



BIOVIA BIOLOGICAL REGISTRATION

DATASHEET



IDENTITY, GENEALOGY, SECURITY BIOVIA Biological Registration is a multi-entity system for defining, registering, relationship tracking, querying, and reporting on biological entities. Built in close collaboration with top pharmaceutical companies, this award-winning system enables you to track the progress of your biologics across discovery and development. Supporting a wide range of biologics out-of-the-box, BIOVIA Biological Registration provides powerful tools to enable you to register your own custom biologics without needing to write code. Let BIOVIA Biological Registration enable you to make the most of your investment in biologics R&D by helping you manage what you have, understand how it was created and how it relates to your other biologic assets.

TRACK BIOLOGICS AND IMPROVE EFFICIENCY

BIOVIA Biological Registration improves operational efficiency by providing you with an easy-to-use system to enable you to establish the identity of biological entities and understand how they may relate to entities that have already been registered. Establishing identity helps you to:

- Avoid wasting time spent needlessly duplicating work
- Reduce or eliminate the chance of generating invalid results from working on the wrong sample due to identity confusion

By establishing the identity of a sample, BIOVIA Biological Registration makes it easier for individual project scientists to assemble data for the same sample, promoting collaboration, more effective team work and enabling faster recognition of the most promising candidates.

REGISTER TO DETERMINE UNIQUENESS AND ESTABLISH RELATIONSHIPS

Compare your entities against others in your system and establish relationships between other entities by comparing key attributes such as sequence, species and supplier during registration:

- Import sequences from Genbank, Vector NTI® and FASTA files
- Perform "what-if" analysis prior to registration
- Automatically cross-reference new entities against those already registered
- Create relationships between different entities such as plasmids, cell lines and expressed proteins to establish lineage and track genealogy
- Store supplemental file attachments associated to registered entities
- Assign corporate and lot identifies based on configurable identifying attributes
- Edit current entities and create new ones as your research evolves
- Use configurable curation workflows to control when identity conflicts trigger the need for additional review prior to registration
- Register entities singly or in bulk from Microsoft® Excel® files
- Perform virtual registration of computational entities
- Capture registration and edit events automatically in an audit loq

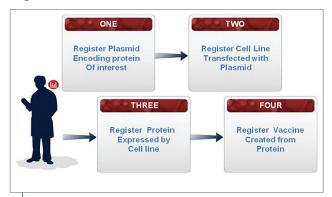


Figure 1: This illustration shows the development and registration of various entities as a vaccine is developed. Commonly, these or similar steps are carried out by individuals in different parts of an organization. BIOVIA Biological Registration helps manage the flow of relevant information among groups by providing a common system for recording the progress and relationships between the components that make up the vaccine.

STANDARD ENTITIES AVAILABLE IN BIOVIA BIOLOGICAL REGISTRATION

- Plasmids
- siRNA
- Cell line (immortalised and hybridoma)
- Proteins
- Antibodies (6 types including monoclonal and fab)
- Vaccines (5 types including conjugate, DNA and protein-only)
- Yeast
- Multi-component entities
- Antibody Drug Conjugates (ADCs)

MODIFY AND RECONFIGURE

Create your own custom entities and business rules, or modify existing entries through an easy-to-use graphical UI without needing to write code:

- Create new entities or edit existing entities
- Define chemistry attributes to support the registration of antibody drug conjugates and other chemically modified biologics represented in a variety of formats include SCSR, Molfile and HELM
- Modify or create new identity, validation and population rules to meet your own business needs
- Design custom vocabularies to support your own custom entities

SEARCH AND ANALYZE

BIOVIA Biological Registration provides you with powerful analysis and search capabilities to enable you to understand and extract value from your registered data:

- Perform sequence similarity searching and alignment via BLAST
- Search registered data using easy to use forms-based and ad-hoc gueru builder tools
- Mine entity relationships via a highly visual, intuitive query builder interface
- Export search results to BIOVIA Insight and Insight for Excel® for further analysis
- Provide custom analysis and export protocols built using BIOVIA Pipeline Pilot to users to run on search results

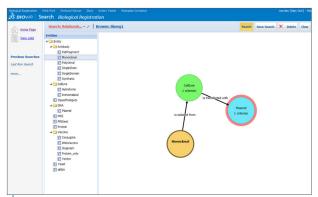


Figure 2: Building a relationship query to find monoclonal antibodies generated by transfection of a cell line

A configurable security model can be applied to control access to registered entities. Security can be configured in a variety of ways. For example it can be used to restrict access to individual users and groups based on project membership, a common scenario required by companies that interact with other third-party research and CRO organizations.

BIOVIA Biological Registration is built on the BIOVIA Foundation and BIOVIA Pipeline Pilot, making it easy for you to extend capabilities and integrate with other applications and third party systems:

- Make use of the comprehensive RESTful API that Biological Registration provides to enable single and file registration from third-party applications and tools
- · Connect to inventory systems
- Integrate with ELNs including BIOVIA Workbook and Notebook
- Create new analysis and reporting tools using Pipeline Pilot and provide them within the BIOVIA Biological Registration user interface to users
- Create dashboards for oversight and decision making

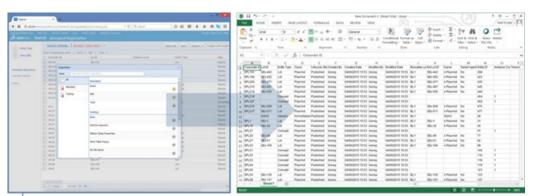


Figure 3:Integration with BIOVIA Pipeline Pilot makes it easy for you to add additional analysis and export tools and make them available to users in the BIOVIA Biological Registration user interface.

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