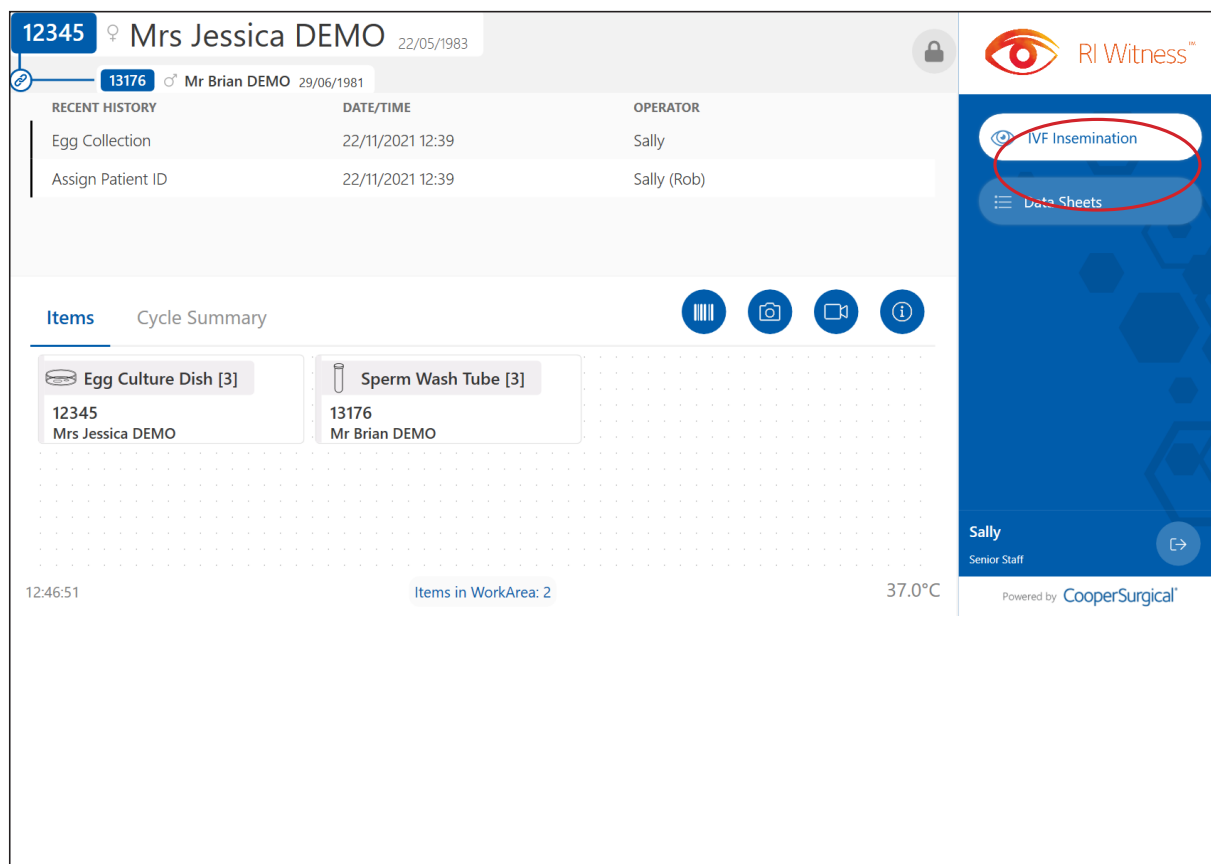


Figure 5-2 The IVF Insemination Witness Point Is The Only Match For The Contents Of This Work Area

Beginning a New Cycle in RI Witness

The first step in the RI Witness procedure is when the identity card for the patient is assigned. This is the most important step in the protocol. At this point the correct assignment of the patient identity to the identity card means the security of the cycle is assured.

Section 5

Witnessing in RI Witness WorkArea

Starting a New Procedure

1. To start a new procedure, log in then place one or more unassigned, tagged items into the work area (usually a patient ID card, egg collection dish or sperm pot). A question mark will show that the tag has been detected and is unassigned. See Figure 5-3. Press the pencil icon to open the Choose Patient window
2. In the All Patients tab type the patient name or ID number to locate the correct patient in the database. See Figure 5-4
3. Alternatively, the Daily Lists tab shows all Egg Collections and Embryo Transfers scheduled for the day. Click the patient cycle for either Egg Collection or Embryo Transfer, this will display the chosen patient's details in the work area
4. Choose an action to register/perform and then click the Confirm Icon 
5. If a double check by another person has been set at this point, a second Witness window will appear. This requires a colleague to verify the action by inputting their name and PIN. See "Witness Point Confirmation" on page 18

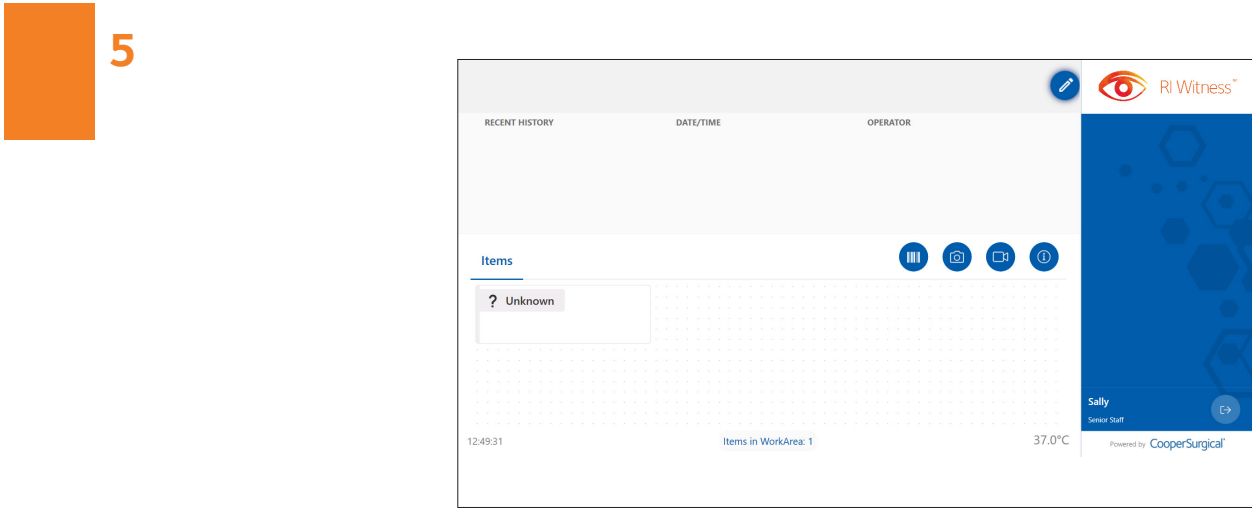


Figure 5-3 Unassigned Tag Has Been Detected

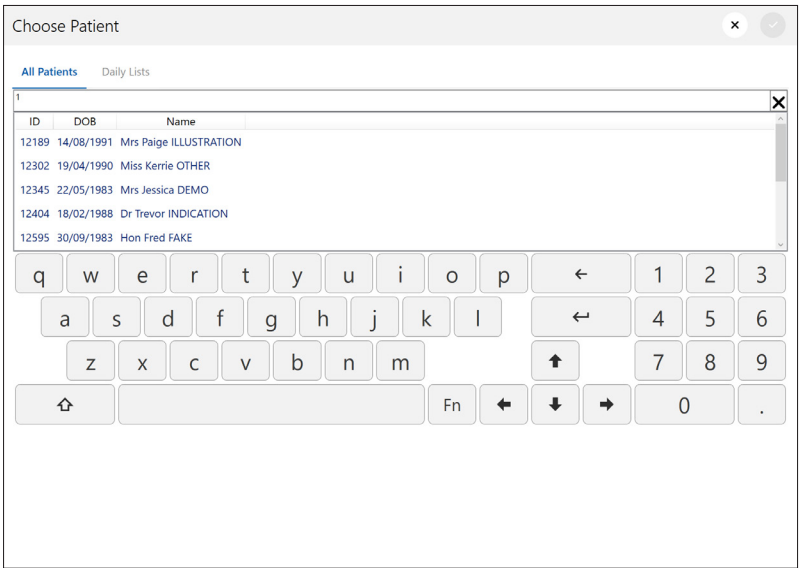
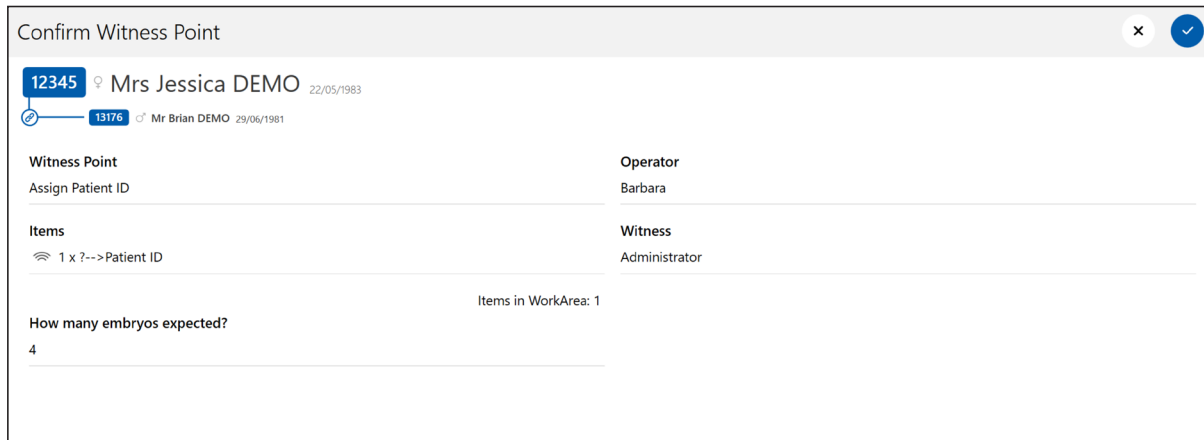


Figure 5-4 Choose Patient/All Patients Window To Assign ID

Witness Point Confirmation

At every step in the procedure, a witness point (action) must be registered in the system. Therefore, when an action is performed, select the relevant witness point and confirm by checking the details in the confirmation window before clicking the Confirm Icon .



