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# Genomic Data Commons

## Data Portal

# Introduction

At the GDC, we prioritize creating a consistent and user-friendly design, with a strong focus on web accessibility and inclusivity. To achieve this, we use Tailwind CSS and Mantine components, customizing them to meet our specific needs.

**Tailwind CSS** provides us with a utility-first framework that allows for rapid development and easy customization. This enables us to build responsive and visually appealing interfaces that align with our design principles.



**Mantine** components offer a robust set of UI elements that complement Tailwind CSS. These components are highly customizable, helping us create a cohesive and unique design that reflects the GDC's style and requirements.



We tailor Tailwind CSS and Mantine components to incorporate unique design elements and functionalities specific to the GDC. This flexibility ensures that our designs can scale and adapt to various project needs while maintaining a consistent look and feel.

By integrating these tools into our development process, we ensure consistency and efficiency across all our projects. This approach also enhances collaboration between our design and development teams.

Accessibility is a key priority for us. We meticulously incorporate accessibility features into our customized components, ensuring that our designs are inclusive and comply with web accessibility standards.

## How do you use this style guide?

This style guide is your go-to reference for creating consistent and accessible designs at the GDC. Here's how you can use it:

- **Design Guidelines:** Refer to sections on colors, typography, and spacing to ensure your designs are visually consistent.
- **Components:** Use our library of pre-built components made with Tailwind CSS and Mantine. Customize these components as needed.
- **Best Practices:** Follow our best practices for accessibility, responsiveness, and usability.

# Accessibility

At the GDC, accessibility is a core principle in our design and development process. We are committed to creating digital experiences that are inclusive and accessible to all users, regardless of their abilities.

**Color Contrast:** Ensuring sufficient color contrast is vital for readability, especially for users with visual impairments. We strive to meet WCAG AA standards for text, which is considered small text by WCAG (under 14pt or approximately 18px). A contrast ratio of 4.5:1 or higher is preferred for text and UI elements. For larger text, such as titles, a contrast ratio of 3:1 can be used. This careful selection of color combinations ensures clarity and legibility, making our interfaces easier to read and navigate.

Element	Contrast ratio
Standard text	4.5:1
Large text	3:1
GDC components	Strives to meet 4.5:1

While color contrast is a key focus, we are also working on improving other aspects of accessibility, such as:

- **Keyboard Navigation:** Designing interfaces that are fully navigable using a keyboard, with clear focus indicators and accessible interactive elements.
- **Screen Reader Compatibility:** Building components that work seamlessly with screen readers by using proper semantic HTML and ARIA (Accessible Rich Internet Applications) attributes.
- **Responsive Design:** Creating layouts that adapt to various devices and screen sizes, providing a consistent and accessible experience.

We strive to comply with [\*\*Section 508\*\*](#) standards, ensuring our data portal is accessible to people with disabilities. We are continuously testing and refining our designs to enhance accessibility. Feedback from users and accessibility experts is invaluable in this process, helping us identify areas for improvement and ensuring our products are usable by everyone.

By integrating these accessibility practices into our design and development workflows, we aim to create high-quality digital experiences that are accessible to all.

## Further learning

- [\*\*A11Y Project\*\*](#): Explore reference checklists, blog posts, and more. This tool is excellent for learning about accessibility.
- [\*\*Understanding WCAG 2.2\*\*](#): Find detailed information about the Web Content Accessibility Guidelines.
- [\*\*Deque aXe DevTools\*\*](#): Discover the software that powers our accessibility testing.
- [\*\*Deque aXe Figma Plugin\*\*](#): Verify color contrast and account for color blindness using the aXe plugin.

# Styles

Our style guide includes predefined styles to ensure consistency across all the GDC portal.

## Color Palette

Use the GDC-approved colors to maintain visual harmony and accessibility. Each color is chosen to meet contrast standards.

## Typography

Follow the specified fonts and text sizes to create a cohesive look. This includes headings, body text, and other typographic elements.

## Spacing

Adhere to the provided spacing guidelines for margins, padding, and layout. Consistent spacing improves readability and visual balance.

By following these styles, you ensure that all designs align with the GDC's visual identity and accessibility standards.

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# Colors

## NCI Primary

10 #EBF5F9	15 #D5EBF1	20 #C1E3ED	25 #ADD9E5	30 #97CFDD	35 #85C7D7
40 #72BED1	45 #5EB3C9	50 #48A9C5	55 #319FB8	60 #2F97B5	65 #2D91AE
70 #2B8BA7	75 #2885A0	80 #267F98	85 #227991	90 #1F7289	95 #1E6C82
100 #135F73					

10 #E9F5F7	15 #D3EBE8	20 #BBDFE3	25 #A5D5D9	30 #8FC9CD	35 #79C1C7
40 #64B7BD	45 #4BABB3	50 #36A1AB	55 #0D95A1	60 #0B8F9A	65 #0B8A94
70 #09848E	75 #077E88	80 #047882	85 #01727B	90 #006C74	95 #00666E
100 #005961					

10 #E9EFF5	15 #D5E3ED	20 #C1D5E5	25 #ABC5DB	30 #93B7D1	35 #7FA9C9
40 #6A9DC1	45 #548DB7	50 #4181AF	55 #2A72A5	60 #286D9E	65 #276998
70 #256492	75 #22608B	80 #205B85	85 #1D567E	90 #1A5177	95 #174C70
100 #0F4163					

10 #E9EFF3	15 #D1DFE7	20 #BBCFDB	25 #A3BCF1	30 #8FACF1	35 #7A9FB7
40 #648FAB	45 #4C7E9F	50 #366E93	55 #1C5E86	60 #1A5C83	65 #17577C
70 #155276	75 #124E70	80 #0F496A	85 #0C4564	90 #08405E	95 #043B58
100 #00314C					

