r3id

Personalized Surgery

User Guide

restor3d

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Quick Start

Enrollment / Registration

If you have not been onboarded onto r3id, access can be requested via the **r3id.restor3d.com/login** page by selecting "request access to r3id". You'll received a welcome email once a restor3d representative approves the enrollment request.

Once you're enrolled, you'll be able to login to the r3id platform at **r3id.restor3d.com/login**

First Login

After initial enrollment into the r3id Personalized Surgery platform, follow these steps when you receive the welcome email:

1 Click on the link provided in the onboarding welcome email (Fig. 1).

2 Set your new password. Your password must follow this criteria (Fig. 2):

- Have at least 8 characters
- Contain 1 special character
- Contain 1 number

3 After setting your password, select **"Save Password"**.

> **NOTE:** Be sure to bookmark
> **https://r3id.restor3d.com**

After logging in, you can navigate throughout the platform. From your Dashboard, you can see action items for open cases, create new cases, and review your past cases with restor3d.
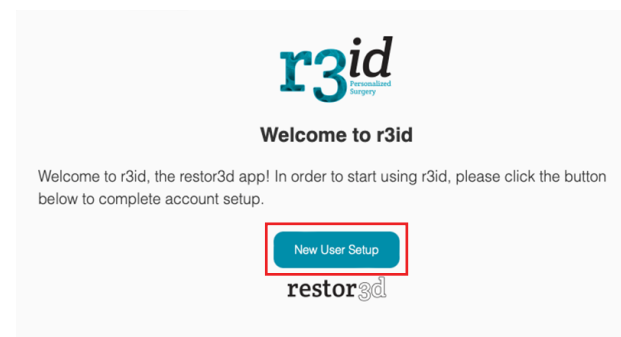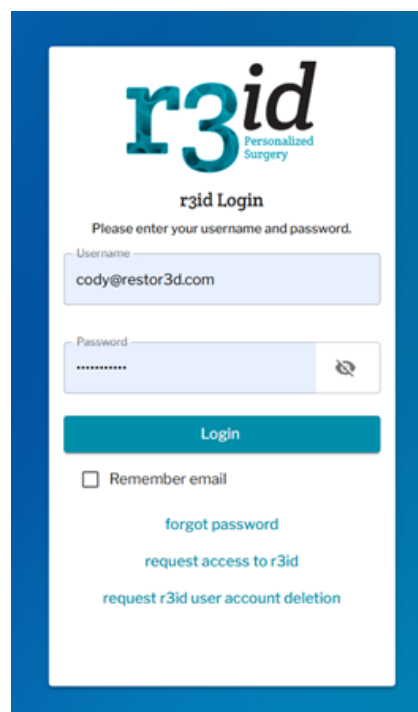

Fig. 1

Fig. 2

Quick Start

Setting Up Your User Profile

Most of your information will be set up on the backend prior to your first login. Please confirm your information is correct when you first log into the platform. In addition, follow the steps below to add your staff to your account.

1 Select the circle in the upper right hand corner with your initials upon logging in for the first time. Then select **"My Profile"** from the drop down (Fig 3).

2 Confirm the information is correct. Each editable section will have an edit button (pencil icon) to the right. Click on this icon to modify information if an update is required or more information is needed (Fig. 3).
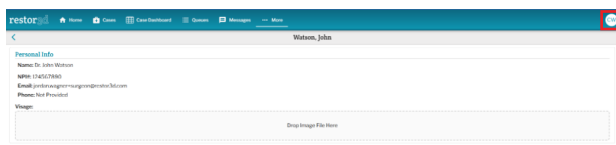
Fig. 3

3 In the "Physician Staff" section, select the add button ("**+ Add"**) to create additional users for your Clinical Staff or Fellows (Fig. 4).

Complete the Staff Member information prompts. Selecting **"Save"** will send the newly added Staff Member a welcome email with their login information.
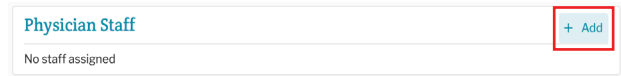
Fig. 4

Set up Biometric Login for your Phone or Tablet

1 Once logged in, select **"More"** and navigate down the **"More Options"** navigation menu. Select **"My Settings"** at the bottom of the menu (Fig. 5).

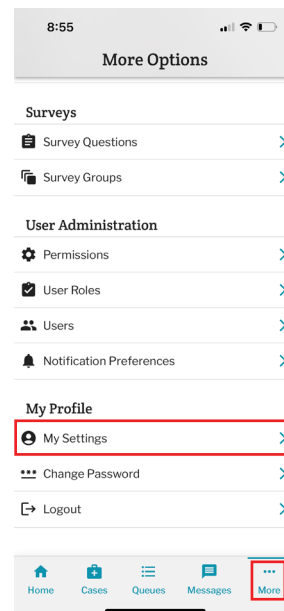**2** Toggle on **"Use Face ID"** to enable biometric login access (Fig 6).

Fig. 5
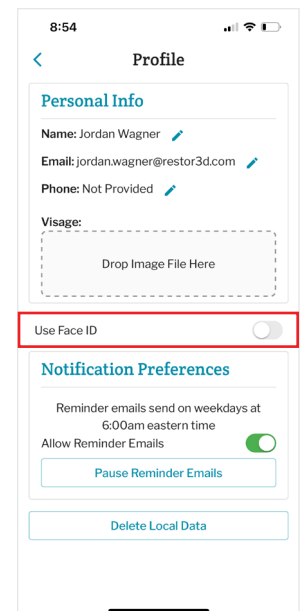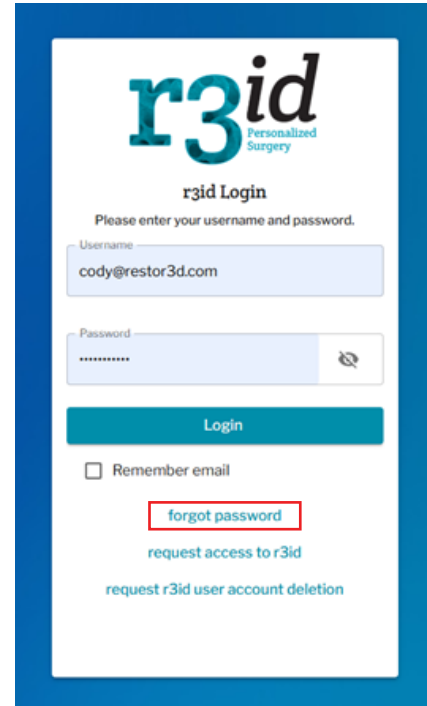
Fig. 6