Confirm Witness Point

12345 Mrs Jessica DEMO 22/05/1983

13176 Mr Brian DEMO 29/06/1981

Witness Point Assign Patient ID	Operator Barbara
Items 1 x ?--> Patient ID	Witness Administrator

Items in WorkArea: 1

How many embryos expected?
4

Figure 5-5 Confirming A Witness Point

Double Witness Points

Critical points, as defined by the administrator, must be witnessed by a second operator. The second witness must enter their PIN or use their RI Witness ID fob to verify their ID and the double witnessing step. See Figure 5-6



2nd Witness choose your user name

Admin	Alf	Charlie
Chris	Damian	Ermentrude
Frederik	Geraldine	Harriet
Jerry	Martin	Martin B
Rob	Sally	Yujin

Figure 5-6 A Double Witness Point

Section 5

Witnessing in RI Witness WorkArea

Question Witness Points

Question Witness Points, as defined by the administrator, require a response from the operator. Examples of text and numeric questions are shown in Figure 5-7, Figure 5-8 and Figure 5-9.

The Witness Point question and the operator response is displayed during the final witness point confirmation window. The question and response also form part of the history logged for this event.

Assign Patient ID

How many embryos expected?

4

q w e r t y u i o p ← 1 2 3

a s d f g h j k l ← 4 5 6

z x c v b n m ↑ 7 8 9

⏏ Fn ← ↓ → 0 .

Figure 5-7 Witness Point Questions

Assign Patient ID

What is the ID number?

12345

q w e r t y u i o p ← 1 2 3

a s d f g h j k l ← 4 5 6

z x c v b n m ↑ 7 8 9

⏏ Fn ← ↓ → 0 .

Figure 5-8 Witness Point Questions

Assign Patient ID
× ✓

Have you checked the ID number?

Figure 5-9 Witness Point Questions

Perform a Procedure



CAUTION: Before starting a new procedure which involves bringing another patients samples into the work area, ensure the work area is cleared of all previous patient samples.

On starting a procedure, gather all the items that are required, placing RFID-tagged items and scanning barcoded items into the work area.

A window representing the work area will display all the items and show the identity of any items already known to the system.

An active patient is selected either manually or automatically; manually by clicking on the Patient Details section of the work area and choosing a patient from the list, or by the system automatically selecting the patient identified by the items in the work area:

- If there is one patient in the work area, then this is the current patient
- If there are two patients in the work area, who are male/female partners then the female patient is the current patient
- If there are two or more patients after a donation where the patients are donor/ recipient(s) then the donor is the current patient
- A list of possible witness points is shown, determined by the selected patient and visible items. Choose the appropriate witness point

If the witness point is a tagged donation type, then the recipient will need to be chosen from a list at this point.

If the witness point requires further information to be entered by the operator, then this will be requested.

If the witness point requires a second witness, then another operator will need to choose their name and enter their PIN.

Section 5

Witnessing in RI Witness WorkArea

A confirmation window summarises all the details relating to the witness point that will be recorded. If all the details are correct, then selecting the tick will record the witness point.

If any new items are added to the work area during the processing of a witness point (or admin assign) then the witness point will be cancelled. Similarly, if the operator is automatically logged out during the processing of a witness point, this will cause the witness point to be cancelled.

When a witness point is cancelled no information is recorded, a warning message will be displayed and an alarm tone will play to alert the user.

Unassigned Items

Any unknown RFID-tagged or barcoded items are shown as a question mark icon in the work area display. See Figure 5-10. When a witness point is recorded, all unassigned items are automatically assigned to the patient that is currently displayed on the screen.

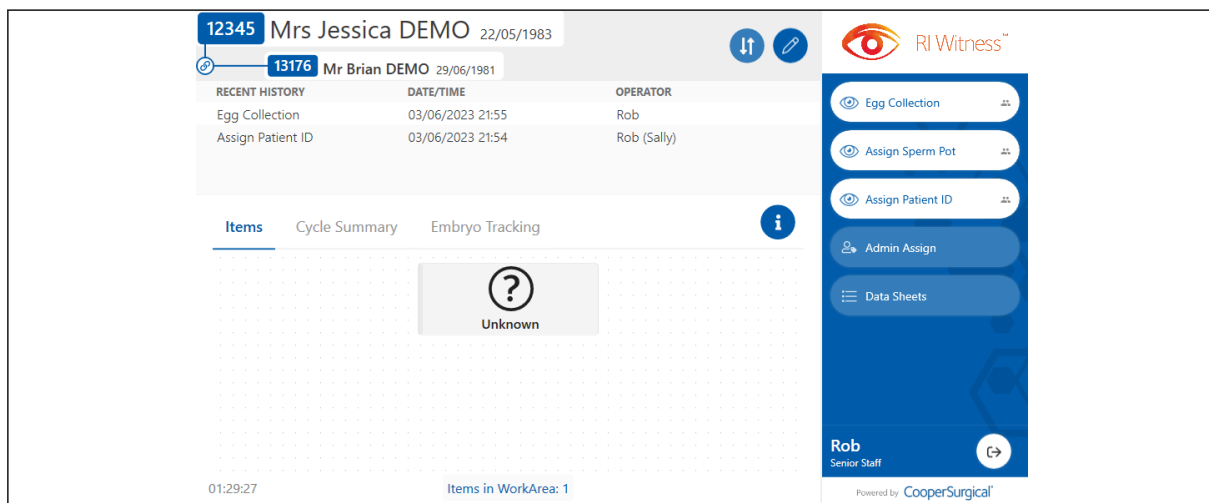


Figure 5-10 The Question Mark Icon Represents An Unassigned Item

Unassigned RFID-Tagged Item Removal

A **STOP** warning is displayed when an unassigned RFID-tagged item is removed from the work area. See Figure 5-11. This message informs the operator that an unassigned RFID-tagged item entered and exited the work area without being registered in the current procedure. If that is correct select Close and continue. If not, replace the sample/labware in the work area and perform a witness point.



Figure 5-11 Unassigned Tag Removal

Make Unassigned Tag Removal Alarm Sound Continuously

Work Area

☐ Require PIN on login with ID tag

☐ Warn on logout if tags left in WorkArea

☒ Unassigned item removed alarm continues until acknowledged

OPERATOR AUTO LOGOUT TIME

0 Minutes (zero for no timeout)

Figure 5-12 Make Unassigned Tag Removal Alarm Sound Continuously

An option has been added, which will make this alarm sound continuously until it is dismissed. The option can be found in Manager, in General Settings in the WorkArea Settings section: It is off by default.

Item Mismatch

The RI Witness system will only allow one patient (with donor) or a couple's samples to be placed in a work area at any time. If an unlinked sample is placed in the work area, a continuous alarm will sound and a mismatch window will appear immediately. The **STOP** message is displayed. See Figure 5-13.

1. Remove the samples in order to stop the alarm and select Close to close the window.
2. A mismatch reason window is displayed. If Mismatch categories have been configured in RI Witness Manager, the relevant category must be chosen from the list. Depending on the mismatch category selected, the operator may then need to enter an explanation for the mismatch before work can continue. The explanation will appear in both patients' cycle histories and will be visible in the RI Witness Manager software.
If no mismatch categorization has been configured in RI Witness Manager, the operator will be prompted to enter free-text to identify the type of mismatch.

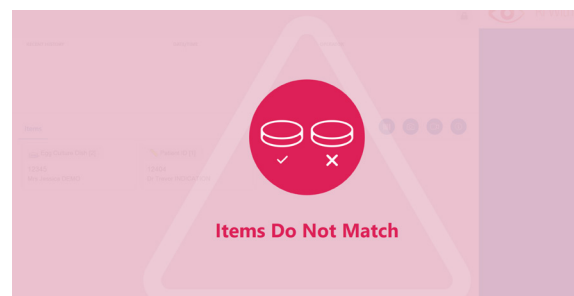


Figure 5-13 Item Mismatch

Mismatch

Embryo Transfer Dish (2) 12345 Mrs Jessica DEMO Patient ID (1) 12302 Miss Kerrie OTHER

Reason for Mismatch

☐ Discarding empty dishes of multiple patients

☒ ID Card left in reader

☐ Other dish too close to reader

☐ Previous dish not removed

☐ Other

☐ Mismatch test

Figure 5-14 Choosing A Mismatch Category

Note: If the mismatch occurred while no operator was logged in, an explanation for the mismatch is associated with the operator entering the explanation but the mismatch will not be associated with them.

Double Witnessing of Admin Assigns

When enabled, this option requires Admin Assigns to have a 2nd witness.

The option can be found in RI Witness Manager, in General Settings in the Witnessing section, and it is off by default.

Witnessing

☒ Require second witness for container discards

☐ Require Second Witness for Admin Assign

☐ Only use RI Barcodes

BARCODED ITEMS NOT WITNESSED TIMEOUT

1 Hours (0: disabled)

Figure 5-15 Double Witnessing Of Admin Assigns

Section 5

Witnessing in RI Witness WorkArea

Admin Assign

Designated operators may use the Admin Assign button, see Figure 5-16, to assign any tag type (sperm pot, inseminated dish, sperm wash tube, etc) to an unassigned RFID-tagged or barcoded item at any point.

Note: Admin Assign should only be used under exceptional circumstances and by trained personnel only.

Note: With Admin Assign the type of dish already assigned to a patient can be changed.