10 #F9E7ED	15 #F1D1D9	20 #EBBBC5	25 #E3A5B3	30 #D88B9F	35 #D5768D
40 #CF5F78	45 #C74769	50 #C12D55	55 #B80E3D	60 #B61E3E	65 #AB1A39
70 #A31836	75 #9A1532	80 #92112E	85 #8A0E2A	90 #820A26	95 #7A0522
100 #6A0019					

10 #F1F1F1	15 #E1E1E1	20 #D5D5D5	25 #C5C5C5	30 #B7B7B5	35 #A9A9A7
40 #9B9B9B	45 #8D8B8B	50 #7F7E7E	55 #706F6F	60 #6A6A6B	65 #656565
70 #606060	75 #5A5A5B	80 #545555	85 #4F4F50	90 #494A4A	95 #444545
100 #38393A					

## NCI Secondary

10 #EDF7F5	15 #D9F1E9	20 #C7EDDF	25 #B3E5D5	30 #9FD9C9	35 #8DD98F
40 #7CD1B5	45 #68CBA9	50 #56C59F	55 #2DC799	60 #43B38E	65 #40AC88
70 #3CA582	75 #399D7D	80 #359677	85 #318F71	90 #2C876B	95 #287F65
100 #1E7158					

10 #F1E9F3	15 #D1DFE7	20 #BBCFDB	25 #A3BCF1	30 #8FACF1	35 #7A9FB7
40 #648FAB	45 #4C7E9F	50 #366E93	55 #1C5E86	60 #1A5C83	65 #17577C
70 #155276	75 #124E70	80 #0F496A	85 #0C4564	90 #08405E	95 #043B58
100 #00314C					

10 #F9E7ED	15 #F1D1D9	20 #EBBBC5	25 #E3A5B3	30 #D88B9F	35 #D5768D
40 #CF5F78	45 #C74769	50 #C12D55	55 #B80E3D	60 #B61E3E	65 #AB1A39
70 #A31836	75 #9A1532	80 #92112E	85 #8A0E2A	90 #820A26	95 #7A0522
100 #6A0019					

10 #FDEFFB	15 #FBD7D3	20 #F9CBF8	25 #F9BFAA	30 #F7AD95	35 #F59C7F
40 #F3BF5A	45 #F17E54	50 #EF6D3D	55 #FF5F00	60 #FF5F00	65 #DB581F
70 #D1541D	75 #C7501B	80 #BD4C18	85 #B34715	90 #A94311	95 #A03E0D
100 #8D3503					

10 #FFF9E8	15 #FFF5DC	20 #FFF2D1	25 #FFE296	30 #FFDC80	35 #FFD66B
40 #FFD056	45 #FFC52C	50 #FFC3F8	55 #FFB717	60 #FB5116	65 #E5AC15
70 #D9A214	75 #CC9912	80 #B8F811	85 #B28610	90 #A67C0F	95 #97930E
100 #8C690D					

## Feedback

10 #FEEED3	15 #FBD7D3	20 #F9CBF8	25 #F9BFAA	30 #F7AD95	35 #F59C7F
40 #F4DCC4	45 #F0C7B6	50 #E6B3A0	55 #D8A5A5	60 #C895B2	65 #B885C4
70 #E3A5B3	75 #D9B3A9	80 #			

# Typography

CLASS NAME	FONT WEIGHT
font-thin	100
font-extralight	200
font-light	300
font-normal	400
font-medium	500
font-semibold	600
<b>font-bold</b>	700
<b>font-extrabold</b>	800
<b>font-black</b>	900

FONT FAMILY	FONT USAGE
Montserrat	Heading, Button
Noto Sans	Content

CLASS NAME	FONT STYLE
italic	Italic
not-italic	Normal

CLASS NAME	FONT SIZE	LINE HEIGHT
text-xs	0.75 rem / 12px	1rem / 16px
text-sm	0.875rem / 14px	1.25rem / 20px
text-base	1rem / 16px	1.5rem / 24px
text-lg	1.125rem / 18px	1.75rem / 28px
text-xl	1.25rem / 20px	1.75rem / 28px
text-2xl	1.5rem / 24px	2rem / 32px
text-3xl	1.875rem / 30px	2.25rem / 36px
text-4xl	2.25rem / 36px	2.5rem / 40px
text-5xl	3rem / 48px	1
text-6xl	3.75rem / 60px	1
text-7xl	4.5rem / 72px	1
text-8xl	6rem / 96px	1
text-9xl	8rem / 128px	1

TEXT TYPE	FONT FAMILY	TEXT SIZE	FONT WEIGHT
Heading/ Regular/H1	Montserrat	text-2xl	font-normal
Heading/Regular/H2	Montserrat	text-lg	font-normal
Heading/Regular/H3	Montserrat	text-base	font-normal
Heading/Regular/H4	Montserrat	text-sm	font-normal
<b>Heading/ Semibold/H1</b>	Montserrat	text-2xl	font-semibold
<b>Heading/Semibold/ H2</b>	Montserrat	text-lg	font-semibold
<b>Heading/Semibold/ H3</b>	Montserrat	text-base	font-semibold
<b>Heading/Semibold/ H4</b>	Montserrat	text-sm	font-semibold
<b>Heading/Bold/ H1</b>	Montserrat	text-2xl	font-bold
<b>Heading/Bold/ H2</b>	Montserrat	text-lg	font-bold
<b>Heading/Bold/ H3</b>	Montserrat	text-base	font-bold
<b>Heading/Bold/ H4</b>	Montserrat	text-sm	font-bold
Body/Regular/Large	Noto Sans	text-base	font-normal
Body/Regular/Medium	Noto Sans	text-sm	font-normal
Body/Regular/Small	Noto Sans	text-xs	font-normal
<b>Body/Semibold/Large</b>	Noto Sans	text-base	font-semibold
<b>Body/Semibold/Medium</b>	Noto Sans	text-sm	font-semibold
Body/Semibold/Small	Noto Sans	text-xs	font-semibold
<b>Body/Bold/Large</b>	Noto Sans	text-base	font-bold
<b>Body/Bold/Medium</b>	Noto Sans	text-sm	font-bold
<b>Body/Bold/Small</b>	Noto Sans	text-xs	font-bold
<b>Button/Large</b>	Montserrat	text-base	font-semibold
<b>Button/Medium</b>	Montserrat	text-sm	font-semibold
<b>Button/Small</b>	Montserrat	text-xs	font-semibold

