



This self-guided workbook allows technologists, sonographers, and imaging staff to practice navigating through Enterprise Imaging (EI) workflow. Please note, the following scenarios are designed to demonstrate functionality and may not be inclusive of all Northern Light Health policies and procedures.

## Table of Contents

<b>Signing into Enterprise Imaging (EI) – Acquisition Desktop</b> .....	2
<b>Manage Activities Overviews</b> .....	2
<b>Locate Patient Order via Task List</b> .....	2
<b>Toolbar Icons</b> .....	3
<b>Desktop Customizations</b> .....	5
<b>Locate Patient Order</b> .....	6
<b>F12 Options</b> .....	7
<b>Text Page Details</b> .....	8
<b>Technologist Comments</b> .....	8
<b>Image Visualization</b> .....	9
<b>Image Area Markup Tools</b> .....	9
<b>Image Area Context Menu</b> .....	9
<b>How to Configure a Default Tool</b> .....	10
<b>MPR Features</b> .....	10
<b>MPR Features within Hanging Protocol</b> .....	11
<b>QC – Quality Control</b> .....	11
<b>Start a QC task</b> .....	12
<b>Print and Export</b> .....	13
<b>Import CD</b> .....	14
<b>Import file from Desktop</b> .....	14
<b>Burn or Transfer multiple studies</b> .....	15
<b>Patient Merge</b> .....	16

## Signing into Enterprise Imaging (EI) – Acquisition Desktop

- Click the **Windows** icon at the bottom left of the computer screen.
- Click **Enterprise Imaging**.
- Type your network **Username** and **Password**.
- Click **OK**.



## Manage Activities Overviews

**STEP 1:** Select **List area**.

**STEP 2:** Select **Activities overviews**.

**STEP 3:** Click the **radio button** in **Default** column for the **Exam Task list** used most.




**NOTE:** To add additional Exam Task lists, check the box in the Show in drop-down list.


Show in drop-down list	Default	Personal	Code	Name	Available for	Active from	Active to
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ACTOV4819	Spectrum Remote Dx Weeke...	System, NLH Radiologist, NLH...	09/29/2022	
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ACTOV14002	Spectrum FPPE	NLH Radiologist, System ad...	02/16/2024	
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ACTOV15	BHMH Cardiologist Reading ...	System, NLH Cardiologist, N...	09/29/2022	
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ACTOV205	ARG Technologist Modality ov...	NLH Imaging Technologist, N...	10/01/2022	
<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	ACTOV4826	Clinician Workflow	System, NLH Clinicians, NLH...	07/06/2023	
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ACTOV4814	Spectrum SJH MG Rad Task	System, NLH Radiologist, NLH...	09/29/2022	
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ACTOV6801	BHMC Sonographer Overview	NLH Imaging Technologist, N...	10/01/2022	
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ACTOV13	Mercy Caroling Reading T...	System, NLH Cardiologist, N...	09/29/2022	
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ACTOV17	SVH Radiologist Reading Task	NLH Radiologist, NLH Syste...	09/29/2022	
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ACTOV204	Mercy Technologist Modality o...	NLH Imaging Technologist, N...	10/01/2022	

**STEP 4:** Click **Close** in the bottom right corner of the screen to return to the **Task List – “To do.”**

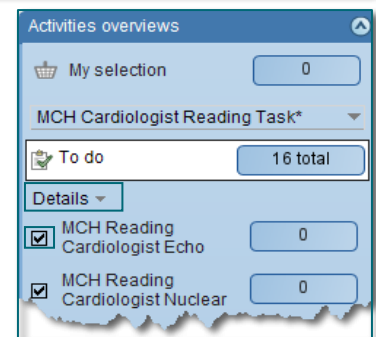
**STEP 5:** Click the checkbox(es) to the left of the modality in the **Details** dropdown to open the Task List for the selected modalities.

## Locate Patient Order via Task List

**STEP 1:** Optional: Select **Start Acquisition** , the technologist then performs examination and sends in study into EI.

**STEP 2:** View **Details** and Image thumbnails on **List Area Page**. 

**STEP 3:** Add technologist comments in EI unless workflow is to be done in the RIS.




**STEP 4:** Open Study to view details and images if needed.

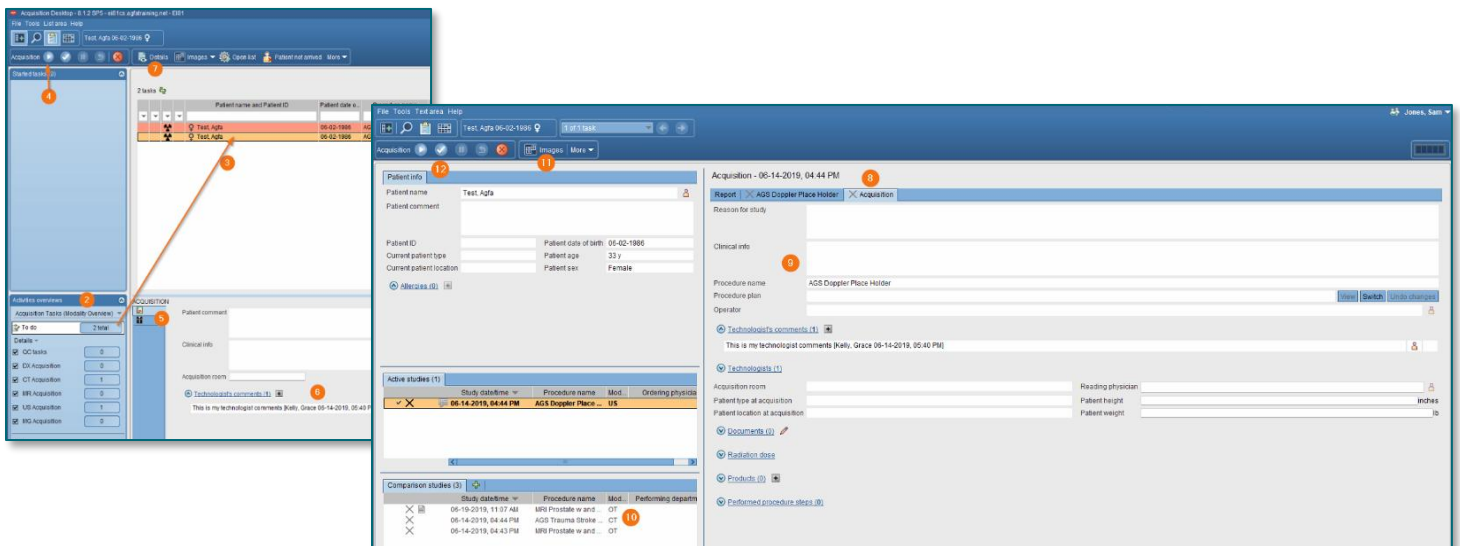
**STEP 5:** Detail page will display acquisition tab (default).

