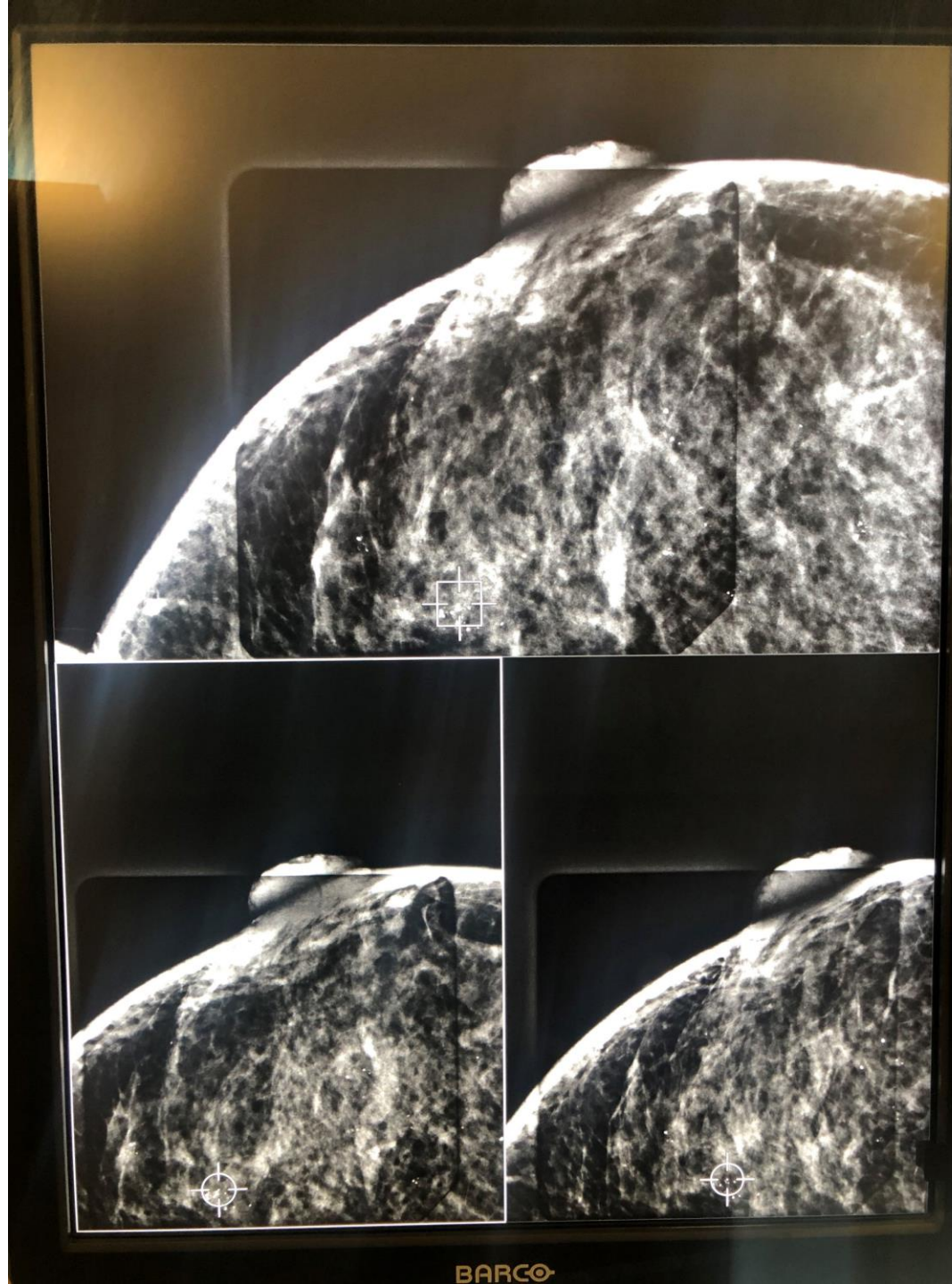


Instructions for downloading BMP and JPG files from a Hologic Affirm Stereotactic Unit

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1. Select a case where the target is really easy to see.
2. Try downloading JPG files from a PACS workstation.
3. Review these images to assess the resolution. The resolution needs to be good (really good) to showcase the work you've done.
4. Image files are stored in a format called DICOM. Some PACS systems reduce the resolution when they convert DICOM files to JPG versions.
5. If the JPG files you downloaded are not as clear as the images you can see on the Hologic workstation, use the following process to download higher resolution files (BMP or JPG) directly from the Hologic workstation for submission.



1. There are two USB slots on the right side of the Hologic Affirm console, next to the power switch.



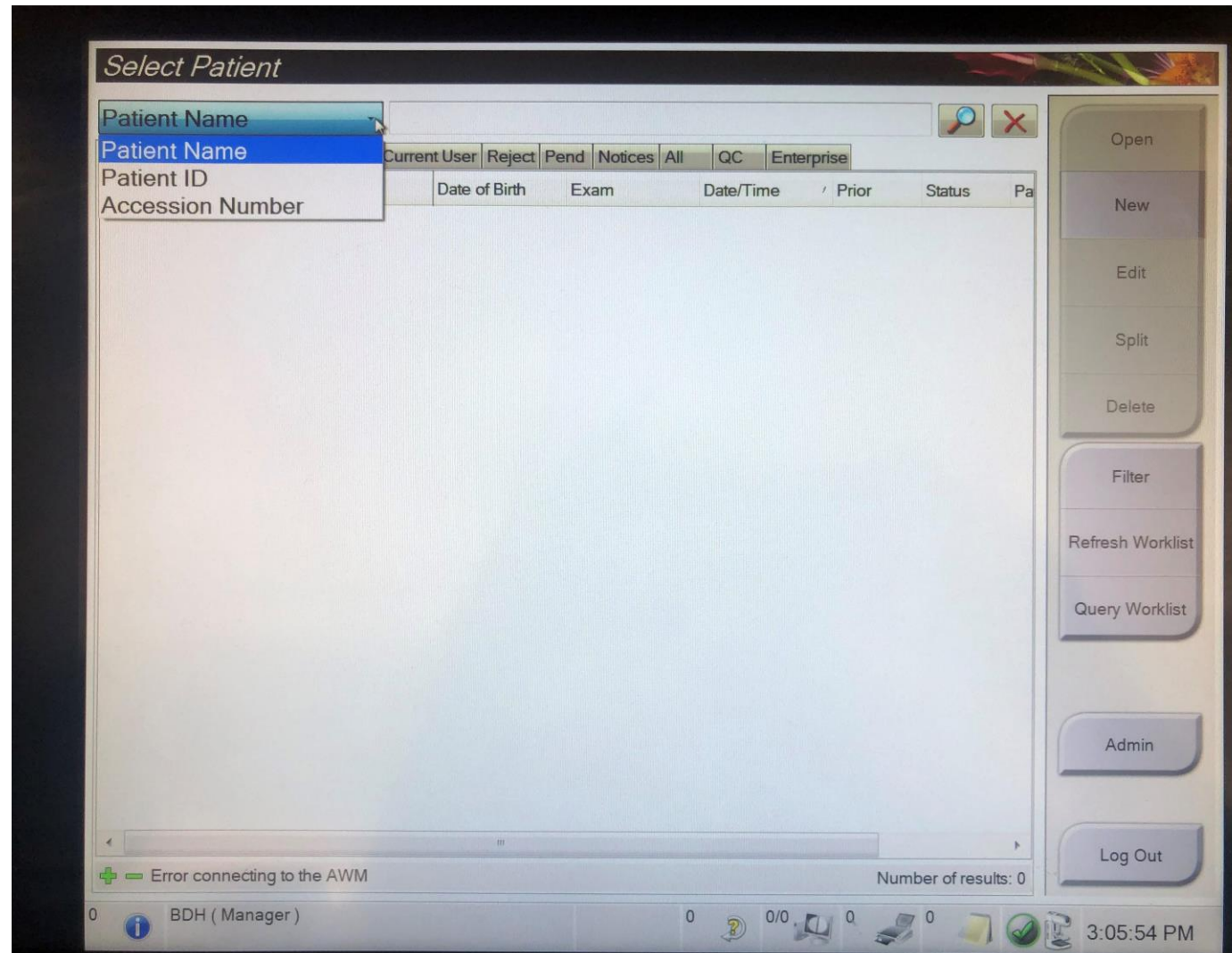
2. Plug a USB drive into either slot.