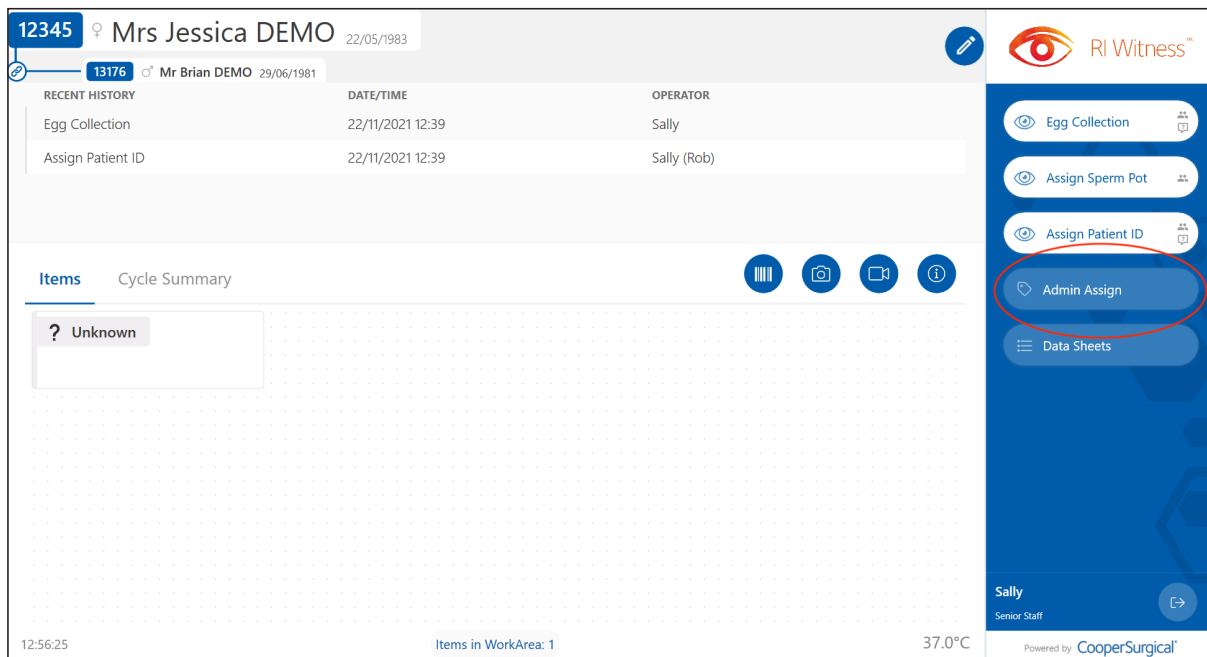


Figure 5-16 Admin Assign

Discards

To prevent confusion between active and discarded containers, RI Witness allows the system to visually differentiate between them. Single items and multiple items of different types can be discarded in cases where the containers are no longer being used for any procedures. Once discarded, these items can no longer be used in electronic witnessing.

When the Discard button is enabled, see Figure 5-17, pressing it will display a confirmation screen. The Close Icon  will cancel the discard and close the confirmation window, whilst the Confirm Icon  will mark the items as discarded – changing how they are displayed in the work area and preventing any witness points taking place whilst they are in the work area.

There is also the option from within RI Witness Manager to enable Discards to require a second witness. Once enabled, a second witness will be prompted to log in on the screen, following the operator selecting the Discard button. After a successful login the confirmation window will be displayed as usual.

The screenshot shows the RI Witness WorkArea interface. At the top, patient information for Mrs Jessica DEMO (ID 12345) is displayed. Below this, a 'RECENT HISTORY' table lists actions like 'Egg Collection' and 'Assign Patient ID'. The 'Cycle Summary' tab is active, showing details for 'Egg Culture Dish [2]'. On the right, a sidebar contains buttons for 'Discard', 'Admin Assign', and 'Data Sheets'. The 'Discard' button is circled in red. At the bottom, the interface shows the time (12:57:30), items in the work area (1), and temperature (37.0°C).

RECENT HISTORY	DATE/TIME	OPERATOR
Egg Collection	22/11/2021 12:39	Sally
Assign Patient ID	22/11/2021 12:39	Sally (Rob)

Cycle Summary
Egg Culture Dish [2] 12345 Mrs Jessica DEMO

12:57:30 Items in WorkArea: 1 37.0°C Powered by CooperSurgical

Figure 5-17 Discard

Cycle Summary

The cycle summary is available in the work area, it displays the details of the current cycle for the selected patient(s).

Cycle Type	Cycle Type
ICSI / IVF	ICSI / IVF
Transfer Date	Max Embryos To Replace
19/01/2023	2
	Freeze Spare Embryos
	Yes
	Donate To Research
	Yes

Figure 5-18 Cycle Summary Details Tab

Section 5

Witnessing in RI Witness WorkArea

Data is taken from a selected data sheet that is created in RI Witness Manager. If a patient is not selected, or there is no cycle summary for a selected patient, the cycle summary display will say <No Details Available>. If the selected patient contains a cycle summary sheet, this sheet will be displayed in the Cycle Summary area.

Embryo Tracking

Selecting this tab in the work area shows the details of any embryo records associated with the current cycle.

Daily Lists

On the patient select window, the daily list can be selected, which shows the current day's patients. The selected date is displayed top left of the window. To choose another date and view its related procedures, click on the left and right arrows at the top of the window. (The left arrow moves the date back one day and the right arrow advances the date by one day). To select a patient, click on the patient ID number.

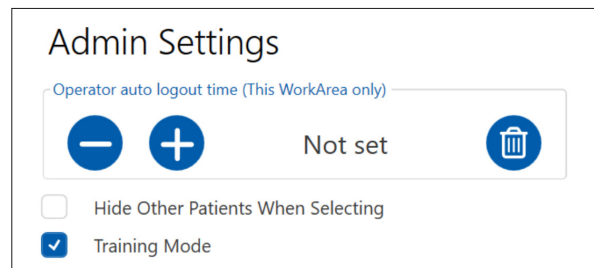


Figure 5-19 Admin Settings – Training Mode

Training Mode

Any RI Witness work area may be set to Training Mode if training and testing is required.

1. Log in as an Admin user
2. Open WorkArea Status
3. Click WorkArea Settings
4. Click Admin Settings
5. Tick Training Mode. See Figure 5-19

In Training Mode, the background of the right hand panel turns orange. See Figure 5-20. When logging out of Training Mode, the training work area events will automatically be deleted.

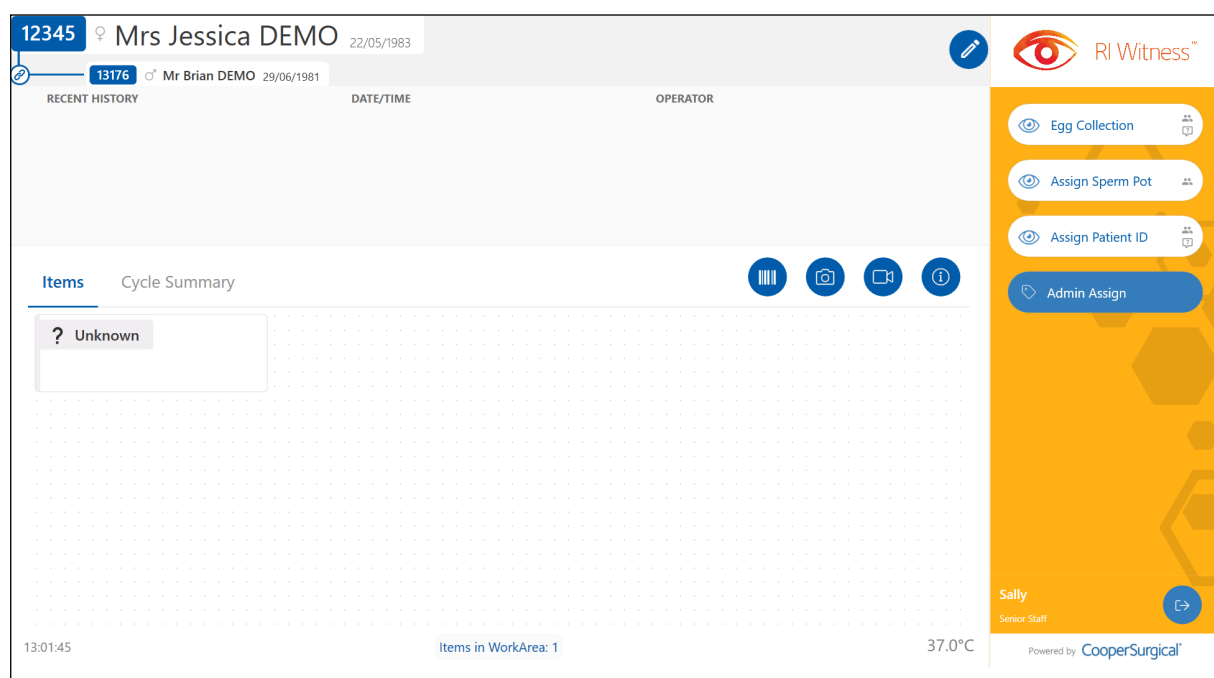


Figure 5-20 WorkArea – Training Mode

Test Mode

When there are unpublished Witness Point Diagram changes and Training Mode is enabled, the Test Mode option becomes available. This allows Admin users to test out changes to the Witness Point diagram which have yet to be published.

When in Test Mode, the background colour of the right hand panel changes to match the colour of the Draft Witness Point diagram in RI Witness Manager. As Training Mode is also enabled, any witnessing events are not saved to the database and are discarded when exiting Test Mode.

