app

- Upload Data
- Descriptive Stats
- Compare Groups
- Risk Factors
- **Survival Analysis**
- Correlations
- Analyze

Data Selection

Choose Dataset

COVID-19 & Multiple …

⏱️ Survival Analysis

Analyze **time-to-event** data. How long do patients survive? How quickly do events occur? We'll use **Kaplan-Meier curves** and **Cox regression** to answer these questions.

🔧 Configure Analysis

What do you want to analyze?

- ○ 📈 Compare survival between groups (Kaplan-Meier + Log-rank test)
- ● 🎯 Find predictors of survival (Cox Regression)

Time Variable

How long until event or censoring?

outcome

Event Variable

Did the event occur?

age_in_cat

✅ Binary event detected: 1 and 2

ℹ️ Which value means the event **occurred**?

Event occurred when value is:

- ● 1
- ○ 2

Predictor Variables

Which variables might predict survival time?

outcome_label × secret_name × report_source × bmi_in_cat2 × covid19_admissi… ×

> 👀 Preview Data

🎯 Find Survival Predictors

Dropped 31 rows with missing data (51.7%)

Converting categorical variables to dummy variables: outcome_label, secret_name, report_source, bmi_in_cat2

Error running analysis: Convergence halted due to matrix inversion problems. Suspicion is high collinearity. Please see the following tips in the lifelines documentation: https://lifelines.readthedocs.io/en/latest/Examples.html#problems-with-convergence-in-the-cox-proportional-hazard-modelMatrix is singular.

ConvergenceError: Convergence halted due to matrix inversion problems. Suspicion is high collinearity. Please see the following tips in the lifelines documentation:

https://lifelines.readthedocs.io/en/latest/Examples.html#problems-with-convergence-in-the-cox-proportional-hazard-modelMatrix is singular.

Traceback:

```
File "/Users/jasontouleyrou/Projects/md_data_explorer/src/cli
    cph, summary_df = run_cox_regression(
                      ~~~~~~~~~~~~~~~~~~^
        analysis_df,
        ^^^^^^^^^^^^
    ...<2 lines>...
        covariates=covariates
        ^^^^^^^^^^^^^^^^^^^^^
    )
    ^

File "/Users/jasontouleyrou/Projects/md_data_explorer/src/cli
    cph.fit(data, duration_col=duration_col, event_col=event_
    ~~~~~~~^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

File "/Users/jasontouleyrou/Projects/md_data_explorer/.venv/l
    return function(model, *args, **kwargs)

File "/Users/jasontouleyrou/Projects/md_data_explorer/.venv/l
    self._model = self._fit_model(
                  ~~~~~~~~~~~~~~~^
        df,
        ^^^
    ...<12 lines>...
        fit_options=fit_options,
        ^^^^^^^^^^^^^^^^^^^^^^^
    )
    ^

File "/Users/jasontouleyrou/Projects/md_data_explorer/.venv/l
    return self._fit_model_breslow(*args, **kwargs)
           ~~~~~~~~~~~~~~~~~~~~~~~^^^^^^^^^^^^^^^^

File "/Users/jasontouleyrou/Projects/md_data_explorer/.venv/l
    model.fit(*args, **kwargs)
    ~~~~~~~~~^^^^^^^^^^^^^^^^^

File "/Users/jasontouleyrou/Projects/md_data_explorer/.venv/l
```

```
    return function(model, *args, **kwargs)
File "/Users/jasontouleyrou/Projects/md_data_explorer/.venv/l
    params_, ll_, variance_matrix_, baseline_hazard_, baseline

        X_norm,
        ^^^^^^^
    ...<6 lines>...
        show_progress=show_progress,
        ^^^^^^^^^^^^^^^^^^^^^^^^^^^
    )
    ^
File "/Users/jasontouleyrou/Projects/md_data_explorer/.venv/l
    beta_, ll_, hessian_ = self._newton_raphson_for_efron_mode
                           ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~^

        X,
        ^^
    ...<6 lines>...
        **fit_options,
        ^^^^^^^^^^^^^
    )
    ^
File "/Users/jasontouleyrou/Projects/md_data_explorer/.venv/l
    raise exceptions.ConvergenceError(
    ...<4 lines>...
    )
```