# Dimensions

SPACING	CLASS NAME	SIZE	PIXELS
	0	0px	0px
	px	1px	1px
	_5	0.125rem	2px
	1	0.25rem	4px
	1_5	0.375rem	6px
	2	0.5rem	8px
	2_5	0.625rem	10px
	3	0.75rem	12px
	3_5	0.875rem	14px
	4	1rem	16px
	5	1.25rem	20px
	6	1.5rem	24px
	7	1.75rem	28px
	8	2rem	32px
	9	2.25rem	36px
	10	2.5rem	40px
	11	2.75rem	44px
	12	3rem	48px
	14	3.5rem	56px
	16	4rem	64px
	20	5rem	80px
	24	6rem	96px
	28	7rem	112px
	32	8rem	128px
	36	9rem	144px
	40	10rem	160px
	44	11rem	176px
	48	12rem	192px
	52	13rem	208px
	56	14rem	224px
	60	15rem	240px
	64	16rem	256px
	72	18rem	288px
	80	20rem	320px
	96	24rem	384px

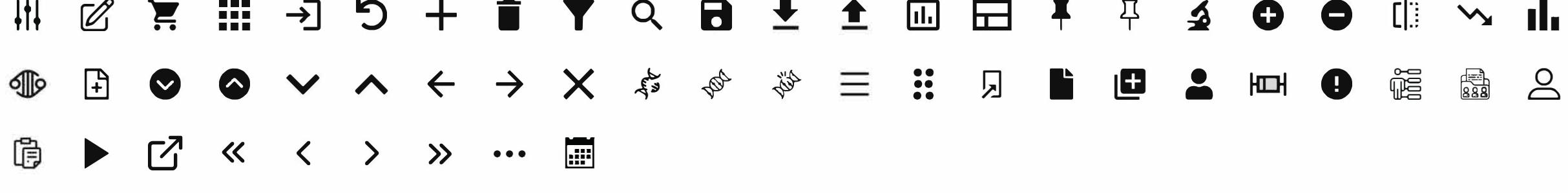
# Radius

RADIUS	CLASS NAME	VALUE (PX)	VALUE (EM)
	rounded-none	0px	0px
	rounded-sm	2px	0.125rem
	rounded	4px	0.25rem
	rounded-md	6px	0.375rem
	rounded-lg	8px	0.5rem
	rounded-xl	12px	0.75rem
	rounded-2xl	16px	1rem
	rounded-3xl	24px	1.5rem

# Shadow

SHADOW	CLASS NAME	COLOR	OPACITY	X VALUE	Y VALUE	BLUR VALUE	SPREAD
	shadow-sm	<span style="color: black;">●</span> <code>rgb(0,0,0)</code>	5%	0	1px	2px	0
	shadow	<span style="color: black;">●</span> <code>rgb(0,0,0)</code>	10% 10%	0 0	1px 1px	3px 2px	0 -1px
	shadow-md	<span style="color: black;">●</span> <code>rgb(0,0,0)</code>	10% 10%	0 0	4px 2px	6px 4px	-1px -2px
	shadow-lg	<span style="color: black;">●</span> <code>rgb(0,0,0)</code>	10% 10%	0 0	10px 4px	15px 6px	-3px -4px
	shadow-xl	<span style="color: black;">●</span> <code>rgb(0,0,0)</code>	10% 10%	0 0	20px 8px	25px 10px	-5px -6px
	shadow-2xl	<span style="color: black;">●</span> <code>rgb(0,0,0)</code>	25%	0	25px	50px	-12px
	shadow-inner	<span style="color: black;">●</span> <code>rgb(0,0,0)</code>	5%	inset 0	2px	4px	0
	shadow-none	<span style="color: black;">●</span> <code>rgb(0,0,0)</code>	0	0	0	0	0

# Icons



ICON	NAME	ICON	NAME
☰	Manage Sets	📊	Chart
✍	Browse Annotations	ℰ	Annotations
🛒	Cart	➕	Add Sets
🎛	GDC Apps	⌄	Expand Sub-table
➡	Login	⌞	Collapse Sub-table
⟳	Discard / Refresh	⌄	Expand
➕	Add	⌞	Collapse
-trash	Delete	⬅	Query Collapse
🔍	Filter	➡	Query Expand
🔍	Search	✖	Close
💾	Save	⚡	Cohort
⬇	Export Cohort	��	Gene
⬆	Import Cohort	↗	Open Modal
📊	Summary View	📁	File
📜	Table View	➕	Add Custom Filter
📌	Pin Cohort Bar	👤	Case
▢	Unpin Cohort Bar	▣	Box/QQ Plot
-slides	Slides	ISIL	Primary Sites
➕	Show More	📁	Projects
➖	Show Less	👤	Cases
☰	Flip Facet Card	📁	Files
⚡	Survival	▶	Start Apps/Tools
⚠	Mutation	☰	Customize Columns
⤒	Move Columns		

# Layout Breakpoints

CLASS NAME	BREAKPOINT
sm	640px
md	768px
lg	1024px
xl	1280px
2xl	1536px

# Components

Our style guide offers a library of pre-built components using [Tailwind CSS](#) and [Mantine](#). These components are flexible and customizable to meet the GDC's needs.

