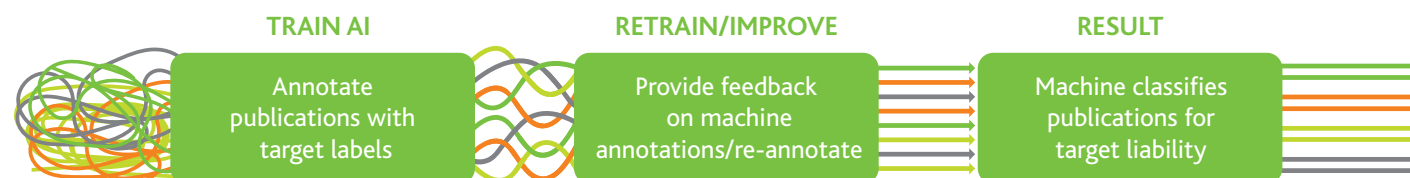


Building High Quality AI/ML Datasets

AI/ML methods hold huge potential in all facets of drug discovery, including predictive toxicology. It is of paramount importance that high quality datasets are used to build and train all AI/ML models. When quality matters, you can count on Rancho! With over 12 years of experience in harmonizing/standardizing datasets containing a wide range of data types we can support you with such needs and give you confidence in the quality of the datasets used to train & build AI/ML models. We are platform agnostic and have robust workflows and pipelines to extract data from different sources:

- Scientific publications
- Clinical trial protocols,
- Toxicology and pathology reports,
- and much more



Rancho SMEs harmonize toxicology findings across multiple studies by aligning terms to **SEND**, **MedDRA** and other Ontologies. That is a significant step towards achieving FAIR data principles. **FAIR** stands for **F**indable, **A**ccessible, **I**nteroperable, and **R**eusable, which are guidelines that aim to enhance the utility and value of digital assets.

Data harmonization supports meta-analyses and systematic reviews and helps to uncover patterns, trends, and outliers across studies, leading to more informed conclusions about the toxicity and safety profiles of substances.

Rancho has experienced data scientists and subject matter experts (SMEs) who can build tailor-made AI/ML models:

- Predictive toxicology
- Cellular phenotype classification
- Target liability
- Disease signature analysis