**STEP 6:** View any study information or other site-specific study comments.

**STEP 7:** View additional comparisons – right-click to get viewing options.

**STEP 8:** Select **Images** to proceed to image page. 

**STEP 9:** Complete acquisition task via RIS trigger auto complete EI task or manually complete in EI and complete in RIS. 



## Toolbar Icons

Tools necessary to manipulate the system

➤ **File – Menu Option**

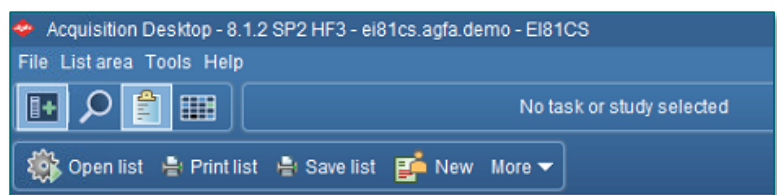
- Logoff
- Exit
- Add user

➤ **List Area – Menu Option**

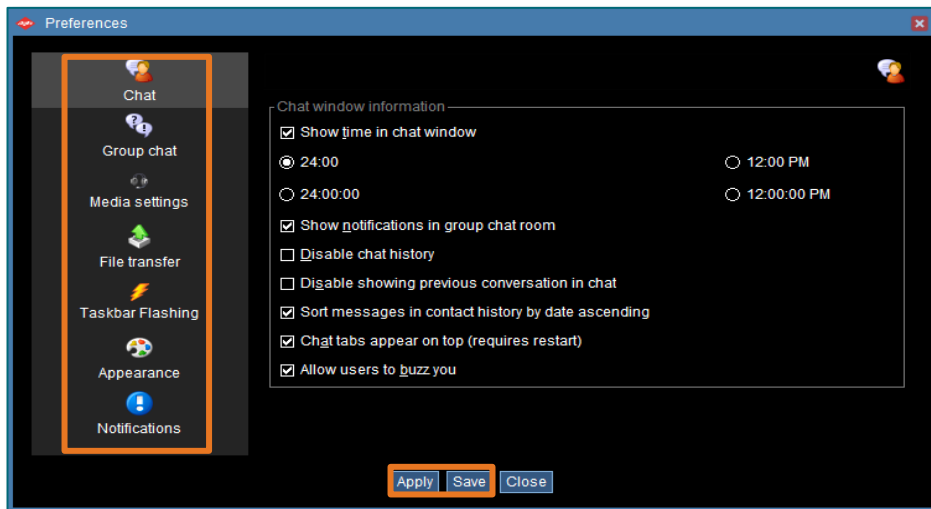
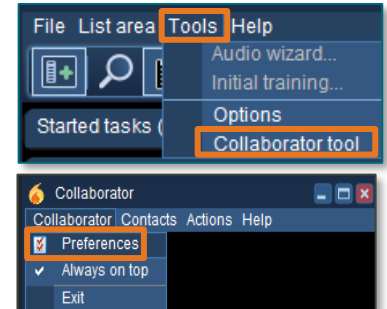
- Activities Overview
- Customize columns

➤ **Tools – Menu Option**

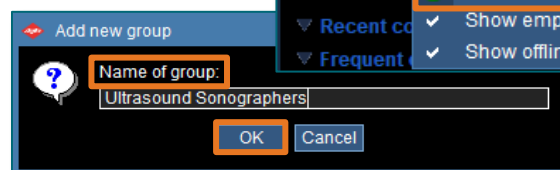
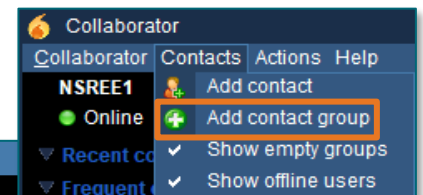
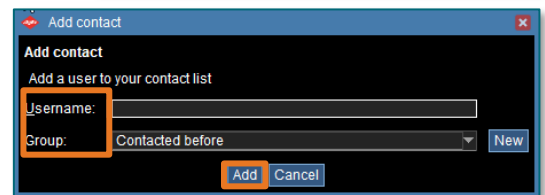
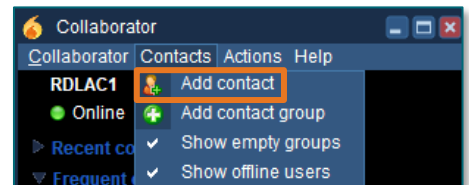
- Options
  - Also accessible using the F12 button.



- **Collaborator tool** is a text messaging tool used to talk to staff and physicians.
  - Select **Preferences** to customize the Collaborator.
  - Click **Preferences** for each feature.
  - Click **Apply**, then **Save** to keep new preferences.
  - Unselect **Always on top** if the Collaborator is not wanted on the top.
  - Click **Exit** to leave the Collaborator.

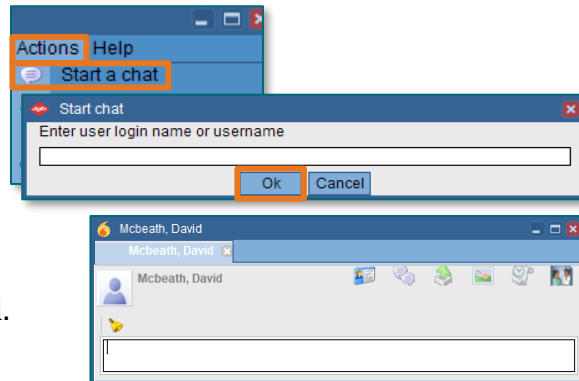


- **Collaborator tool – Adding Contacts**
  - Click **Contacts**.
  - Click **Add Contacts**.
    - Enter the **Username**.
    - Select **Username** for the dropdown list that displays.
    - Select the **Group** the user should be added to using the Group dropdown.
    - Click **Add**.
    - The user will be added to Contacted before and the selected Group.
- **Collaborator tool – Create a New Group**
  - Click **Contacts**
    - Select **Add contact group**.
    - Enter **Name of the group**.
    - Click **OK**.



▪ **Starting a Chat**

- Click **Actions**.
  - Select **Start a chat**, enter the **username**, and click **OK**.
  - The Chat window opens.
  - Type the message.
  - Select **Enter** on the keyboard.



