User Guide for the ASCO Interactive Map of Oncology

The ASCO Interactive Map of Oncology allows users to visualize and interact with spatially-oriented data from an array of data sources and themes including the oncologist workforce, US population demographics, disease epidemiology, and social determinates of health.

**Tips for opening the tool:** The tool is web-based and works well in Chrome, Firefox, Edge, and Safari browsers from a computer screen. It can benefit from adjusting the zoom levels in the browser, depending on screen size. It may take up to 10 seconds to load at the outset and will operate responsively thereafter. The tool has a 2-panel interface:

**Panel 1:** Select 1 or more map layers

**Panel 2:** Toggle between tool description/supporting materials, graphical visualizations of data, and a second map

**Mapping Terminology**

**Point map** – map with points/dots representing a specific pair of latitude/longitude coordinates (e.g., a street address or central point within a county). Points can range in size and/or color based on a data variable within the map. The blue points above comprise a point map of US oncology practices.

**Polygon map** – map with geographic areas such as counties or states that are shaded according to the distribution of values of a data variable from the map. Unless otherwise specified, all polygon maps in this tool are shaded according to data quintiles (5 equally sized groups). The red shaded map above is a polygon map of confirmed COVID-19 cases per 100,000 population.

**Layer** – each map is a layer that can be stacked with other map layers. Layered displays work best with only one underlying polygon map and one or more point maps on top. The map above shows one point layer of oncology practices over a county-level polygon layer of COVID-19 cases/100,000 population.

**Legend** – shows the distribution of values and color key for current map visualizations (see page 2 for directions on how to open legend).
Mapping Functionality

A. **Filter by state/region** – zoom map by US state, region, or division (see pg. 4)
B. **Popup information** – click a point or polygon shape on any layer to view additional data and source information. Click arrow on top right of box for details on neighboring areas and layers displayed.
C. **Search for location** – type in geographic area such as city, county, or state to zoom or pan to that area (note: this will not filter graphical data nor zoom map in Panel 2)
D. **Reset view to Continental US** – resets map to default zoom of continental United States

E. **View map legend** – displays value intervals per color of currently selected layers. All polygon layers are colored according to quintiles of data (5 equal-sized groups). Suppressed and/or missing data is presented separately from the quintiles.
F. **Select map layers** – Individuals can select one or more of dozens of available layers. To display a layer, click on the Layers icon, find a category name of interest (e.g., ASCO Registry Data), and click the eye (👁️) icon to the left of the name. Categories can be expanded by clicking the arrow (▶️) next to the title to reveal layers that can be hidden and displayed (e.g., County Cases/100K Residents).
G. **Base map gallery** – choose between background maps (e.g., gray background, topographic, or satellite maps)
H. **Expand to full screen** – open map in full view without Panel 2 display for more room to explore.
I. **Zoom features** – click + to zoom in and – to pan out from the center of current view. You can also use keyboard shortcuts. Clicking and dragging your mouse will shift your map location. Holding shift and selecting a rectangle with your mouse will zoom to that area. Moving your mouse wheel will zoom and pan the map.
A. Filter by state/region – filtering by state or US region by expanding the arrow to the left of Panel 1 will also focus the graphics and maps in Panel 2 (see pg. 4)

B. Reveal data – click a bar on a graphic to reveal the data value and corresponding state.

C. National benchmark – some figures have national rates as values and/or horizontal lines to contextualize the state-level data.

D. Expand to full screen – open graphics or secondary map in full view without Panel 1 display for more room to explore.

E. Toggle display – choose between graphical displays of ASCO Registry data, background information about the tool, and a secondary map view.
Filtering Functionality

Clicking the arrow on the far left of the tool expands a State and Region selection tool.

Select State(s): You can select one or more states from a dropdown list to focus the left-hand map on the desired area—the right-hand panel tabs will filter as well (i.e., Registry Demographics, Cancer Information, COVID-19 Information, and Map).

Select Region(s): You can select one or more US Census Divisions from a dropdown list to focus the left-hand map on the desired area—the right-hand panel (graphics or secondary map) will filter as well. To filter based on US Census Region, type the region in the search box and choose the “Select All” option below the dropdown (e.g., typing “south” lists the South Atlantic, East South Central, and West South Central divisions comprising the South Region, as demonstrated below).