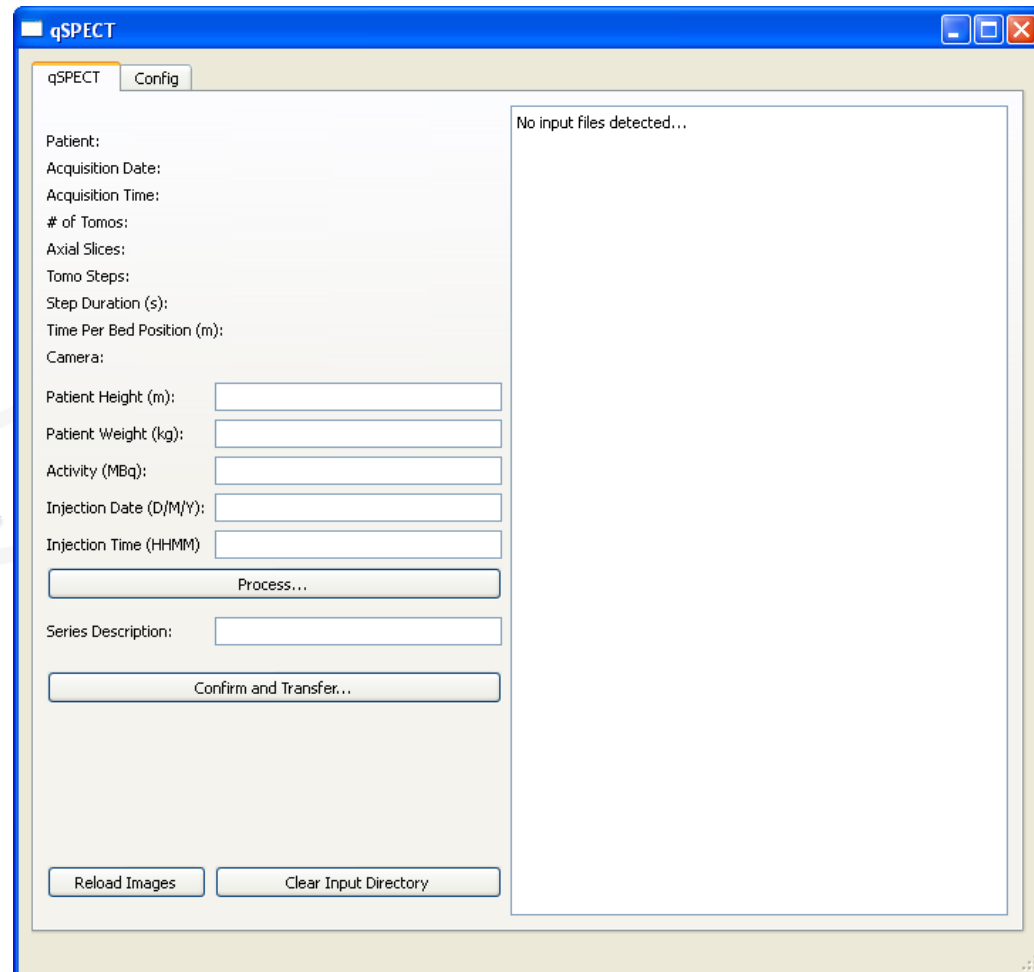
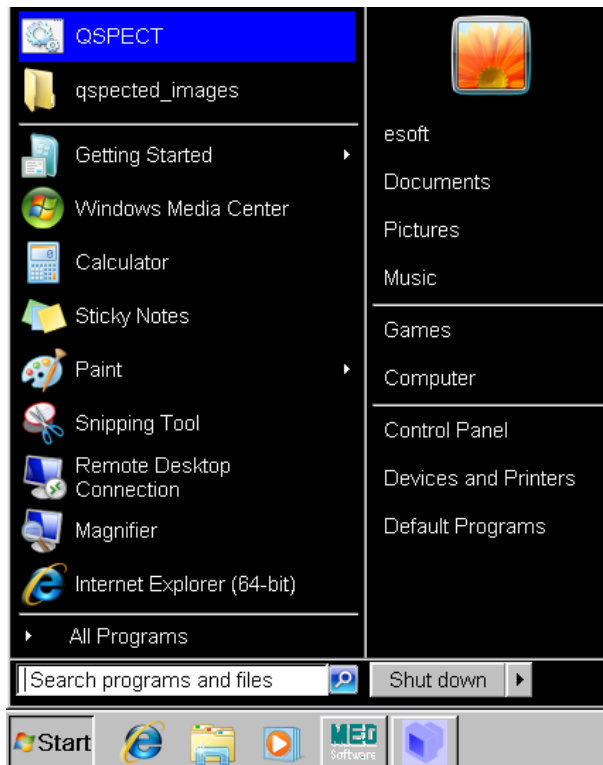