**NOTE:** Click [here](#) for more information on how to use the Collaborator Tool within Enterprise Imaging.

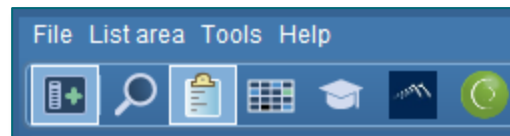
➤ **Help** – Menu Option is available to find answers needed.

➤ **Hide Navigation**

➤ **Search**

➤ **Patient List**

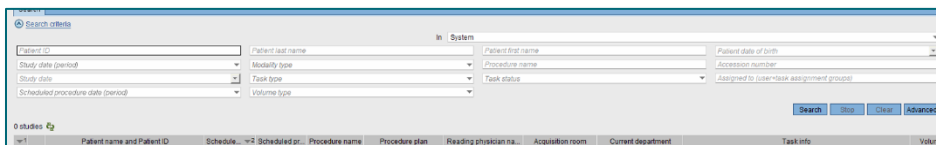
➤ **Calendar**



## Desktop Customizations

Right-click in the white area to provide options for customization.

**STEP 1:** Select white area in search field or columns.



**STEP 2:** Right-click.

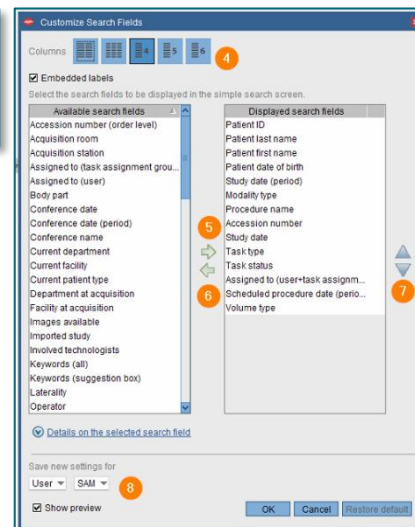
**STEP 3:** Select **customize fields** or **customize columns**.

**STEP 4:** To specify the number of search columns, click the **Perspective Column** button.

**STEP 5:** To display additional search fields, select and move items from **Available** search fields to **Displayed** search fields.

**STEP 6:** To remove currently displayed fields, reverse the above step.

**STEP 7:** To change the displayed order, select up/down arrows to right of displayed field.



**STEP 8:** The setting saves for the login user.

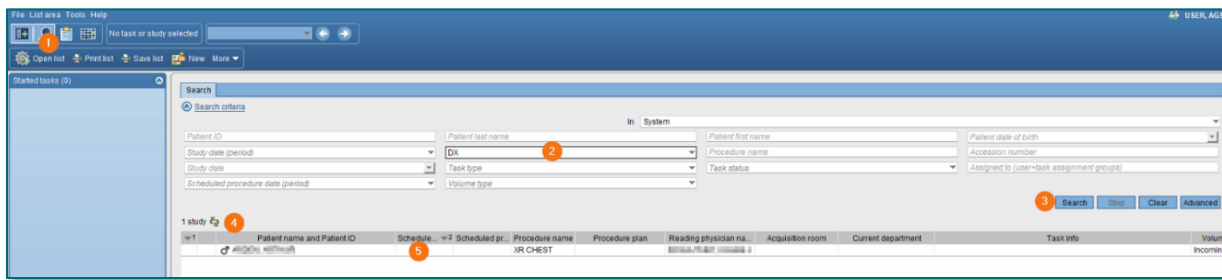
**STEP 9:** Select **OK**.


**NOTE:** Helpful search criteria that should be added:

- Images available
- Report available
- Study verification status

## Locate Patient Order

➤ **Via task list or adhoc search**



**STEP 1:** Select **Search** icon  in the tool to begin an ad-hoc search.

**STEP 2:** Input search criteria (**i.e., Patient ID, patient last name, accession number**).

**STEP 3:** Select 

**STEP 4:** Search results display with the number of results that meet your search criteria. 

**STEP 5:** Select the study you want to review.

**STEP 6:** Double-click or right-click the line of the study you wish to display and open.

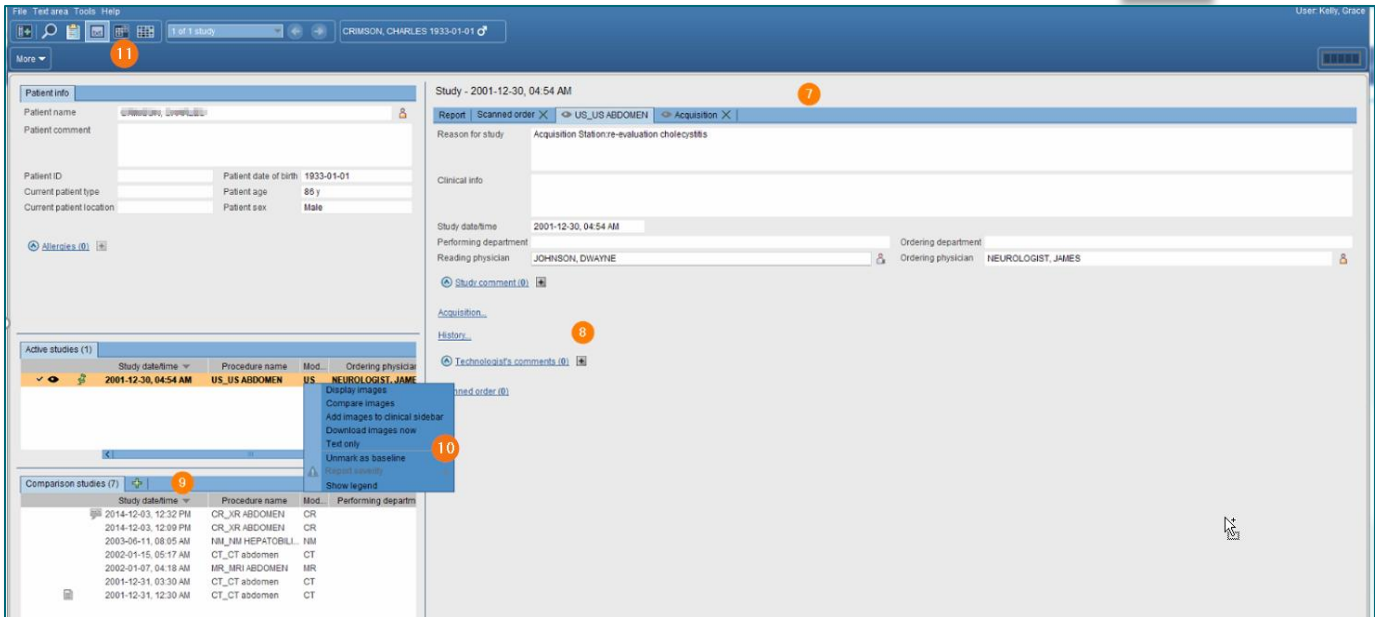
**STEP 7:** Text area displays.