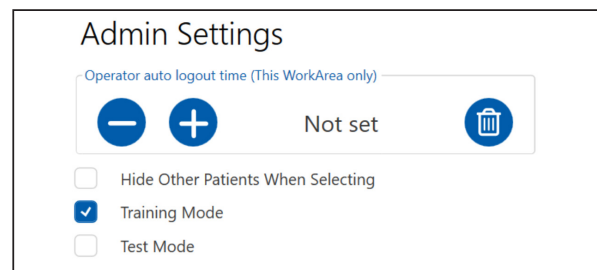


Figure 5-21 Admin Settings – Test Mode

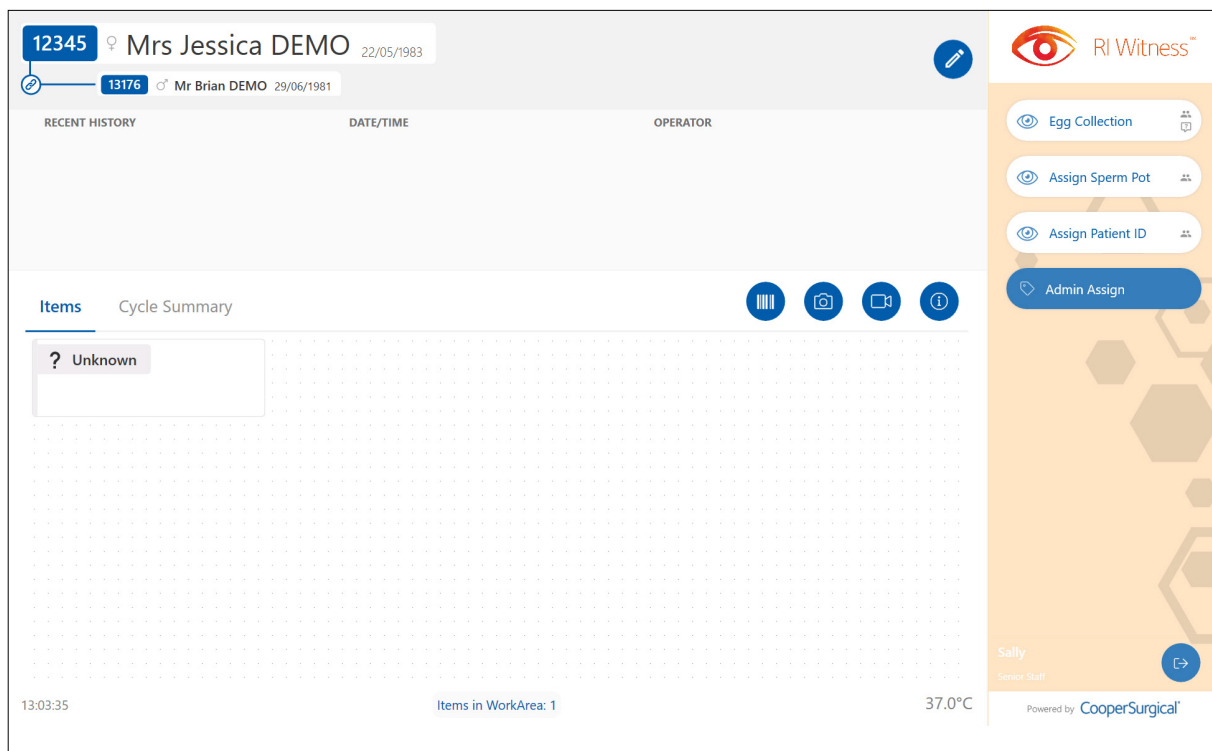


Figure 5-22 WorkArea – Test Mode

Section 6

Cryo Witnessing

SECTION 6 – CRYO WITNESSING

An Introduction to Cryo Witnessing

Many embryology labs wish to extend witnessing and reporting to include samples stored in cryo storage. The Cryo feature is a barcode labelling solution for cryo items.

Clinics have the option to scan barcodes that have already been attached to samples, or scan RI barcodes that have been printed from RI Witness Manager and are assigned to a particular patient or tracked embryo.

For a clinic only wishing to scan barcodes printed from the RI Witness Manager application:

- 1. Open RI Witness Manager
- 2. Click Settings
- 3. Click General Settings
- 4. Tick the checkbox under the Barcode section, Only use RI Barcodes. See Figure 6-1



Figure 6-1 Only Use RI Barcodes

6 Scanning Barcodes

In the work area a patient can be chosen by scanning a barcode that has previously been assigned to the patient or printed from the RI Witness system. Once scanned, these barcodes will appear with a question mark icon annotated with a small barcode, representing that the barcode is not currently associated with an item type.

Barcodes known to the RI Witness system with no assigned type may be used as unassigned items when performing witness points, in a similar way to unassigned RFID tagged items; once a barcode has been used in a witness point it will be assigned a type.

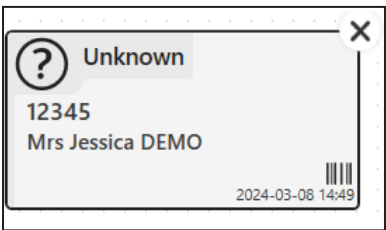


Figure 6-2 Known Barcode, With Unknown Type

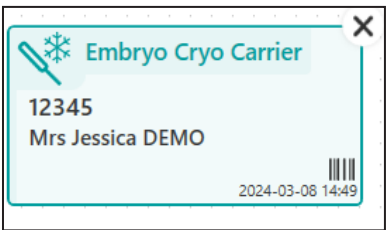


Figure 6-3 Known Barcode, With Known Type

As with RFID-tagged items, barcoded items can be admin assigned to other types, and discarded (See Section 5).

If the barcode was not printed from RI Witness Manager, the scan barcode button  must be clicked prior to scanning, allowing the barcode to appear within the work area. See Figure 6-4. If the option to Only use RI Barcodes is enabled, this button is not available, so only barcodes printed from RI Witness Manager can be scanned into the work area. Any such barcodes will be assigned to the patient after the successful completion of a witness point.

If a scanned barcode has already been assigned to a different patient, the mismatch alarm is activated. The barcoded straw/sample should be removed from the work area, then press the button to close the mismatch warning and remove the barcode from the WorkArea. The Mismatch Reason will then be shown, as it is shown following an RFID tag mismatch. See Figure 6-5.

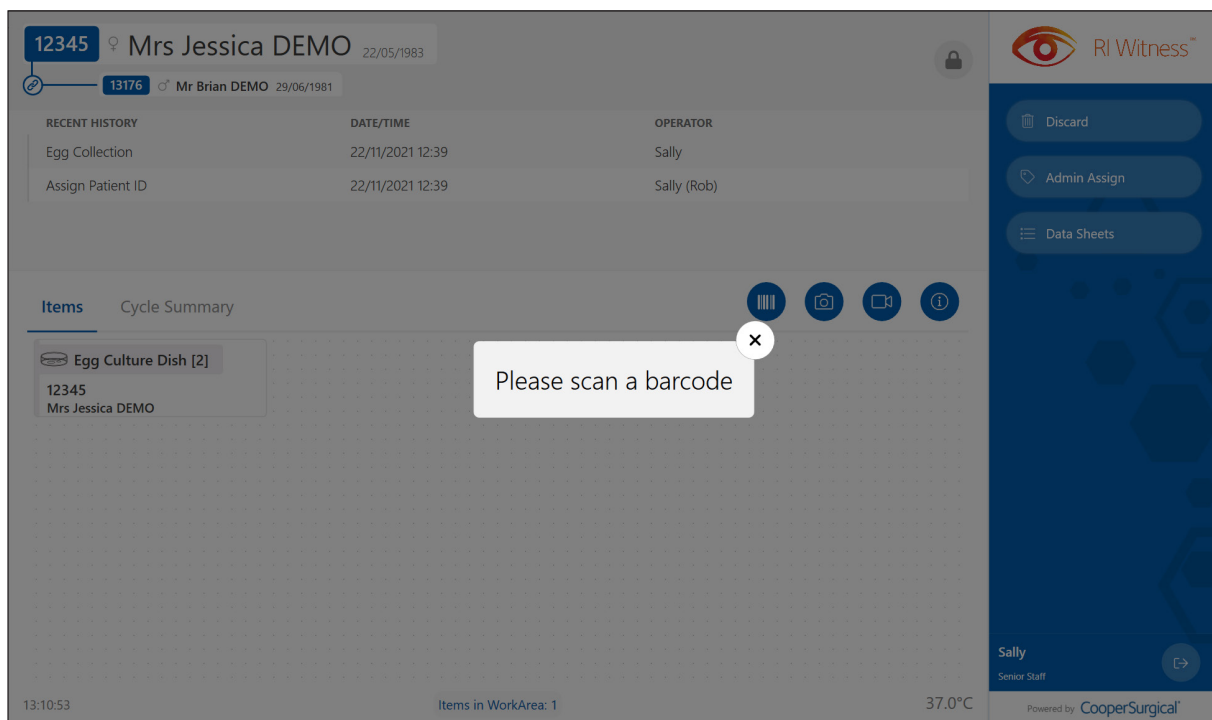


Figure 6-4 Scanning A Barcode

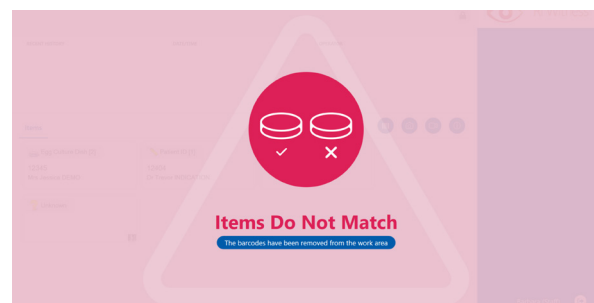


Figure 6-5 Barcode Mismatch

Section 6

Cryo Witnessing

Legacy Barcodes (Barcodes Created Prior to RI Witness 4.0)

Barcodes created prior to RI Witness 4.0 are treated as legacy barcodes, for example any barcoded items in cryo storage at the time the RI Witness system was upgraded to 4.0.

When scanned, legacy barcodes will appear in the work area with a barcode icon, displaying the patient details underneath.

Legacy barcodes can be used with any witness point where a normal barcoded item would be used. To do so, the type that would normally be assigned to the barcoded item must be enabled as a Legacy Barcode Type. To do this, go to the item Types screen and press the Legacy Barcode Types button. Then, tick the box next to any types which should be treated as Legacy Barcode types. See Figure 6-7.