## Using Components

Discover a range of components, including buttons, cards, modals, and navigation elements. Each component is crafted to ensure accessibility and ease of use, following the GDC's design standards.

## Consistency

Use these components to maintain a uniform design across all the GDC portal. Consistency in design not only enhances the user experience but also reinforces the GDC's visual identity.

## Best Practices

Follow the provided guidelines for accessibility, responsive design, and usability to implement components effectively.

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# Breadcrumb

A breadcrumb component displays the navigation path, helping users understand their current location within the site hierarchy.



TOOL NAME • STEP 1 • **STEP 2**

# Button

A button component designed for interactive actions, providing clear visual feedback on click and ensuring accessibility with proper labeling and contrast.

## Filled

	Default	Hover	Focus	Disabled
Text only	<span>Label</span>	<span>Label</span>	<span>Label</span>	<span>Label</span>
Text + Icon	<span>+ Label</span>	<span>+ Label</span>	<span>+ Label</span>	<span>+ Label</span>
Menu only	<span>Label   ▾</span>	<span>Label   ▾</span>	<span>Label   ▾</span>	<span>Label   ▾</span>
Menu + Icon	<span>+ Label   ▾</span>	<span>+ Label   ▾</span>	<span>+ Label   ▾</span>	<span>+ Label   ▾</span>

## Outlined

	Default	Hover	Focus	Disabled
Text only	<span>Label</span>	<span>Label</span>	<span>Label</span>	<span>Label</span>
Text + Icon	<span>+ Label</span>	<span>+ Label</span>	<span>+ Label</span>	<span>+ Label</span>
Menu only	<span>Label   ▾</span>	<span>Label   ▾</span>	<span>Label   ▾</span>	<span>Label   ▾</span>
Menu + Icon	<span>+ Label   ▾</span>	<span>+ Label   ▾</span>	<span>+ Label   ▾</span>	<span>+ Label   ▾</span>

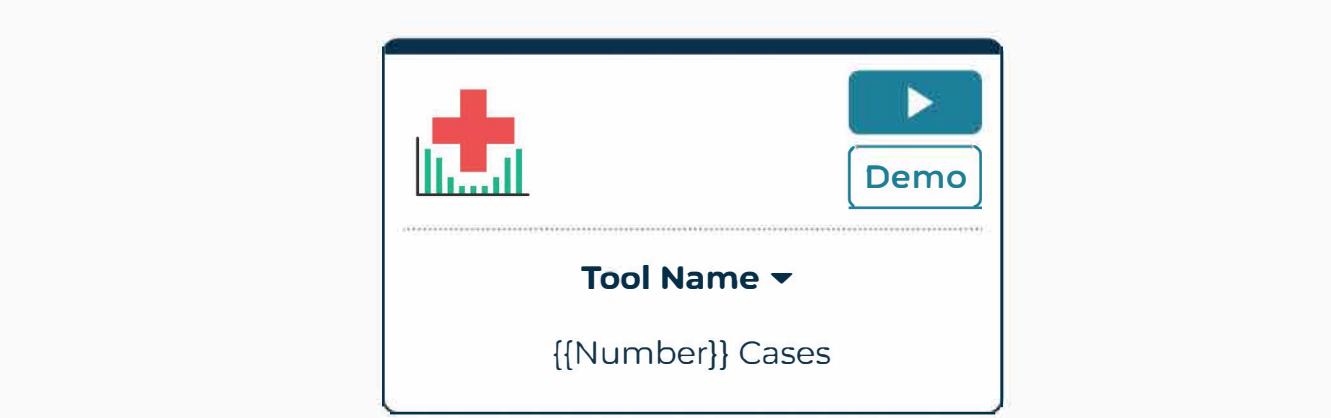
## Action

	Default	Hover	Focus	Disabled
Large	<span>+</span>	<span>+</span>	<span>+</span>	<span>+</span>
Small	<span>+</span>	<span>+</span>	<span>+</span>	<span>+</span>

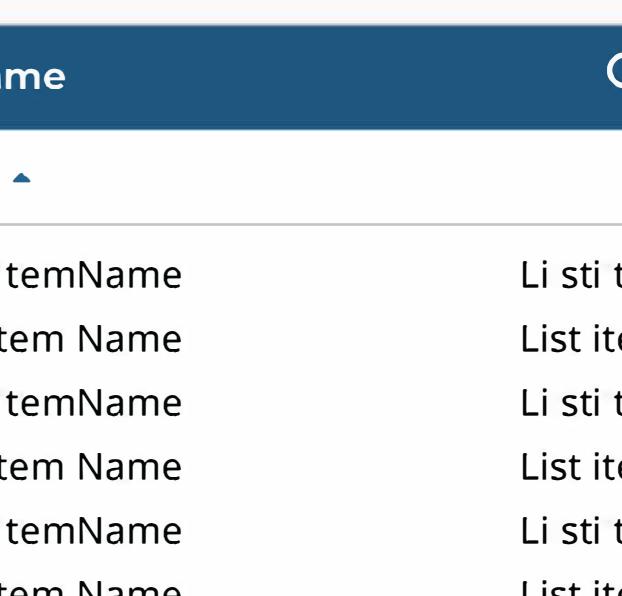
# Card

A card component groups related information in a compact, visually distinct container, enhancing content organization and readability.

