



# Rancho's Terminology Management Solution (TMS)

Unlock the potential of universal data interoperability! Rancho's Terminology Management Solution (TMS) empowers you to align term lists or datasets with your preferred terminology standard, ensuring a streamlined and consistent data ecosystem. TMS not only supports popular public standards, but also accommodates custom standards or ontologies. TMS is accessible via a user-friendly interface or a powerful API, allowing you to design your workflow.



## STANDARDIZE TERMINOLOGY:

Ensures consistent use of terminology across projects, leading to improved communication, alignment, and data accuracy.

## DATA-DRIVEN INSIGHTS:

Enables data harmonization, allowing disparate data sources to be integrated and analyzed, leading to valuable insights for informed decision-making.

## REDUCE ERRORS:

By automating data handling and harmonization processes, TMS helps minimize the risk of errors, enhancing the reliability and quality of project outcomes.

## ACCELERATE TIMELINES:

Significantly reduces project timelines by automating manual processes, allowing teams to focus on high-impact tasks and deliver results faster than ever before.

## ENHANCE EFFICIENCY:

Endpoints generated by TMS can be integrated into existing systems, providing automated workflows and intuitive data management tools.

## USER INTERFACE (OPTIONAL):

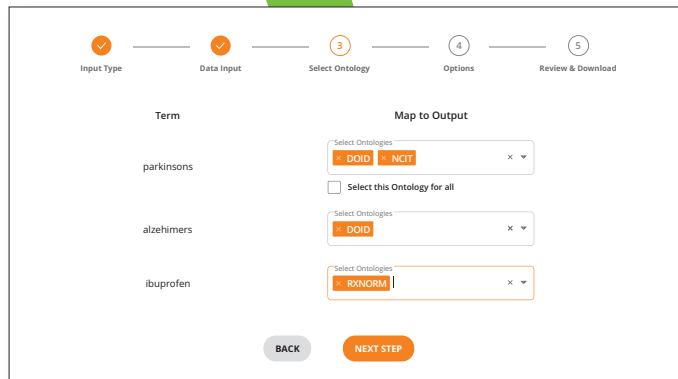
TMS involves integration into existing systems by use of API calls to the service, a user-interface is available that allows users to map terms to standard ontologies, no-coding needed.



## FEATURES:

Powerful API suite: singular API endpoint, which can be used to map any term to the currently supported ontologies using either phonetic or semantic methods.

Optionally users can use TMS with a friendly interface that eliminates the need for complex scripts and development time.



Query Term	Label	Iri	Curie	Synonyms	Ontology Name	Similarity Score
B_cell immature	immature B cell	<a href="http://purl.obolibrary.org/obo/CL_0000816">http://purl.obolibrary.org/obo/CL_0000816</a>	CL_0000816	immature B lymphocyte   immature B-cell   I...	CL	1.0
B_cell immature	immature T cell	<a href="http://purl.obolibrary.org/obo/CL_0002420">http://purl.obolibrary.org/obo/CL_0002420</a>	CL_0002420	immature T-cell...	CL	0.78
B_cell immature	immature natural killer cell	<a href="http://purl.obolibrary.org/obo/CL_0000823">http://purl.obolibrary.org/obo/CL_0000823</a>	CL_0000823	immature NK cell	CL	0.74
B_cell immature	immature NK T cell	<a href="http://purl.obolibrary.org/obo/CL_0000914">http://purl.obolibrary.org/obo/CL_0000914</a>	CL_0000914	immature NK T lymphocyte   immature NK...	CL	0.7
B_cell immature	mature B cell	<a href="http://purl.obolibrary.org/obo/CL_0000785">http://purl.obolibrary.org/obo/CL_0000785</a>	CL_0000785	mature B lymphocyte   mature B-cell   matur...	CL	0.67
B_cell Memory	memory B cell	<a href="http://purl.obolibrary.org/obo/CL_0000787">http://purl.obolibrary.org/obo/CL_0000787</a>	CL_0000787	memory B lymphocyte   memory B-cell   me...	CL	1.0
B_cell Memory	double negative memory B cell	<a href="http://purl.obolibrary.org/obo/CL_0000981">http://purl.obolibrary.org/obo/CL_0000981</a>	CL_0000981	dn memory B cell   dn memory B lymphocyt...	CL	0.82
B_cell Memory	IgA memory B cell	<a href="http://purl.obolibrary.org/obo/CL_0000973">http://purl.obolibrary.org/obo/CL_0000973</a>	CL_0000973	IgA memory B lymphocyte   IgA memory B-c...	CL	0.78
B_cell Memory	IgD-negative memory B cell	<a href="http://purl.obolibrary.org/obo/CL_0001053">http://purl.obolibrary.org/obo/CL_0001053</a>	CL_0001053	IgD-memory B cell	CL	0.78
B_cell Memory	IgE memory B cell	<a href="http://purl.obolibrary.org/obo/CL_0000948">http://purl.obolibrary.org/obo/CL_0000948</a>	CL_0000948	IgE memory B lymphocyte   IgE memory B-c...	CL	0.78

## ONTOLOGY STORE:

A graph database allowing users to ingest standard and custom ontologies and perform basic ontology operations, such as text annotation, common ancestor, and level alignment.

## MAPPING SUGGESTOR:

The Ontology Mapping Suggester Tool suggests the best ontologies to use based on users' existing text or term list.

## UI PORTAL APPLICATION:

A UI Front-end Application allows users to annotate terms directly from their browser, interfacing with TMS while enabling standard spreadsheet functions (for example: column mapping; range mapping; etc.).

## 2D MAPPING:

Simply upload a 2D file and select the ontologies you would like each column mapped to, simplifying complex alignment of sample-level metadata into one easy step.

## SUPPORTED ONTOLOGIES

**Disease/Phenotype:** DOID, HPO, ICDO3, ICD10CM, ICD11, MONDO, ORDO

**Multi-Modal:** BTO, EFO, FMA, GARD, MeSH, NCIT, OBA, OMIM, OMOP, SNOMEDCT, MedDRA

**Assay:** CHMO, OBI

**Drug:** CHEBI, RXNORM, VO

**Strain:** NCBITAXON, RS

**Tissue/Cell:** BTO, CL, CLO, UBERON

**Other:** AFO, GO, HGNC, LOINC, PATO, PR, UO

\*Some ontologies may require additional licenses

