

# VPAT Accessibility Conformance Report

(Based on ITI VPAT<sup>®</sup>)

Name of Product	<b>ImmunoQuery</b>
Date Last Updated	April 15, 2026
Completed by	Elsevier Digital Accessibility Team
Applicable Standards/Guidelines	This document rates ImmunoQuery according to the <a href="#">W3C WCAG 2.1 A and AA</a> requirements.
Contact for More Information	Elsevier Digital Accessibility Team <a href="mailto:accessibility@elsevier.com">accessibility@elsevier.com</a>
Testing Tools and Methods	<ul style="list-style-type: none"><li>• Hands-on keyboard operation</li><li>• DevTools/Code inspection</li><li>• Chrome 138.0.7204.183 Official on Windows 11 23H2</li><li>• NVDA screen reader 2025.1.2</li><li>• ARC Toolkit Browser Extension</li><li>• Axe DevTools Browser Extension</li><li>• IBM Equal Access Accessibility Checker Browser Extension</li><li>• Web Developer Browser Extension</li><li>• WAVE Browser Extension</li><li>• Color Contrast Analyzer</li><li>• Paul J. Adams Bookmarklets</li><li>• <a href="#">W3C Web Accessibility Initiative (WAI) Pages</a></li><li>• <a href="#">Elsevier Accessibility Checklist</a></li></ul>
Document Sections	This review document includes all WCAG 2.1 A and AA checkpoints, organized into 7 logical sections: <ul style="list-style-type: none"><li>• Visuals</li><li>• Keyboard</li><li>• Headings and Structure</li><li>• Labeling</li><li>• Multimedia</li><li>• Usability</li><li>• Mobile User Experience</li></ul>
Pages Covered	<ul style="list-style-type: none"><li>• Sign in</li><li>• Build Panel Tab - Diagnoses &amp; Antibodies</li><li>• Learn Tab - Diagnoses &amp; Antibodies</li><li>• Saved Cases</li><li>• Diagnosis Panel 5 column</li><li>• Antibody Panel</li><li>• Analyze Results</li><li>• Another Sign In page</li><li>• Forgot Password</li><li>• Global (header footer)</li><li>• CME</li></ul>
Terms	<ul style="list-style-type: none"><li>• <b>Supports:</b> The functionality of the product has at least one method that meets the criteria without known defects or meets with equivalent facilitation.</li></ul>

	<ul style="list-style-type: none"><li>• <b>Partially supports:</b> Some functionality of the product does not meet the criteria.</li><li>• <b>Does not support:</b> Majority of functionality of the product does not meet the criteria.</li><li>• <b>Supports (N/A):</b> According to W3C on conformance, "If there is no content to which a success criterion applies, the success criterion is satisfied."</li></ul>
Notes/Terminology	<ul style="list-style-type: none"><li>• "AT" stands for Assistive Technology such as screen readers, voice input, etc.</li></ul>

## Conformance Summary

WCAG 2.1 Success Criterion	Level	Evaluation
1.1.1: Non-text Content	A	Partially supports
1.2.1: Audio-only and Video-only (Prerecorded)	A	Supports
1.2.2: Captions (Prerecorded)	A	Supports (N/A)
1.2.3: Audio Description or Full Text Alternative	A	Supports (N/A)
1.2.4: Captions (Live)	AA	Supports (N/A)
1.2.5: Audio Description	AA	Supports (N/A)
1.3.1: Info and Relationships	A	Partially supports
1.3.2: Meaningful Sequence	A	Supports
1.3.3: Sensory Characteristics	A	Supports
1.3.4: Orientation (2.1)	AA	Supports
1.3.5: Identify Input Purpose (2.1)	AA	Supports
1.4.1: Use of Color	A	Supports
1.4.2: Audio Control	A	Supports (N/A)
1.4.3: Contrast (Minimum)	AA	Supports
1.4.4: Resize text	AA	Partially supports
1.4.5: Images of Text	AA	Supports
1.4.10: Reflow (2.1)	AA	Partially supports
1.4.11: Non-Text Contrast (2.1)	AA	Supports
1.4.12: Text Spacing (2.1)	AA	Supports
1.4.13: Content on Hover or Focus (2.1)	AA	Partially supports
2.1.1: Keyboard	A	Supports
2.1.2: No Keyboard Trap	A	Supports
2.1.4: Character Key Shortcuts (2.1)	A	Supports (N/A)
2.2.1: Timing Adjustable	A	Supports
2.2.2: Pause, Stop, Hide	A	Supports (N/A)
2.3.1: Three Flashes or Below Threshold	A	Supports (N/A)
2.4.1: Bypass Blocks	A	Partially supports
2.4.2: Page Titled	A	Supports
2.4.3: Focus Order	A	Supports
2.4.4: Link Purpose (In Context)	A	Supports
2.4.5: Multiple Ways	AA	Supports
2.4.6: Headings and Labels	AA	Supports
2.4.7: Focus Visible	AA	Supports
2.5.1: Pointer Gestures (2.1)	A	Supports (N/A)
2.5.2: Pointer Cancellation (2.1)	A	Supports (N/A)
2.5.3: Label in Name (2.1)	A	Partially supports
2.5.4: Motion Actuation (2.1)	A	Supports (N/A)
3.1.1: Language of Page	A	Supports
3.1.2: Language of Parts	AA	Supports (N/A)