2. Plug a USB drive into either slot.



3. Go to the Hologic Affirm console and look up the patient that you wish to download.
4. Click on the selection criteria (in the left upper corner) if you wish to change the selection criteria. You can look up patients by name, ID or accession number.
5. Type the patient's name (or ID or accession number) in the box at the top of the screen (between the selection criteria and the magnifying glass).



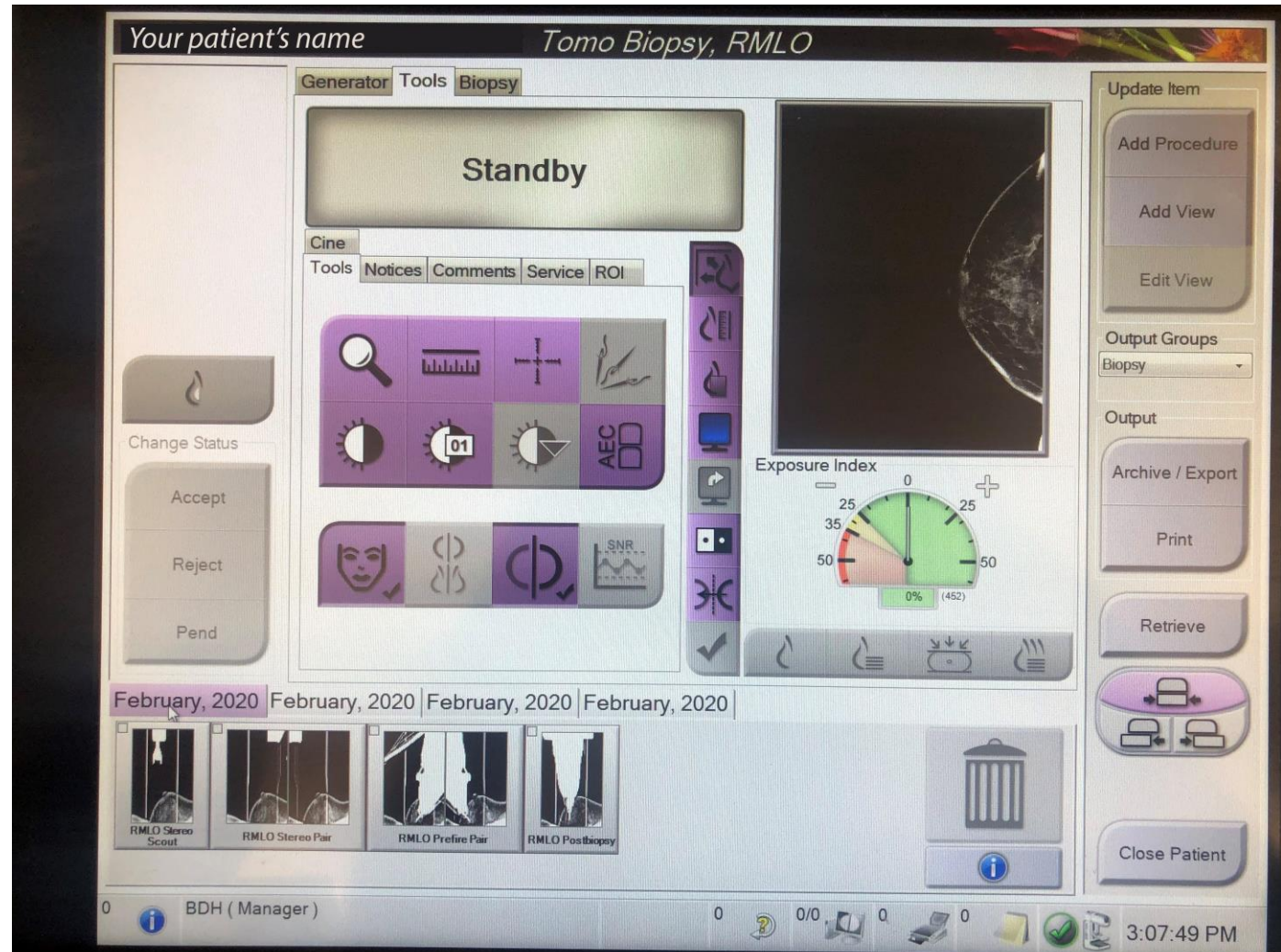
6. After typing in your patient's name and clicking on 'Open' (the button on the top right side of the screen), your patient's name should appear in the patient list. If your patient had more than one stereotactic biopsy, she will appear more than once. You will then have to select the correct study.

The screenshot displays a software window titled "Select Patient". At the top, there is a search bar labeled "Patient Name" with a magnifying glass icon and a close button (X). Below the search bar are several filter tabs: "Scheduled", "In Progress", "Completed", "Current User", "Reject", "Pend", "Notices", "All", "QC", and "Enterprise". The main area is a table with the following columns: "Name", "Date of Birth", "Exam", "Date/Time", "Status", and "Patient ID". One row is highlighted in blue, containing the text "Your patient's name", "9/4/1977", "Multiple", "2/7/2020 2:42 PM", "Completed", and "1000168:". To the right of the table is a vertical toolbar with buttons for "Open", "New", "Edit", "Split", "Delete", "Filter", "Refresh Worklist", "Query Worklist", "Admin", and "Log Out". At the bottom of the window, there is a status bar showing "Error connecting to the AWM" and "Number of results: 1". The system tray at the very bottom shows the user "BDH (Manager)", system icons, and the time "3:07:21 PM".

