**PROJECT REQUIREMENTS**  
  
PROJECT: Real-World Evidence page for the NCATS Open Data Portal

DESCRIPTION: The purpose is to publish and display on a public web page the data related to Real-World studies of COVID-19 Therapeutics so that anyone can review the data, as well as filter by several criteria. Several screenshots have been attached. You can also review the current public version of this page developed in Angular. You can find this page at:  
<https://opendata.ncats.nih.gov/covid19/variant/real-world-evidence>

The advantage of looking at the page is that you can see how the filters work as well as how the grid is formatted.

TECH STACK: Develop a web application that has the following tech stack:

* Front-end UI should be developed using React + Vite using Javascript/Typescript. Use Ag-Grid for the data table.
* Middleware should be developed using FastAPI in Python
* Back-end database should be Postgres and simply needs the one table for Real-World Evidence (.csv file of this data is attached)

DATA COLUMNS TO DISPLAY: These are the columns that you need to display in the grid. This table shows you the data column name in the .csv file, and then the “visual name” that you need to use. It also includes and formatting notes.

|  |  |  |
| --- | --- | --- |
| **Data Column Name** | **Front End Column Name** | **Formatting Notes** |
| data\_title | Title |  |
| first\_author | Author |  |
| data\_date | Publication Date | Format as: 01/09/2025 |
| treatments\_compiled\_edited | Treatment (n) |  |
| study\_start | Study Start | Format as: 01/09/2025 |
| study\_end | Study End | Format as: 01/09/2025 |
| summary | Summary |  |
| lineage | Viral Lineage |  |
| hospitalization\_endpoint | Hospitalization Endpoint |  |
| mortality\_endpoint | Mortality Endpoint |  |
| other\_endpoint | Other Endpoint |  |
| mortality\_endpt\_metric\_pvalue | Mortality Outcome (value (95% CI); p-value) |  |
| other\_metric\_used | Other Metric |  |
| other\_defined | Other Defined |  |
| other\_endpoint\_metric\_pvalue | Other Outcome (value (95% CI); p-value) |  |
| cohort\_uniqueness | Cohort Type |  |
| data\_source | Source |  |
| citation | Link | Format as blue hyperlink with an icon indicating it pops out into new window |

DATA FILTERS: The page should have 3 filters in a column on the left side of the page which is also to the left of the grid. The filters should use checkboxes for each unique value that is in the specified column. The checkboxes should be OR logic where click multiple checkboxes adds any record that has that value in the column. The section labels for the filters should be color: #006666. There should be a right facing caret that when clicked opens that filter section to display the unique checkboxes available for that filter.

|  |  |  |
| --- | --- | --- |
| Data Column(s) for Filter | Visible Filter Section Name | Notes |
| treatments\_compiled\_formula | Treatments |  |
| hospitalization\_endpoint, mortality\_endpoint, other\_endpoint | Endpoint | Each column is mapped to just one checkbox. |
| lineage | Lineage (Variant) |  |

VISUAL FORMATTING: The page should have a header and footer that matches the live page, as shown also in the screenshots. There are a number of images that you need to use to make the design look properly. You can download those from the live web page, or a zip file has been attached that contains all of the relevant images for this design.