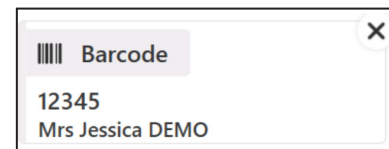


Figure 6-6 Legacy Barcode

6

Legacy Barcode Item Type Configuration

Patient ID	☐
Sperm Pot	☐
Sperm Wash Tube	☐
Egg Culture Dish	☐
Inseminated Dish	☐
Embryo Culture Dish	☐
Cryo Dish	☐
ICSI Dish	☐
ICSI Culture Dish	☐
Embryo Transfer Dish	☐
Embryo Cryo Carrier	☒

CancelSave

Figure 6-7 Legacy Barcode Types Configuration

Whenever a Legacy barcode is scanned into the work area, it will be treated as all types enabled as Legacy Barcode Types for the purposes of determining the available witness points.

For example, this Embryo Freeze witness point (see Figure 6–8) would usually assign the Embryo Cryo Carrier type to a barcode, so to use a Legacy barcode with this witness point, the Embryo Cryo Carrier type must be enabled as a Legacy Barcode Type. Then when a Legacy barcode is scanned into the work area along with an RFID-tagged Cryo Dish, the Embryo Freeze witness point will be available.

This Sperm Thaw witness point (see Figure 6–9) would usually require a barcode assigned with the Sperm Cryo Vial type, so to use a Legacy barcode with this witness point, the Sperm Cryo Vial type must be enabled as a Legacy Barcode Type. Then when a Legacy barcode is scanned into the work area along with an unassigned RFID tag, the Sperm Thaw witness point will be available.

Legacy barcodes can not be assigned types as the result of being used in Witness Points. They also cannot be Discarded or used with Admin Assigns.

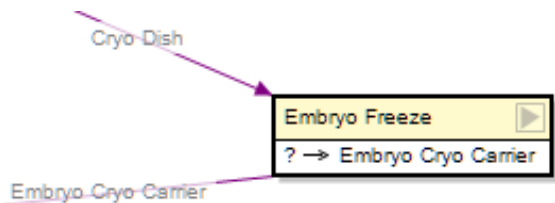


Figure 6–8 Embryo Freeze Witness Point



Figure 6–9 Sperm Thaw Witness Point

Section 7

Embryo and Biopsy Tracking

SECTION 7 – EMBRYO AND BIOPSY TRACKING

An Introduction to Embryo and Biopsy Tracking

RI Witness can provide witnessing and traceability for the embryos and/or biopsies contained in relevant RFID tagged dishes or barcoded items such as cryo carriers, straws or PCR tubes.

The “Embryo and Biopsy Tracking” features added in version 4.4 allow for the recording of initial locations and movement of embryos and biopsy samples. The droplets occupied by an embryo or biopsy sample may also be recorded using “Droplet layouts” configured in RI Witness Manager and assigned to a dish on its first use.

Initiating Embryo Tracking

Tracking of the embryos within the electronically witnessed items begins automatically from freezing when using Embryo Tracking-enabled barcode labels printed from RI Witness Manager. The dish containing the embryos to be frozen is brought into the work area and Embryo Tracking-enabled barcode labels for each embryo to be frozen are scanned. When recording the freeze ‘Witness Point’, embryo records are automatically created and associated with each cryo carrier; the sequence number of the embryos match the numbers selected during printing.

Assign Embryos

It is possible to assign embryos to a dish before freezing. The recommended time to do this is when each embryo is held in a separate droplet, likely just before biopsy. Use the Assign Embryos action (see Figure 7-1). This action is only available with a single RFID tagged dish in the work area.

There are two modes of assigning embryos:

When the current cycle has **available embryos** to assign (see Figure 7-2)

- Set Egg/Embryo Count button in Manager has been used.
- Available embryos are listed and can be selected and moved to the dish.

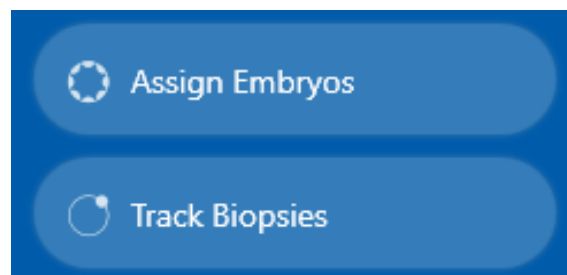


Figure 7-1 Assign Embryos And Track Biopsies
Action Buttons

When the current cycle has **no available embryos** to assign (see Figure 7-3)

- No embryos have been registered (Set Egg/Embryo Count not used).
- Or all embryos have been assigned to dishes.
- Pressing empty droplets in the dish will continuously create new embryos for the cycle.

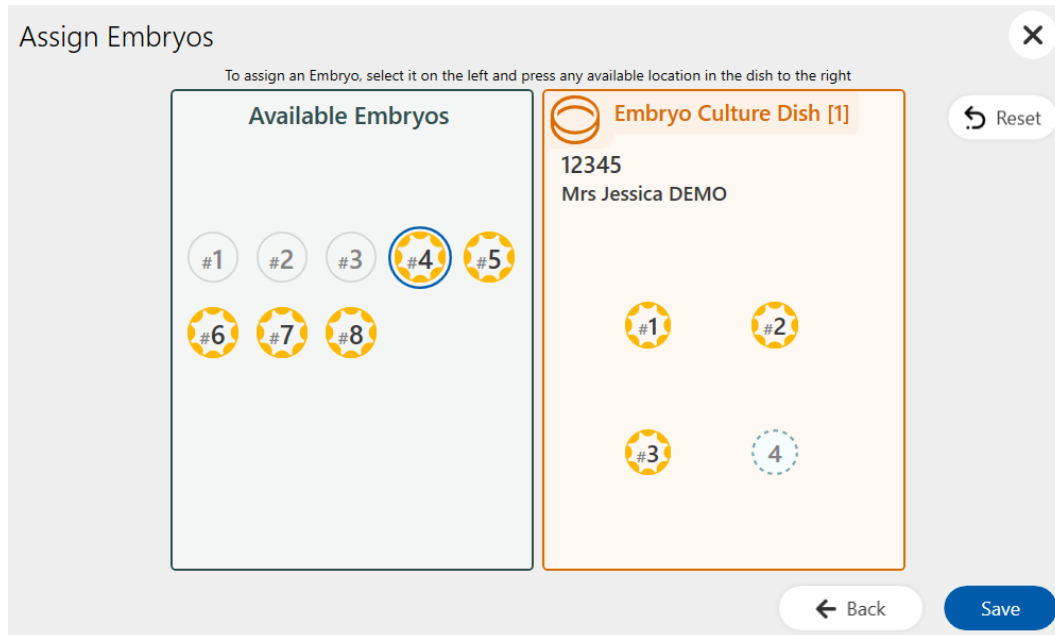


Figure 7-2 Assign Embryos 1

Note: The 'Assign Embryos' action is not a typical 'Witness Point' and does not need to be added to the Witness Point diagram/configuration to be used.

Initiating Biopsy Tracking

Tracking of biopsy samples happens automatically during the 'tubing' procedure when using Biopsy Tracking-enabled barcode labels printed from RI Witness Manager. The biopsy dish containing the samples to be tubed is brought into the work area and Biopsy Tracking-enabled barcode labels for each sample to be tubed are scanned. When recording the tubing 'Witness Point' biopsy sample records are automatically created and associated with each PCR tube; the sequence number of the samples match the numbers selected during printing. Creating a second sample record for an embryo following a re-biopsy is also supported.

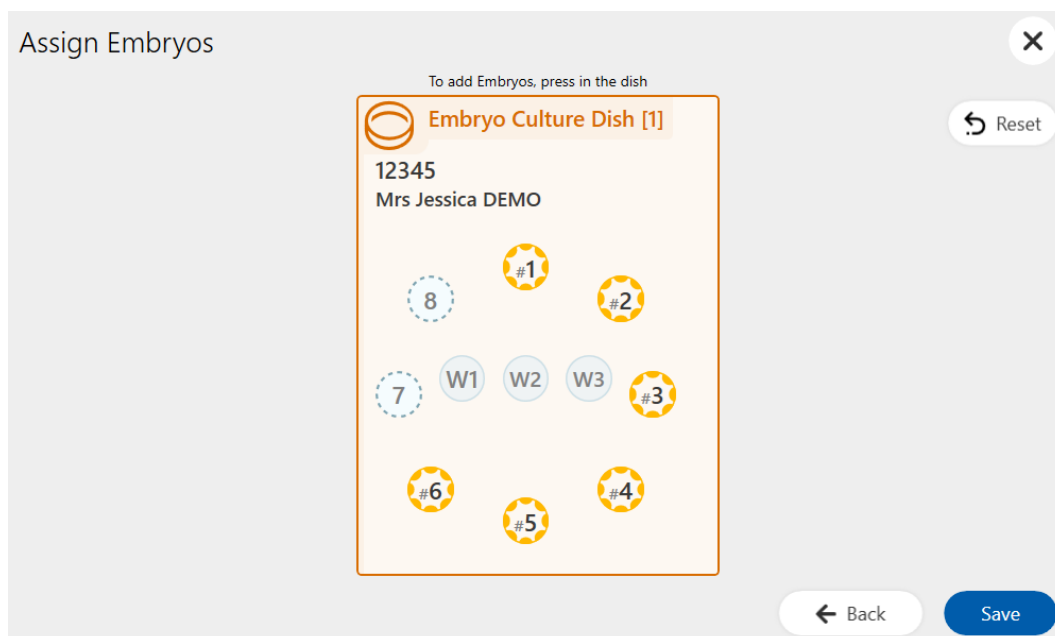


Figure 7-3 Assign Embryos 2

Section 7

Embryo and Biopsy Tracking

Track Biopsies

It is possible to assign biopsies to a dish before tubing. The recommended time to do this is just after biopsy, when each embryo and its biopsy are in the same droplet of the biopsy dish. Use the Track Biopsies action (see Figure 7-1).