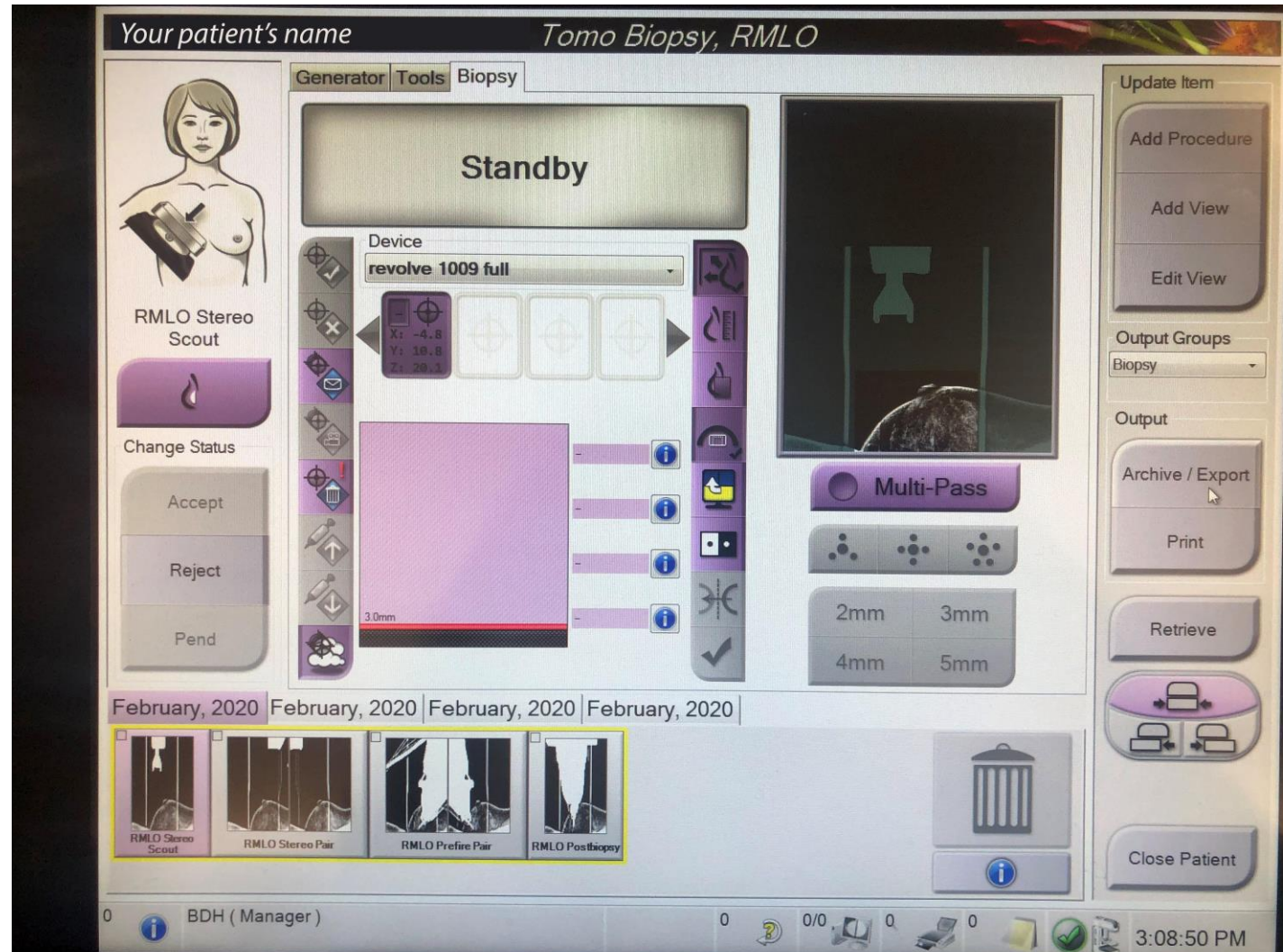
Name	Date of Birth	Exam	Date/Time	Status	Patient ID
Your patient's name	9/4/1977	Multiple	2/7/2020 2:42 PM	Completed	1000168:

7. If your patient had more than one study or more than one site biopsied, you will need to select the study that you wish to download (selecting a date or a specific image on the bottom left). If you want to download all of the images in a given study, just click on the date of the study. If you want to download only a few images, select the images below the dates.

Note: This example is for illustration only. Please select a case for submission where you did a 2D biopsy, rather than a Tomo biopsy.



8. After selecting the study that you wish to download, click on the button that says 'Archive/Export' (on the right side of the screen).



9. The next screen should show your patient's name and the images that are available for download. In the case shown, the patient had two biopsies done (RMLO and then LCC), followed by a post-biopsy mammogram. Select the study (or studies) that you wish to download by clicking in the maroon circle to the left of the study (on the left side of the screen). If you don't want to download all of the images in a study, click on the '+' symbol to the left of the maroon circle and this will show you all of the images that are in that study.

The screenshot displays the 'On Demand Archive' interface. At the top, the title 'On Demand Archive' is visible. Below it is a table with columns: Header, Patient ID, Study Date, Study Time, Accession Num, and Pa. The table lists four studies for Patient ID 100016826, all dated 20200207. The studies are: 'Your patient's name', 'Tomo Biopsy, RMLO', 'Tomo Biopsy, LCC', and 'MAMMO DIAG ADDL VIEWS BIL NO A-R ...'. To the right of the table is a sidebar with buttons for 'Device List', 'Group Details', 'Output Group' (set to 'Routine'), 'Select All', 'Clear', 'Display' (with 'Priors' checked and 'Rejected' unchecked), 'Export', 'Archive', and 'Back'. At the bottom, there are four image thumbnails labeled 'RMLO Stereo Scout', 'RMLO Stereo Pair', 'RMLO Prefire Pair', and 'RMLO Postbiopsy'. The system tray at the bottom shows the user 'BDH (Manager)' and the time '3:09:08 PM'.

Header	Patient ID	Study Date	Study Time	Accession Num	Pa
● Your patient's name	100016826				19
● Tomo Biopsy, RMLO	100016826	20200207	132828	200065312	19
● Tomo Biopsy, LCC	100016826	20200207	135248	200065311	19
● MAMMO DIAG ADDL VIEWS BIL NO A-R ...	100016826	20200207	144216	200104584	19

10. I clicked in the maroon circle to the left of 'Tomo Biopsy, RMLO'. Consequently, I was shown all of the images that are part of this study. Since I clicked in the top maroon circle, all of the images were selected. I now have the option to individually unselect any images that I don't want to download. This might be useful if the patient moved or had to be repositioned before you did the biopsy.