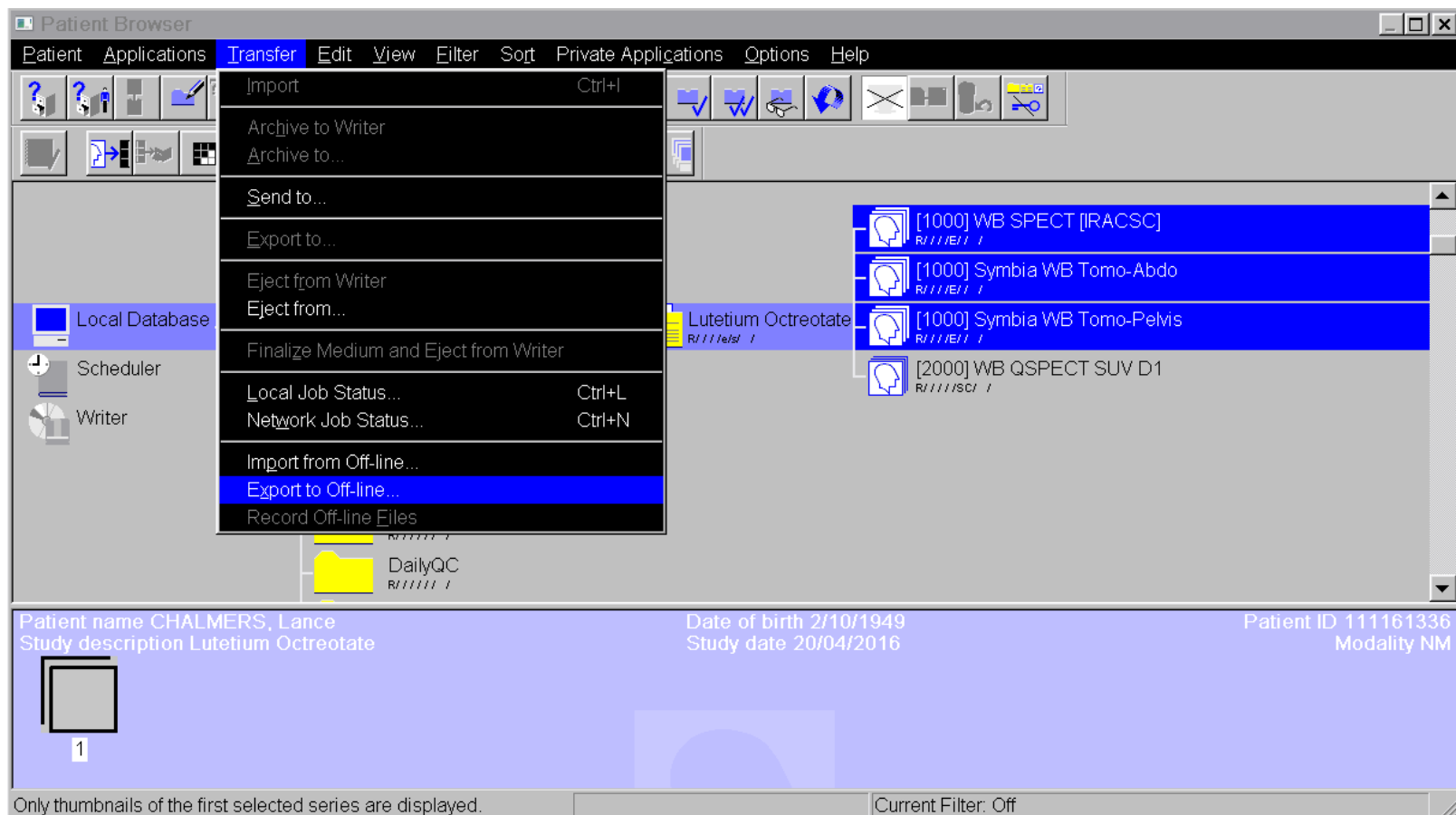
qSPECT v2: Reference Manual

- Open from Start Menu
 - 'QSPECT_v2'