## Core Cards



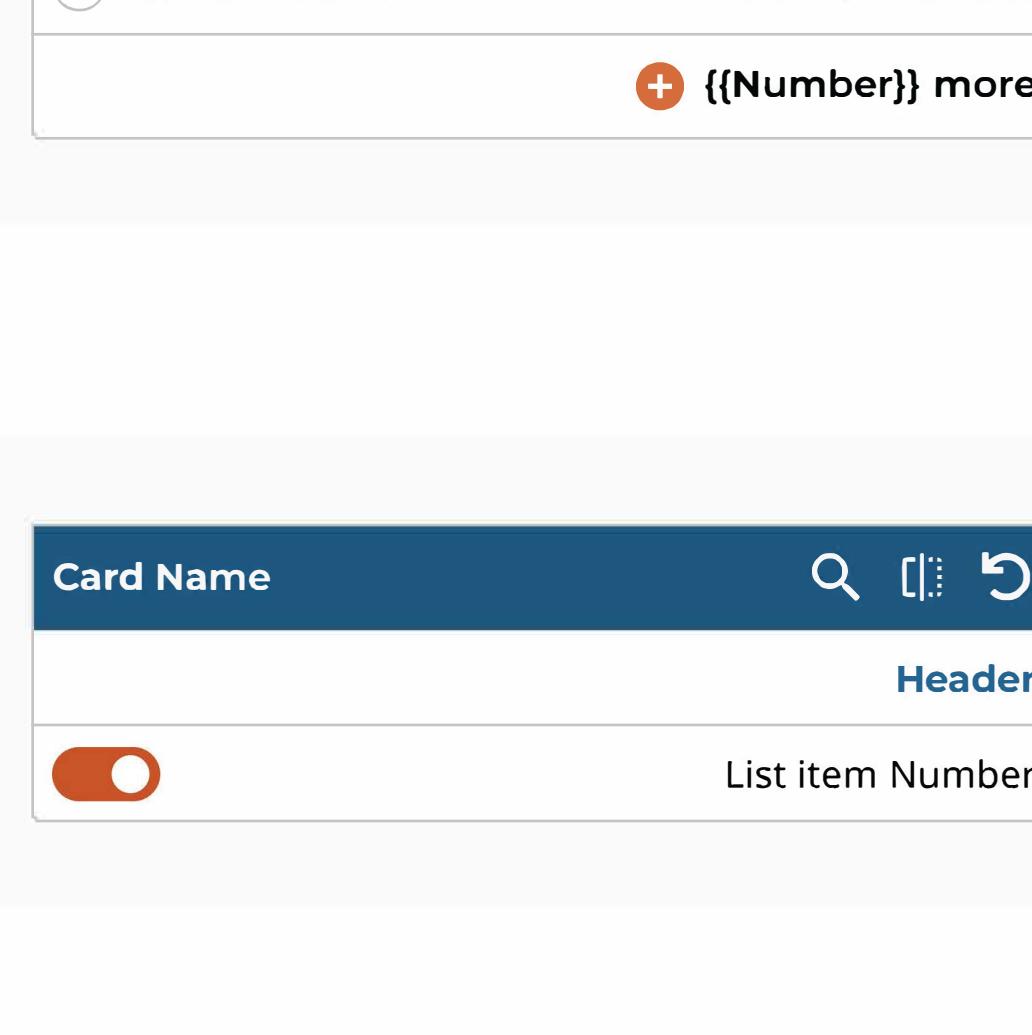
## Tools Cards



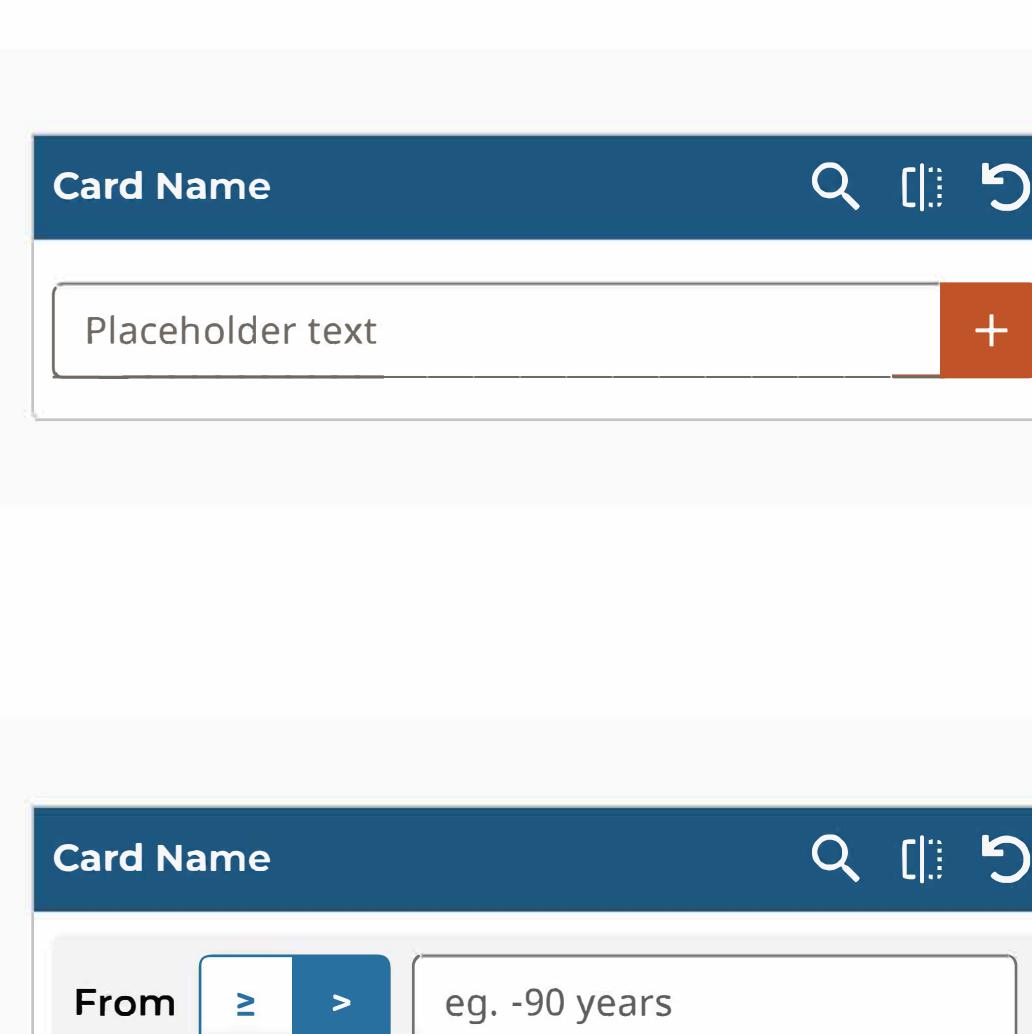
## Facet Cards

A facet card component displays filter options for refining search results, helping users to narrow down content effectively.