On Demand Archive

Header	Patient ID	Study Date	Study Time	Accession Num
[-] Your patient's name	100016826			
[-] <input checked="" type="checkbox"/> Tomo Biopsy, RMLO	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Postbiopsy (Unprocessed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Postbiopsy (Processed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Stereo Scout (Unprocessed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Stereo Scout (Processed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Stereo Pair [-] (Unprocessed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Stereo Pair [+] (Unprocessed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Stereo Pair [-] (Processed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Stereo Pair [+] (Processed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Prefire Pair [+] (Unprocessed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Prefire Pair [-] (Unprocessed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Prefire Pair [+] (Processed)	100016826	20200207	132828	200065312
<input checked="" type="checkbox"/> R MLO Prefire Pair [-] (Processed)	100016826	20200207	132828	200065312

February, 2020 February, 2020 February, 2020 February, 2020

RMLO Stereo Scout RMLO Stereo Pair RMLO Prefire Pair RMLO Postbiopsy

BDH (Manager) 3:09:55 PM

11. Click on 'Export' and the following screen appears. Before you start, please click on 'Anonymize'. This will remove all patient identification from the downloaded images. The files will be saved in a folder named by the date of the study. If you plan to download more than one study from the same date, you should probably rename each folder so you can identify which study applies to which patient.

On Demand Archive

Header	Patient ID	Study Date	Study Time	Accession Num
Your patient's name	100016826			
Tomography Biopsy, R				
R MLO Postbi				
R MLO Postbi				
R MLO Stere				
R MLO Stere				
R MLO Stere				
R MLO Stere				
R MLO Stere				
R MLO Stere				
R MLO Stereo Pair [+] (Processed)	100016826	20200207	132828	200065312
R MLO Prefire Pair [+] (Unprocessed)	100016826	20200207	132828	200065312
R MLO Prefire Pair [-] (Unprocessed)	100016826	20200207	132828	200065312
R MLO Prefire Pair [+] (Processed)	100016826	20200207	132828	200065312
R MLO Prefire Pair [-] (Processed)	100016826	20200207	132828	200065312

February, 2020 February, 2020 February, 2020 February, 2020

R MLO Stereo Scout R MLO Stereo Pair R MLO Prefire Pair R MLO Postbiopsy

BDH (Manager) 3:10:27 PM

12. Once you click on 'Start' a green bar will track the progress of the download. It rarely takes more than a minute.

The screenshot displays the 'On Demand Archive' application interface. At the top, the title bar reads 'On Demand Archive'. Below it, a header section contains fields for Patient ID (100016826), Study Date (20200207), Study Time (132828), and Accession Num (200065312). The main area shows a tree view of patient data with a table listing various scan types and their processing status. An 'Export' dialog box is open, showing a progress bar for 'R MLO Stere' scans, which is partially filled with green. The dialog also includes a 'Target' dropdown set to 'LEXAR (E:)', a 'Start' button, and a 'Close' button. On the right side, there are several control panels: 'Device List', 'Group Details', 'Output Group' (set to 'Routine'), 'Select All', 'Clear', 'Display' (with 'Priors' checked and 'Rejected' unchecked), 'Export', 'Archive', and 'Back' buttons. At the bottom, there are four thumbnail images labeled 'RMLO Stereo Scout', 'RMLO Stereo Pair', 'RMLO Prefire Pair', and 'RMLO Postbiopsy'. The system tray at the very bottom shows the user 'BDH (Manager)', system icons, and the time '3:11:02 PM'.

Header	Patient ID	Study Date	Study Time	Accession Num
Your patient's name	100016826			
Tomo Biopsy, RM				
R MLO Postbi				
R MLO Postbi				
R MLO Stere				
R MLO Stere				
R MLO Stere				
R MLO Stere				
R MLO Stere				
R MLO Stere				
R MLO Stereo Pair [+] (Processed)	100016826	20200207	132828	200065312
R MLO Prefire Pair [+] (Unprocessed)	100016826	20200207	132828	200065312
R MLO Prefire Pair [-] (Unprocessed)	100016826	20200207	132828	200065312
R MLO Prefire Pair [+] (Processed)	100016826	20200207	132828	200065312
R MLO Prefire Pair [-] (Processed)	100016826	20200207	132828	200065312

14. Once this study has been fully downloaded to the USB drive, you will see the words 'Successfully exported file set'.

The screenshot displays the 'On Demand Archive' software interface. A central 'Export' dialog box is open, showing a progress bar for 'R MLO Stere' that is nearly full and green. The text 'Successfully exported file set.' is visible. The dialog also includes a 'Target' dropdown menu set to 'LEXAR (E:)', 'Anonymize' and 'Advanced' checkboxes, and 'Start' and 'Close' buttons.

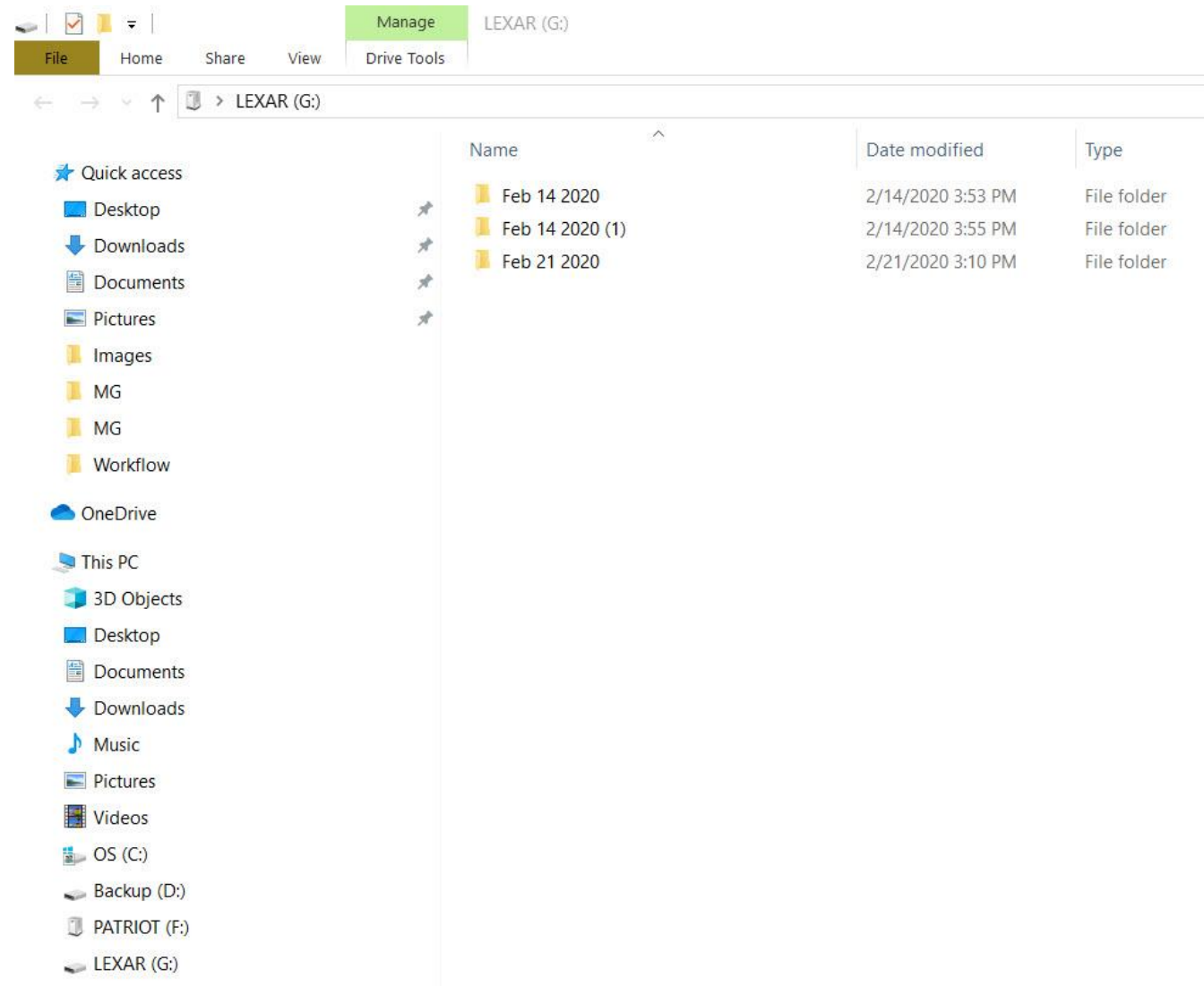
Below the dialog, a table lists study details:

