Use Case 2: How to Custom Order Compounds from a CRO: Request and Shipping Management

How to Effectively Manage Work Request Management, Compounds and Related Sample Data Between CRO and Pharma Company

Provide a better collaboration platform for working with CRO network. Eliminate multiple tools and a series of systems that require CROs to work in multiple systems to load data

- Increase Efficiency
  - Streamline overall workflow processes to provide a single solution for the receipt of new compounds
- Effective Project Management
  - Enable internal scientists to understand both the status of the work being performed as well as view the experiments executed by the CRO in near real time

The Arxspan Workflow platform can be utilized for the creation and submission of compounds for synthesis by a CRO. Required fields like formats, structure, content, etc. can be configured to meet the needs of the client. The submission process is the same whether the request is for a final compound or an intermediate. The system is configured to allow selection of the appropriate request type. The system also allows files like Invoice, Material Safety Form, TSA Form, Sheets and any other attachments for use by the CRO.

(Please see Use case No 1. For Requesting Compound Synthesis Work from a CRO)

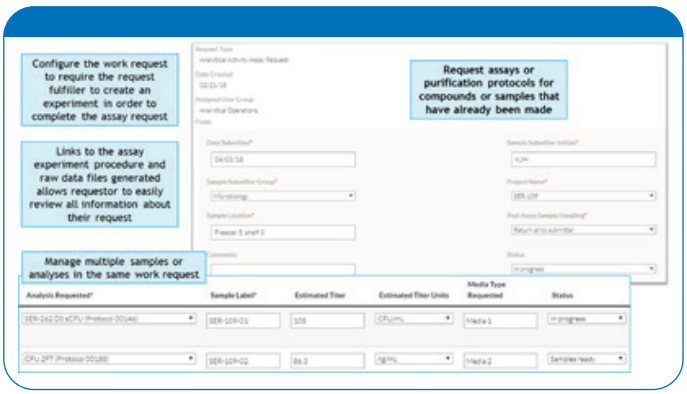

Figure 1. Compound Request Management

An SD file is uploaded and parsed into the compound request table. The system reads and maps all required data into the request table including structures. The file can be reviewed, and requested compounds reprioritized by the scientist prior to submission. Rules in the system prevent the submission of the request until all required fields are completed.

After the request form is submitted, the requested compounds are given a tracking identifier within the Arxspan system. The request is then routed to an internal coordinator or sent directly to the CRO (Configuration option).

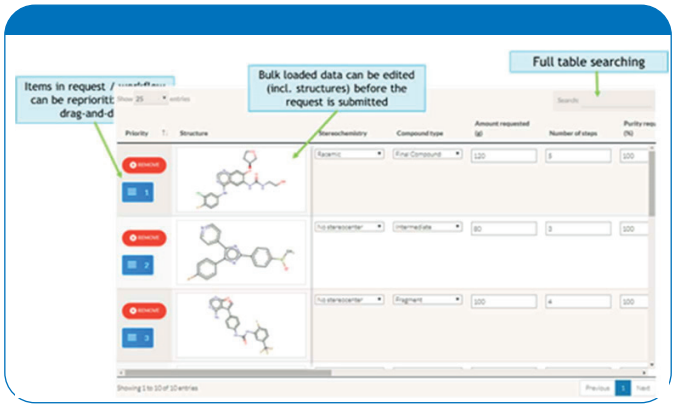

Figure 2. Compound Request Management

Sample reprioritization is done either by the submitting scientist or by a project manager throughout the lifetime of the request. If a reprioritization is made, all required users of the system are notified.

Upon receiving the request, the scientist can execute the required synthesis (see Use case 1 for details).

Upon receiving the list of compounds, the CRO updates the status of the order (eg. "in Execution") and distributes the requests to their scientists. The requests can mask company fields and present the CRO with alternative values (Reg ID v. sample ID). The request can include mandatory fields that the CRO needs to fill in to complete the request.

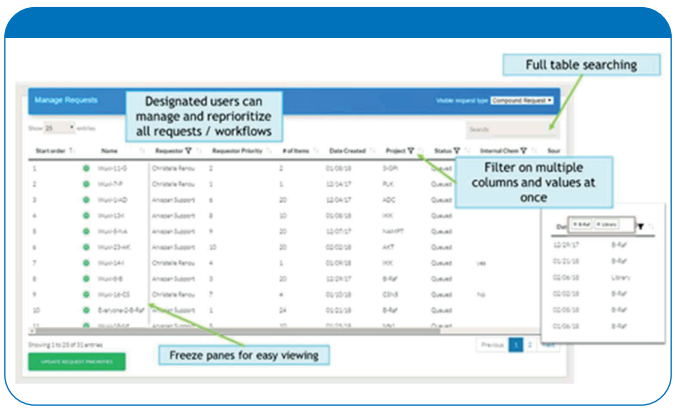

Figure 3. Compound Request Management

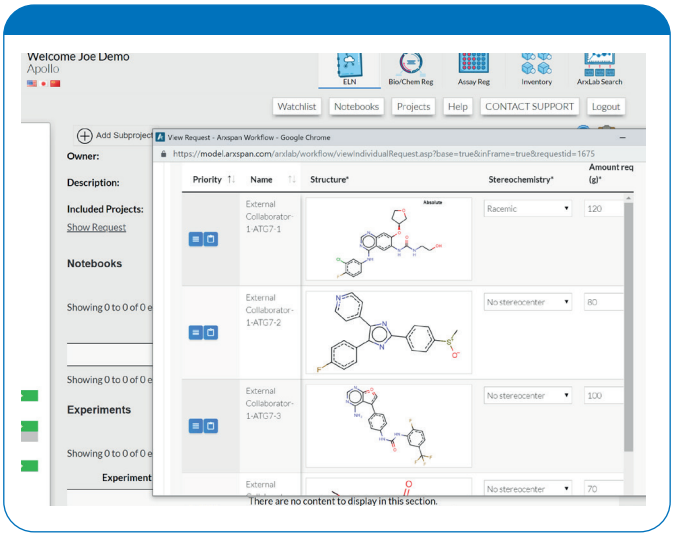

Figure 4. CRO view of the Compound Requests

The CRO scientists can then execute the required synthesis within the Arxspan platform. This allows all experiments executed by the CROs to be directly linked with every experiment performed to complete a required synthesis.