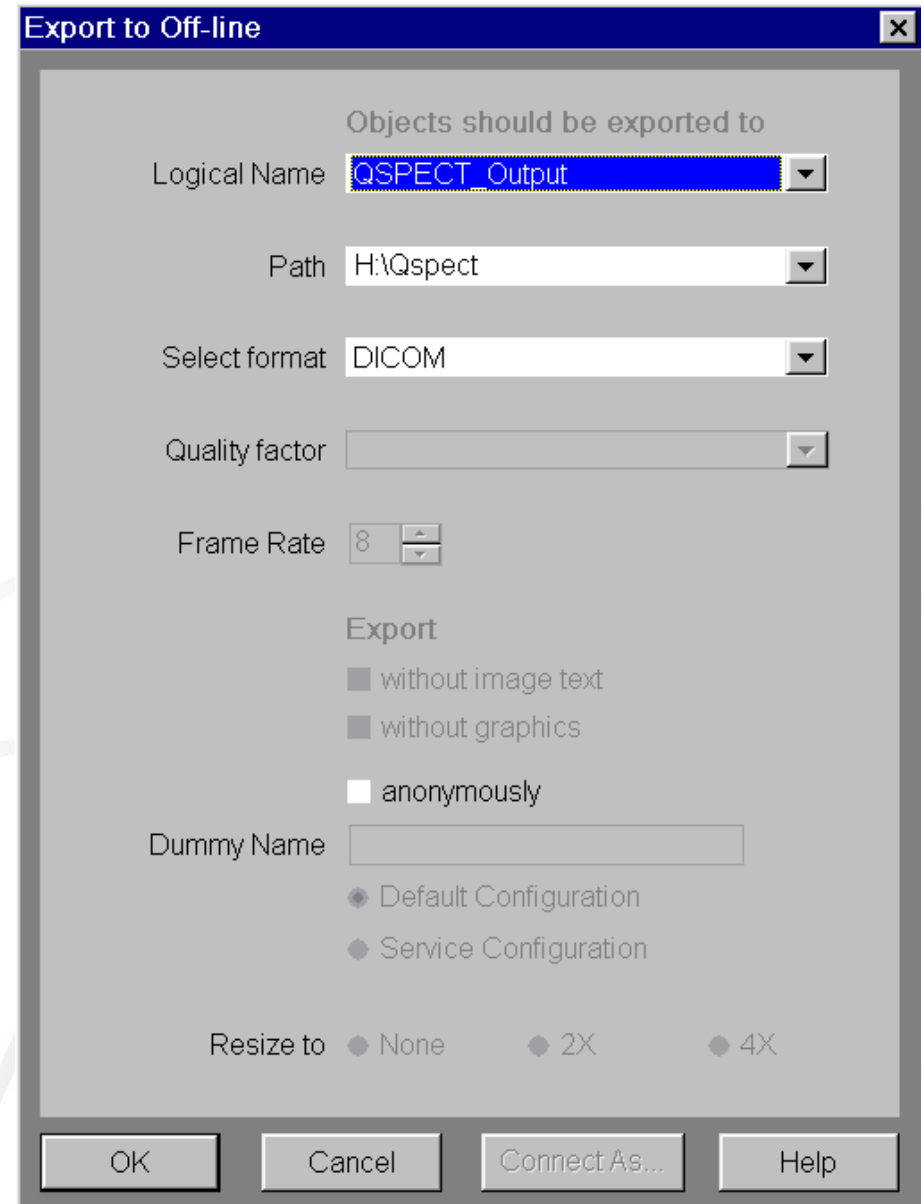
Export Images to Offline

- Select TOMOs & IRACSCS recon
- Send to QSPECT folder (H:\QSPECT or similar)