Quick Start

Password Reset

1 Visit **https://r3id.restor3d.com**
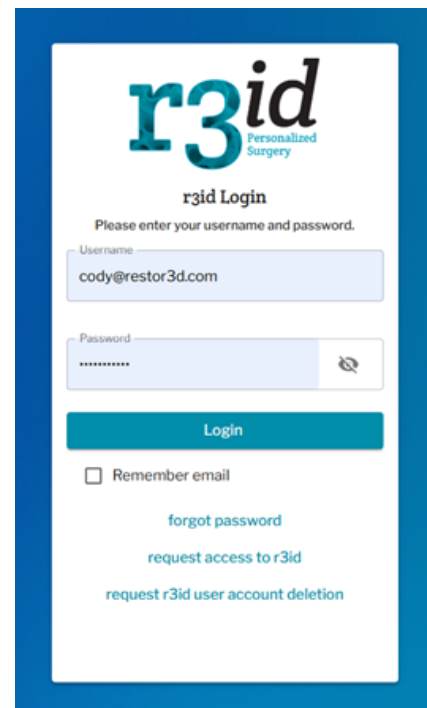
2 Select **"Forgot Password"** (Fig. 7).

3 Enter your email address (Fig. 8).

4 Select **"Send Link"** (Fig. 8).

5 From the link in the email you receive, reset your password and log in as normal.

Fig. 7

Fig. 8

restor3d Design Process

1

r3 Identification

Surgeon identifies patient and completes CT scan protocol. Hospital approval initiated.

2

Case Creation

Surgeon uploads CT scan, provides additional case information, and any required documentation.

3

Design Meeting

Surgeon and restor3d planning meeting.

4

Design Proposal

Created using computer imaging and the patient's CT Scan.

5

Surgeon Approval

Proposal sent to surgeon for modifications or approval.

6

Manufacturing

Patient-Specific implants and instruments manufactured per approved proposal.

7

Surgery

Surgeon follows the preoperative plan to complete surgery with patient-specific implant and instrumentation.

Patient-Specific Process

Case Creation

Creating and submitting a case will initiate your collaboration with the restor3d design engineering team.

Your Clincial Staff or restor3d Sales Agent can create a case on your behalf. If this is done, you'll need to ensure to go into the case after creation and modify the submitted case to add indication, patient information and CT scans (if not previously done). Note, only the physician can add indication specifics for the case.

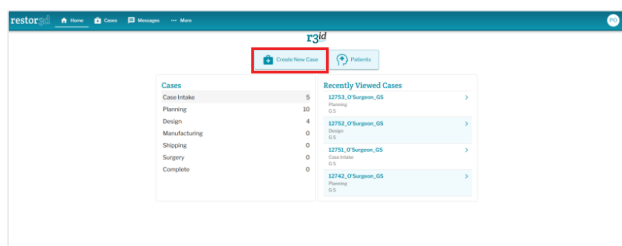**1** From the **"Home"** (Fig. 9a) or **"Cases"** (Fig. 9b) screen, select **"Create Case"**
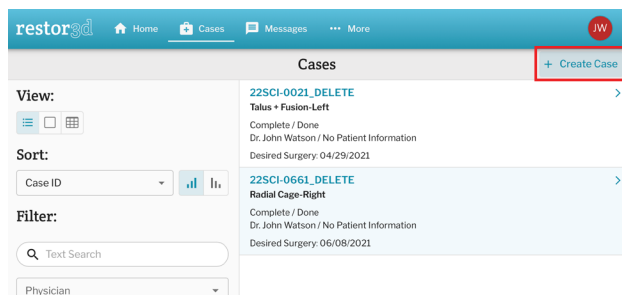

Fig. 9a

Fig. 9b

2 Select physician name from the **"Physician"** drop down (Fig. 10).

3 Select the Medical Facility from the facility drop down (Fig. 10).

NOTE: Adding a Medical Facility is optional. If the physician's facility is not present, please enter the facility where the surgery will occur as a Case Message.
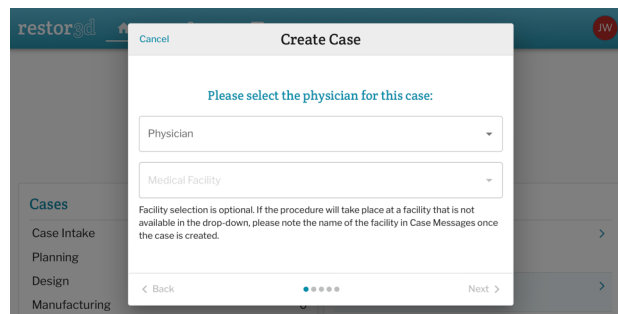
Fig. 10

Patient-Specific Process

Case Creation Cont.

4 Select the **"Affected Anatomy"** and **"Laterality"** for the case (Fig 11).

> **NOTE:** The Affected Anatomy can be selected from the points on the graphic.

Fig. 11

5 If restor3d offers a Patient Specific cleared product line within the selected Affected Anatomy, it will be presented as an option to select (Fig. 12). Select one of these devices. If no cleared product lines are available and the case requires a custom device, select the appropriate Case Category (Fig. 13)