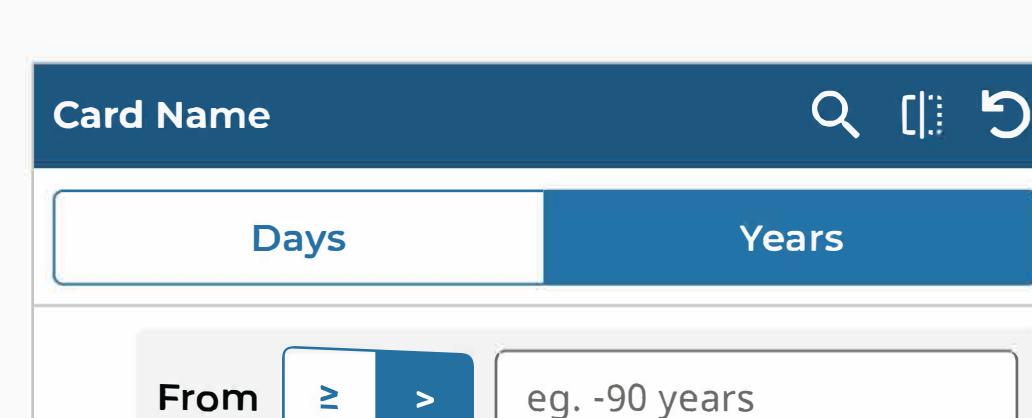
### Multiple Selection Card



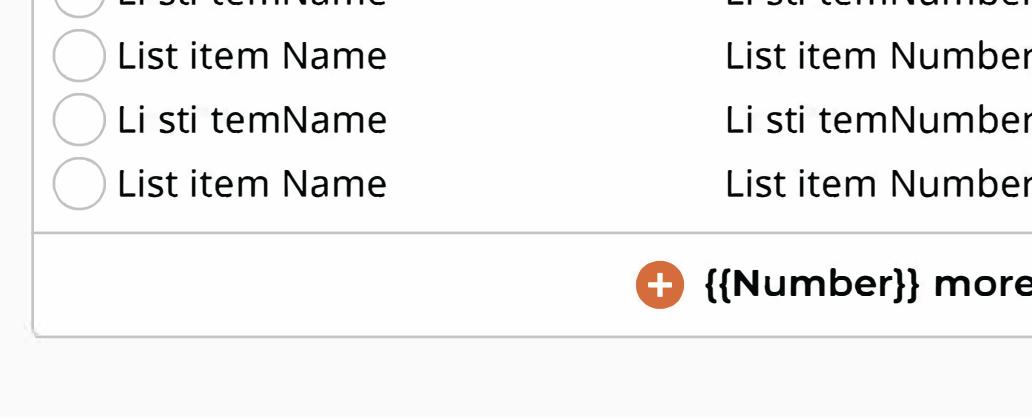
### Single Selection Card



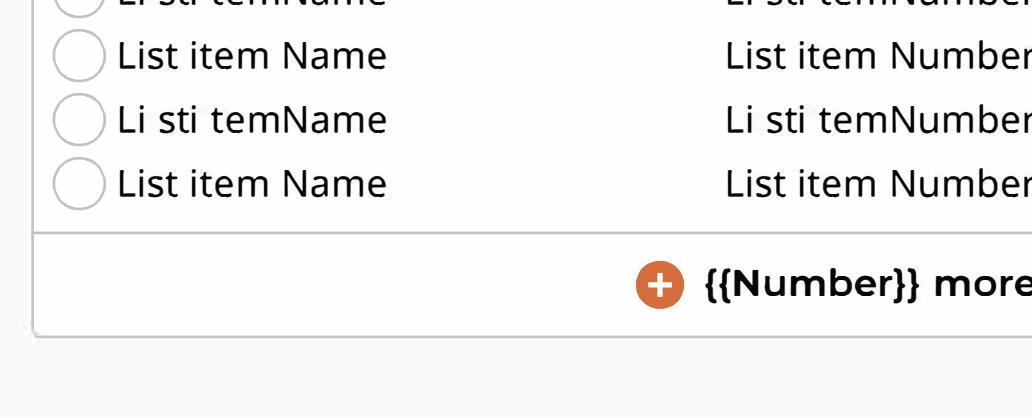
### Boolean Card



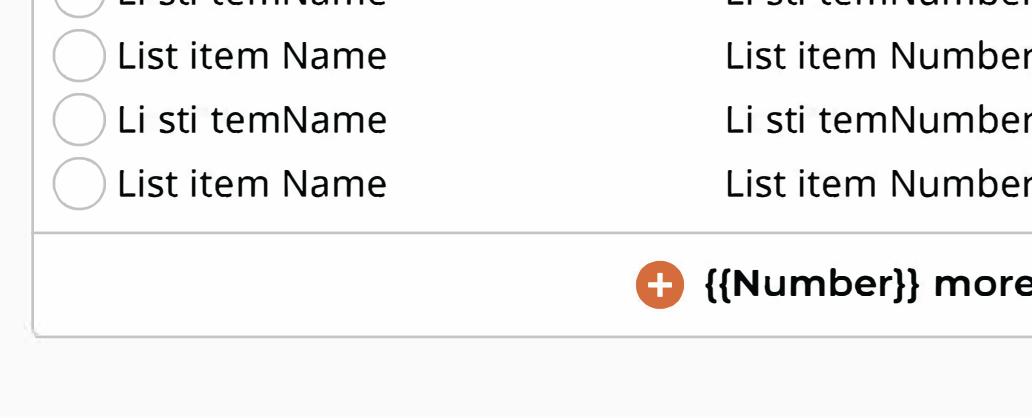
### Date Ranges Card



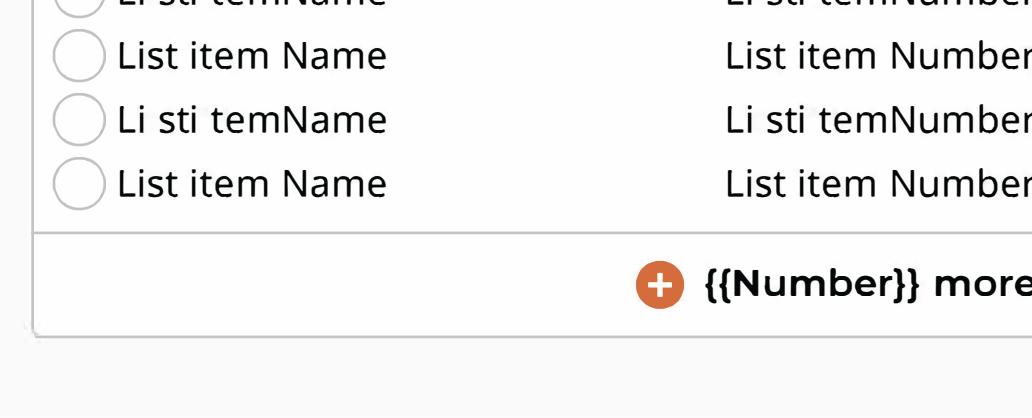
### String Input Card



### Numeric Range Card



### Numeric Ranges With Bucketing Card



## Chart View



# Control

Control components include checkboxes for multiple selections, toggle switches for binary choices, radio buttons for single selections, and chips for displaying concise information or actions.

## Checkbox

A checkbox component for selecting one or multiple options, designed for easy interaction and clear visibility.

	Default	Focused	Disabled
Unselected	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Selected	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Radio

A radio button component for selecting a single option from a set, ensuring clarity and accessibility.

	Default	Focused	Disabled