Export Images to Offline

- Select TOMOs & IRACSCS recon
- Send to QSPECT folder (H:\QSPECT or similar)



The dialog box is titled "Export to Off-line" and contains the following settings:

- Objects should be exported to**
 - Logical Name: QSPECT_Output
 - Path: H:\Qspect
 - Select format: DICOM
 - Quality factor: (empty)
 - Frame Rate: 8
- Export**
 - ☐ without image text
 - ☐ without graphics
 - ☐ anonymously
- Dummy Name: (empty)
- ☒ Default Configuration
- ☐ Service Configuration
- Resize to: ☐ None ☐ 2X ☐ 4X

Buttons at the bottom: OK, Cancel, Connect As..., Help

Click Reload images

- Will detect most patient details
 - Error if multiple studies or missing images
- Clear input & reload

The screenshot shows the qSPECT software window. The 'Config' tab is active, displaying patient information and acquisition parameters. A blue arrow points to the 'Reload Images' button at the bottom left of the window.

qSPECT Config

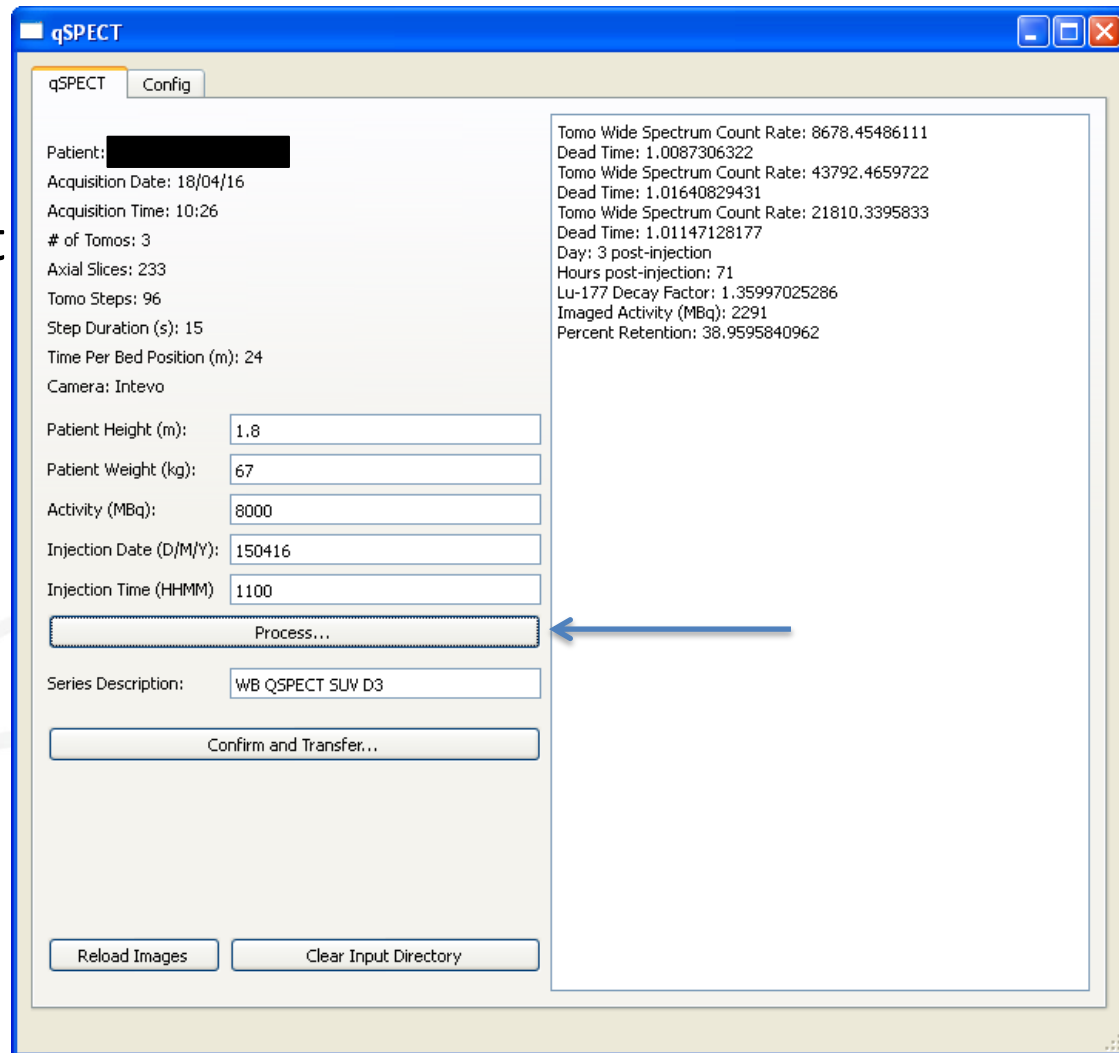
Patient: [REDACTED]
Acquisition Date: 18/04/16
Acquisition Time: 10:26
of Tomos: 3
Axial Slices: 233
Tomo Steps: 96
Step Duration (s): 15
Time Per Bed Position (m): 24
Camera: Intevo