Fig. 12

Fig. 13

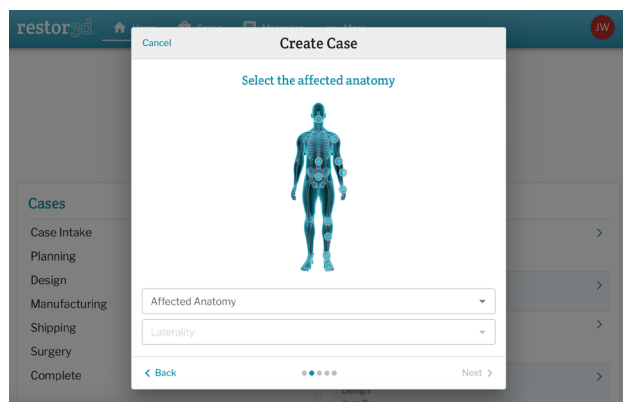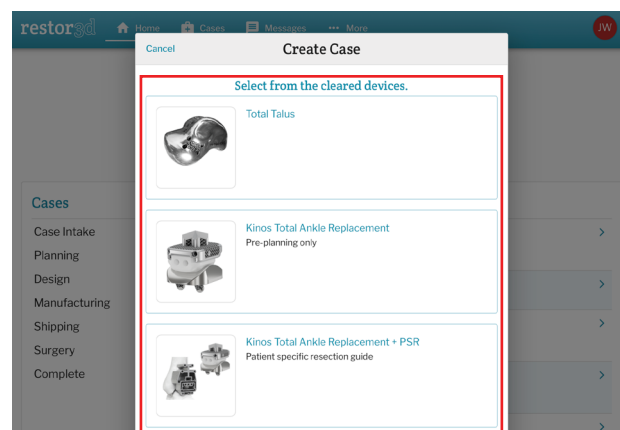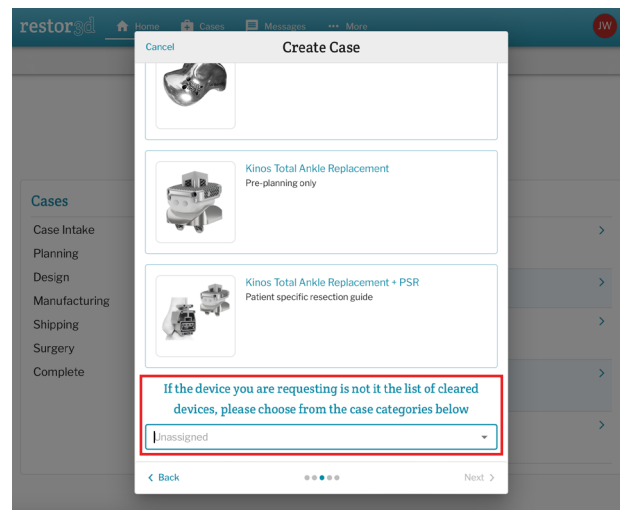# Patient-Specific Process

Case Creation Cont.

6 **Patient Selection**
If you wish to add patient information at the time of case creation, select **"New Patient"** (Fig. 14).
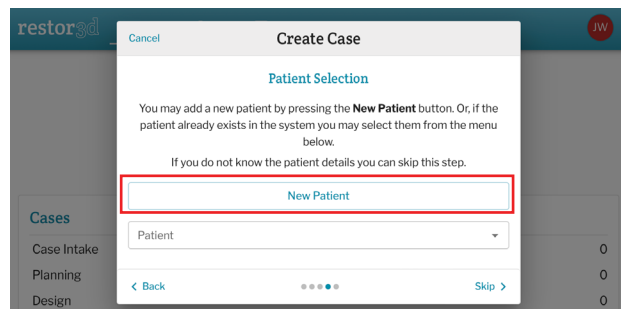
Fig. 14

Enter the patient's **First and Last Name, Sex, Date of Birth, and MRN**. If MRN is not used at the facility, this can be left blank. Select **"Save"** (Fig. 15).

Fig. 15

If you wish to add patient information later, select **"Skip"** and continue to review case information to submit (Fig. 16).
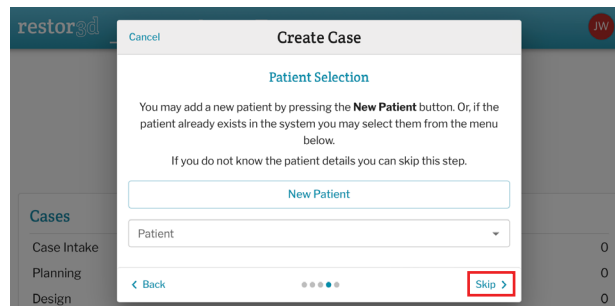
Fig. 16

If the patient has received a restor3d device previously the patient's information remains in r3id. Select the patient's name from the **"Patient"** drop down and select **"Next"** (Fig. 17).

> **NOTE:** Please be sure the case you are creating is not a duplicate before completing case creation by checking your active cases.

Fig. 17

7 Review the details for accuracy, and select Create Case (Fig. 18).

Fig. 18

9
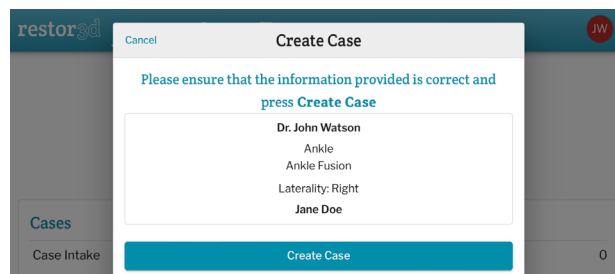
Patient-Specific Process

Case Submission

1 If patient information was not added during Case Creation, clicking **"Select Patient"** (Fig. 19) will allow you to **Add New Patient** or select an existing **Patient** (Fig. 20).
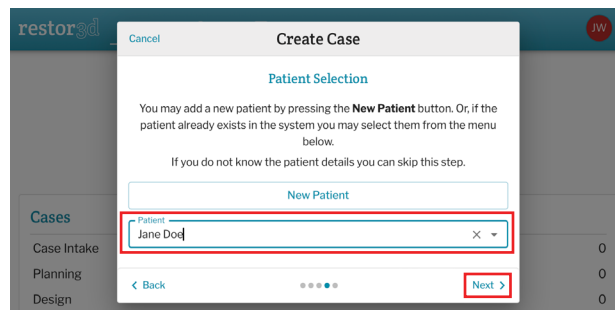
> **NOTE:** Patient information is required to submit the case.
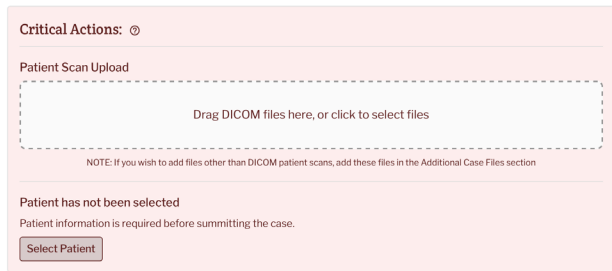
Fig. 19
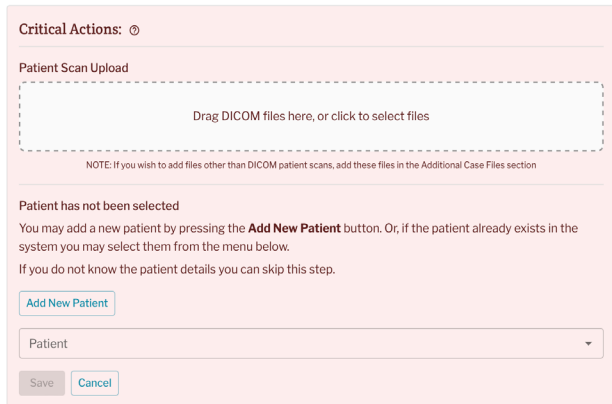
Fig. 20

2 If patient information was added during Case Creation, upload patient CT Scans to the upload area. This can be done by dragging the DICOMs folder from a CD or from a file on the computer to the critical actions section of the case page (Fig. 21).

