Important Contact Information
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All surgeon and patient details appearing in the demo screen shots are fictitious. Any resemblance to real persons is coincidental.
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Definitions

3D model — A 3D-printed, surrogate model of a patient’s glenoid that interfaces with the glenoid targeter device, enabling the transfer of the planned pin trajectory from the model to the patient.

3D order — This order type includes a plan viewable within the VIP™ preoperative planning system, as well as a 3-dimensional bone model. This order involves the use of the glenoid targeter device.

3D and 5D order — This order type includes everything from the 3D and 5D order types.

5D calibrator — The instrument that is used in conjunction with the glenoid targeter device (series 06-xxxx). Arthrex provides the 5D calibrator settings for patients based on their surgical plan. When set up properly, the 5D calibrator establishes the correct leg height settings on the glenoid targeter device.

5D order — This order type includes a plan viewable within the VIP system and specific instructions for setting the 5D calibrator (06-xxxx Series) or targeter leg heights (AR-5400 Series). This order involves the use of the glenoid targeter device.

Administrator — This user has access to all other users’ profiles and cases. There will be a very limited number of users at Arthrex who have administrator privileges.

Approved preoperative plan — The final, surgeon-approved preoperative plan that is referenced at the time of surgery. It exists in digital (web session) form. Once a preoperative plan is approved, it cannot be modified.

Archive — Case action that hides a case from the “Cases” page to keep it from becoming overpopulated and cluttered.

Virtual Implant Positioning™ (VIP) system — A shoulder arthroplasty surgical planning system that can include the following: glenoid targeter, 3D model, 5D calibrator, and surgical tray. The VIP web portal is indicated for use with the VIP system.

VIP web portal or web portal — The Arthrex website for which this document was written. It facilitates communication between surgeons and Arthrex technicians during preoperative surgical planning.

Assistant — Any colleague, such as a nurse or resident, of a surgeon user who can upload a CT scan to the web portal on behalf of the surgeon. Assistants must register in the web portal under a surgeon.

“Case Details” page — The page where the individual case details can be viewed and edited.

Case ID — A unique alphanumeric ID that is assigned to each case. This ID must be different for every case.

Case status — The status of preoperative plan creation. A list of statuses within the Arthrex workflow can be found under the “Cases” page section of this document (see page 10).

Case status flowchart — A flowchart at the top of the “Case Details” page that allows users to track a case status throughout the planning process.

“Cases” page — The page where cases can be managed and accessed. Administrators and technicians can view all the cases on the web portal. Other users’ access is limited to their specific cases.

Arthrex technician or technician — A trained Arthrex employee who is tasked with creating preoperative plans and interacting with web portal users to fulfill their requests.

Expiration date — The expiration date of an approved preoperative plan. This occurs 6 months from the date that the CT Scan was taken.

Glenoid targeter device — This instrument, which is a part of the VIP system, transfers the preoperatively planned pin trajectory to a patient’s glenoid.

Main screen — The home page that is visible when entering the VIP web portal.

“New Case” page — The page where new case information is entered by a web portal user.

“New User Registration” page — The page where new users can register for the VIP web portal.

Order number — The unique number (based on the date and number order for a certain month) Arthrex uses to trace the status of an order and complete it. The form of this number is: [2-Digit Project Number]-YY-MM-[4-Digit Sequential for Month]. For example, the 50th order of the Arthrex glenoid targeter device for September 2015 is: 12-15-09-0050.

OrthoVis — This desktop software, which is used by Arthrex technicians, has more advanced functions than the web portal, including thresholding and separation of the bony joint.

Plan — A web session, OrthoVis session, approved preoperative plan, etc. It is the preoperative plan that exists in any state throughout the planning process.
Definitions (Cont)

Plan ID — The identification number for an approved or unapproved plan on the web portal. When a web session is created, it is given a plan ID that it holds through approval. The plan ID is typically “plan 1.”

Plan-only order (1D) — This order type includes only a plan viewable in the VIP web portal.

Plan status — Listed as “Approved” or “Ready for Review,” this refers to the status of the planned implant placement with regards to surgeon approval.

Register New User page — The location on the VIP web portal where a new user enters their information.

Surgery date — The date on which the preoperatively planned surgery will take place. This date is entered by the operating surgeon or assistant when a new case is created.

