



TFL Designer Community – Demo and Q/A

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COSA Spotlight

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**CDISC Analysis Result
Standards – Releasing
April 2024!**



Creating Analysis Results Metadata: JSON

Table 2. Baseline Demographic and Clinical Characteristics, Safety Population, Pooled Analyses (or Trial X)

Characteristic	Drug Name Dosage X N = XXX n (%)	Drug Name Dosage Y N = XXX n (%)	Placebo N = XXX n (%)	Active Control N = XXX n (%)	Total Population N = XXX n (%)
Sex, n (%)					
Male	n (%)	n (%)	n (%)	n (%)	n (%)
Female	n (%)	n (%)	n (%)	n (%)	n (%)
Age, years					
Mean (SD)	XX (Y.Y)	XX (Y.Y)	XX (Y.Y)	XX (Y.Y)	XX (Y.Y)
Median (min, max)	XX (Y.Y, ZZ)	XX (Y.Y, ZZ)	XX (Y.Y, ZZ)	XX (Y.Y, ZZ)	XX (Y.Y, ZZ)
Age groups (years), n (%)					
≥17 to <65	n (%)	n (%)	n (%)	n (%)	n (%)
≥65	n (%)	n (%)	n (%)	n (%)	n (%)
≥65 to <75	n (%)	n (%)	n (%)	n (%)	n (%)
≥75	n (%)	n (%)	n (%)	n (%)	n (%)
Race, n (%)					
American Indian or Alaska Native Asian	n (%)	n (%)	n (%)	n (%)	n (%)
Black or African American	n (%)	n (%)	n (%)	n (%)	n (%)
Native Hawaiian or Other Pacific Islander	n (%)	n (%)	n (%)	n (%)	n (%)
White	n (%)	n (%)	n (%)	n (%)	n (%)
Other	n (%)	n (%)	n (%)	n (%)	n (%)

Source: [include Applicant source, datasets and/or software tools used].
¹ Difference is shown between [treatment arms] (e.g., difference is shown between Drug Name dosage X vs. placebo).
 Abbreviations: N, number of patients in treatment arm; n, number of patients with given characteristic; SD, standard deviation



```
{
  "name": "FDA Standard Safety Tables and Figures - Integrated Guide, Table 2",
  "id": "FDA_STF_T2",
  "listOfPlannedAnalyses": {
    "listItems": [
      {
        "name": "Table 2. Baseline Demographic and Clinical Characteristics, Safety Population, Trial CDISCIPL0T01",
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        "outputId": "0_FDA_STF_T2",
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              "level": 2,
              "order": 1,
              "analysisId": "A_SAF_CNT_USUBJID_TRT"
            },
            {
              "name": "Count of Subjects (Total Population)",
              "level": 2,
              "order": 2,
              "analysisId": "A_SAF_CNT_USUBJID"
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          ]
        }
      },
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              "level": 3,
              "order": 1,
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            {
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              "level": 3,
              "order": 2,
              "analysisId": "A_SAF_SUM_USUBJID_SEX"
            }
          ]
        }
      }
    ]
  }
}
```

Leveraging ARS Metadata to Drive Results Automation

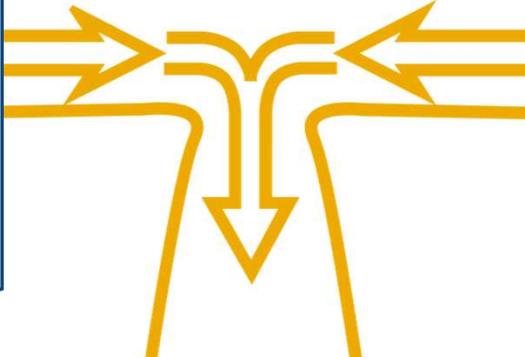
ARS Metadata

```

"name": "FDA Standard Safety Tables and Figures - Integrated Guide, Table 2",
"sp": "FDA_STF_T2",
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      "level": 1,
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          {
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            "level": 2,
            "order": 2,
            "analysisID": "A_SAF_Ont_USUBJID"
          },
          {
            "name": "Sex, n (%)",
            "level": 2,
            "order": 3,
            "subset": {
              "listItems": [
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                  "name": "Summary of Subjects by Treatment",
                  "level": 3,
                  "order": 1,
                  "analysisID": "A_SAF_SUM_USUBJID_Trt_Sex"
                },
                {
                  "name": "Summary of Subjects (Total Population)",
                  "level": 3,
                  "order": 2,
                  "analysisID": "A_SAF_SUM_USUBJID_Sex"
                }
              ]
            }
          }
        ]
      }
    }
  ]
}
    
```