	Patient ID	Study Date	Study Time	Accession Num
✓ Your patient's name	100016826			
✓ Tomo Biopsy, RI				
✓ R MLO Postbi				
✓ R MLO Postbi				
✓ R MLO Stere				
✓ R MLO Stere				
✓ R MLO Stere				
✓ R MLO Stere				
✓ R MLO Stere				
✓ R MLO Stere				
✓ R MLO Stereo Pair [+] (Processed)	100016826	20200207	132828	200065312
✓ R MLO Prefire Pair [+] (Unprocessed)	100016826	20200207	132828	200065312
✓ R MLO Prefire Pair [-] (Unprocessed)	100016826	20200207	132828	200065312
✓ R MLO Prefire Pair [+] (Processed)	100016826	20200207	132828	200065312
✓ R MLO Prefire Pair [-] (Processed)	100016826	20200207	132828	200065312

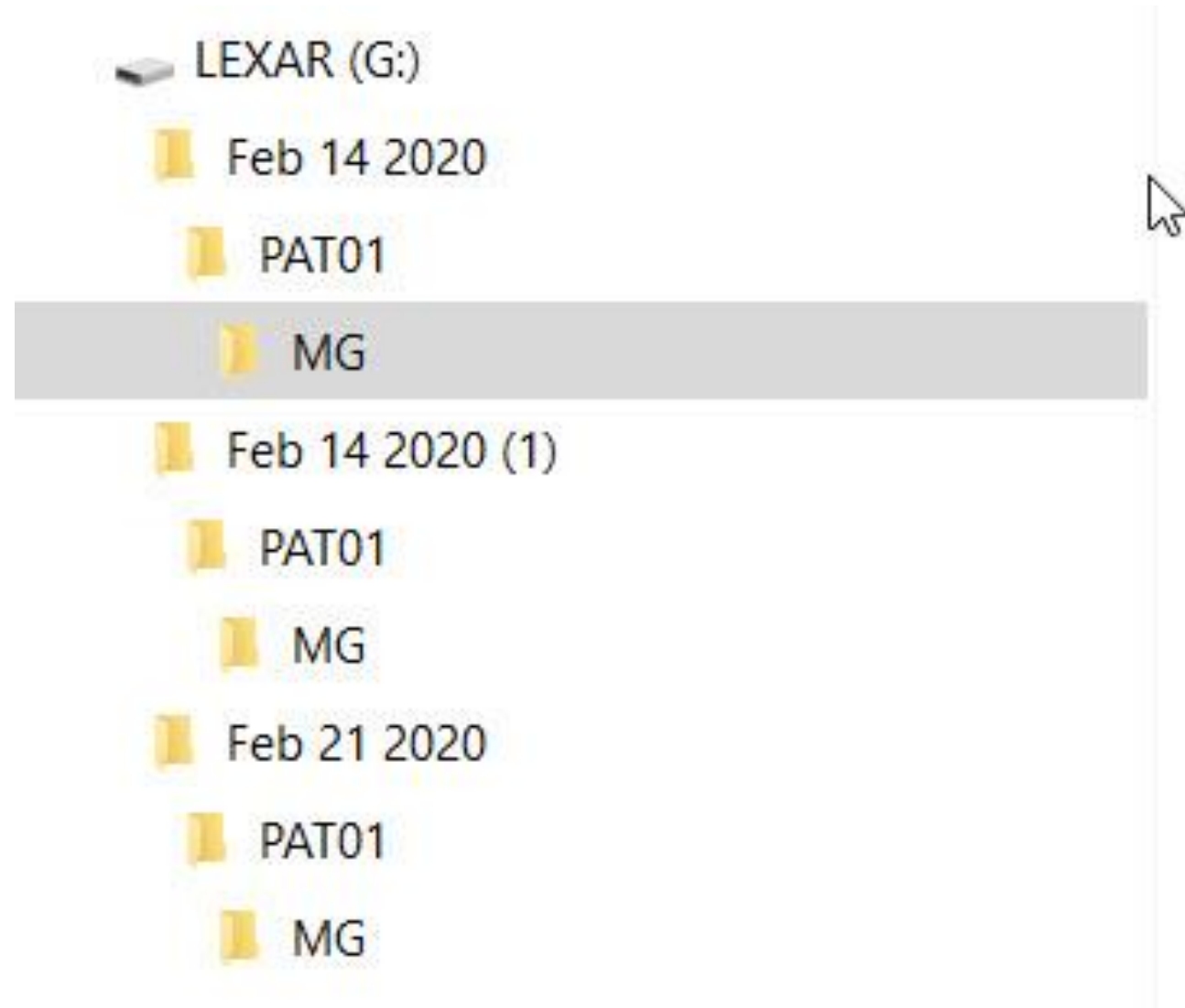
At the bottom, there are four thumbnail images labeled 'R MLO Stereo Scout', 'R MLO Stereo Pair', 'R MLO Prefire Pair', and 'R MLO Postbiopsy'. The right sidebar contains buttons for 'Device List', 'Group Details', 'Output Group' (set to 'Routine'), 'Select All', 'Clear', 'Display' (with 'Priors' checked and 'Rejected' unchecked), 'Export', 'Archive', and 'Back'. The system tray at the bottom shows 'BDH (Manager)' and the time '3:11:33 PM'.

16. Plug your USB drive into your laptop or personal computer. If your computer runs Windows, use File Explorer (click on the icon that looks like a file folder) to open and review the contents of the USB drive. If your computer is a MAC, an icon (representing the USB drive) should appear on your desktop. Click on this icon to open and review the contents of the USB drive.