> **NOTE:**
> - The upload may take a moment to begin based on the folder size.
> - Only DICOM files will be accepted and processed here.
> - DICOM is a file type for all medical imaging – CT scans, Xrays, MRIs, etc.
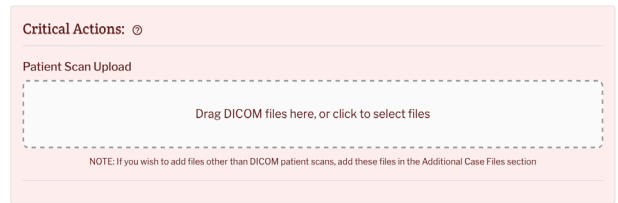
Fig. 21

3 Once the upload is completed, a **"Submit Case"** button will be displayed. Select it to submit the case and patient scans to initiate the scan assessment against the restor3d scan protocol (Fig. 22).

> **NOTE:** Patient information is required to submit the case.
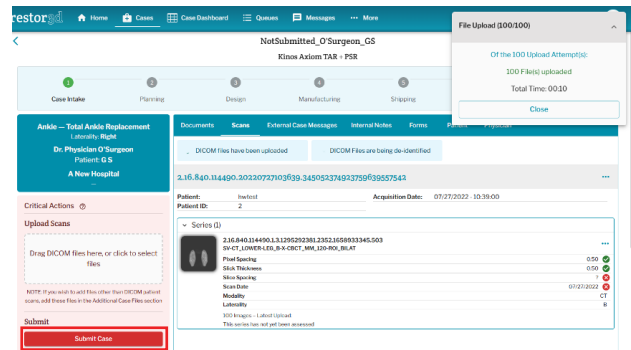
Fig. 22

Patient-Specific Process

Case Submission Cont.

Based on the Case Category or product line selected during case creation, a Planning Questionnaire may be available.

4 If available, select **"Complete Planning Questionnaire"** to complete the available questionnaire (Fig. 23).
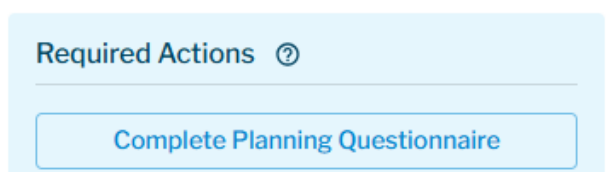
Fig. 23

5 Once you have answered the questions throughout the questionnaire. Select **"Submit"** to save (Fig. 24).
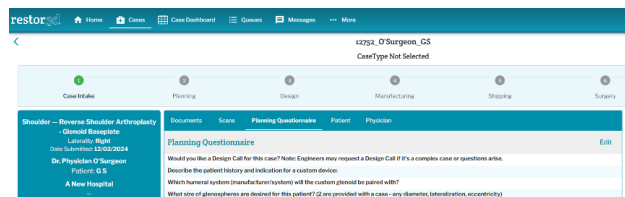
Fig. 24

6 Your case has been submitted after all Critical Actions have been completed.

Review case details found at the top of the case for accuracy. Select the edit icon (Fig. 25) to update information such as Indication, Surgery Date, etc as needed. (Fig. 26).

Fig. 25
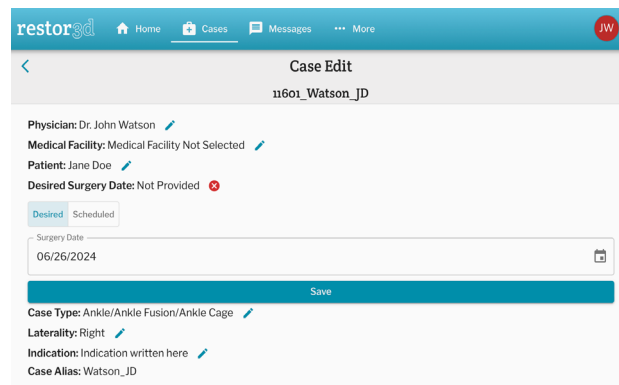
Fig. 26

Patient-Specific Process

Case Submission Cont.

Once DICOMS have been added to a case, you will be able to visualize them to confirm the correct patient scans have been uploaded or review.

By clicking the scan you wish to view under Series (Fig. 27) your DICOM study will load a DICOM viewer. You can use the scroll bar at the bottom of the page to scrub through the image stack. Click outside of the popup browser to close the DICOM viewer and return to your case (Fig. 28).
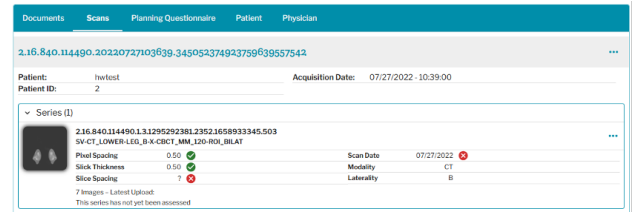
Fig. 27
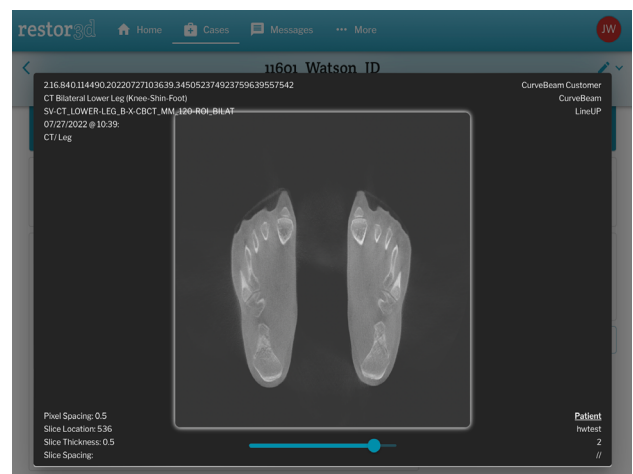
Fig. 28

Patient-Specific Process

Scan Assessment

During **Case Intake** (Fig. 29) sales reps and physicians may be notified for **Additional Scans Requests, Scan Exception Approval/Rejection**, or **Scan Rejection** following completion of the restor3d Scan Assessment.