ADaM Dataset

USUBJID	ARM	AGE	AGEGR1	AGEU	RACE	SEX
01-701-1015	Placebo	63	<65	YEARS	WHITE	F
01-701-1023	Placebo	64	<65	YEARS	WHITE	M
01-701-1028	Xanomeline High Dose	71	65+	YEARS	WHITE	M
01-701-1033	Xanomeline Low Dose	74	65+	YEARS	WHITE	M
01-701-1034	Xanomeline High Dose	77	65+	YEARS	WHITE	F
01-701-1047	Placebo	85	65+	YEARS	WHITE	F



id	operation_id	resultGroup1_groupingid	resultGroup1_groupid	resultGroup2_groupingid	resultGroup2_groupid	rawValu	formattedVal
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_1_n	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_1	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_1	14	14
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_1_n	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_1	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_2	72	72
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_1_n	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_2	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_1	8	8
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_1_n	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_2	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_2	76	76
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_1_n	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_3	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_1	11	11
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_1_n	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_3	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_2	73	73
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_2_pct	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_1	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_1	16.27907	(16.3)
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_2_pct	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_1	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_2	83.72093	(83.7)
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_2_pct	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_2	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_1	9.52381	(9.5)
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_2_pct	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_2	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_2	90.47619	(90.5)
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_2_pct	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_3	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_1	13.09524	(13.1)
An03.02_AgeGrp_ByTrt	Mth01_CatVar_ByGrp_2_pct	AnlsGrouping_02_Trt	AnlsGrouping_02_Trt_3	AnlsGrouping_03_AgeGp	AnlsGrouping_03_AgeGp_2	86.90476	(86.9)

Analysis Results Dataset



Analysis Results Standard Model and User Guide

<https://cdisc-org.github.io/analysis-results-standard/>

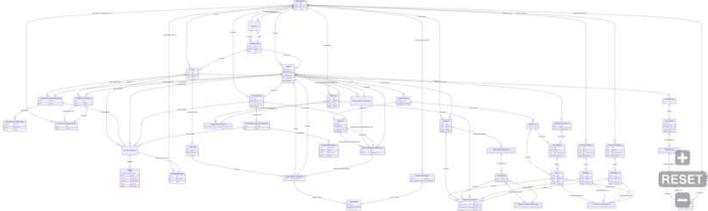
Analysis Results Standard (ARS) Search

Analysis Results Standard (ARS)

DRAFT Logical model to support both the prospective specification of analyses and the fully contextualized representation of the results of the analyses.

URI: <https://www.cdisc.org/ars/1-0> Name: ars_idm

Schema Diagram



Classes

Classes provide templates for organizing data. Data objects instantiate classes in the schema. Each class has a set of slots (aka fields, attributes) that are applicable to it. See [LinkML documentation](#) for more information.

Class	Description
NamedObject	An object with a name
ReportingEvent	A set of analyses and outputs created to meet a specific reporting requiremen...
NestedList	A list of items (analyses or outputs) that may be organized within sub-lists



Analysis Results Standard User Guide

Version 1.0 (Draft)

Prepared by the
Analysis Results Standard Team

Notes to Readers

- This is the draft Version 1.0 of the Analysis Results Standard User Guide.
- This document is based on ADaM v2.1 and Analysis Results Metadata (ARM) v1.0 for Define-XML v2.0