Unselected	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Selected	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>

## Switch

A toggle switch component for binary choices, offering a smooth user experience with clear on/off states.

### Default

	Default	Focused	Disabled
Unselected	<input type="button"/>	<input checked="" type="button"/>	<input type="button"/>
Selected	<input checked="" type="button"/>	<input checked="" type="button"/>	<input checked="" type="button"/>

## Cohort

	Default	Focused	Disabled
Unselected			
Selected			

## Chip

A chip component for displaying small pieces of information or actions, styled for consistency and readability.

### Assist

Controlled      Open

Controlled      Open

### Input

Default      Hover      Focused

Label ×      Label ×      Label ×

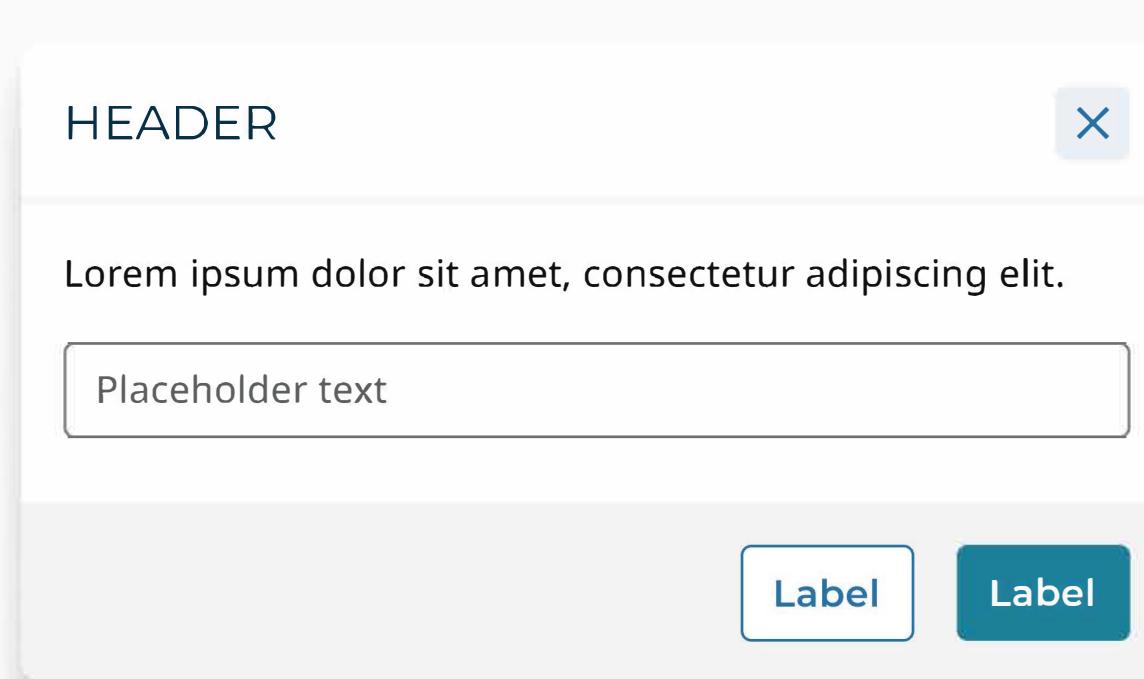
### Filter

Default      Hover      Active      Focused      Disabled

Label      Label      Label ×      Label      Label

# Dialog

A dialog component displays important information or prompts user actions, appearing as a modal overlay for focused interaction.