17. The example shown is from a computer running Windows. My USB drive (LEXAR (G:)) contains two cases done on February 14, 2020 and one case done on February 21, 2020.



18. Each of the folders has a subfolder labeled PAT01, and this has a subfolder labeled MG. The DICOM files from each study are in the subfolder labeled MG.
19. You probably won't be able to open (or view) the DICOM files, unless you have some very uncommon software on your laptop. You can however download a free DICOM viewer.
20. As general advice, don't download any software from the internet unless you trust the site and have up-to-date antivirus software.

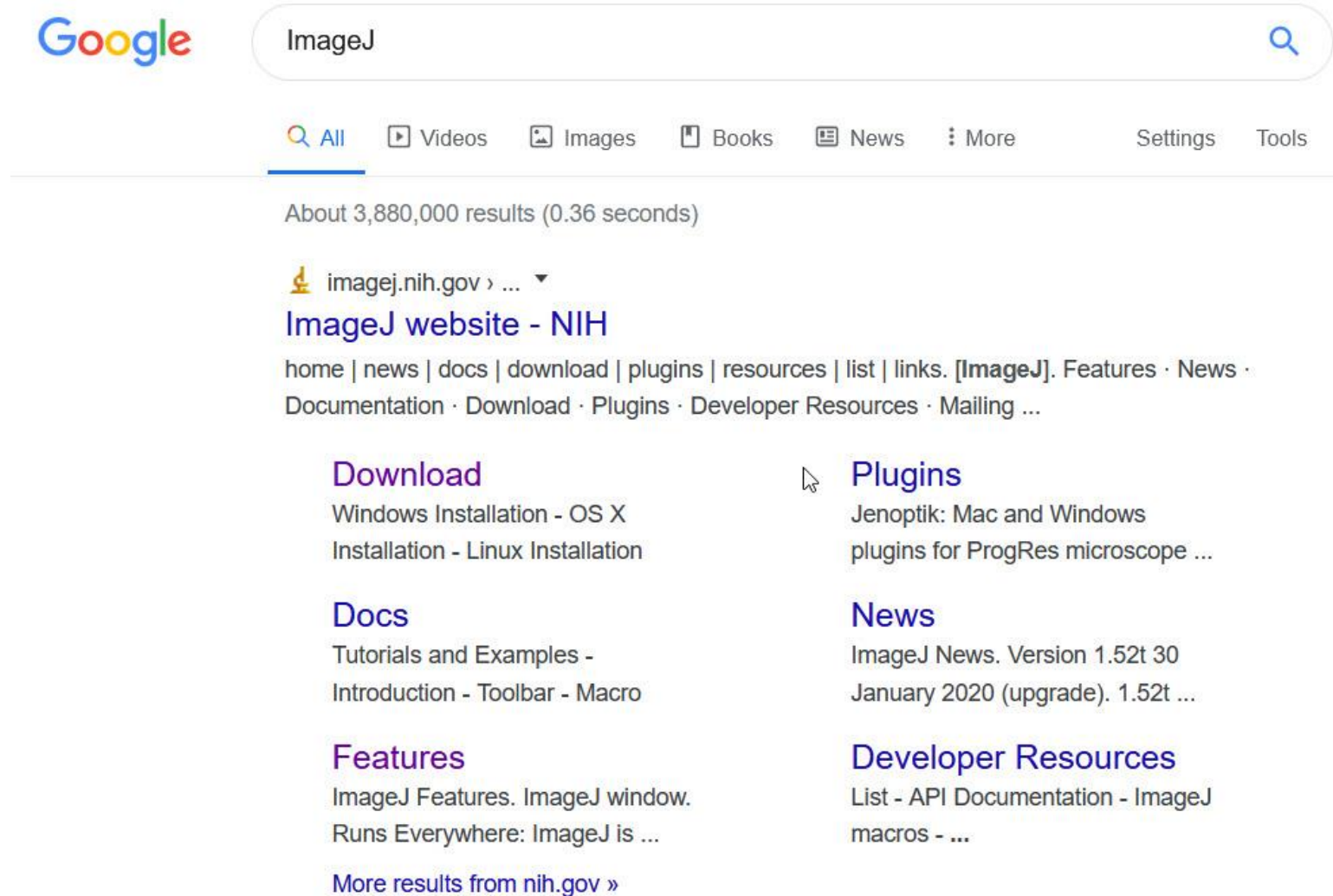


21. Here is a list of free DICOM viewers. We got this list from the NIH website:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2766899/table/T0002/?report=objectonly>

Free DICOM Software	Web address
Radfiler DICOM for PowerPoint	http://www.radfiler.com/
DicomLitev1.01	http://www.3d-head.com
DCM2JPG	http://www.sph.sc.edu/comd/rorden/ezdicom.html
DICOM Browser from FP Image	http://www.fpimage.com/info.html
DicomWorks v 1.3.5	http://dicom.online.fr/
Eviewbox	http://eviewbox.sourceforge.net/
ezDICOMv1.0	http://www.sph.sc.edu/comd/rorden/ezdicom.html
ImageJ v 1.38x	http://rsb.info.nih.gov/ij/
ImRead DICOM Processor	http://www.uchsc.edu/sm/neuroimaging/download/imread/imread1.htm
IrfanView v 4.1	http://www.irfanview.com/
JiveX [dv] Viewer v 4.2.1	http://www.visus-tt.com/DICOM_View.59.0.html
MEDISP v 1.0.2	http://medisp.bme.teiath.gr/downloadMEDISPDI-COMViewer.htm
Osiris v 4.19	http://www.sim.hcuge.ch/osiris/01_Osiris_Presentation_EN.htm

22. We recommend using ImageJ, which you can download from: <http://rsb.info.nih.gov/ij/>
23. Alternatively, run a Google search for 'ImageJ'. There are 3,880,000 results. Select the one published by the NIH. It's usually the first one listed. Click on Download.



The screenshot shows a Google search for 'ImageJ'. The search bar contains 'ImageJ' and the search button is visible. Below the search bar, there are navigation tabs for 'All', 'Videos', 'Images', 'Books', 'News', 'More', 'Settings', and 'Tools'. The search results show 'About 3,880,000 results (0.36 seconds)'. The top result is from 'imagej.nih.gov' and is titled 'ImageJ website - NIH'. Below the title, there is a navigation menu: 'home | news | docs | download | plugins | resources | list | links. [ImageJ]. Features · News · Documentation · Download · Plugins · Developer Resources · Mailing ...'. There are four main sections of links: 'Download' (Windows Installation - OS X, Installation - Linux Installation), 'Docs' (Tutorials and Examples - Introduction - Toolbar - Macro), 'Features' (ImageJ Features. ImageJ window. Runs Everywhere: ImageJ is ...), and 'Plugins' (Jenoptik: Mac and Windows plugins for ProgRes microscope ...). There are also 'News' (ImageJ News. Version 1.52t 30 January 2020 (upgrade). 1.52t ...) and 'Developer Resources' (List - API Documentation - ImageJ macros - ...) sections. At the bottom, there is a link for 'More results from nih.gov »'.