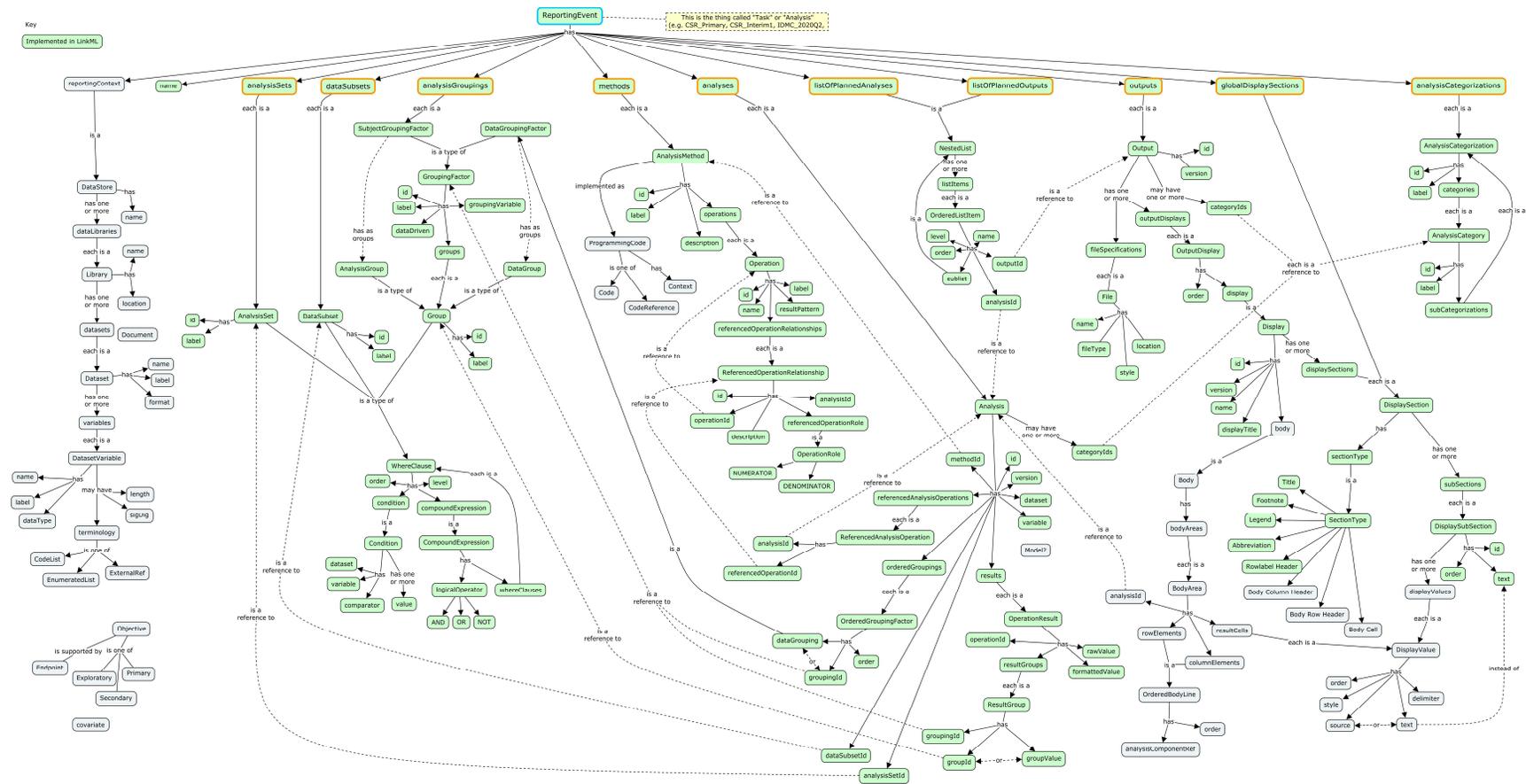
Revision History

Date	Version
2023-08-22	Internal Review Draft



<https://wiki.cdisc.org/display