When the Biopsy Tracking screen is confirmed, a biopsy sample is created for each selected embryo; if an embryo was not biopsied, press it to de-select it (see Figure 7-4). This action can also be used to create a second sample record for an embryo following a re-biopsy.

Note: The 'Track Biopsies' action is not a typical 'Witness Point' and does not need to be added to the Witness Point diagram/configuration to be used.

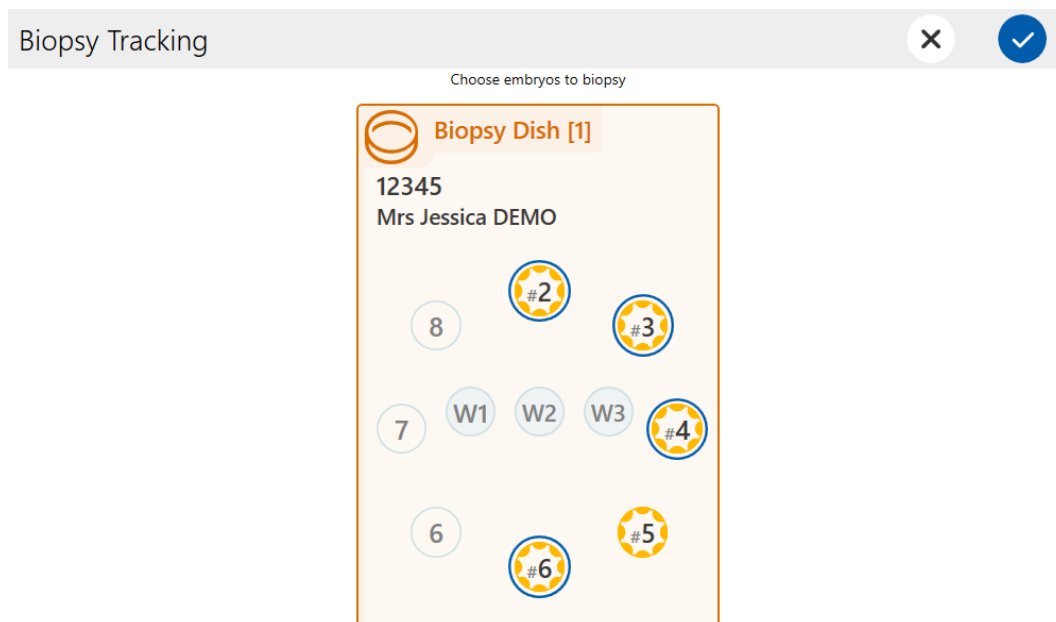


Figure 7-4 Track Biopsies

Embryo and Biopsy Tracking as Part of a Witness Point

The Embryo and Biopsy Tracking Screen (see Figure 7-5) is automatically invoked during the witness point process when there is a tracked embryo or biopsy sample present (in any container). This added step in the witness point process is used to record the movement of embryos and biopsy samples.

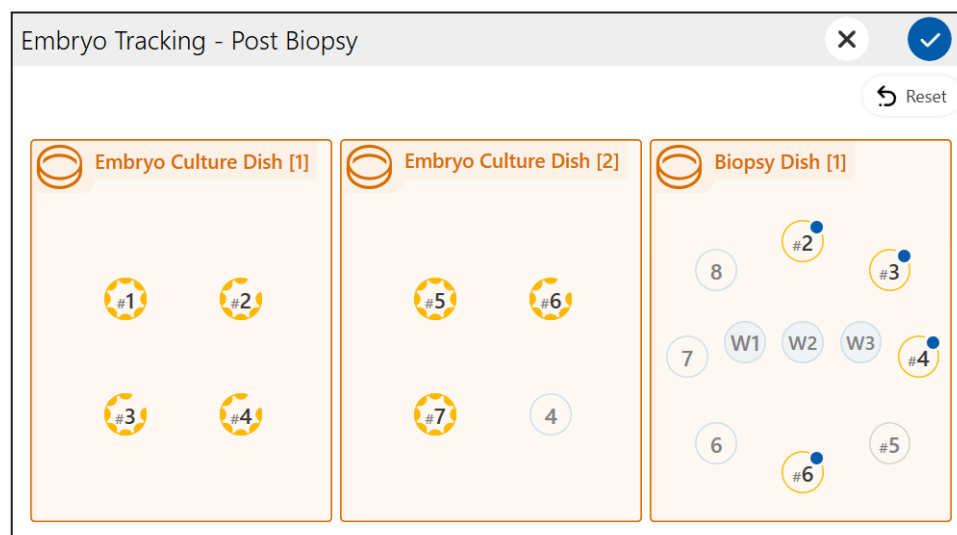


Figure 7-5 Embryo/Biopsy Tracking

If there is a tag of unknown type involved in a witness point, and tracked embryos or biopsy samples are present, then when recording a witness point the operator will first be asked to choose a droplet layout for the new dish. This allows for movement of embryos to be recorded into the new dish as part of the witness point.

If tracking through specific droplets is not required, the “Do not track droplet locations” option may be used on the droplet layout selection screen (see Figure 7-6).

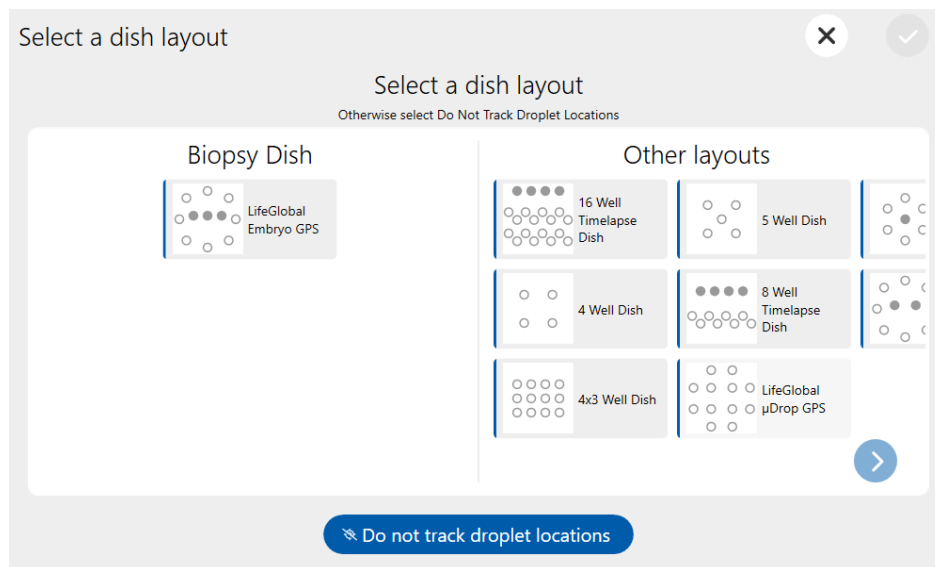


Figure 7-6 Droplet Layout Selection

Embryo and Biopsy Movement

With the embryo and biopsy tracking dialog on the screen, movements of embryo and biopsy samples can be recorded by first selecting the embryo or biopsy sample to be moved. All valid destinations for the selected embryo or biopsy sample will be highlighted (see Figure 7-7).

Note that an embryo or biopsy sample is allowed to re-occupy any droplet it has previously occupied, but it may not occupy a droplet previously occupied by material originating from an embryo other than itself.

If a droplet is occupied by both an embryo and a biopsy sample, selecting the droplet and then a destination always moves the embryo and leaves the biopsy sample. Once an embryo and biopsy sample have been split into separate droplets they cannot occupy the same droplet again.

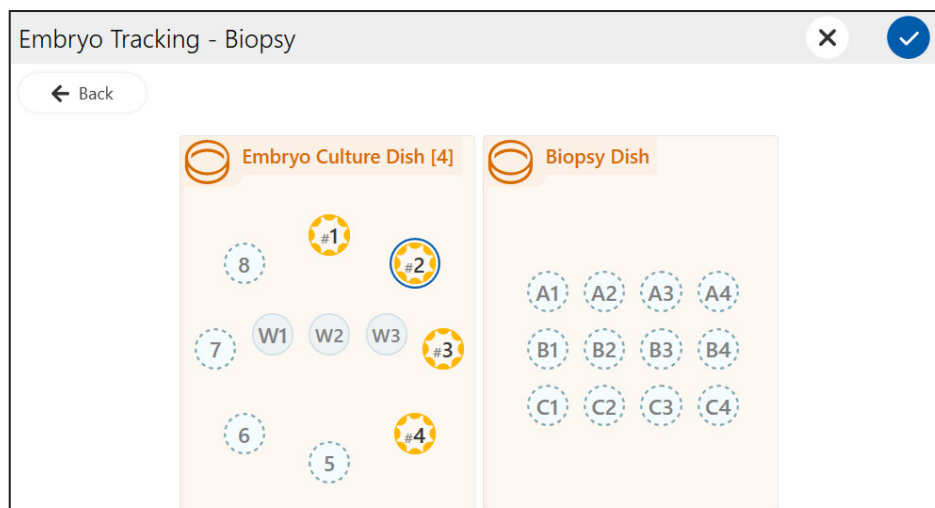


Figure 7-7 Embryo Selected For Movement, Showing Highlighted Valid Destinations

Section 7

Embryo and Biopsy Tracking

Following a biopsy during which the Track Biopsies action was used, the biopsy dish will have several embryos with biopsies alongside them in the droplets. To quickly return the embryos to the culture dish for incubation, press the Return Embryos button (see Figure 7-8). The biopsy samples will remain in the biopsy dish to be taken for tubing.