**STEP 8:** Study information tab displays if report has not been created. If report is created, the report tab displays here by default. View study information and technical comments by users either entered in EI manually or in the RIS via HL7 message.

**STEP 9:** Comparison studies are available for this patient.

**STEP 10:** To display comparisons, right-click for display options.

**STEP 11:** On a one monitor setup, click the **image** icon to go to image display.



**STEP 12:** Image page displays.

**STEP 13:** Available tools.

## F12 Options

Defines the settings that change the look and feel of the desktops.

**STEP 1:** Select **Tools > Options** or **F12**.

**STEP 2:** Options window displays.

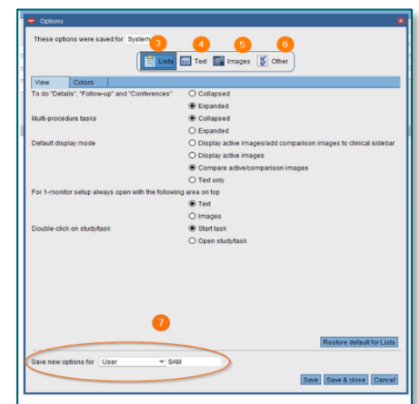
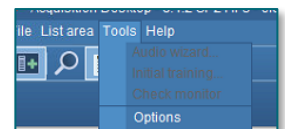
**STEP 3:** Selecting **Lists** allows customization of items related to List area.

**STEP 4:** Selecting **Text** allows customization of items related to Reporting and Text area.

**STEP 5:** Selecting **Images** allows customization of items related to Image area including image display options, keyboard shortcuts, and saving of mark-ups.

**STEP 6:** Selecting **Others** allows you to turn on or off the collaborator tool for default login setting.

**STEP 7:** This setting saves for the login user.





## Text Page Details


**STEP 1:** Patient information

**STEP 2:** Active studies

**STEP 3:** Comparison studies

**STEP 4:** Eyeball icon  show images are in display.

**STEP 5:** Report icon  shows the study has a report attached.

**STEP 6:** Study comment communication between provider and radiologist. 

**STEP 7:** If an image is not in display, right-click for display options.

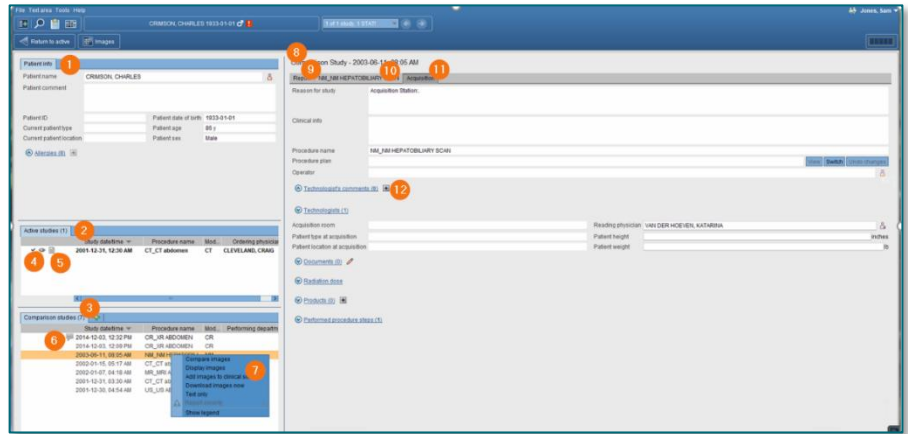
**STEP 8:** Study information for study that is in display.

**STEP 9:** Report Tab

**STEP 10:** Order Tab

**STEP 11:** Acquisition Tab

**STEP 12:** Comments



## Technologist Comments

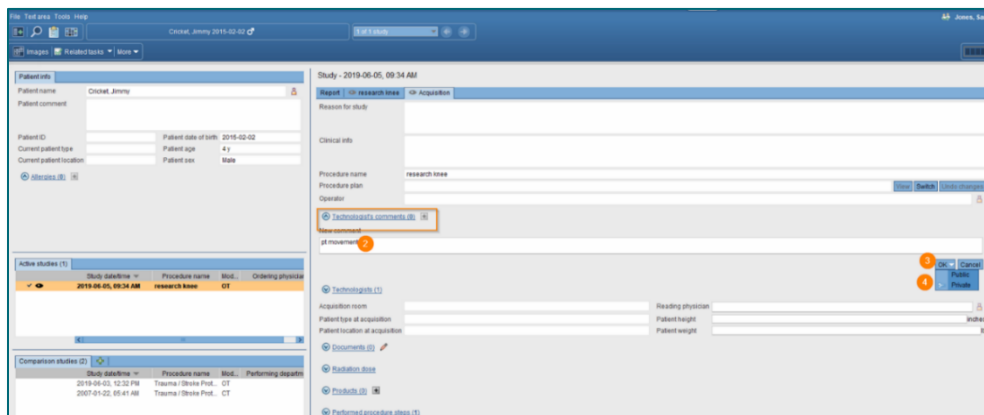
Allows the staff to place a descriptive message regarding the patient/exam that is visible within EI

**STEP 1:** Select **Technologist comments**.

**STEP 2:** Enter comments.

**STEP 3:** Select **OK**.

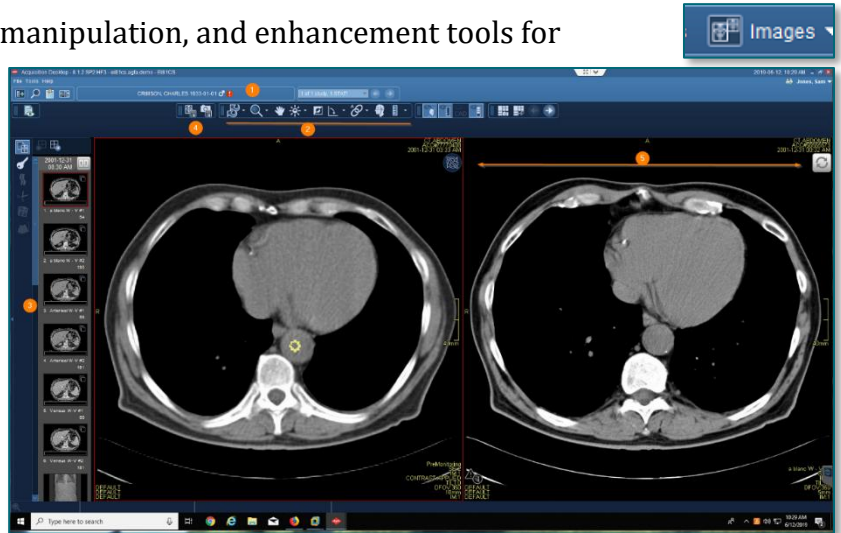
**STEP 4:** Select **Public**.