Username — The unique name that a user selects for logging into ArthrexVIP.com. Users can be given one of 5 designations based on their function: surgeon, assistant, sales, technician, or administrator.

Viewer page — The online web portal viewer that allows surgeons and Arthrex technicians to communicate and adjust / approve a plan (web session). Approval creates an approved preoperative plan.

Web session — An unapproved plan on the web portal that a surgeon and Arthrex technician can adjust. Once approved by a surgeon, it becomes an approved preoperative plan.
Introduction

The VIP™ preoperative planning system web portal is a medical device designed to facilitate the transfer of information between surgeons and Arthrex technicians. With purposeful functionality, the portal allows surgeons to make adjustments to protocol-based plans created by Arthrex technicians. Once the initial plan is created, it is uploaded into a web session within the portal, in which surgeons can adjust an implant’s position and orientation on the isolated scapula in both 2D and 3D. The web portal also acts as a communication channel between surgeons and technicians throughout the approval process. Once a plan is approved in the portal, further changes are prohibited. Approved 2D and 3D plans can be accessed as locked PDF files via the “Viewer” page.

Intended Use

Indications for Use

The Arthrex VIP web portal is intended for use as a software interface and for the transfer of imaging information from a medical scanner such as a CT scanner. It is also intended as software for displaying/editing implant placement and surgical treatment options that were generated by in the OrthoVis desktop software by trained Arthrex technicians. The VIP web portal is intended for use with the Arthrex glenoid targeter and with the Arthrex OrthoVis Preoperative Plan. It is indicated for use with the following glenoid implant lines: Arthrex Univers™ II and Arthrex Univers Apex, keeled or pegged glenoid components, the VaultLock® glenoid component, as well as the Univers Revers and Modular Glenoid System (MGS) baseplate components.

Contraindications

■ The VIP web portal is not to be used with any shoulder replacement system, or component, other than the total shoulder systems and components identified in the Indications for Use.
■ The VIP web portal and/or VIP system is indicated for use with certain total shoulder systems, listed in the Indications for Use. The contraindications associated with those systems remain the same, unaltered, as described in each implant system’s labeling (with or without the use of VIP web portal).
■ The VIP web portal is not indicated for use in shoulder hemiarthroplasty.
■ An unapproved preoperative plan is not to be used for clinical purposes.
Intended Use (Cont)

Warnings
- Do not use the approved preoperative plan on anyone other than the patient indicated on the approved preoperative plan or in the web portal.
- The surgeon who will be performing the surgery must be the user responsible for approving the preoperative plan.
- Do not use the approved preoperative plan after its expiration date (6 months after the CT scan).
- The VIP™ preoperative planning system web portal is indicated for use with specific total shoulder systems. The warnings associated with those systems remain the same, unaltered, as described in each implant system’s labeling (with or without the use of VIP web portal).
- Use of the web portal or OrthoVis is not a guarantee of improved accuracy or results as the approved preoperative plan is for visual reference only.
- Do not use an unapproved preoperative plan (web session or OrthoVis session) for clinical purposes.
- Due to resolution variation across devices, the images displayed on the web portal are not intended for diagnostic purposes and are for orthopedic surgical planning only. A persistent on-screen message displays this information on the web portal viewer.
- CAUTION: US federal law restricts this device to sale on or by the order of a physician.

Patient Counseling and Patient Information
Physicians should consider the following in counseling patients about this product:
- Discuss the risks of using the web portal in conjunction with OrthoVis or with the VIP system as a visual reference/planning tool for total shoulder arthroplasty.

How Supplied
The VIP web portal is provided as a web page located at www.arthrexvip.com. It is meant to facilitate communications between surgeons and technicians, while working towards a final approved preoperative plan that can be used in the OR.

Instructions

Inspection Prior to Use
- Inspect the approved preoperative plan to confirm that it corresponds with the patient who will be undergoing surgery. Also inspect the side of the patient that the surgery will take place on (left or right).
- If you are referring to a hard copy of the plan, ensure that all pages are available.
- Make sure that the approved preoperative plan is not expired (6 months after CT scan).