WCAG 2.1 Success Criterion	Level	Evaluation
3.2.1: On Focus	A	Supports
3.2.2: On Input	A	Partially supports
3.2.3: Consistent Navigation	AA	Supports
3.2.4: Consistent Identification	AA	Supports
3.3.1: Error Identification	A	Supports
3.3.2: Labels or Instructions	A	Supports
3.3.3: Error Suggestion	AA	Supports
3.3.4: Error Prevention (Legal, Financial, Data)	AA	Supports
4.1.1: Parsing	A	Supports
4.1.2: Name, Role, Value	A	Partially supports
4.1.3: Status Messages (2.1)	AA	Supports

## WCAG 2.1 A and AA Success Criteria

### Visuals

WCAG 2.1 Checkpoint	Conformance Level	Remarks
<a href="#">1.1.1: Non-Text Content</a> (A) Provide text alternatives for non-text content (e.g. images)	Partially supports	Most informative images that require text alternatives provide appropriate text alternatives or labels to ensure screen reader compatibility.  <b>Exceptions:</b> <ul style="list-style-type: none"> <li>Header: Settings image icon button has state of aria-expanded but no textual equivalent accessible label.</li> <li>Diagnosis panel pages: All but the "Commercially not available" icon is not labeled.</li> </ul>
<a href="#">1.3.3: Sensory Characteristics</a> (A) Do not rely on sensory characteristics of components such as shape, size, visual location, orientation, or sound	Supports	There are no instructions or areas of content which rely solely on sensory characteristics.
<a href="#">1.4.1: Use of Color</a> (A) Color is not used as the only visual means of conveying info	Supports	When color is used as a means of conveying information, another visual method is also used to convey the information without color.
<a href="#">1.4.3: Color Contrast (Minimum)</a> (AA) Text has enough contrast with the background (4.5:1 for small text and 3:1 for large text)	Supports	Text contrast meet the 4.5:1 minimum ratio requirement.
<a href="#">1.4.4: Resize Text</a> (AA) Text can be enlarged up to 200% without loss of functionality.	Partially supports	Text may be enlarged to 200% while preserving functionality of content in most instances.  <b>Exceptions:</b> <ul style="list-style-type: none"> <li>When increasing the text up to 200%, depending on the width of the browser such as 1280px wide or 13inch laptop displays, the table content with be cut off and cannot be accessed.</li> <li>On the Learn pages' table content becomes misaligned with their corresponding table headings.</li> </ul>
<a href="#">1.4.5: Images of Text</a> (AA) Text is used rather than images of text, except where the presentation of text is essential, such as logos	Supports	No images of text are used other than for logos or essential presentation in most areas.
<a href="#">1.4.10: Reflow</a> (AA)	Partially supports	Most content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions.

<p>Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:</p> <ul style="list-style-type: none"> <li>• Vertical scrolling content at a width equivalent to 320 CSS pixels;</li> <li>• Horizontal scrolling content at a height equivalent to 256 CSS pixels..</li> </ul>		<p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• Some content such as dropdown select forms get cut off and all the table content at high zoom levels cannot be accessed by horizontal scrolling only the first 2 columns are visible.</li> </ul>
<p><a href="#">1.4.11: Non-Text Contrast</a> (AA) User interface components and graphical objects have a contrast ratio of at least 3:1 against adjacent color(s).</p>	Supports	Non-text UI components and graphical objects have at least a 3:1 contrast ratio against surrounding colors.
<p><a href="#">1.4.12: Text Spacing</a> (AA) In content implemented using markup languages that support the following text style properties, no loss of content or functionality occurs by setting all the following and by changing no other style property:</p> <ul style="list-style-type: none"> <li>• Line height (line spacing) to at least 1.5 times the font size;</li> <li>• Spacing following paragraphs to at least 2 times the font size;</li> <li>• Letter spacing (tracking) to at least 0.12 times the font size;</li> <li>• Word spacing to at least 0.16 times the font size.</li> </ul>	Supports	Users may adjust the text spacing of content on pages to the minimum baseline properties without causing loss of content or functionality.