## Image Visualization

The image area combines all image display, manipulation, and enhancement tools for reading in EI.

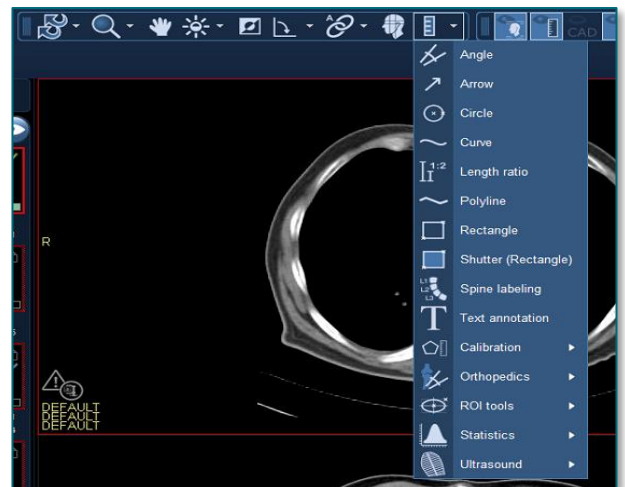
- STEP 1:** Patient banner
- STEP 2:** Tools
- STEP 3:** Clinical sidebar
- STEP 4:** Save Presentation State and Create Snapshot
- STEP 5:** Active vs. Comparison



## Image Area Markup Tools

Calibrate images, take measurements, highlight, and annotate areas with arrows or text. Also have the ability to hide, modify, or delete markups.

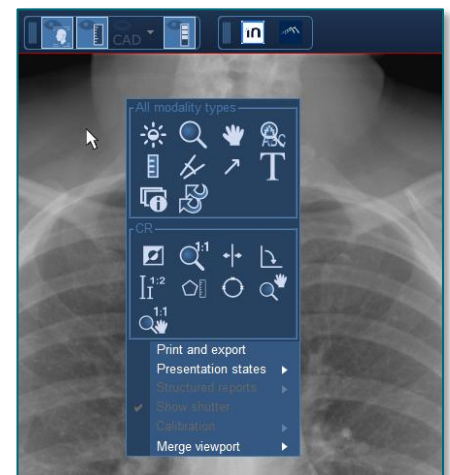
- STEP 1:** Activate tool with left-click and see tool attach to arrow.
  - STEP 2:** Use tool with by left-clicking.
  - STEP 3:** Deactivate tool with right-click, tool no longer is attached to arrow.
- NOTE:** If there is an arrow to the right of tool, this indicates more options are available.



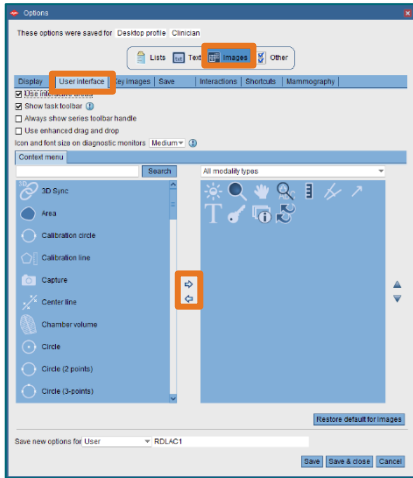
## Image Area Context Menu

Access a selection of relevant tools without leaving the current image with the pointer.

- STEP 1:** Right-click to open context menu.
- STEP 2:** Left-click **desired tool**.
- STEP 3:** Left-click to **utilize tool**.
- STEP 4:** Right-click to **deactivate**.



**STEP 5:** Customization for the **Image context menu** can be obtained from F12.



## How to Configure a Default Tool

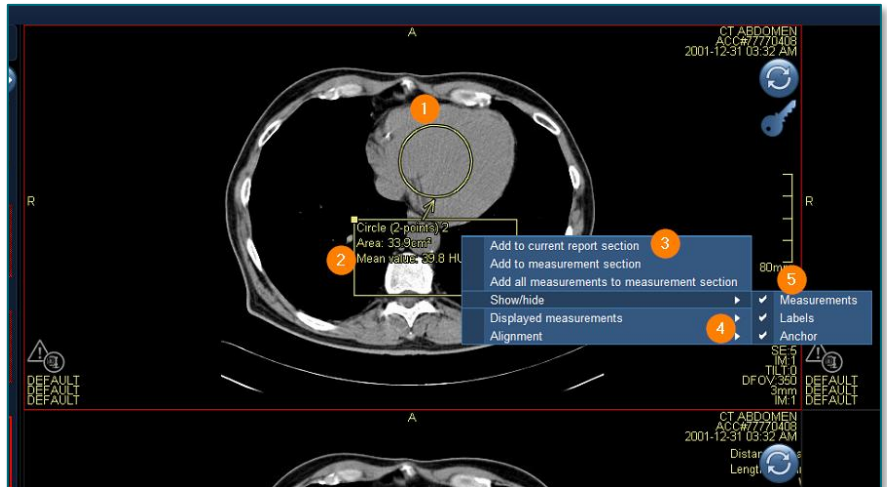
**STEP 1:** Select tool, create measurement, and deactivate.

**STEP 2:** Hover over measurements with left-click until enhanced measurements are viewable.

**STEP 3:** Right-click to see an additional box with options.

**STEP 4:** Select side arrow to see additional options.

**STEP 5:** Select or deselect desired options.



**NOTE:** These measurement settings are set as the user's default.

➤ Click [here](#) for more information on how to use the Image Area Tools within Enterprise Imaging.

## MPR Features

Method for reconstructing axial, coronal, sagittal, or oblique views from slices in any of these planes.

➤ **Changing the view in an MPR viewport:**

**STEP 1:** Place **cursor** over the bottom center of the view port.




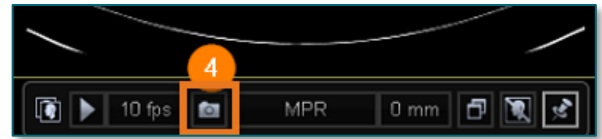
**STEP 2:** To open **view sub options**, point to **2D to change viewport** to an MPR or other options.