Review the Preoperative Plan
- Surgeons can review and approve the web session any time prior to the operation.
- Surgeons should be thoroughly familiar with the approved preoperative plan before using it in the OR.
**Intraoperative References**

- When using the approved preoperative plan by itself as a planning tool (without any other tools/devices, such as the glenoid targeter device), the images within the plan are used for visual reference, helping to facilitate the accurate placement of the glenoid guide pin and glenoid implant.
- Be sure to maintain sterility by keeping the nonsterile preoperative plan document out of the sterile field and away from contact with the patient.
- Surgeons can use the locked digital plan on the web portal or the plan PDF as an intraoperative reference. The digital plan on the web portal can be viewed as a 2D and 3D model in real time (web session), but the implant and guide pin location cannot be changed after surgeon approval.

**System Requirements**

**Graphics Card/Chipset**

- Graphics memory: At least 256 MB recommended.
- All graphics cards and chipsets that support OpenGL 2.1 or higher should be supported. This typically includes all contemporary graphics cards from nVidia®, AMD, or Intel, and latest integrated graphics chipsets.
- On Windows systems: Install the latest drivers for the graphics card/chipset.
- For detailed information, see WebGL specifications at [https://www.khronos.org/webgl/wiki/BlacklistsAndWhitelists](https://www.khronos.org/webgl/wiki/BlacklistsAndWhitelists).

**Web Browser**

Google Chrome (versions ≥55) is the only browser that supports the web portal software. In general, it is recommended that the latest version of the browser be used for reasons of security and stability.
Features of the VIP™ Preoperative Planning System: Web Portal

- Securely upload patient-specific CT data
- View bones and implants in 3D as well as orthographic 2D cross sections
- Display/adjust plans created by Arthrex technicians in OrthoVis
- Display the case and plan status
- Comments function that allows surgeons and technicians to communicate
- Perform angle and length measurements in 2D views
- Surgeons can approve preoperative plans by typing their username and password into the web portal
- Organization of cases and plans into an easy-to-read table
- Archive cases that have passed their surgical date
- Allow surgeon assistants and technology consultants to upload CTs on a surgeon’s behalf
- Snap the view of the 3D model to anatomic reference planes (ie, anterior, posterior, inferior, and superior)
- Adjust type and size of implant that was chosen by Arthrex technician
- Reset implant placement to what was originally planned by Arthrex technician
- Show/hide 3D model components (ie, guide pin, implant, and bone)
- Show the original CT slices in the 3D view
- Adjust the transparency of the bone in the 3D view from 0% to 100% transparency
- View articulating surfaces for both anatomic and reverse total shoulder replacements
- View screw trajectory for baseplates with screw options
- View backside seating and the maximum gap/depth of implant to patient anatomy
Navigating the Web Portal

Main Screen

Access the VIP™ preoperative planning system web portal by navigating the supported web browser to www.arthrexvip.com. After the program initializes, you will be presented with the main screen (Figure 1). From here you can register as a new user, or log in as a current user (upper right corner of main screen).

Additionally, the main screen includes a link to Arthrex’s corporate website (Arthrex.com) at the bottom right of the screen. The “Labeling” link at the bottom left of the screen links to a page that contains reference documents for the VIP web portal device.

This “Labeling” link includes:

- VIP Glenoid Targeter Surgical Technique (AR-5400 Series) [LT1-000040-en-US_A].
- Specifications for CT Scan Data Acquisition [LR1-000018-en-US_A].
- VIP System Directions for Use [DFU-0289-3].
- VIP System Glenoid Targeter Surgical Technique (series 06-xxxx) [DFU-0329E].
Navigating the Web Portal (Cont)

**Register New User**

At the top right of the main screen, click the “Register” link to access the Terms & Conditions, which must be agreed to and accepted prior to registration. Once the Terms & Conditions have been accepted, the registration form will appear. Users must enter a unique username and password. If a username is not available, the user will be alerted to choose another. Passwords must be at least 6 characters long and will need to be entered twice for confirmation.

Users must then enter their full name (first and last), phone number, and email address. A drop-down field allows users to define the capacity in which they will use the system. Selections include surgeon, assistant, and sales representative. If surgeon is selected, additional fields will populate for hospital affiliations, city, state/province, and sales rep email. If assistant is selected, no additional fields will populate. If sales representative is selected, additional drop-down fields will populate for agency and region.