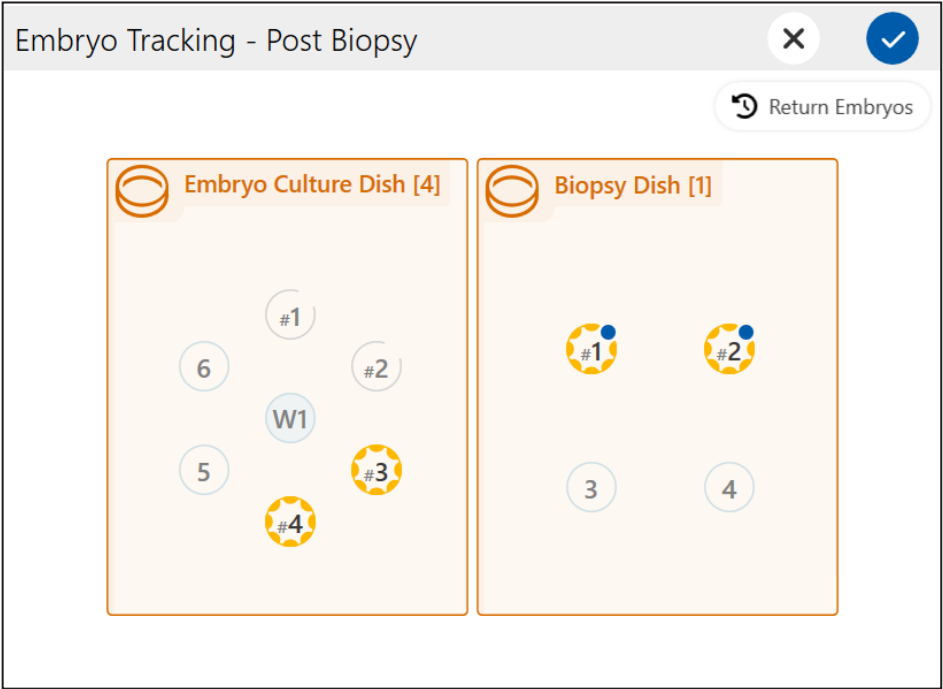


Figure 7-8 Return Embryos

Embryo Transfer Approval Status

When PGT results are received, they should be reviewed and a status assigned (approved/not approved for transfer) to the embryos recorded in RI Witness, this can be done through RI Witness Manager. The status of the embryo will then show whenever a container with that embryo is brought into the work area. A summary of this information for the current cycle can also be seen on the 'Embryo Tracking' tab in workarea (see Figure 7-9).

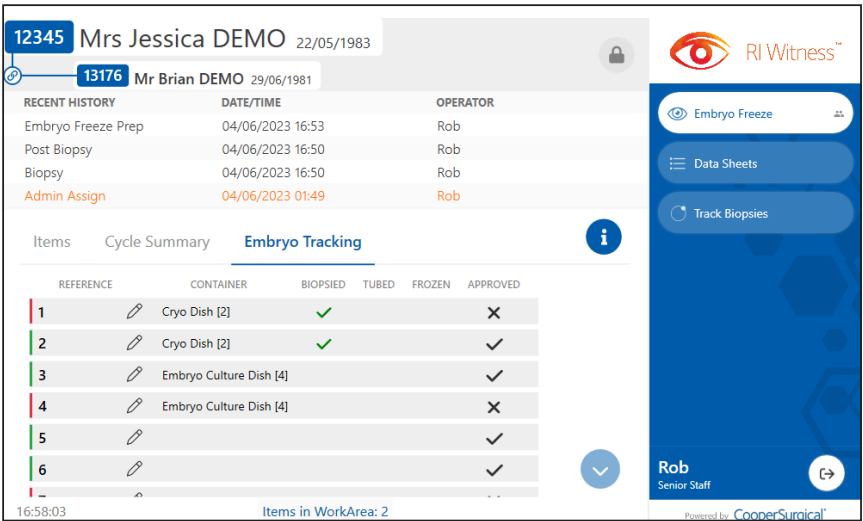


Figure 7-9 Embryo Tracking Tab

Thawing

To witness the thawing process, the cryo carrier is scanned into the work area and a new RFID tagged dish is brought in. When the relevant thaw witness point is selected, a droplet layout can be selected for the new dish, then the Embryo Tracking dialog is shown. The embryos can then be moved into the new dish.

After thawing a single embryo for transfer, the embryo must move through one or more dishes which will not have a Droplet Layout. To make recording the movement of the embryo easier, it is automatically selected to move between dishes, so long as there are only two RFID-tagged dishes present and neither have a Droplet Layout selected.

Alerts

When an embryo marked as Not approved for transfer is brought into the work area, an alarm sounds and the Not approved for transfer alert appears. Once the alert is dismissed the alarm will stop sounding, but a red “Not approved for transfer” banner will continue to be shown at the bottom of the work area screen (see Figure 7-10).

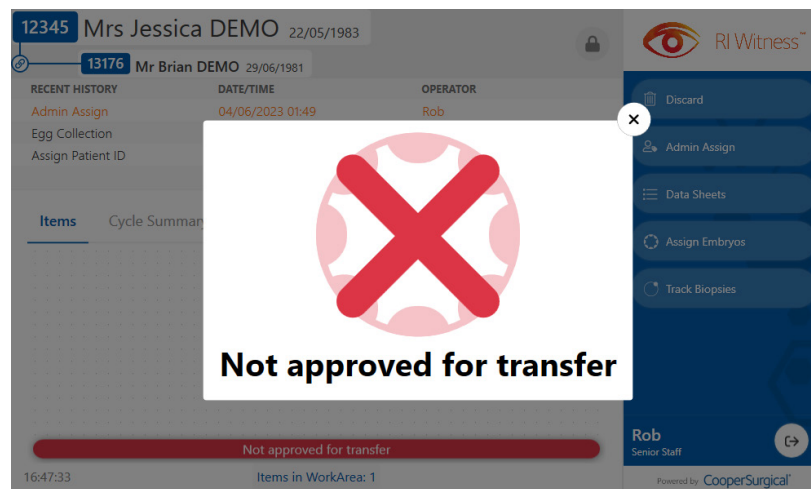


Figure 7-10 Not Approved For Transfer Alert, With Red Banner Shown Below

Section 7

Embryo and Biopsy Tracking

When any Embryo Tracking or Biopsy Tracking barcode labels are scanned into the work area and the embryos or biopsies expected to move into those barcoded items (for freezing or tubing) are not present in the work area, an alarm is activated and the Expected Embryo/Biopsy Not Present in WorkArea alert is shown.

Once the alert is dismissed the alarm will stop sounding, but a red “Expected embryo/biopsy not present in WorkArea” banner will continue to be shown at the bottom of the work area screen (see Figure 7-11).

If the Expected Embryo or Biopsy Not Present in WorkArea alert is being shown and a dish containing all the expected embryos and/or biopsies is added to the work area, the alarm is cancelled and the alert is dismissed.

It is possible to create and assign embryo and biopsy records at the point of freezing and tubing i.e. not using the Assign Embryos and Track Biopsies actions, so the alerts are only triggered when the embryos or biopsies have been seen before by RI Witness and are not present in the work area.



Figure 7-11 Expected Embryo Or Biopsy Not Present In WorkArea Alert, With Red Banner Shown Below

SECTION 8 - IMAGING

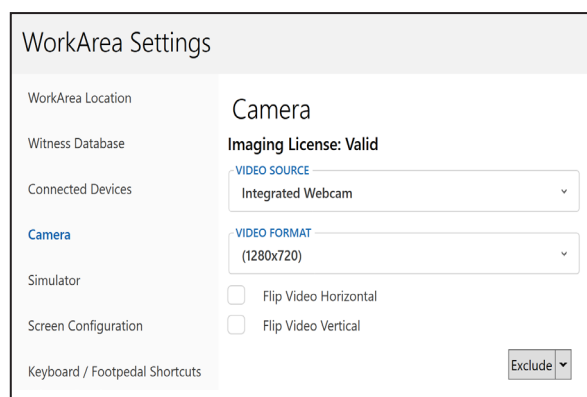
Exclude Cameras

It is now possible to exclude any connected camera from use with Imaging.

This can be helpful when the camera is required by another application, taking patient photos for example.

1. Open WorkArea Settings and select Camera.
2. Press the down arrow then tick the camera to be excluded.
3. Restart WorkArea for the setting to take full effect.

Figure 7-1 Exclude Cameras



How to View Live Images

A camera needs to be connected to the PC running RI Witness WorkArea and the drivers must be installed correctly to view live images. A valid Imaging license must also be issued.

RI Witness software will automatically recognise both analogue and compatible digital camera devices connected to the PC. If there is only one camera device detected, it will show the live image for that device. If multiple camera devices are connected, it will use the camera that was last selected from the video source drop down box.

If there are multiple cameras attached to the PC, the user may select the specific device to watch the live image from.

To do this, select the Camera from the dropdown list on the Settings panel.

8

How to Take a Picture

1. This is available on both the work area screen and secondary Imaging screen.
2. Log in using operator name and PIN
3. Ensure there is a patient with an active / open cycle in the work area
Press the Camera icon 

How to Record Video

This is available on both the work area screen and secondary Imaging screen.

1. Login using operator name and PIN
2. Ensure there is a patient with an active / open cycle in the work area
3. Click the Film icon 
4. Each video recording can last for a maximum of one hour. This eliminates the problem of accidentally leaving the software recording and possibly rendering the computer unusable

Section 8

Imaging

5. When freeze frame is set as keyboard shortcut, the live image recording can be paused
6. second press of the shortcut key will restart the live image recording
7. Press or click Pause **||** to stop recording

How to Zoom & Pan the Image

Available on the Imaging screen, there are three ways to zoom into an area on the screen.