**STEP 3:** To change the view to axial, sagittal, or coronal, click the **respective** button.



**STEP 4:** To get a **Secondary Capture**, select the **camera** icon.

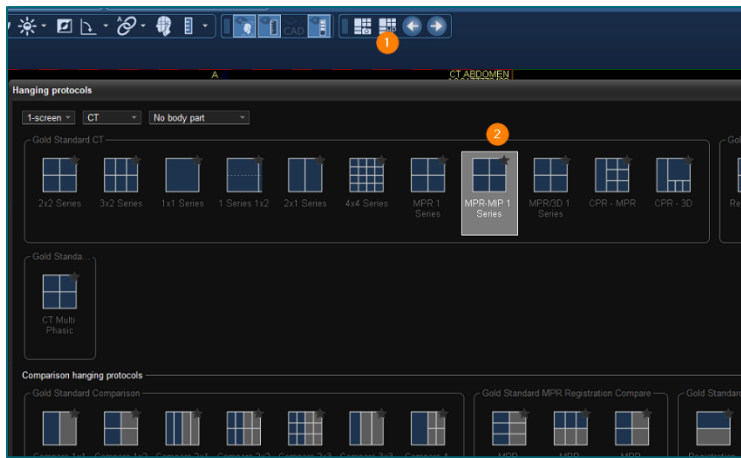
**STEP 5:** If you want to keep the **tool bar** active in the viewport select the push pin. 



## MPR Features within Hanging Protocol

**STEP 1:** To activate **MPR display**, open the **hanging protocol gallery**.

**STEP 2:** Select a **predesigned MPR hanging protocol**.



## QC – Quality Control

Create QC- to assign a quality control task for the selected study or studies to yourself or another person.



**STEP 1:** Select a **study** for QC.

**STEP 2:** **Right-click** and then choose **QC task**.

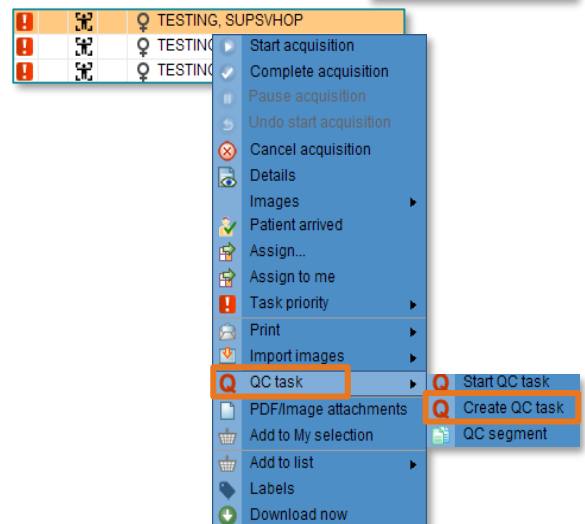
**STEP 3:** Create **QC task**.

**STEP 4:** Select **Auto-assign** or **Assign to**.

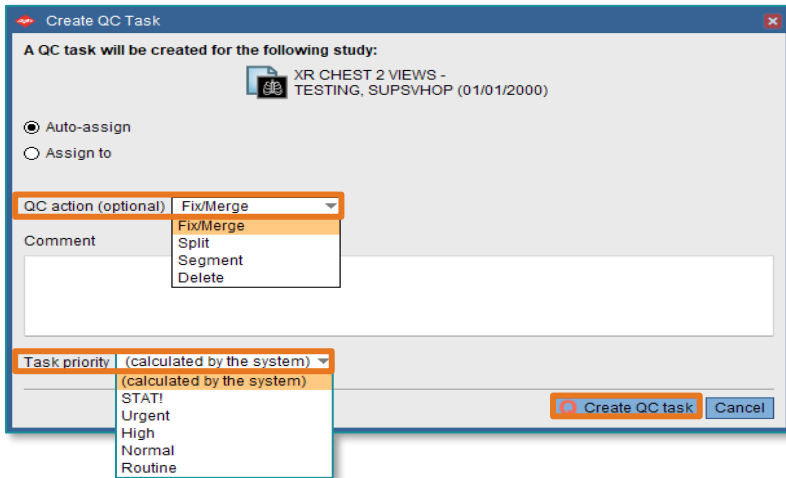
**STEP 5:** Select QC action-fix/merge, split, segment, delete.

**STEP 6:** Include Task comments if necessary.

**STEP 7:** Select Task Priority from dropdown.

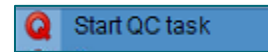


**STEP 8:** Select **Create QC Task**.

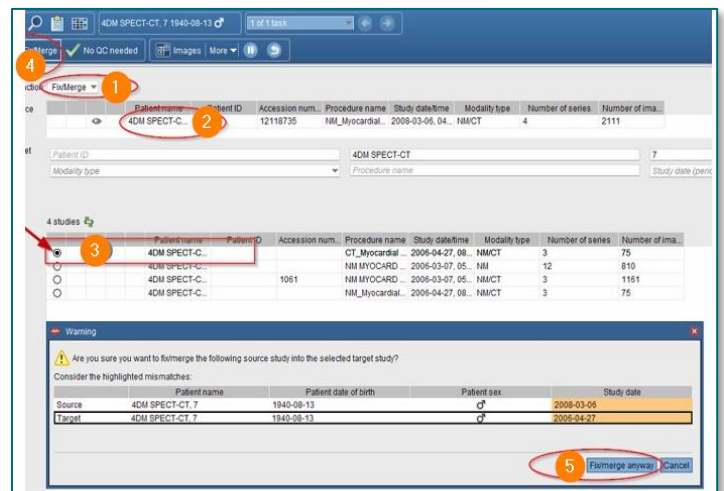


**Start a QC task**

Start a QC task from a task list to resolve the quality control issue.



- **Fix/Merge** – Manually fixing studies aligns patient and order information with unverified images. Merging images assembles multiple studies that belong to one patient.



**STEP 1:** Select the correct action **Fix/Merge**.

**STEP 2:** Verify source.

**STEP 3:** Select the **target** for Merge.

**STEP 4:** Initiate the merge by clicking **Fix/Merge**.

**STEP 5:** Confirm and **select Fix/Merge anyway**.

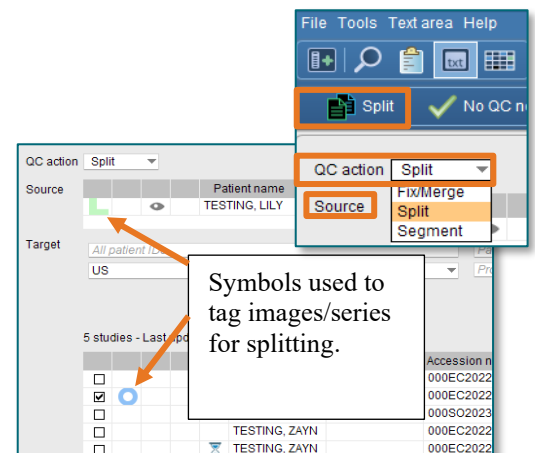
- **Spilt** – Manually split a study with images belonging to multiple patients, orders, or procedures.