<p><a href="#">1.4.13: Content on Hover or Focus</a> (AA) Where receiving and then removing pointer hover or keyboard focus triggers additional content to become visible and then hidden, the following are true:</p> <ul style="list-style-type: none"> <li>• Dismissible</li> <li>• Hoverable</li> <li>• Persistent</li> </ul>	Partially supports	The only instance of content that appears via mouse hover is the on the Sign In pages. The Password guidance question mark is only available via mouse hover, and it is not persistent nor does it receive focus.
<p><a href="#">2.3.1: Three Flashes or Below Threshold</a> (A) No more than three flashes in a 1-second period, or the flashes are below the defined thresholds</p>	Supports (N/A)	No flashing content exists.

## Keyboard

WCAG 2.1 Checkpoint	Conformance Level	Remarks
<p><a href="#">1.3.2: Meaningful Sequence</a> (A) The correct reading sequence can be programmatically determined</p>	Supports	The correct reading sequence is typically logical and programmatically determinable, with the DOM order according with the visual order.
<p><a href="#">2.1.1: Keyboard</a> (A) All functionality is available from a keyboard, except for tasks such as drawing</p>	Supports	Globally, web page content and functionality are keyboard operable across pages.
<p><a href="#">2.1.2: No Keyboard Trap</a> (A) The user can use the keyboard to move through page elements and is not trapped on a particular element</p>	Supports	No pages have a keyboard trap.
<p><a href="#">2.1.4: Character Key Shortcuts</a> (A) If a keyboard shortcut is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at</p>	Supports (N/A)	The site does not use any character key shortcuts.

<p>least one of the following is true:</p> <ul style="list-style-type: none"> <li>• Turn off</li> <li>• Remap</li> <li>• Active only on focus</li> </ul>		
<p><a href="#">2.4.3: Focus Order</a> (A) Users can tab through the elements of a page in a logical order</p>	Supports	Globally, there are links or buttons on every page that do not receive keyboard focus and are not in the tab order.
<p><a href="#">2.4.7: Focus Visible</a> (AA) The page element with the current keyboard focus has a visible focus indicator</p>	Supports	All elements that receive focus on the site have a visible indication of focus.
<p><a href="#">3.2.1: On Focus</a> (A) When a UI component receives focus, this does not trigger unexpected actions.</p>	Supports	Focusable elements do not cause unexpected actions/changes of context when receiving focus.

## Headings and Structure

WCAG 2.1 Checkpoint	Conformance Level	Remarks
<p><a href="#">1.3.1: Information and Relationships</a> (A) Info, structure, and relationships can be programmatically determined</p>	Partially supports	<p>In most instances the information, structure, and relationships can be programmatically determined.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• Some of the headings are only styled to look like heading but are not marked as such in the HTML.</li> <li>• No semantic table structures are provided for tables in the "Learn About" pages. Also in the "Learn about" pages, the "All Articles List" is marked as a table for layout purposes and doesn't utilize HTML list markup.</li> </ul>
<p><a href="#">2.4.1: Bypass Blocks</a> (A) Users can bypass repeated blocks of content.</p>	Partially supports	<p>Most pages contain skip links to skip to different parts of the web page. Some pages contain HTML headings.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• The CME pages lack skip links or other methods to bypass the header area.</li> </ul>
<p><a href="#">2.4.6: Headings and Labels</a> (AA) Headings and labels are clear and consistent.</p>	Supports	Occasional visual-only headings exist and are clear and consistent.
<p><a href="#">3.1.1: Language of Page</a> (A)</p>	Supports	Language of the pages are defined with lang="en".