Patient Height (m):
Patient Weight (kg):
Activity (MBq):
Injection Date (D/M/Y):
Injection Time (HHMM):

Series Description:

Enter Patient Details & click Process

- Enter patient height & weight (if missing)
- Enter Injected Activity (at treatment time), Date, & Time
 - Date with or without '/', time with or without ':'
- Click PROCESS



The screenshot shows the qSPECT software interface. The window has a blue title bar with the text 'qSPECT' and standard window controls. Below the title bar is a tabbed interface with 'qSPECT' and 'Config' tabs. The 'qSPECT' tab is active, displaying a form for patient and acquisition details. The form includes fields for Patient (redacted), Acquisition Date (18/04/16), Acquisition Time (10:26), # of Tomos (3), Axial Slices (233), Tomo Steps (96), Step Duration (s) (15), Time Per Bed Position (m) (24), Camera (Intevo), Patient Height (m) (1.8), Patient Weight (kg) (67), Activity (MBq) (8000), Injection Date (D/M/Y) (150416), and Injection Time (HHMM) (1100). A 'Process...' button is highlighted with a blue arrow. Below this is a 'Series Description' field containing 'WB QSPECT SUV D3', followed by a 'Confirm and Transfer...' button. At the bottom are 'Reload Images' and 'Clear Input Directory' buttons. On the right side of the window, a text box displays acquisition statistics: Tomo Wide Spectrum Count Rate: 8678.45486111, Dead Time: 1.0087306322, Tomo Wide Spectrum Count Rate: 43792.4659722, Dead Time: 1.01640829431, Tomo Wide Spectrum Count Rate: 21810.3395833, Dead Time: 1.01147128177, Day: 3 post-injection, Hours post-injection: 71, Lu-177 Decay Factor: 1.35997025286, Imaged Activity (MBq): 2291, and Percent Retention: 38.9595840962.

qSPECT Config

Patient: [REDACTED]
Acquisition Date: 18/04/16
Acquisition Time: 10:26
of Tomos: 3
Axial Slices: 233
Tomo Steps: 96
Step Duration (s): 15
Time Per Bed Position (m): 24
Camera: Intevo

Patient Height (m): 1.8
Patient Weight (kg): 67
Activity (MBq): 8000
Injection Date (D/M/Y): 150416
Injection Time (HHMM): 1100

Process...