Fig. 29

Additional Scan Requests typically arise when parts of the patient anatomy are missing or clipped. These issues can usually be resolved in coordination with the radiology departments. Notification for additional scans will be sent to your email (Fig. 30) and flagged as a Critical Action (Fig. 31) on the case screen.

11588_O'Surgeon_RP - Additional Patient Imaging Requested

Additional patient imaging is required for 11588_O'Surgeon_RP. Please see the details below:
Reason for Additional Scans

11588_O'Surgeon_RP

Fig. 30

II Case On Hold
Additional images requested: Please provide the contralateral side

Critical Actions ⑦

Additional Scans

Drag DICOM files here, or click to select files

NOTE: If you wish to add files other than DICOM patient scans, add these files in the Additional Case Files section
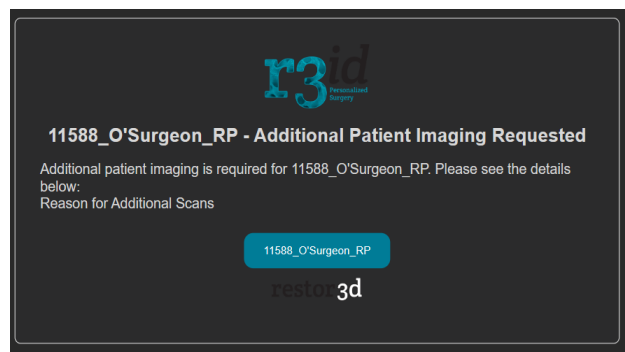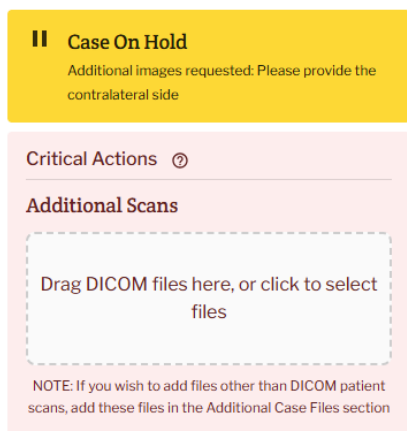
Fig. 31

Scan Exceptions arise when the patient scans are outside the restor3d prescribed CT protocols but the patient specific engineering team has deemed the scans to be usable for design.

Physicians are required to sign-off within r3id if an exception is taking place. If accepted, the case will move into the Planning phase. If rejected, the case will be placed on hold until new scans are provided. (Fig. 32)
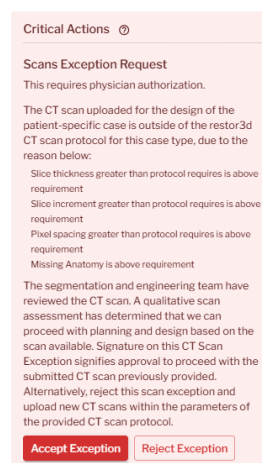
Critical Actions ⑦

Scans Exception Request
This requires physician authorization.

The CT scan uploaded for the design of the patient-specific case is outside of the restor3d CT scan protocol for this case type, due to the reason below:
 Slice thickness greater than protocol requires is above requirement
 Slice increment greater than protocol requires is above requirement
 Pixel spacing greater than protocol requires is above requirement
 Missing Anatomy is above requirement
The segmentation and engineering team have reviewed the CT scan. A qualitative scan assessment has determined that we can proceed with planning and design based on the scan available. Signature on this CT Scan Exception signifies approval to proceed with the submitted CT scan previously provided. Alternatively, reject this scan exception and upload new CT scans within the parameters of the provided CT scan protocol.

Accept Exception   Reject Exception

Fig. 32

Scan Rejections occur when the patient scans provided are not usable for device design. A new CT scan or alternative scan will have to be uploaded before device planning and design will continue.

The reason of receipt for each of the aforementioned scan assessment notifications will be provided in the email and/or on the submitted case in r3id.

You're able to see all the phases of the Patient-Specific Process through the progress bar on your case screen. Some of these phases will require input or action from you, others will be managed by the restor3d team (Fig. 33).

Fig. 33

Patient-Specific Process

Design Call

During planning, design engineers will have the opportunity to request a design call to be scheduled or schedule a design call.

1 If a design call is needed, a "**Required Action**" will appear within the case window. Select **"Schedule Design Call"** to schedule a date and time for the call (Fig. 34).
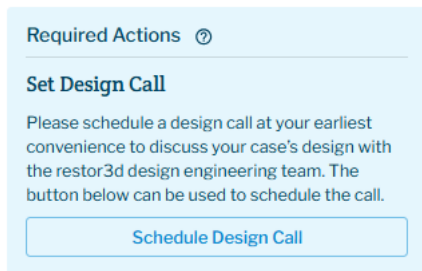

Fig. 34

2 Select a desired Date and Time then confirm selection (Fig. 35).

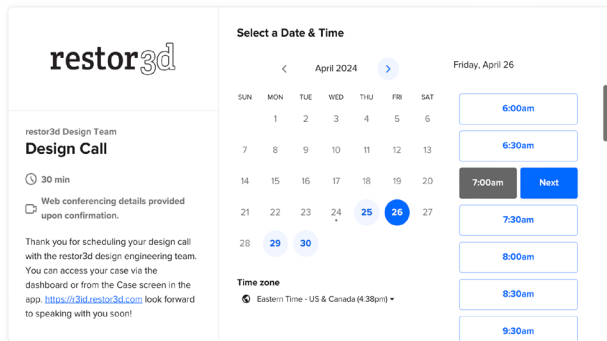> **NOTE:** Mondays, holidays, and weekends are not available for call scheduling.