The language of the page is specified		
<a href="#">3.1.2: Language of Parts</a> (AA) Specify the language of text passages that are in a different language than the default language of the page.	Supports (N/A)	There are no sections of text that do not match the default language of the page.
<a href="#">4.1.1: Parsing</a> (A) Use valid, error-free HTML	Supports	HTML and CSS typically pass concerning these 4 specific criteria: (i) elements have complete start and end tags, (ii) elements are nested according to their specifications (iii) elements do not contain duplicate attributes (iv) any IDs are unique, except where the specifications allow these features.  Note: There may be other general HTML validation errors outside the scope of this criterion. WCAG 2.1 Errata notes: “This Success Criterion should be considered as always satisfied for any content using HTML or XML.”

## Labeling

WCAG 2.1 Checkpoint	Conformance Level	Remarks
<a href="#">1.3.5: Identify Input Purpose</a> (AA) The purpose of each input field collecting information about the user can be programmatically determined when: <ul style="list-style-type: none"> <li>The input field serves a purpose identified in the Input Purposes for User Interface Components section; and</li> <li>The content is implemented using technologies with support for identifying the expected meaning for form input data.</li> </ul>	Supports	The purpose of each input field collecting information about the user can be programmatically determined.
<a href="#">2.4.2: Page Titled</a> (A) The page has a title describing its topic or purpose	Supports	Page titles are uniquely defined and reflect the purpose of the page.

<p><a href="#">2.4.4: Link Purpose (In Context)</a> (A) The purpose of each link can be determined from the link text or surrounding context.</p>	Supports	The purpose of each link can be determined from the link text itself or surrounding context.
<p><a href="#">2.5.3: Label in Name</a> (A) For user interface components with labels that include text or images of text, the name contains the text that is presented visually.</p>	Partially supports	<p>User interface components that have visible text contain that text consistently within the accessible name.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> <li>• The accessible names of the accordion buttons do not exactly match the visible label.</li> <li>• Build Panel Tab Search results: The aria-label for the add and remove buttons are inaccurate, the aria-label takes precedents over the innerText of the button so screen reader users will only hear the label "Add diagnosis group to panel cart" which overwrites actual name of the diagnosis group text that is visually on screen.</li> </ul>
<p><a href="#">3.2.4: Consistent Identification</a> (AA) UI components used across the web site are identified consistently on every page.</p>	Supports	Components are typically consistent across the site and identified consistently where they perform the same function across pages.
<p><a href="#">3.3.1: Error Identification</a> (A) Input errors are clearly marked and described to the user.</p>	Supports	Errors are identified and presented well visually. For many inputs, errors are typically validated before form submission. Error messages that offer specific feedback are presented adjacently and visually distinguished.
<p><a href="#">3.3.2: Labels or Instructions</a> (A) Items requiring user input are clearly labeled or have clear instructions.</p>	Supports	<p>Labels and instructions are provided for some form elements.</p> <p>Note: see SC 1.3.1 for exceptions where visible labels may not be programmatically associated with inputs.</p>
<p><a href="#">3.3.3: Error Suggestion</a> (AA) When the user makes an input error, give suggestions for valid input.</p>	Supports	The nature of content would largely not give rise to opportunities for error suggestions, but relevant helpful suggestions are occasionally provided in text.
<p><a href="#">4.1.2: Name, Role, Value</a> (A) For all UI components, the name, value, and role can be programmatically determined.</p>	Partially supports	<p>Some UI components communicate their state programmatically, and many have accessible names that are appropriately defined. Several ARIA attributes and roles are not present where appropriate.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> <li>• Tables with sorting: The aria-sort attribute is in the wrong element (in the button instead of the table heading) and has the incorrect state value (ascending and descending are swapped).</li> </ul>

		<ul style="list-style-type: none"> <li>• Dialogs: The dialogs lack proper labels, currently the aria-labelledby attribute references the entire dialog container and the dialog's heading.</li> <li>• Build Panel Tab Search results: The aria-label for the add and remove buttons are inaccurate, the aria-label takes precedents over the innerText of the button so screen reader users will only hear the label "Add diagnosis group to panel cart" which overwrites actual name of the diagnosis group text that is visually on screen.</li> <li>• Sign-in: The show/hide password button state is not immediately reflected upon activation.</li> <li>• The search forms contain empty &lt;label&gt; elements.</li> <li>• The skip links contain invalid role="navigation" and are not identified as links.</li> <li>• The page tabs implement incomplete ARIA page tab patterns lacking some expected attributes and specific keyboard interactions.</li> <li>• The password tooltip in the sign in page lack name, role and state information.</li> </ul>
<a href="#">4.1.3: Status Messages</a> (AA) In content implemented using markup languages, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus.	Supports	Status messages, although not common in this application, can be programmatically determined and notified of assistive technologies such as automatically updated results.