Series Description: WB QSPECT SUV D3

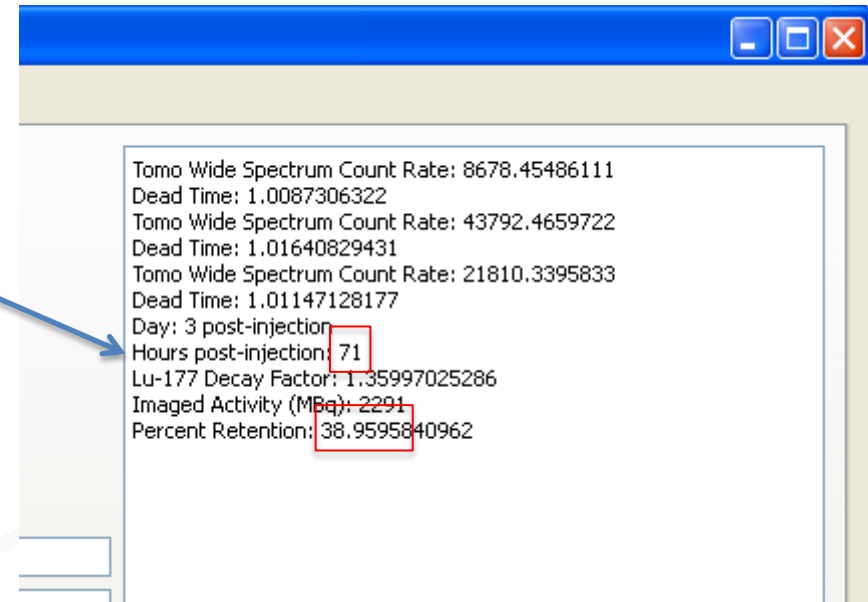
Confirm and Transfer...

Reload Images Clear Input Directory

Tomo Wide Spectrum Count Rate: 8678.45486111
Dead Time: 1.0087306322
Tomo Wide Spectrum Count Rate: 43792.4659722
Dead Time: 1.01640829431
Tomo Wide Spectrum Count Rate: 21810.3395833
Dead Time: 1.01147128177
Day: 3 post-injection
Hours post-injection: 71
Lu-177 Decay Factor: 1.35997025286
Imaged Activity (MBq): 2291
Percent Retention: 38.9595840962

Check PI Time & Percent ID

- Check Post-injection time & Percent Retention

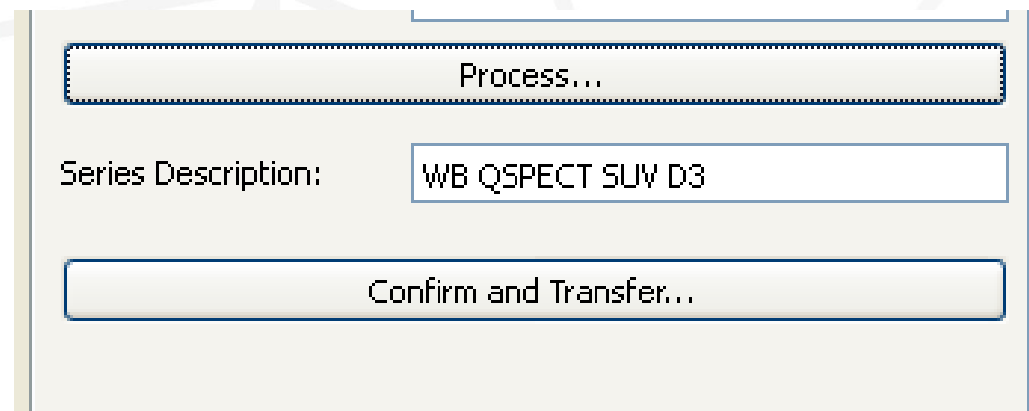


Tomo Wide Spectrum Count Rate: 8678.45486111
Dead Time: 1.0087306322
Tomo Wide Spectrum Count Rate: 43792.4659722
Dead Time: 1.01640829431
Tomo Wide Spectrum Count Rate: 21810.3395833
Dead Time: 1.01147128177
Day: 3 post-injection
Hours post-injection: 71
Lu-177 Decay Factor: 1.35997025286
Imaged Activity (MBq): 2291
Percent Retention: 38.9595840962

- Generates default series description:

- 'WB QSPECT SUV D#'
- Can modify

- Click CONFIRM



Process...