Fig. 35

3 Confirm the auto populated details are correct, including guest emails for your clinical staff, fellows, and reps associated to your account. You can remove guest emails by clicking the **"x"** button to the right of the email (Fig. 34).
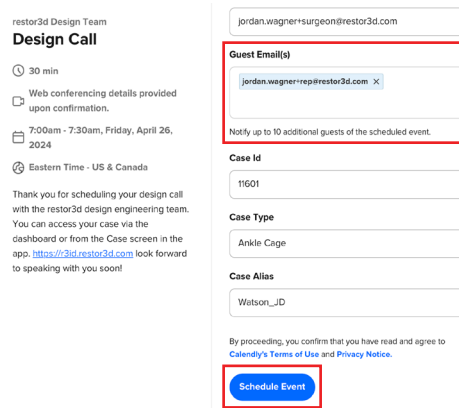

Fig. 36

4 Select **"Schedule Event"** (Fig. 36). Following confirmation, you'll receive an email with a link to the scheduled Zoom call. You can reschedule or cancel the call via your case's **Needed Actions** section (Fig. 37).
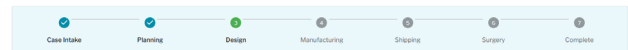

Fig. 37

Patient-Specific Process

Design

During the Design phase (Fig. 38), your case's design engineer will prepare designs based on the Design Call. A design proposal will be created and submitted for your review. Once the design engineer has submitted the design proposal, you'll receive an email from r3id with a link to view the proposal through your phone or desktop.

Fig. 38

1 On your case's screen, your design proposal will show up beneath **Critical Actions**. Select the **"Download"** button or **"Open to New Window"** to review the design proposal.

> **NOTE:** You must download or open a new window with this document to approve (Fig. 39). Viewing the design in the 3D Visulize feature does not qualify as completing design review.
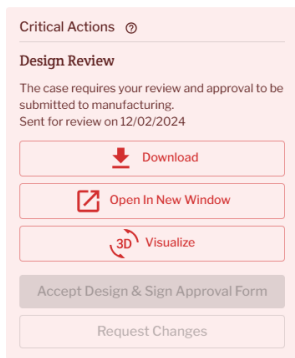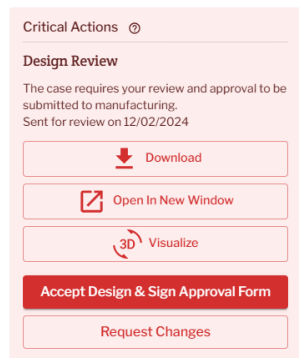
Fig. 39

Fig. 40

2 After reviewing the design proposal, you have the option to select:

A. Accept Design & Sign Approval Form: If you agree with the contents of the design proposal you'll be taken to the Approval Form (Fig. 40-41). Those set up with biometric recognition on r3id, can sign off with Face ID."

B. Design Revisions Requested: if you require design modification.

> **NOTE | Option B:** You must provide some commentary on what you would like changed on the design. Comments provided here will be visible to the design engineers working your case so they can incorporate your changes.
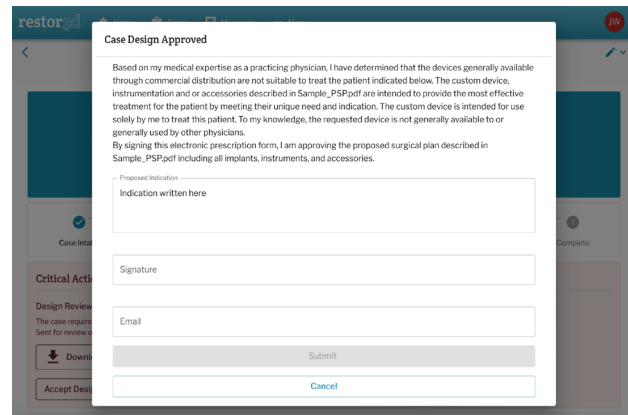
Fig. 41

> **WARNING:** For approval, read the attestation and confirm the indication. Based on regulatory requirements, you will have to enter your username and password to formally signed the approval form. The approval form will be accessible under the case once executed (Fig. 41).

Patient-Specific Process

Remaining Phases

You'll be able to track the progress of the remaining phases of the r3id Patient-Specific Process via the r3id Home screen's **Case** dashboard (Fig. 42), filtered under the **Cases** screen (Fig. 43), or the individual case page itself (Fig. 44).

Manufacturing

During the Manufacturing phase, there should be no action required by you.

Shipping

During the Shipping phase, there should be no action required by you. Once tracking information is provided, it will be visible on your case.

Surgery

Once surgery is complete and restor3d is informed, the surgery will be marked as complete and your case will be finished!

Completed

Final phase in the design process, indicating no further action is needed for this case.
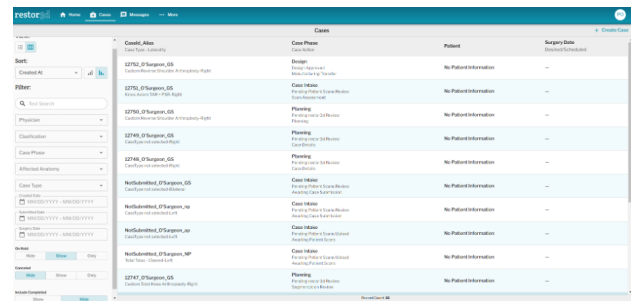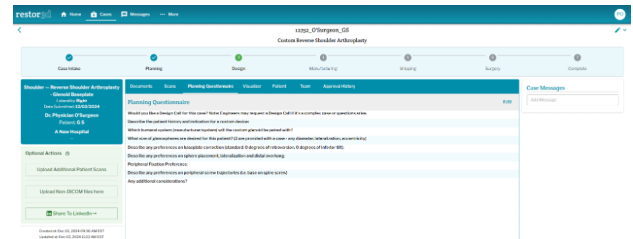

Fig. 42

Fig. 43

Fig. 44

Additional Information & Highlights

Mobile Companion

r3^{id}'s mobile application is available for Apple and Android users to download from the app store. Search your app store for "restor3d" to find the app for download.

The mobile device will allow you to have access to your case file at the palm of your hand (Fig. 45). Comment on the case file, review and approve the design proposal, as well as add or modify patient information on the go.

Fig. 45

Case Messages

Throughout your case's design you can communicate directly with the restor3d design team, or anyone on your team that has access, using the **Case Messages** section of the case details screen. Simply type in your comment or question then select the **"Add Message"** button, and your input will be saved to the case. You will also be able to see comments left by other members of your team or the restor3d design team for easy communication (Fig. 46).
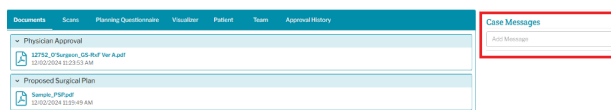

Fig. 46

Additional Information & Highlights

3D Visualization

Case designs contained within your Design Propsal PDF can be viewed within a 3D viewer on r3^{id}. This will allow you to zoom into the anatomy to more closely inspect designs, rotate the design to view it from different angles, toggle visibility on and off for bones within an anatomy, and change the opacity of the bones and devices with the anatomy.