Lastly, a reCAPTCHA is required for user verification. If reCAPTCHA is unsure that a click is performed by a human, additional verification questions will be displayed. Press “Register” to submit the form and complete registration. Press “Cancel” to return to the main screen.
# Navigating the Web Portal (Cont)

## User Permissions

<table>
<thead>
<tr>
<th>Surgeon</th>
<th>Assistant</th>
<th>Technology Consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Register as user(^1)</td>
<td>Register as user(^2)</td>
<td>Register as user(^2)</td>
</tr>
<tr>
<td>Change own profile info</td>
<td>Change own profile info</td>
<td>Change own profile info</td>
</tr>
<tr>
<td>Add assistants and technology consultants to profile</td>
<td>Change own password</td>
<td>Change own password</td>
</tr>
<tr>
<td>Change own password</td>
<td>View cases/plans of associated surgeons</td>
<td>View cases/plans of associated surgeons</td>
</tr>
<tr>
<td>View own cases and plans</td>
<td>Create cases for associated surgeons</td>
<td>Download PDFs for associated surgeons</td>
</tr>
<tr>
<td>Create cases</td>
<td>Upload CTs for cases of associated surgeons</td>
<td>Comment on associated cases and plans</td>
</tr>
<tr>
<td>Upload CT scans for cases</td>
<td>Edit associated cases</td>
<td>Edit associated cases</td>
</tr>
<tr>
<td>Edit own cases</td>
<td>Archive/unarchive cases of associated surgeons</td>
<td>Create cases for associated surgeons</td>
</tr>
<tr>
<td>Archive/unarchive cases</td>
<td>Edit plans of associated surgeons</td>
<td>Upload CT scans for associated surgeons</td>
</tr>
<tr>
<td>Edit plans</td>
<td>Download PDFs for associated surgeons</td>
<td></td>
</tr>
<tr>
<td>Approve plans</td>
<td>Comment on associated cases and plans</td>
<td></td>
</tr>
<tr>
<td>Download PDFs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comment on own plans and cases</td>
<td></td>
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</tbody>
</table>

1. When a surgeon registers on the web portal, their identity must be verified by a system administrator before they can log into the web portal.

2. When a technology consultant registers on the web portal, they must be linked to a surgeon account in order to use manage cases and view plans. A surgeon or system administrator must link a technology consultant to a surgeon account before they can view or edit any cases.
Upon successfully logging in, the user is brought to the Cases page (whether they are a surgeon, assistant, or technology consultant).

This page, which provides surgeons with an organized view of their cases, provides quick navigation, sorting options, and searchable columns.

Each search bar queries within its respective column (category) and can be used to filter results. Multiple search bars can be used simultaneously.

Each case is characterized by 6 categories (columns):
- **Order #** — A unique identification number assigned to each case that ensures no two cases can be characterized in exactly the same way.
- **Surgeon** — The name of the surgeon corresponding to a particular case.
- **Patient Name** — The name of the patient corresponding to a particular case.
- **Surgery Date** — The date on which the procedure is scheduled to be performed. As a registered web portal user, the surgery date listed in the VIP™ system can be changed by a surgeon, surgeon assistant, or Arthrex technician.
- **Procedure** — The elected shoulder arthroplasty procedure (total shoulder arthroplasty [TSA] or reverse shoulder arthroplasty [RSA]).

![Figure 3: Cases Page](image)
• **Status** — This indicates a case’s current status along the preoperative planning process. The case progresses through the following statuses during the preoperative planning workflow:
  - **No CT**: A new case has been created, but the CT has not been uploaded.
  - **CT Received**: A new case has been created, and the user has successfully uploaded CT images.
  - **CT Unacceptable**: The uploaded CT images do not pass the acceptance criteria for CT scans and must be reuploaded to continue processing the case.
  - **CT Accepted/Planning**: The CT images for a new case have been uploaded and have passed the CT scan acceptance criteria. An Arthrex technician begins planning the case according to the protocol.
  - **Ready for Review**: A technician has uploaded a proposed preoperative plan for the case, and it is ready for surgeon review and approval.
  - **Approved**: A surgeon has accepted and endorsed a plan, including the implant type and size as well as its location and orientation. The approved preoperative plan includes order type, which varies from case to case, and is based on surgeon needs for that particular case. **The case cannot be processed without surgeon approval of the case plan.**
  - **Processing**: Technicians are processing the case’s specific order requests.
  - **Order Complete**: Technicians have filled an order request (ie, 3D model has been shipped, an approved preoperative plan has been uploaded, or both).