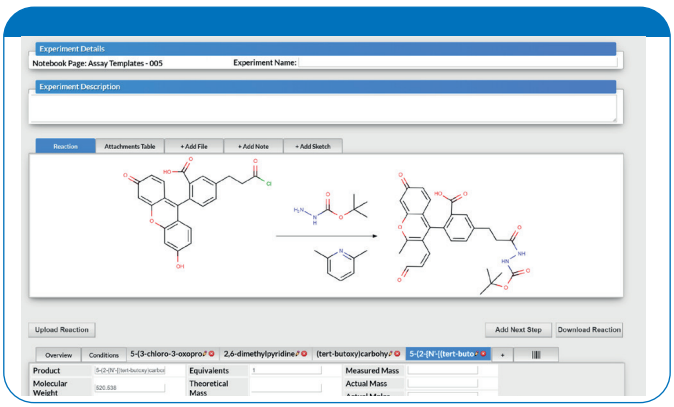

Figure 5. Arxspan ELN for Chemistry

The use of the Arxspan ELN allows a company to deploy integrated compound registration from the ELN. The Arxspan platform allows for both single compound and batch loading of compounds by the CRO.

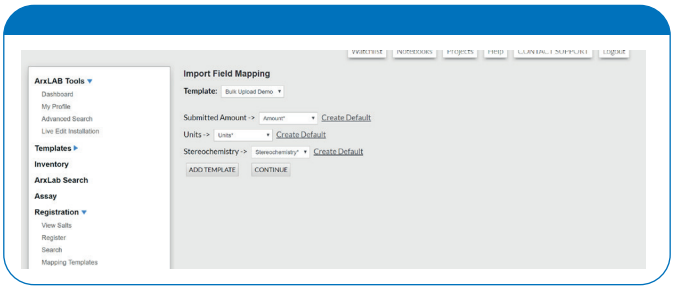

Figure 6. Compound Request Management

The Arxspan Registration system parses an SD file and allows for mapping of the fields within the file dynamically or by a pre-configured stored template. The template can be configured for synthesis type or CRO.
Upon loading the file, the system checks the uploaded data for quality and provides the appropriate error to the partner. The partner then has the option to correct the data.

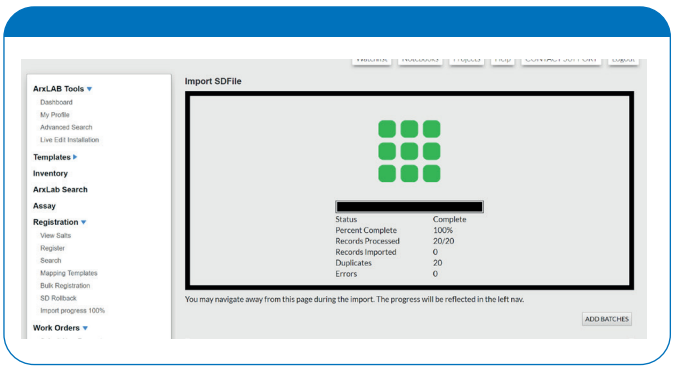

Figure 7. Compound Request Management

Once the data passes the validation rules within the Arxspan platform, the compound is assigned the appropriate Registration ID. The Registration ID is masked to the CRO who is provided a sample ID to associate with the order. The system provides the appropriate shipping code. This can be done by either storing the codes in the Arxspan platform or by integrating with the appropriate company system.
If the compound was registered through the Arxspan ELN, the sample ID is loaded into the experiment.

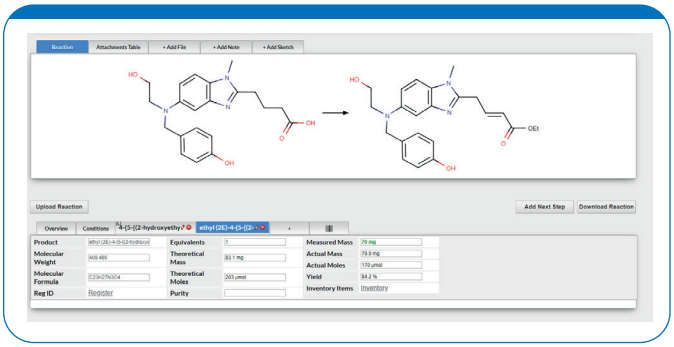

Figure 8. Compound Request Management

The process is completed when the CRO populates all the required fields within the Request forms. This can include any company required fields (purity, amount, barcode ID, tracking ID).

Read our related use cases:

- Use Case 1: Requesting Work from a CRO: Compound Synthesis and Related Sample Data Management
- Use Case 3: Receiving Compounds from a CRO
- Use Case 4: Storing Experimental Pharmacological Data in an Assay System
- Use Case 5: Managing experimental results data from CRO
- Use Case 6: Simplifying the Administration of your enterprise systems

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