**STEP 1:** Select the **QC action** to split.

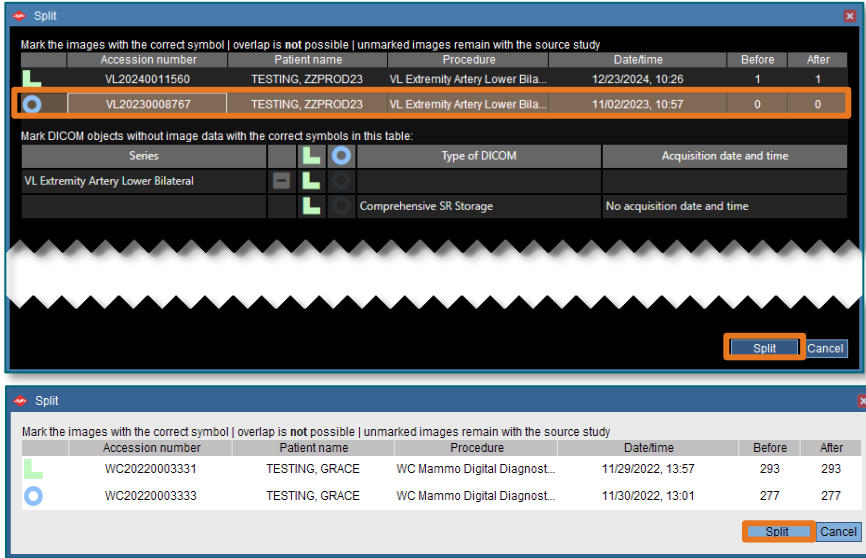
**STEP 2:** Select your **target**.

**STEP 3:** Click the **Split** action.

**STEP 4:** Select the **study** to tag and click split; symbol will activate on your cursor. You now can **select an image(s)** or the **thumbnail** to select the series.



**STEP 5:** Confirm and select **Split**.



➤ **Segment** – Manually segment one patient into multiple procedures for the same patient.

**STEP 1:** Select the **QC action** to Segment.

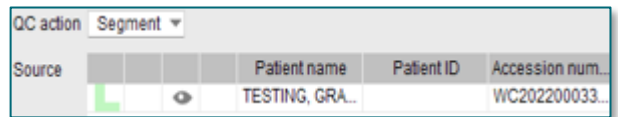
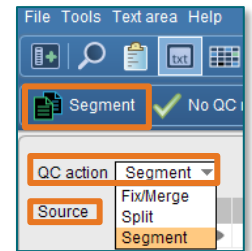
**STEP 2:** Select your **target**.

**STEP 3:** Click the **Segment** action.

**STEP 4:** Select the **study** you want to tag; symbol will activate on your cursor.

**STEP 5:** Confirm and select **Segment**.

**NOTE:** Delete image(s) – This is done by logging a ticket with Enterprise Imaging IS Team.



**Print and Export**

Print, fax, email, save to media, and transfer DICOM data.

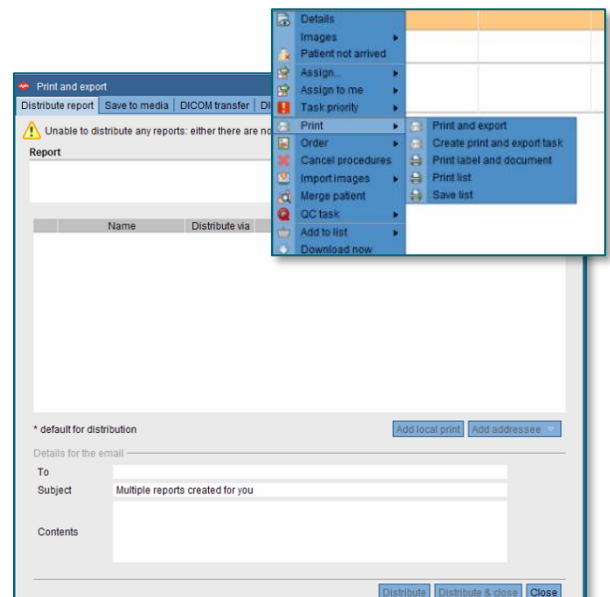
**STEP 1:** Select **Patient**.

**STEP 2:** Select **More**, top toolbar or right-click.

**STEP 3:** Select **Print**.

**STEP 4:** Select **Print and Export**.

**STEP 5:** Select **Distribute report**, **Save to Media**, **Dicom Transfer**, or **Discom Print**.



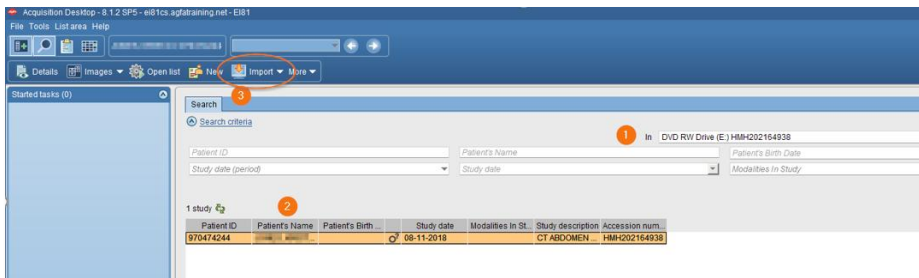
## Import CD

Add images from a local source by importing them to the currently selected study to a new order.