Series Description: WB QSPECT SUV D3

Confirm and Transfer...

Confirm & Transfer

- Writes output qSPECT images and sends to the PC patient browser
- Export next patient & click RELOAD IMAGES

The screenshot shows the qSPECT software window with a blue title bar and a menu bar containing 'qSPECT' and 'Config'. The main area is divided into two panes. The left pane contains patient information and input fields: Patient (redacted), Acquisition Date: 18/04/16, Acquisition Time: 10:26, # of Tomos: 3, Axial Slices: 233, Tomo Steps: 96, Step Duration (s): 15, Time Per Bed Position (m): 24, Camera: Intevo, Patient Height (m): 1.8, Patient Weight (kg): 67, Activity (MBq): 8000, Injection Date (D/M/Y): 15/4/16, Injection Time (HHMM): 1100, Series Description: WB QSPECT SUV D3. Below these are buttons for 'Process...', 'Confirm and Transfer...', 'Reload Images', and 'Clear Input Directory'. A blue arrow points to the 'Reload Images' button. The right pane displays transfer logs for three consecutive attempts, each showing a successful transfer of a .dcm file to a specific directory, followed by a backup message.

qSPECT

qSPECT Config

Patient: [REDACTED]
Acquisition Date: 18/04/16
Acquisition Time: 10:26
of Tomos: 3
Axial Slices: 233
Tomo Steps: 96
Step Duration (s): 15
Time Per Bed Position (m): 24
Camera: Intevo

Patient Height (m): 1.8
Patient Weight (kg): 67
Activity (MBq): 8000
Injection Date (D/M/Y): 15/4/16
Injection Time (HHMM): 1100

Process...

Series Description: WB QSPECT SUV D3

Confirm and Transfer...

Reload Images Clear Input Directory

Sending file:
out\1.3.12.2.1107.5.6.1.90214.30710116041801194952107601583.dcm
Transfer: LittleEndianExplicit -> LittleEndianImplicit
Store SCU RQ: MsgID 231, (PI)
XMIT:...
C-Store RSP: MsgID: 231 [Status=Success]
AffectedSOPClassUID: =PETImageStorage
AffectedSOPInstanceUID:
1.3.12.2.1107.5.6.1.90214.30710116041801194952107601583
Data Set: Not Present

Sending file:
out\1.3.12.2.1107.5.6.1.90214.30710116041801194952107601584.dcm
Transfer: LittleEndianExplicit -> LittleEndianImplicit
Store SCU RQ: MsgID 232, (PI)
XMIT:...
C-Store RSP: MsgID: 232 [Status=Success]
AffectedSOPClassUID: =PETImageStorage
AffectedSOPInstanceUID:
1.3.12.2.1107.5.6.1.90214.30710116041801194952107601584
Data Set: Not Present

Sending file:
out\1.3.12.2.1107.5.6.1.90214.30710116041801194952107601585.dcm
Transfer: LittleEndianExplicit -> LittleEndianImplicit
Store SCU RQ: MsgID 233, (PI)
XMIT:...
C-Store RSP: MsgID: 233 [Status=Success]
AffectedSOPClassUID: =PETImageStorage
AffectedSOPInstanceUID:
1.3.12.2.1107.5.6.1.90214.30710116041801194952107601585
Data Set: Not Present
Releasing Association

Saving local backup to:
C:\Documents and Settings\jackson
price\Desktop\qspect_qt\qspected_images\EPping^ARNOLD_20160418
Backup already exists... overwriting
Complete!

Config Settings: Shouldn't need to modify

- Can adjust the DICOM transfer parameters
- Check/uncheck:
 - Transfer images (storescu)?
 - Delete Input Files?
 - Save local copy to backup directory?
- Change input directory by modifying input_directory.txt
- Current settings written to startup.txt if saved. Copy startup.txt over default.txt to create new backup