/ARSP/Analysis+Results+User+Guide>

ARS Model Representation using CMAP

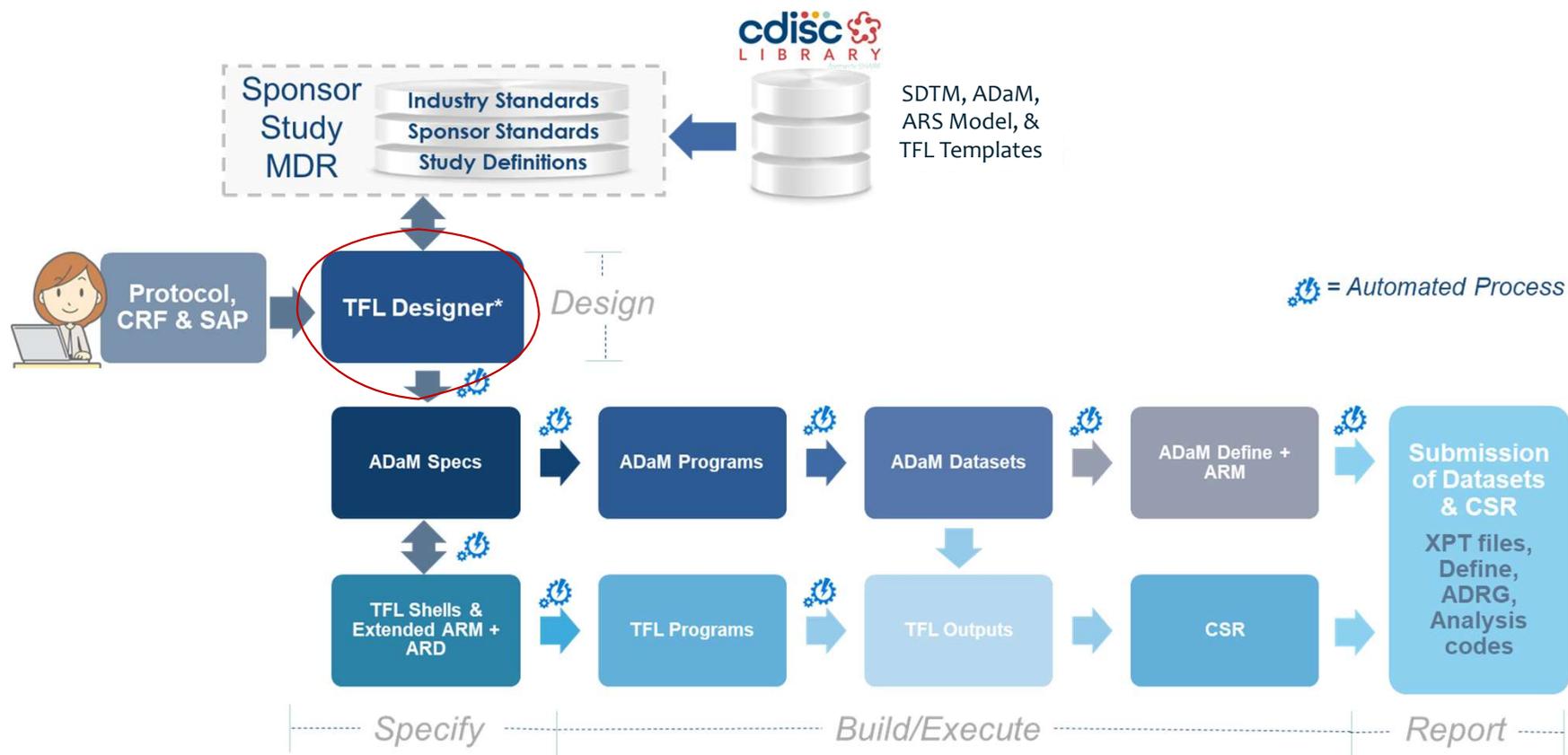


ARS model is complex!