**STEP 1:** Select the local drive in the search area.

**STEP 2:** Select **study** or studies to import.

**STEP 3:** Click **Import** images. 

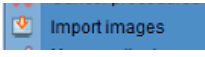


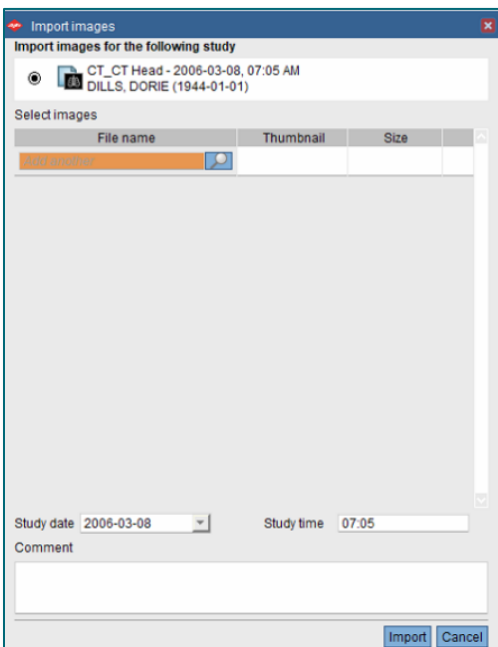
## Import file from Desktop

**STEP 1:** Select **Patient**.

**STEP 2:** Select **More**.

**STEP 3:** Select **Import**.

**STEP 4:** Select **Import images** for selected study. or **Import** images for new order. 



## Burn or Transfer multiple studies

**STEP 1:** Highlight 1 or more exams.

**STEP 2:** Right-click and select **Print**.

**STEP 3:** Click **Print and export**.

All patient IDs	Patient date o...	Task info	Patient name and Patien...	Scheduled pr...	Acquisition station	Study date ▲ <sup>2</sup>	Numb...
0760557 - NLH	11/28/2023		♀ TESTING, ZZPROD23	03/20/2024	NL EMMC VL 4	03/20/2024, 15:...	3
0760557 - NLH	11/28/2023		♀ TESTING, ZZ		L EMMC VL 4	03/21/2024, 16:...	10
0760557 - NLH	11/28/2023		♀ TESTING, ZZ		L EMMC VL 4	03/22/2024, 08:...	8
0760557 - NLH	11/28/2023		♀ TESTING, ZZ		L EMMC VL 4	03/22/2024, 10:...	12
RER - AGEI_N...	01/01/1990		♂ TESTING, ZZ			03/22/2024, 10:...	1
0760557 - NLH	11/28/2023		♀ TESTING, ZZ			03/22/2024, 10:13	
0760557 - NLH	11/28/2023	Reading (NLH Vascular	♀ TESTING, ZZ			03/22/2024, 14:...	1

**STEP 4:** Select **Save to media** or **DICOM transfer**.

**STEP 5:** Make sure the exams you want to burn or transmit have checkmarks beside them.

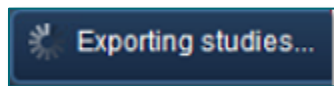
**STEP 6:** Click **Study**.

**STEP 7:** Use dropdown on **Destination**.

**STEP 8:** Select your designation.

**STEP 9:** Click **DICOM transfer & close** or **burn to**.

**STEP 10:** Box appears at top of list Exporting Studies.



**STEP 11:** Info box will display transferred or failed.

**The following studies have been transferred in accordance with filter configuration for the external system:**

ELBOW LT: ROUTINE 3V - 73080 - 06/21/2012, 02:05 PM AGFA, SUSAN (12/21/1966) P-2015-2

XC Photo Dermatology - 09/30/2015, 02:34 PM AGFA, SUSAN (12/21/1966) P-2015-2

CERVICAL SPINE 2-3V - 72040 - 06/19/2012, 08:05 AM AGFA, SUSAN (12/21/1966) P-2015-2

[Close](#)

## Patient Merge

Manually fixing studies aligns patient and order information with unverified images. Merging images assembles multiple studies that belong to one patient.

**STEP 1:** Select Patient.

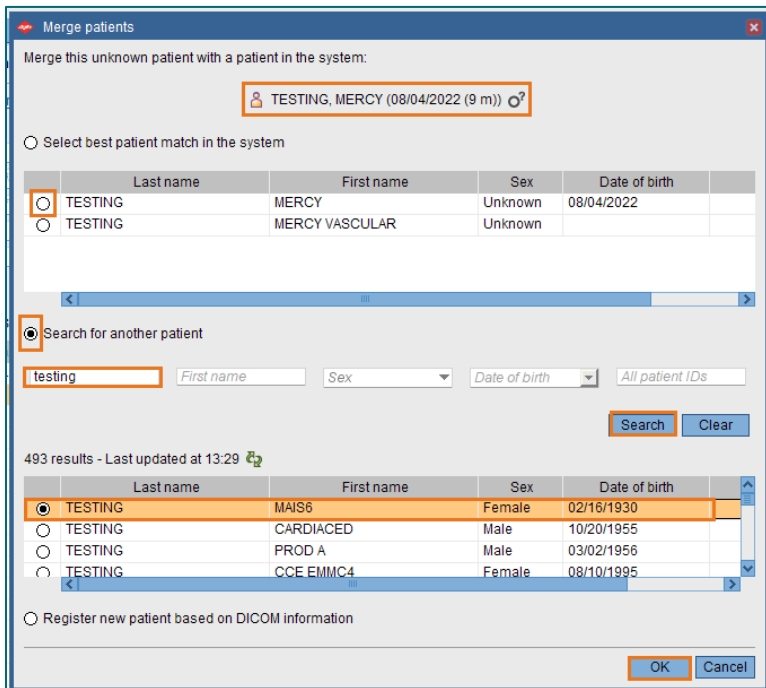
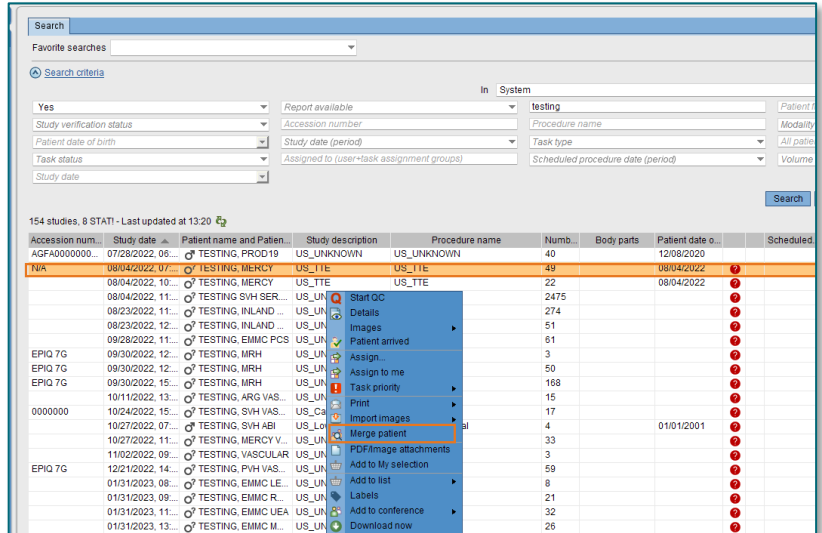
**STEP 2:** Right click and Merge.

**STEP 3:** Select Merge patient.



**STEP 4:** Select OK.

**STEP 5:** Select the patient you want to merge to.



**STEP 6:** Click OK.