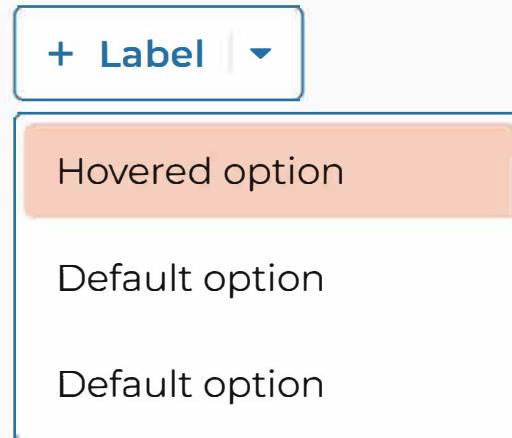
# Dropdown

A dropdown component enables users to select an option from a list, providing a compact and efficient way to handle multiple choices.

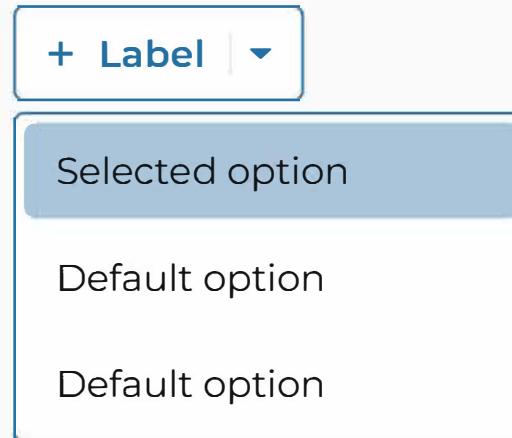
Default



Hover



Selected/Active



# Input Field

An input field component allows users to enter and edit single-line text, designed for clarity and ease of use.

Default

**Label**

Placeholder text

Info text for the input field.

Active

**Label**

Active text

Info text for the input field.

Disabled

**Label**

Disabled text

Info text for the input field.

Error

**Label**

Placeholder text

❗ Info text for the input field.

Warning

**Label**

Placeholder text

⚠ Info text for the input field.

# Link

A link component navigates users to other pages or resources, ensuring accessibility and clear visual cues.

	Default	Hover	Focus	Disabled
Text only	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>
Text + Icon	<a href="#"> Link</a>	<a href="#"> Link</a>	<a href="#"> Link</a>	<a href="#"> Link</a>
Over Color	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>	<a href="#">Link</a>

# Pagination

A pagination component divides content into pages, providing easy navigation and improving content accessibility.

« < 1 2 3 4 5 ... 20 > »

Default

Hover

Active

Focused

Disabled

1

1

1

1

1

# Search Field

An input field component allows users to enter and edit single-line text, designed for clarity and ease of use.

## Default

Default

Search placeholder text

Active

Search placeholder text

Active Text

X

e.g. BRAF, Breast, TCGA-BLCA, TCGA-A5-A0G2

## Quick Search

Keyword

X

### NAME



Description

**Category:** Category value

### NAME



Description

**Category:** Category value

### NAME



Description

**Category:** Category value

## Cohort Builder Search

Keyword

X

### RELATED C

[General](#) [Stage Classification](#) [General Diagnosis](#)  
[Disease Status and History](#) [Treatment](#) [Available Data](#)  
[Other Classification](#) [Demographic](#)

SHOWING 1 - 5 OUT OF 22 FOR: **Keyword**

### Name

**Category:** Category value

### Name

**Category:** Category value

### Name

**Category:** Category value

<< < 1 > >>

Simple description. Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam eirmod tempor invidunt ut labore.

**Values Matched:** Values Matched

# Tabs

A tab component organizes content into separate views, allowing users to switch between sections effortlessly.

## Default

	Default	Active	Hover	Focus	Disabled
Text only	Tab 1	<b>Tab 1</b>	Tab 1	Tab 1	Tab 1
Text + Badge	Tab 1 #	<b>Tab 1 #</b>	Tab 1 #	Tab 1 #	Tab 1 #

## Pill

	Default	Active	Hover	Focus	Disabled
Text only	Tab 1				
Text + Badge	Tab 1 #				

## Vertical

	Default	Active	Hover	Focus	Disabled
Text only	Tab 1	<b>Tab 1</b>	Tab 1	Tab 1	Tab 1

# Table

A table component organizes data into rows and columns, allowing for easy comparison and analysis.

Table Header	Table Header	Table Header	Table Header
Table Cell	☒ <a href="#">Table Cell</a>	Table Cell	Table Cell
Table Cell	☒ <a href="#">Table Cell</a>	Table Cell	Table Cell
Table Cell	☒ <a href="#">Table Cell</a>	Table Cell	Table Cell
Table Cell	☒ <a href="#">Table Cell</a>	Table Cell	Table Cell

# Textarea

A text area component allows users to input and edit multi-line text, designed for flexibility and ease of use.

Default

**Label**

Placeholder text

Active

**Label**

Active text

Error

**Label**

Placeholder text

❗ Info text for the input field.

Disabled

**Label**

Disabled text

# Status / Toast Message

A toast component displays brief, auto-dismissable messages to inform users of actions or updates without interrupting their workflow.

With Action

**Lorem ipsum** dolor sit amet, consectetur adipiscing elit.



[Undo](#)

Text + Close

**Lorem ipsum** dolor sit amet, consectetur adipiscing elit.



Text only

**Lorem ipsum** dolor sit amet, consectetur adipiscing elit.

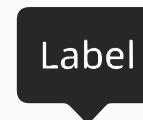
# Tooltip

A tooltip component provides brief, informative text when users hover over or focus on an element, enhancing accessibility and clarity.

Top



Bottom



Left



Right