---

**Figure 4: Case status flowchart**
From the "Cases" page, clicking the “New Case” button (Fig. 5) will direct users to the “New Case” page (Fig. 6). The surgeon username (in this case: "arthrexdemocase") will be autopopulated depending on which user is logged in. Using this form, users can enter and save descriptive information about the case.

**When creating a new case, the following information is REQUIRED unless otherwise noted:**

- **Side:** The shoulder that the surgeon will operate on (left or right).
- **Description (optional):** Any further information related to the case.
- **Patient Name:** Patient’s full name ([first last] or [last, first]).
- **Date of Surgery:** Must be a date in the future.
- **Date of CT Scan (optional).**
- **Type of Procedure:** Total shoulder arthroplasty or reverse shoulder arthroplasty.
- **Status:** No action needed (prefilled and uneditable).
- **Order Type:** Defines the surgeon’s desired deliverable (eg, plan only, 3D model, 5D calibrator, or 3D model and 5D calibrator).
  - **Plan only** — The preoperative plan that is accessible and approved via ArthrexVIP.com
  - **3D model (3D)** — The physical, tangible, 3D-printed bone model that is created with a pin trajectory derived from the surgeon’s approved plan. The 3D model is used to establish the targeter’s leg settings, which are required to intraoperatively achieve the approved plan’s trajectory of the guide pin.
  - **5D calibrator** — An alternative to the 3D model, which includes a set of instructions detailing the appropriate settings for the 5D calibrator (06-xxxx Series) or targeter heights (AR-5400-xx Series) specific to the approved plan. These settings are used to establish the targeter device’s leg settings.
  - **3D model and 5D calibrator** — A 3D model and 5D calibrator instructions.
- **Comments:** Any further information regarding the case that Arthrex should be aware of (optional).

Clicking “Save” will create the new case, moving it to the Cases page.
Cases Page (Cont)

Uploading CT Images

Once a new case is created, the case status will read “NO_CT.”

![Case and CT upload forms](image)

Figure 7: Case and CT upload forms

Notice that there is a section of this page called “Images.” Click the “Upload” button to upload the CT images for this case.

![Navigation to the upload form](image)

Figure 8: Navigation to the upload form
Cases Page (Cont)

Uploading CT Images (Cont)

Within the upload form, the username and order number are autopopulated (Fig. 9).

From the upload form, click the “Choose File…” button to open a standard file browsing window (Fig. 10). The user must navigate to a compressed folder (.zip file) containing the DICOM CT images. Select the compressed folder (.zip file).
Uploading CT Images (Cont)

Once a file has been selected, click “Upload” to begin uploading the CT images (Fig. 11). A spinning wheel indicates that the images are being uploaded and that the web portal has not frozen or crashed during the upload process. Upload progress can be viewed in the bottom left of the browser window.

Once CT images are uploaded, the case status will automatically change from “No CT” to “CT Received.” At this point in the process, a technician will evaluate the CT scan to determine whether the resolution, quality, and field of view are in accordance with the CT scan parameters. If the CT scan is acceptable, a technician will accept the scan and mark the case status as “CT Accepted/Planning” (Fig. 12).
Cases Page (Cont)

Uploading CT Images (Cont)

If the CT scan is unacceptable, the technician will mark the case status as “CT Unacceptable.” They will note why the scan was unacceptable, so that it may be corrected. A case will remain in the “CT Accepted/Planning” status until a technician uploads a proposed preoperative plan (web session) for that case. At this point, the case status immediately becomes “Ready for Review” (Fig. 13).

![Figure 13: Case status flowchart once plan is ready for review](image)

When a case is ready for review, an email notification is sent to the surgeon and the surgeon’s assistants/technology consultants that a case is ready for review on the web portal. This email reminder will be sent once per week until 1 week prior to the surgery date entered by the surgeon. At this point, if the plan is still not approved, daily reminders are sent until 3 days prior to surgery. Once the plan is approved, a confirmation email is sent and the case status is changed to approved.

Case Status Flowchart

There is a status flowchart at the top of the Case Details page (Fig. 14). This status flowchart will update itself throughout the planning process and is a convenient tool for case tracking. Note that no user can change a case status to approved/unapproved except the surgeon who placed the order for the case.