> **NOTE:** Approving a case's design or requesting revisions will still require opening/downloading the Design Proposal file. The 3D viewer is not to be used as a diagnostic device, rather just an alternate view of the content of the Design Proposal.

Additional Information & Highlights

3D Visualization Cont.

1 Access a case in r3id.

> **NOTE:** The case must have a design proposal submitted to access the visualization tool.

2 Under **Case Document**s, select **"Open Visualizer"** (Fig. 47). The first anatomy group of the design proposal will be loaded and displayed.

Controls

A. Anatomy/Device Dropdown – at the top of the page is a dropdown that will allow the user to view the different section of the proposed surgical plan (Fig. 48-49).

B. The Settings option (gear icon) in the bottom left allows the user to control visibility of the various components within the currently viewed assembly (Fig. 48-49).

  i. Hide and show a specific component using the toggle.

  ii. Increase and decrease the transparency of a component by using the slider.

C. The Rotation option in the bottom right allows users to rotate the assembly on a desired axis using the slider control, as well as enabling/disabling auto rotate using the switch control (Fig. 48).

D. Users can zoom in an out using the scroll wheel on a mouse or pinching/spreading two contact points on a track pad or phone screen.
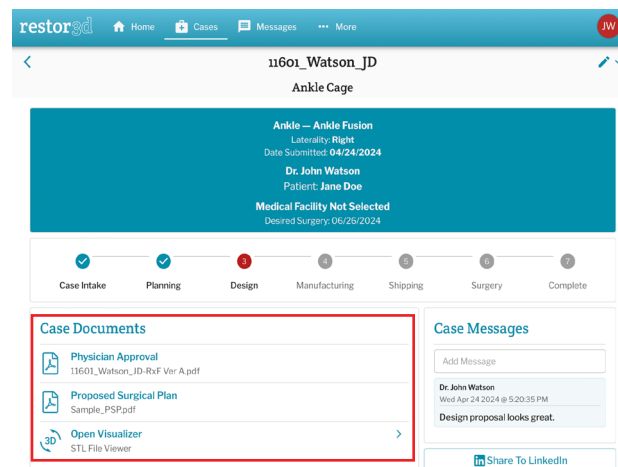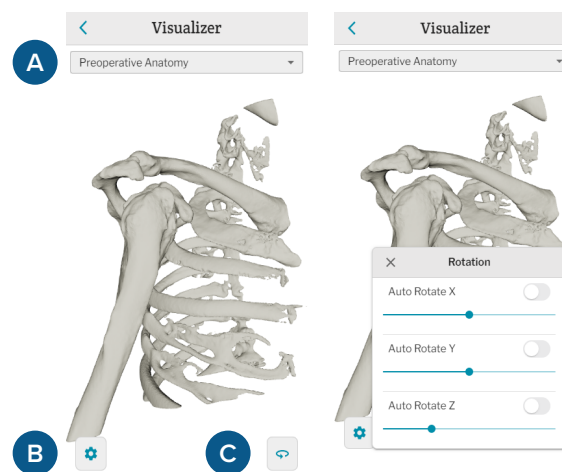

Fig. 47

Fig. 48   Fig. 49

Additional Information & Highlights

DICOM Viewer

Once DICOMS have been added to a case, you will be able to visualize them to confirm the correct patient scans have been uploaded or review.

Select a series in the patient scan section to view the images and metadata in the DICOM viewer (Fig. 50). You can use the scroll bar at the bottom of the page to scrub through the image stack. Click outside of the popup browser to close the DICOM viewer and return to your case (Fig. 51).
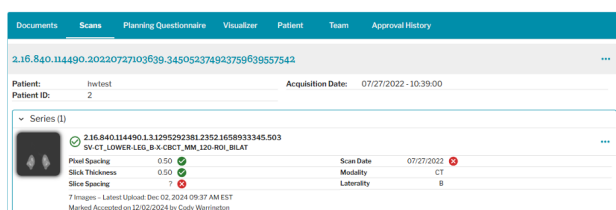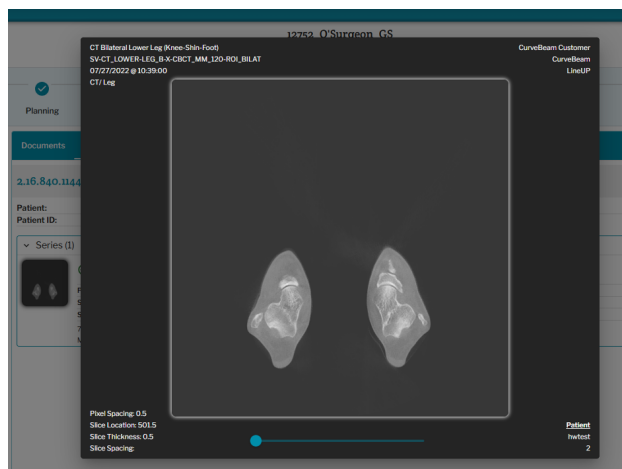

Fig. 50

Fig. 51

Case and Patient Editing

At any point throughout the design process, you can edit your case and patient information by selecting the pencil icon in the top right corner of your case file (Fig. 52).
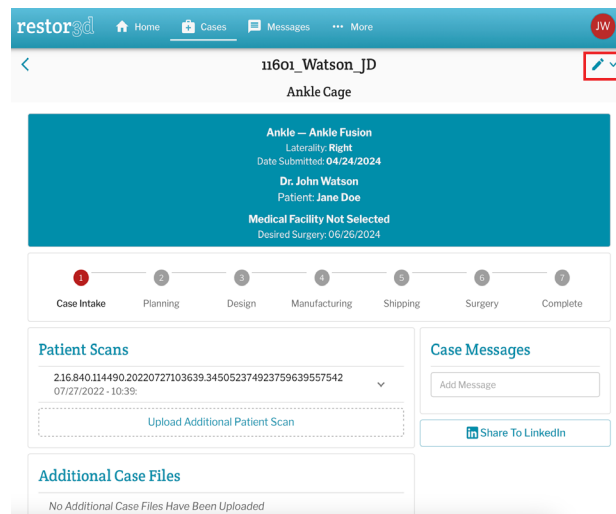

Fig. 52

Additional Information & Highlights

LinkedIn Sharing

Share case details and images to LinkedIn from your r3id cases.