**How do I operationalize it
and generate analysis
results metadata
prospectively?**



Analysis Results Workflow w/ TFL Designer





SDTM, ADaM,
ARS Model, &
TFL Templates

Sponsor
Study
MDR

Industry Standards
Sponsor Standards
Study Definitions

Protocol,
CRF &
SAP

API

API

Select TFL of Interest

Select Analysis
Concepts, Methods,
Terminology & TFL
Display (Template)

Customize TFL Layout
& Metadata

Machine-readable CDISC
ARS (JSON & Excel) +
TFL Shells (RTF & PDF)

TFL
DESIGNER

Study ADaM, ARD
and TFL outputs

Automation Engine
(SAS, R or other
software products)



TFL DESIGNER

TFL Designer – Key Highlights

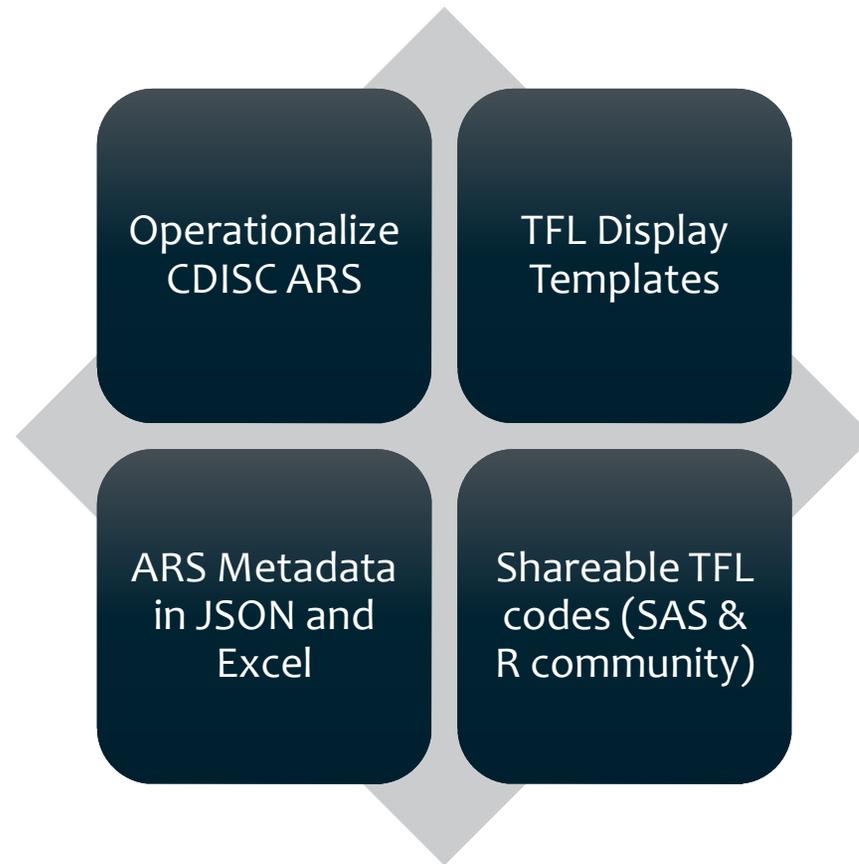
- Web-based solution
- Digitizes your analysis results (TFL)
- Aligned with CDISC Analysis Results Standards
- Central repository for your TFL standards, display templates, conventions and metadata
- Automates generation of TFL shells and provides machine-readable metadata
- Community & Enterprise versions

Key Functionalities

- Central repository for your TFL standards/templates, conventions and metadata
- Access to library of TFL templates (community* and user generated) by disease areas, TA, and indication
- Access to CDISC Standards (SDTM, ADaM, CT) via API to CDISC Library
- Develop new mock-up shells, edit/delete items
- Automatically populate items based on user inputs
- Export TFL shells in RTF & PDF formats
- Export analysis results metadata per the CDISC ARS model in JSON and Excel formats

* including FDA STF-IG
[Will include PMDA, & PHUSE display templates in future updates]