Google

ImageJ

All Videos Images Books News More Settings Tools

About 3,880,000 results (0.36 seconds)

imagej.nih.gov > ...

ImageJ website - NIH

home | news | docs | download | plugins | resources | list | links. [ImageJ]. Features · News · Documentation · Download · Plugins · Developer Resources · Mailing ...

Download
Windows Installation - OS X
Installation - Linux Installation

Docs
Tutorials and Examples -
Introduction - Toolbar - Macro

Features
ImageJ Features. ImageJ window.
Runs Everywhere: ImageJ is ...

Plugins
Jenoptik: Mac and Windows
plugins for ProgRes microscope ...

News
ImageJ News. Version 1.52t 30
January 2020 (upgrade). 1.52t ...

Developer Resources
List - API Documentation - ImageJ
macros - ...

More results from nih.gov »

24. If your computer runs a 64-bit version of Windows, click on the link (in blue text) that says 'ImageJ bundled with 64-bit Java 1.8.0_112' under the Windows header (in the middle of the page). If your computer is a MAC with OS X, select the link that says 'ImageJ bundled with Java 1.8.0_172' under the Mac OS X heading. If your computer has a different operating system, you can try to find your operating system in the ZIP archive (for older systems), or download a different DICOM viewer.

[home](#) | [news](#) | [docs](#) | [download](#) | [plugins](#) | [resources](#) | [list](#) | [links](#)

Download

Platform Independent

To install ImageJ on a computer with Java pre-installed, or to upgrade to the latest full distribution (including macros, plugins and LUTs), download the [ZIP archive](#) (6MB) and extract the ImageJ directory. Use the *Help>Update ImageJ* command to upgrade to newer versions.

Mac OS X

Download [ImageJ bundled with Java 1.8.0_172](#) (may need to work around [Path Randomization](#)). [Instructions](#).

Linux

Download [ImageJ bundled with Java 1.8.0_112](#) (82MB). [Instructions](#).

Windows

Download [ImageJ bundled with 64-bit Java 1.8.0_112](#)(70MB). [Instructions](#).

Documentation

Tiago Ferreira's comprehensive [ImageJ User Guide](#) is available as an 8MB PDF document and as a [ZIP archive](#). The online [JavaDoc API documentation](#) is also available as a [ZIP archive](#).

Source Code

The ImageJ [Java source](#) consists of 132,000 lines of code in 348 files. It is available [online](#) and as [zip archives](#).

Example Images

[31 downloadable sample images and stacks](#) are available in ImageJ's *File>Open Samples* submenu. These images, and more, are also available as a [8.2MB zip archive](#).

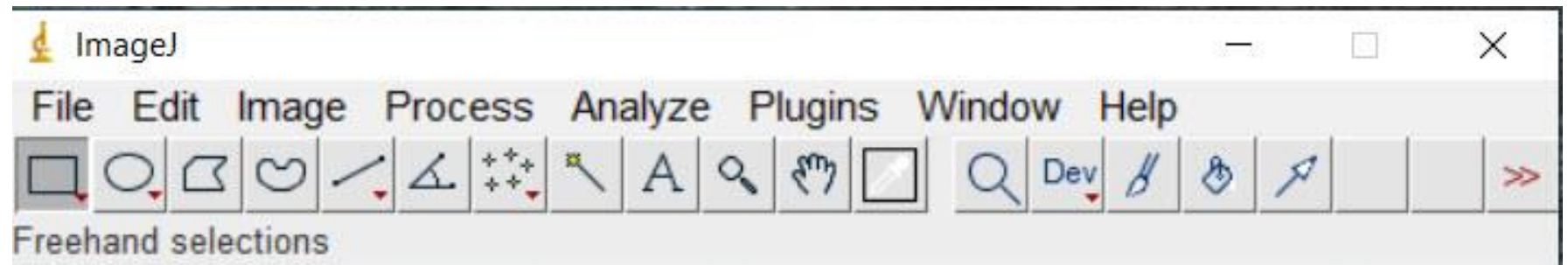
You can also browse the ImageJ download directory at imagej.nih.gov/ij/download/. Newer ImageJ distributions are available at <http://wsr.imagej.net/distros/>. Refer to the [release notes](#) for a list of new features and bug fixes.

25. The version of ImageJ that you download will be compressed. If you only plan to use this once (and never again), use the compressed version and then delete it when you're done. If you might have use for a DICOM viewer in the future, copy the compressed files to a new folder (which will uncompress them for faster loading).
26. To open ImageJ, double-click on the executable file: ImageJ.exe.