![Figure 14: Case Status Flow Chart](image)

Archiving a Case

At the left side of the Case Details page, there is a tab labeled “Admin.” Clicking this tab will display the “Archive” button, which stores the case away and removes it from the Cases page.

Archiving a case does not delete it. Archived cases can be retrieved at any time by an administrator/technician, or by the surgeon who original placed the order for the case.

Clicking on the “Show Archived Cases” button allows users to view all cases that were previously archived. When an archived case is opened, an “Unarchive” button appears that allows the user to move the case back to the Cases page.
Cases Page (Cont)

Accessing the Viewer Page

To access a web session or an approved preoperative plan for a case, click on the “Plan ID” in the upper right of the Case Details page. This will direct you to the viewer page of the VIP™ preoperative planning system web portal.

Figure 15: The Case Details page showing the Plan ID that links to the Viewer page
Viewer Page

Clicking on the Plan ID opens the Viewer page, which displays the rendered 3D image of the CT scan and the Arthrex-selected implant in its proposed location per the planning protocol. From this page, the plan can be modified, saved, and approved.

The coronal and transverse views are shown to the left of the 3D view. Its two planes (blue and green) correspond to the colored outline of each view (ie, the blue plane slices are shown in the view outlined in blue).

![Viewer page displaying proposed preoperative plan](image)

Figure 16: Viewer page displaying proposed preoperative plan
Measurement Tools (Fig. 17)

■ Measure Length
  • Click on the ruler icon at the top left of the 3D view.
  • Click anywhere on a surface to establish the first reference point.
  • Click a second surface point to measure the distance between the two. It will be displayed beneath the ruler icon.

■ Measure Angle
  • Click on the protractor icon at the top left of the 3D view.
  • Click anywhere on a surface to establish the first reference point.
  • Click a second surface point to establish the vertex of the angle desired.
  • Click a third surface point to generate the angle measurement, which will be displayed beneath the protractor icon.
Interface Functionality (Cont)

Snap-to Views and Reset View (Fig. 18)

Click on the eyeglasses icon at the top right of the main 3D view to snap the camera to different anatomical references (eg, anterior, posterior, inferior, superior, and left and right views of the 3D model). The camera view aligns perpendicularly to the datum planes established in the OrthoVis desktop software for the 3D bone model.

Zoom in and out of an image by using a mouse’s center scroll wheel and pan by right clicking and dragging. To reset the image view, click on the “Reset View” button at the top center of the image.
Interface Functionality (Cont)

Save Without Approving Button (Fig. 19)
Click on the “Save Without Approving” button to save plan changes to the location/orientation of the implant without approving the plan. Clicking this button will return users to the “Case Details” page.

Available controls on the Viewer page are divided into 5 control panels: Implant Options, Implant Controls, Viewer Controls, Glenospheres & Inlays, and Max Gap Offset (Fig. 19).

Implant Options (Fig. 20)
- Change the implant type to Pegged, Keeled, VaultLock® Glenoid, Universal Glenoid, or MGS Baseplate.
- Change the implant size.
- Turn screw trajectory on and off using the “View Screw Trajectory” function in the “Implant Options” tab.

Figure 19: Viewer page displaying the proposed preoperative plan

Figure 20: Implant Options control panel
Interface Functionality (Cont)

Screw Trajectory (Fig. 21)

Use this function to visualize the peripheral screw trajectory that is possible when using the Universal Glenoid or Modular Glenoid System baseplates.

![Figure 21: Screw Trajectory function](image)

Implant Controls (Fig. 22)

- Adjust version, inclination, and roll of the implant.
- Adjust S/I, A/P, L/M of the implant location.
- The orientation controls include version, inclination, and roll. Click the “+” or “-” button to increment the selection by one degree. Users can also enter a whole number value into the orientation indicator boxes and press enter, or click elsewhere. Decimal values entered into the orientation controls are truncated and ignored.
- The S/I slider bar moves the implant position (0.5 mm increments) in the superior or inferior direction based on whether the bar slides to the right or left.
- The A/P slider bar moves the implant position (0.5 mm increments) in the anterior or posterior direction based on whether the bar slides to the right or left.
- The L/M slider bar moves the implant position (0.5 mm increments) in the lateral or medial direction based on whether the bar slides to the right or left.
- Reset all or an individual control to its original setting (last save).