TFL Designer: Contributing to Open-source Community



Live Demo

TFL Designer - Clymb Clinical

clymbclinical.com/tfl-designer/

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TFL Designer

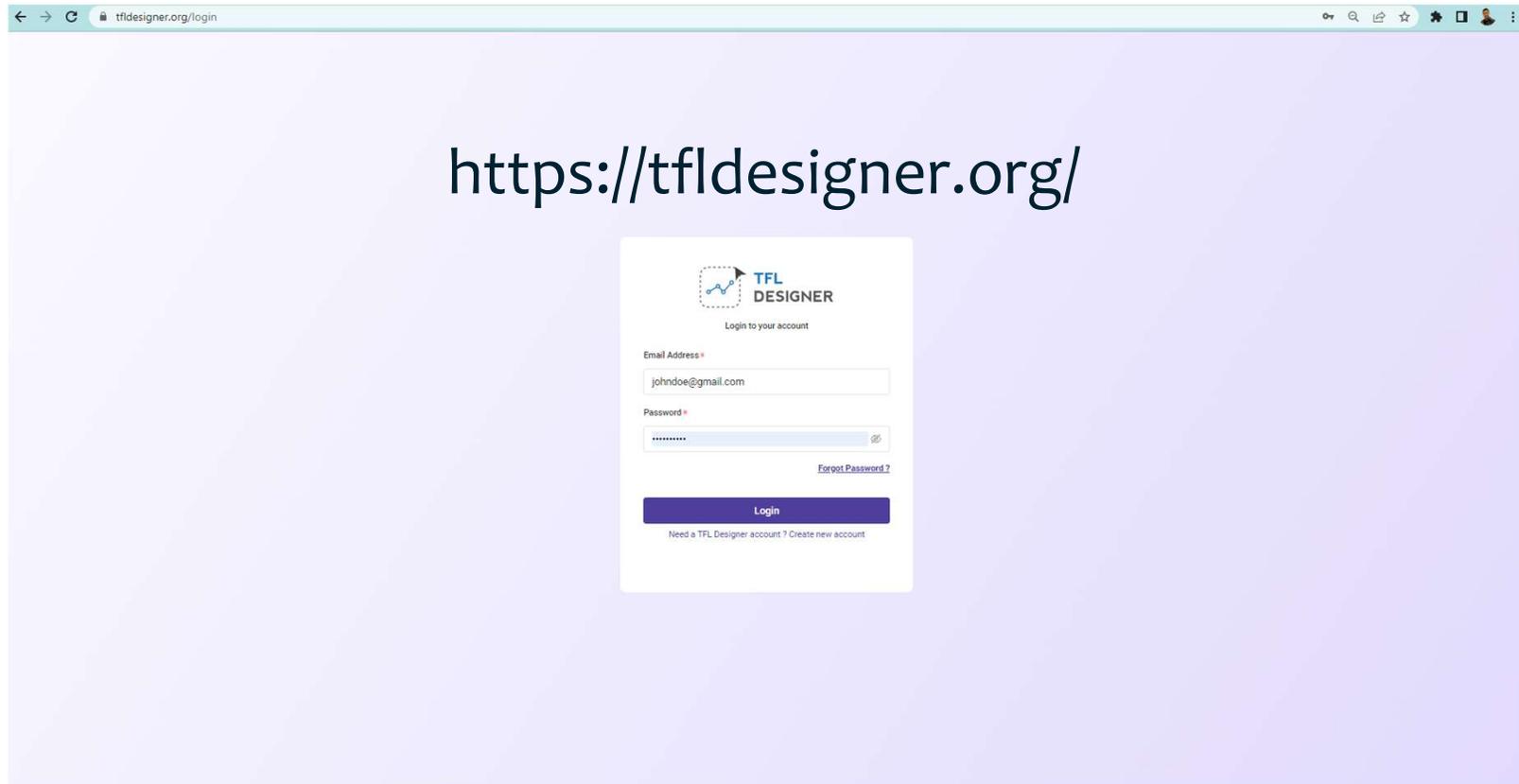
TFL Designer, available as both a Community and Enterprise version, is a leading Software as a Service (SaaS) solution that simplifies clinical trial reporting. This platform automates the creation of TFL shells and provides machine-readable metadata, which can then be seamlessly ingested for downstream automation in the programming of the TFLs. It digitizes analysis results, ensuring alignment with CDISC Analysis Results Standards (ARS), and offers a central repository for TFL standards, templates, conventions, and metadata.

[Explore more](#)

Why TFL Designer?

- Digitizes TFL analysis results
- Provides a centralized repository for TFL standards and templates
- Aligned with CDISC Analysis Results Standards and Model
- Automates TFL shell generation and provides machine-readable metadata

TFL Designer (Community version)



Download files

<http://bit.ly/3uKMAAv>

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