## Multimedia

WCAG 2.1 Checkpoint	Conformance Level	Remarks
<a href="#">1.2.1: Audio-only or Video-only (Prerecorded)</a> (A) Provide alternatives for pre-recorded audio-only or video-only content.	Supports	There is no pre-recorded audio-only or video-only content.
<a href="#">1.2.2: Captions (Prerecorded)</a> (A) Provide captions for pre-recorded audio	Supports (N/A)	No captions are provided for audiovisual content.
<a href="#">1.2.3: Audio Description or Media Alternative (Prerecorded)</a> (A)	Supports (N/A)	Neither audio descriptions nor suitable textual alternatives are provided as alternatives for video in audiovisual content.

Provide alternatives for pre-recorded synchronized audio/video		
<a href="#">1.2.4: Captions (Live)</a> (AA) Provide captions for live audio in synchronized audio/video.	Supports (N/A)	There is no synchronized audio/video content nor live audio.
<a href="#">1.2.5: Audio Description (Prerecorded)</a> (AA) Provide an audio description of pre-recorded video.	Supports (N/A)	No audio descriptions are provided for video in audiovisual content.
<a href="#">1.4.2: Audio Control</a> (A) Audio can be paused and stopped, or the audio volume can be changed.	Supports (N/A)	No pages feature audio that plays automatically.
<a href="#">2.2.2: Pause, Stop, Hide</a> (A) Users can stop, pause, or hide moving, blinking, scrolling, or auto-updating information.	Supports (N/A)	There is no moving, scrolling, or auto-updating information for which the criterion is applicable.

## Usability

WCAG 2.1 Checkpoint	Conformance Level	Remarks
<a href="#">2.2.1: Timing Adjustable</a> (A) Users are warned of time limits shorter than 20 hours and time limits can be turned off or extended	Supports	The session time is 24 hours.
<a href="#">2.4.5: Multiple Ways</a> (AA) More than one way is available to navigate to other web pages.	Supports	A navigation menu is available on all pages, and the searches are a step in a process that generates pages.
<a href="#">3.2.2: On Input</a> (A) Changing the setting of a checkbox, radio button, or other UI component does not	Partially supports	User input, such as changing the values of form elements, does not initiate unexpected actions or changes in context for most UI components in the application.  <b>Exceptions:</b>

trigger unexpected changes in context.		<ul style="list-style-type: none"> <li>For the Saved Cases filtering, selecting a radio button changes the content of the page.</li> </ul>
<a href="#">3.2.3: Consistent Navigation</a> (AA) Navigation menus are in the same location and order on every web page.	Supports	Navigation menus are consistent across pages. For example, global navigation links in the header are consistent across pages, occurring in the same order; secondary navigation is consistently positioned across appropriate sets of pages.
<a href="#">3.3.4: Error Prevention (Legal, Financial, Data)</a> (AA) For web pages with legal or financial commitments, input can be reviewed and corrected before final submission, and submissions can be reverted.	Supports	There are no submissions which require legal or financial commitments.

## Mobile User Experience

WCAG 2.1 Checkpoint	Conformance Level	Remarks
<a href="#">1.3.4: Orientation</a> (AA) Content does not restrict its view and operation to a single display orientation, such as portrait or landscape, unless a specific display orientation is essential.	Supports	Pages do not restrict view and operation of content to a single orientation.
<a href="#">2.5.1: Pointer Gestures</a> (A) All functionality that uses multipoint or path-based gestures for operation can be operated with a single pointer without a path-based gesture, unless a multipoint or path-based gesture is essential.	Supports (N/A)	Pages do not utilize or require multipoint or path-based gestures for any functionality.
<a href="#">2.5.2: Pointer Cancellation</a> (A) For functionality that can be operated using a single pointer, at least one of the following is true:	Supports (N/A)	All interactive content functions through the Up-Event, allowing users to potentially move their pointer off the component to cancel.

<ul style="list-style-type: none"> <li>• No Down-Event</li> <li>• Abort or Undo</li> <li>• Up Reversal</li> <li>• Essential</li> </ul>		
<p><a href="#">2.5.4: Motion Actuation (A)</a>  Functionality that can be operated by device motion or user motion can also be operated by user interface components and responding to the motion can be disabled to prevent accidental actuation, except when:</p> <ul style="list-style-type: none"> <li>• Supported Interface</li> <li>• Essential</li> </ul>	Supports (N/A)	There is no content that utilizes device or user motion.