1. Move the mouse to a point on the screen. Click and hold the right mouse button, then release. This will zoom to the preset zoom level to the spot where the mouse is placed. To zoom out, click and hold the right mouse button
2. Place the mouse at a point on the screen and use the scroll wheel on the mouse (if available). This will give the user control over how much digital zoom is given
3. Using the tool bar at the bottom of the screen, click the + icon to zoom in incrementally
4. To zoom out by the same amount, click on the - icon on the tool bar. The magnifying glass icon will zoom in and out by the preset zoom

Whilst using digital zoom, a thumbnail image of the screen will appear in the top left of the screen. At the top of this panel is the amount of magnification being used. When zoomed out fully, this panel will not appear on the screen.

Zooming in and out can also be achieved using the foot pedal.

How to Perform Measurements

Available on the Imaging screen.

1. Click **Measure** icon  on the tool bar
2. Click on the screen to select a start point for the measurement
3. Click on the screen a second time to select an end point for the measurement

The ends of the line can be dragged to change the measurement.

Lines can be removed by clicking the cross in the context window.

Lines and measurements are shown on an image when images are taken in Line Mode.

How to Select Cameras

Available on both the work area screen and secondary Imaging screen.

1. Open WorkArea Status
2. Click WorkArea Settings
3. Press Camera. See Figure 7-2
4. Click on the drop down box to allow the selection of cameras. Clicking on the required camera in the list will change the live image to that of the selected camera

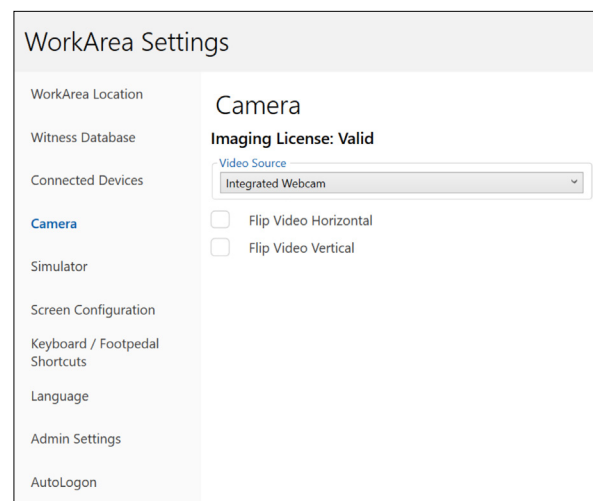


Figure 7-2 Camera Settings

Camera Flipping

Available on both the work area screen and secondary Imaging screen.

1. Open WorkArea Status
2. Click WorkArea Settings
3. Press Camera. See Figure 7-2
4. Tick Flip Video Horizontal (for camera devices that support these options)
5. Tick Flip Video Vertical (for camera devices that support these options)

How to Set the Preset Zoom

Available on the Imaging screen.

1. Click the Image Settings icon  from the Imaging screen
2. Drag the Preset Zoom slider to the required zoom

How to Configure the Foot Pedal/Keyboard

Available on both the work area screen and secondary Imaging screen.

1. Open WorkArea Status
2. Click WorkArea Settings
3. Press Keyboard/footpedal Shortcuts
4. Click the corresponding edit button to assign a shortcut
5. Hold down the key or press the foot pedal to assign
6. Click or press the Confirm Icon  to save the shortcut
7. Once the shortcuts are set up, press the shortcut keys or the corresponding foot pedal to activate the command

8

How to Select Objectives

Available on the Imaging screen.

1. Click the Magnification  on the tool bar
2. Click the required objective magnification

How to Add Objectives

Available on the Imaging screen.

1. Click  on the tool bar
2. Click the Objective Calibration button
3. Click New Objective. The magnification will be the same as the current magnification
4. Click the required objective to edit objective magnification and fine adjustment values

Section 8

Imaging

How to Remove Objectives

Available on the Imaging screen.

1. Click  on the tool bar
2. Click the Objective Calibration button
3. Click X next to an objective

How to Check Objective Calibration

Available on the Imaging screen.

1. Click  on the tool bar
2. Click the Objective Calibration button to open the Objective Calibration panel
3. Place an object of known dimensions (a stage micrometer is supplied with each system for this purpose) in the field of view
4. Ensure that the objective selected in Imaging matches that being used on the microscope
5. The stage micrometer supplied measures 100µm between the longer lines. For best accuracy, position each end point of the line at exactly the same relative position on the scale, for example at the right hand edge of each vertical line
6. Drag the rulers to the point where the stage micrometer is going to be measured from and use the fine adjustment up and down, until the ruler scale matches the stage micrometer

Patient Display

1. To configure a screen as a Patient Display simply select the Patient Display Configuration for the desired screen. The screen will display the RI logo until the display is turned on
2. To turn the patient display on/off so that it shows the video from the camera, click the On or Off button either on the work area or on the patient display panel on the Imaging display. The Imaging display shows a preview of what the patient display will show. See Figure 7-3



Figure 7-3

3. To take a snapshot of the video to use on the Patient Display, press the Pause button on the work area or patient display panel
4. To re-enable live streaming of the video, press Play
Note: When a current patient is activated via the work area, the patient name and ID will appear on the Patient Display. It will only be visible if the Patient Display is turned on. See Figure 7-4
5. Closing the main window will also close the patient display

12345 Mrs Jessica DEMO 22/05/1983

Figure 7-4 Information Shown On Patient Display

Use of Saturn Laser Systems with RI Witness

RI Witness can be run alongside and in conjunction with Saturn Laser Systems. Please refer to the Saturn Laser System user manual for full instructions.

How to Access Saturn Laser System Information from a Work Area

To access settings and information from the work area.

1. Open WorkArea Status panel
2. Press WorkArea Settings
3. Press Connected Devices
4. Press the Saturn device
5. Press Settings. See Figure 7-5

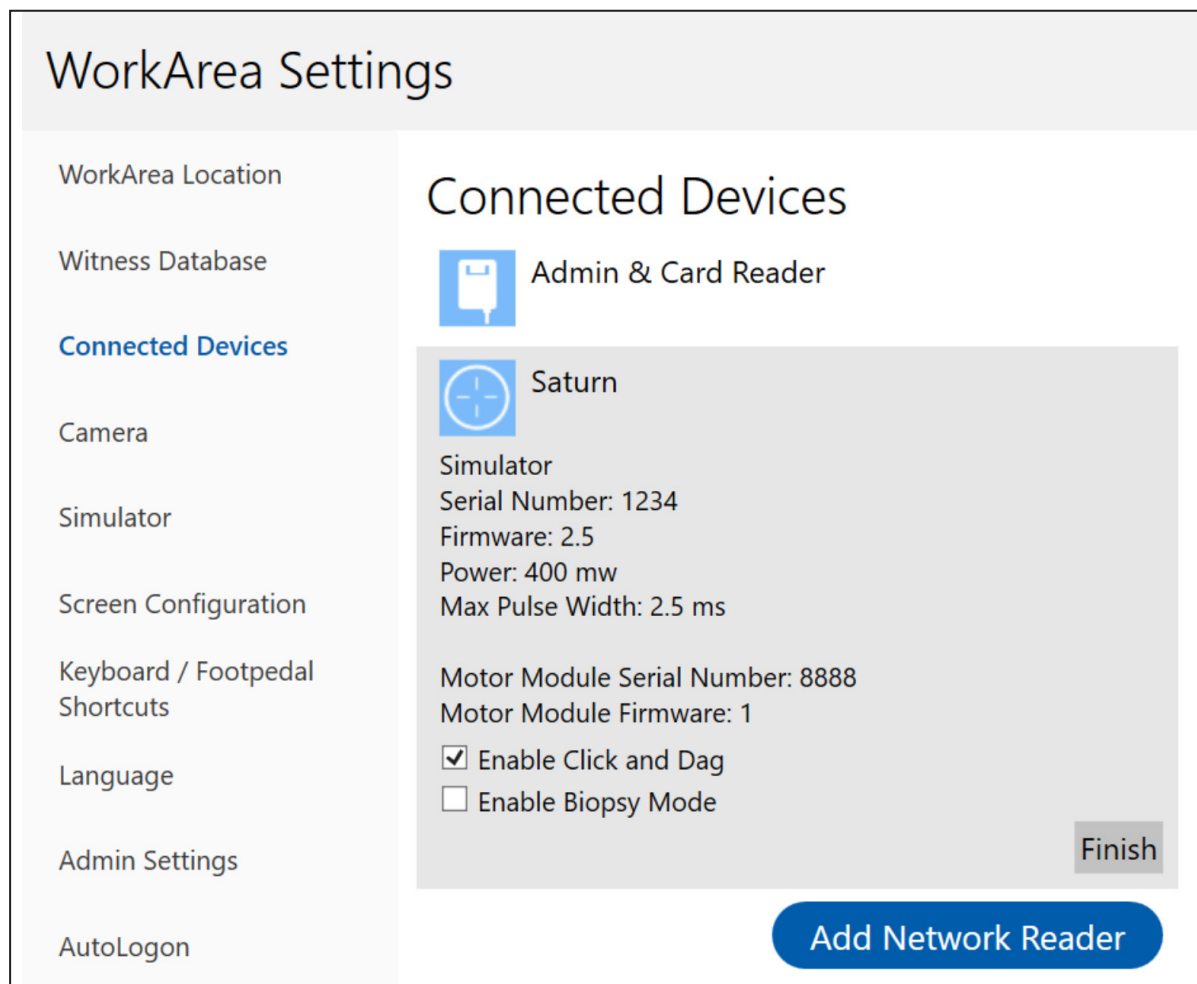


Figure 7-5 Saturn™ Laser System Information

Section 9

Warranty Information and Limits on Liability

SECTION 9 - WARRANTY INFORMATION AND LIMITS ON LIABILITY

Please refer to our Terms and Conditions on our website <https://fertility.coopersurgical.com/commercial-terms-and-conditions/>

Customer Service Contact Details

Tel: +45 46 79 02 02

Fax: +45 46 79 03 02

E-mail: sales@coopersurgical.com

coopersurgical.com

Contact Details for Customers in the USA

Tel: 800-243-2974

Fax: 800-262-0105

coopersurgical.com