![Figure 22: Implant Controls panel](image)
Interface Functionality (Cont)

Viewer Controls (Fig. 23)

- Show/hide elements in the 2D and 3D views (e.g., implant, pin, bone, frames, CT slices, and reamed geometry).
- Change bone transparency from 0% to 100% in the 3D view.
- An option is available to view the original CT slices in the 3D view frames.

Show/Hide Elements (Fig. 24)

- Implant: By clicking the toggle, users can display or hide the implant in the 2D and 3D views.
- Pin: By clicking the toggle, users can display or hide the pin in the 3D view.
- Bone: By clicking the toggle, users can display or hide the bone in the 3D view.
- Frames: By clicking the toggle, users can display or hide the frames in the 3D view.
- Slices: By clicking the toggle, users can display or hide the 2D slice data projected onto the planes in the 3D-rendered model.
- Ream: By clicking the toggle, users can display or hide the instrumented ream/drill preparation for the implant in the 2D and 3D views.
Interface Functionality (Cont)

Reamed Geometry (Fig. 25)
- From the Visibility tab, the Reamed Geometry function is turned on (blue box), with corresponding 2D and 3D images appearing in the viewer.
- This feature gives users visibility to the instrumented ream/drill preparations for the selected implant.

![Figure 25: Reamed Geometry function](image)

Glenospheres & Inlays (Fig. 26)
The “Glenospheres & Inlays” tab displays the articulating geometries of the glenospheres and poly inserts, based on the selected implant, in both the 2D and 3D views.

![Figure 26: Glenospheres & Inlays](image)
Max Gap Offset (Fig. 27)

- This function can be turned on and off using the toggle button (Fig. 27).
- The Max Gap Offset shows the largest distance, and location of max distance, between the backside of the implant and the bone (blue arrow in Fig. 27).
- The Max Depth output displays the largest depth, and location of largest depth, that the backside of the implant is into the bone (blue arrow in Fig. 27).

Figure 27: Max Gap Offset selection
Interface Functionality (Cont)

Backside Seating (Fig. 28)
- This measurement can be maximized or minimized using the arrow next to the Backside Seating text (shown in blue box in Fig. 28).
- This new feature shows areas where the backside of the implant is not contacting bone in red (see red arrows in Fig. 28) and areas where the backside of the implant is contacting bone in green (see green arrows in Fig. 28) in both 2D and 3D views.
- The feature also provides a percentage and surface area measurement of implant backside seating (shown in blue box in Fig. 29) and shows areas where the implant perforates beyond the glenoid bone (see red arrows in Fig. 29).

Info Tab
Clicking the “Info” tab displays further information about the plan—namely the implant’s version and inclination currently saved to the plan. This tab also displays the implant type and size currently saved to the plan.

Approve Button
Clicking the “Approve” button opens a dialogue box in which surgeons must enter their username and password. Users must also confirm the “Order Type” and the “Shipping Address.” Note that entering a surgeon’s username and password and clicking “Approve Plan” constitutes a legally binding electronic signature of approval. Once “Approve Plan” is selected, the plan is approved. Any changes that were made to the plan are saved, and the user is returned to the Case Details page. The case status will now be displayed as “Approved.” Note: Once approved, a plan cannot be changed or unapproved. Also, “Not Used” plans cannot be changed or approved.

Comments Tab
The “Comments” tab allows users to submit comments. Comments are viewable by all who have access to the case (surgeon, assistant, technology consultant, technicians), and these individuals can respond with their own comments.
**User Profile Options Page**

**Profile Tab**

Within the web portal, users can view their user profile, which displays:

- Full Name
- Phone
- Email
- Hospital Affiliations
- Shipping Addresses
- Sales Reps
- Assistants

![Profile page](image-url)

Figure 31: Profile page
Email Preferences Tab
As cases are processed, notification emails will be sent to users regarding various status changes. Users can modify email notification settings by toggling the buttons for each specific notification (Fig. 32).

![Image of Email Preferences Tab]

Figure 32: User Email Preferences Page

Change Password Tab
Users also have the ability to change their password using the “New Password” and “Confirm Password” fields (Fig. 33).

![Image of Change Password Tab]

Figure 33: Change Password

Log Out
The "Log Out" button appears at the top right of ArthrexVIP.com and immediately logs users out, returning them to the main screen.