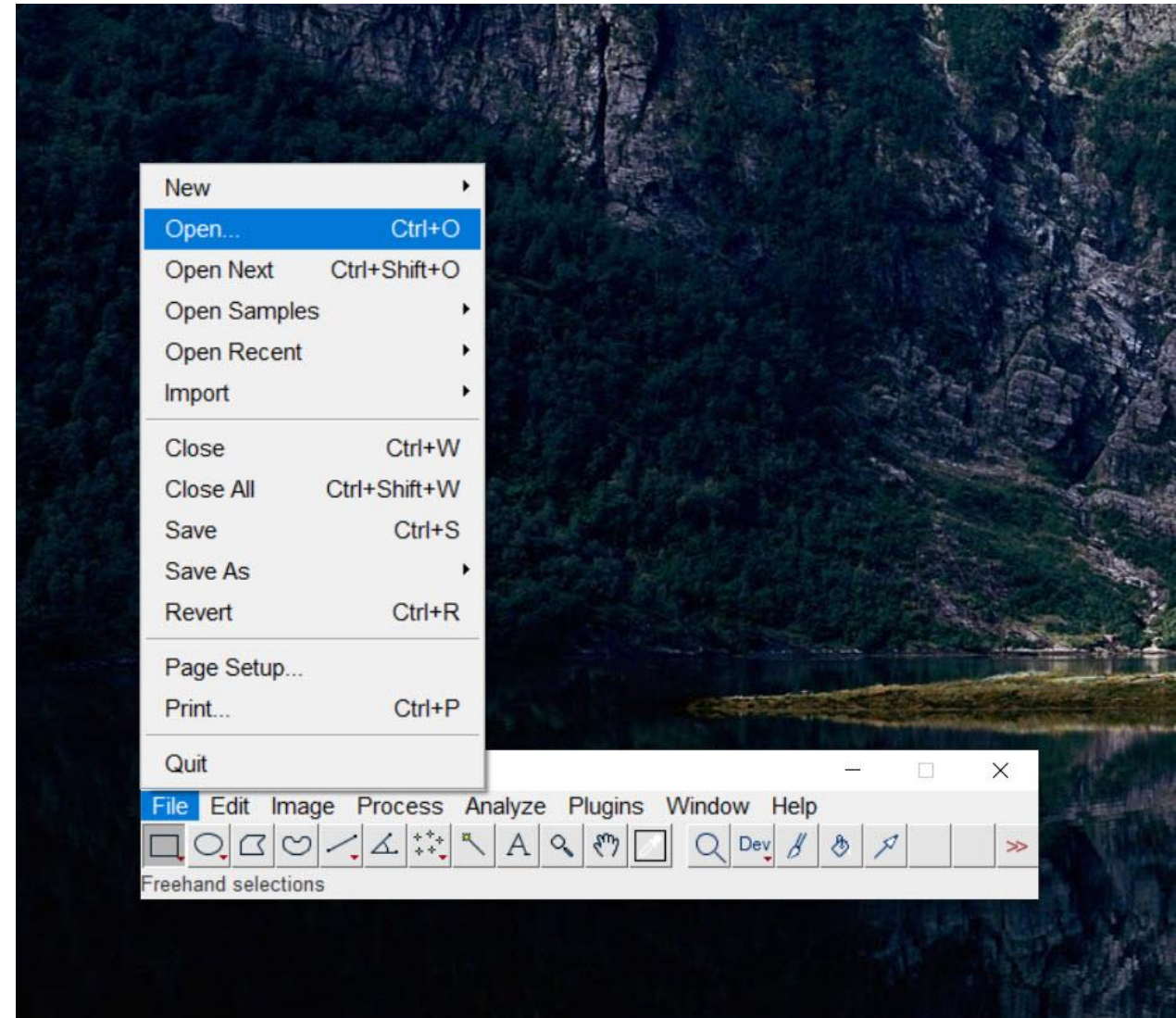
Name	Date modified	Type	Size
📁 jre	2/16/2020 2:58 PM	File folder	
📁 luts	2/16/2020 2:58 PM	File folder	
📁 macros	2/16/2020 2:58 PM	File folder	
📁 plugins	2/16/2020 2:58 PM	File folder	
🔥 ij.jar	2/16/2020 2:58 PM	Executable Jar File	2,175 KB
📄 ImageJ.cfg	2/16/2020 2:58 PM	CFG File	1 KB
🔧 ImageJ.exe	2/16/2020 2:58 PM	Application	386 KB



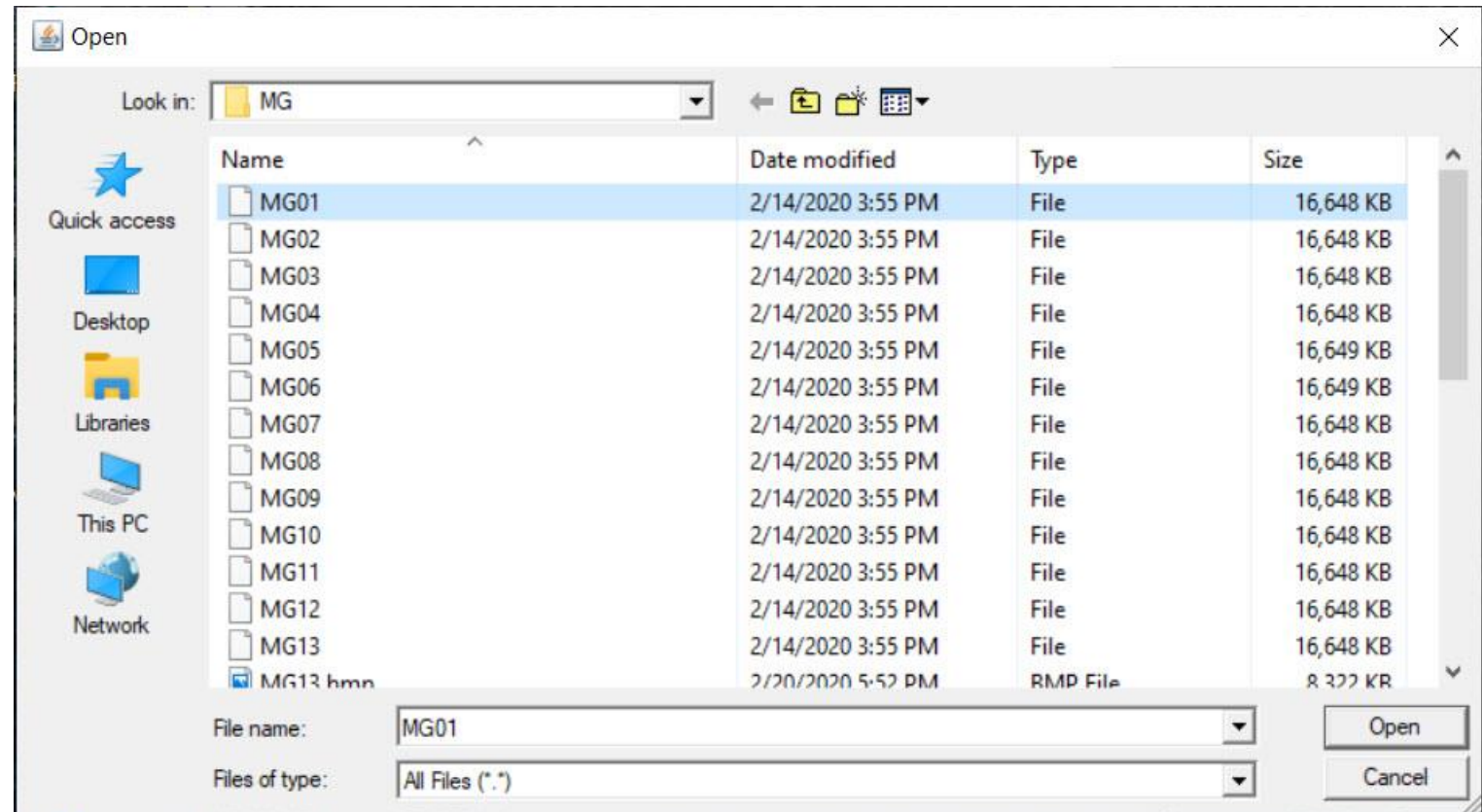
27. The following taskbar should appear on your desktop:



28. Click on 'File', and then 'Open', and then navigate to the directory on your USB drive that contains the DICOM files (see bullet point 18 on page 17).



29. Review the list of files. Open the ones that you plan to submit, one at a time, and check the resolution. If the brightness or contrast are a bit off, ImageJ will let you adjust the Windowing to fix this (just as you do on a PACS workstation). If the image resolution is poor, you should probably select a different image or case.



30. If you like the image you see, then select 'File' and then 'Save As', and then select a format. In the example I selected, the original DICOM images were 16 Meg in size. BMP images will be about 8 Meg and JPG will be substantially smaller. I would recommend saving BMP images.

31. Rename the images to designate what they represent, e.g., Case 01 Scout Image, Case 01 Stereo Image, etc.

32. Upload these images to the ASBS website.