Case images uploaded to a case can be shared along with a quick blurb about the case and hashtags.

1 Access a case in r3id via the **Cases** tab at the top of the homescreen or selecting a case within **Cases**, **Completed** (Fig. 53).

2 Click the **"Share to LinkedIn"** button in the case page found under **Case Messages** (Fig. 54).

3 Enter LinkedIn email or phone number and password (Fig. 55).

> **NOTE:** An access code may be sent the account's email address or phone number. Enter the access code to continue (Fig 56).
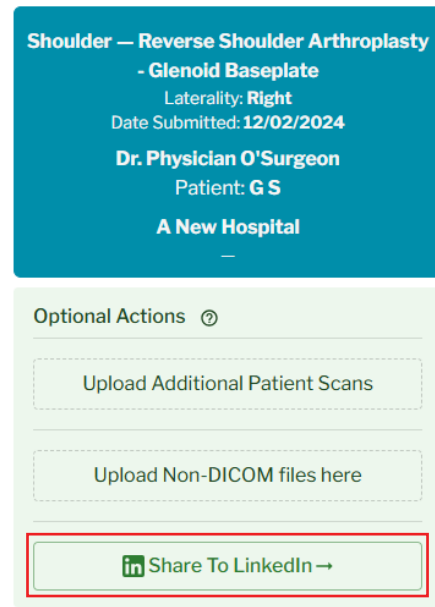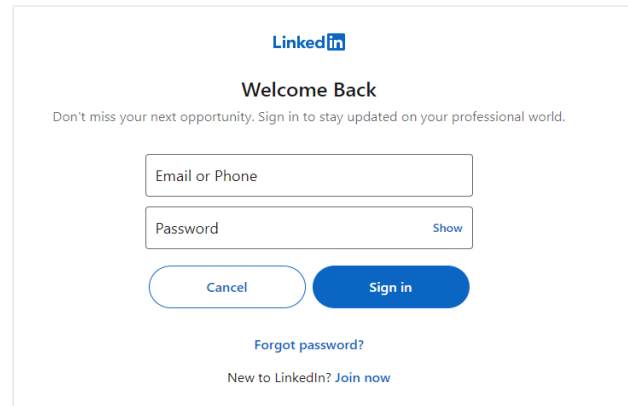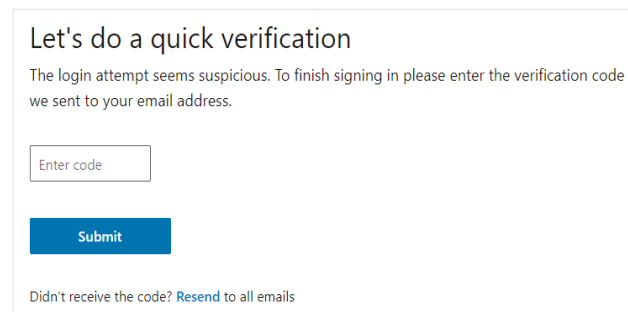

Fig. 53

Fig. 54

Fig. 55

Fig. 56

Additional Information & Highlights

LinkedIn Sharing Cont.

4 Allow sharing permissions for restor3d's r3^{id}. You will be redirected back to the case in r3^{id} after selecting **"Allow"** (Fig 57).

5 Click the Share button again (Fig. 58).

6 Craft your post!

Enter text in the **Post Content** section. If you wish to include a custom hashtags, include it in the **Post Content** section as well (Fig. 59).

Determine if restor3d should be tagged in the post by toggling the slider on/off (Fig. 59).

Select images to be shared along with the post (Fig 59).

NOTE: You must add pictures to the Case Images prior to sharing content. Only images uploaded to the Case Images folder will be selectable at this time.

Select/deselect default hashtags to be included (Fig 59).

Click the **"Post"** button (Fig 59). The post will now be shared on LinkedIn.
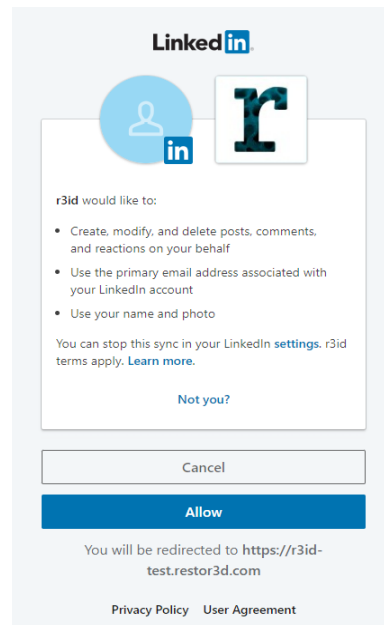

Fig. 57

Fig. 58

Fig. 59

Frequently Asked Questions

1 **Who can see my patients' HIPAA information?**

Once a case has been created, only you and your clinical team, as well as HIPAA trained restor3d employees, can see a patient's full data. If a restor3d employee is not HIPAA trained, they will only see the patient's initials.

2 **I forgot my password. How can I reset it and login?**

Visit **https://r3id.restor3d.com**. Select **"Forgot password"**, enter your email address, and select the **"Send Link"** button. From the email you receive, select the link, reset your password, and login as usual.

3 **Is there a limit to the size of DICOM file I can upload?**

No. The system can accept any sized file uploads.

4 **What digital platforms can I use to log into r3id?**

You can log into the system on your desktop or mobile device.

5 **How can I enable Face ID for r3id Application Login?**

Tap on the **"More"** tab at the lower right hand corner of your screen, scroll down to **My Settings**. For Apple users, toggle on "**Use Face ID**". For Andriod users, toggle on "**Use Biometric Authentication**". Accept use by inputting your r3id password and allowing use when prompted.

> **NOTE:** If you reset your password, you will need to reset your FaceID/Biometric login using the steps above.

Apple

Android

r3id Login
Please enter your username and password.

Username

Password

Login

Use Face ID

Remember email

forgot password

request access to r3id

request r3id user account deletion

r3id Login
Please enter your username and password.

Username

Password

Login

Use Biometric Authentication

Remember email

forgot password

request access to r3id

request r3id user account deletion

Questions? Email: r3id@restor3d.com

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