



Customer Case Study

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Bluejay Therapeutics



Bluejay Therapeutics Adopts CDD Vault to Enhance Collaboration and Speed Drug Discovery

Situation

Bluejay Therapeutics is a private biopharmaceutical company focused on the development of treatments for viral and liver diseases. The company is dedicated to discovering life-changing medicines and cures for people with viral and liver diseases, starting with chronic hepatitis B (CHB) and chronic hepatitis D (CHD).

With an estimated 300 million people chronically infected worldwide, CHB is a principal cause of cirrhosis and hepatocellular carcinoma. Bluejay is developing and advancing innovative programs for chronic hepatitis B virus (HBV), including a proprietary TLR9 agonist (Cavrotolimod) and a liver targeted transcript inhibitor (BJT-628), with the goal of finding combinations that achieve functional cure.

The company recently announced positive preliminary data from the Phase 2 study of BJT-778, a fully human IgG1 monoclonal antibody that acts against hepatitis B surface antigen (anti-HBsAg mAb), in patients with CHD.

The biologists and chemists of Bluejay wanted to replace spreadsheets with a drug discovery informatics platform that would enhance collaboration between its biologists and chemists and speed time to discovery. As a lean, highly driven organization, it sought a platform that was both easy to use and affordable.

Solution

Bluejay Therapeutics deployed Collaborative Drug Discovery's CDD Vault, the hosted drug discovery informatics platform that securely manages both internal and external biological and chemical data.



Bluejay Therapeutics uses CDD Vault to accelerate time to discovery.

“Choosing CDD Vault was a very easy decision, because our previous platform was not really a platform at all,” says Jerome Deval, Vice President of Biochemistry, Bluejay Therapeutics. “We were working with a very well known, product, but it was more like your typical spreadsheet software. We decided we needed to organize our data in a much more systematic, and error-free way. We were also drawn to CDD Vault’s intuitive ease of use and its very attractive price point. CDD was also strongly recommended by colleagues at other drug discovery companies.”

Bluejay Therapeutics currently stores about 400 small molecules in CDD Vault. The solution is used by the company’s biologists and chemists, and also provides the central repository for work done by Bluejay’s contract research organizations.

Benefits

Bluejay Therapeutics has found a number of benefits since adopting CDD Vault, including:

- Intuitive, user friendly, ease of use
- CDD Vault is easy to administer
- CDD Vault provides “a common truth”
- Enhanced collaboration between biologists and chemists
- Visualization tool
- Faster time to discovery
- Attractive pricing
- Protection of IP
- Exceptional customer support

Ease of Use: “CDD Vault is an Intuitive, User-Friendly Tool that We Use Daily”

Bluejay Therapeutics values the ease of use it finds with CDD Vault, which has become an

important tool in their daily efforts to discover new drugs.

“CDD Vault is an intuitive and user-friendly tool that we use daily,” Deval says. “For the first time in my career as a scientist, I have a database system where at the same time, I can be the administrator, I can be the content provider, and I can be the end user—the data viewer. As a small company, this ease of use is very attractive.”

With its tight focus on science, Bluejay Therapeutics didn’t want a data repository that would require a specialized IT resource to manage. “I’ve worked with database systems before that I didn’t like, but I couldn’t do anything about, because the database was in place before joining the company,” Deval says. “So ease of use was essential. As we considered solutions, I knew I was going to have to wear multiple hats in working with the data, and wanted to make sure we didn’t choose a solution that would be so technical and complex that it would require a lot of administrative time.”

CDD Vault is Easy to Administer

Deval serves in the administrative role with CDD Vault, which he finds is easy, and actually helps with his daily scientific work.

“CDD is very user friendly, even for administrators, which is really important,” Deval says. “It provides a lot of flexibility in administering the data. Working with CDD Vault in my daily use I easily create the new assets as an administrator, I support the data as a content creator, and import data from our contract research organizations. CDD Vault makes it easy to retrieve data, analyze data, visualize data, and to manage data such as

adding new assays, or changing assay conditions or the way they are described. CDD Vault is very intuitive. It’s very user friendly and very flexible.”

CDD Vault Provides “a Common Truth”

CDD Vault serves as a central repository for all data generated by Bluejay Therapeutics.

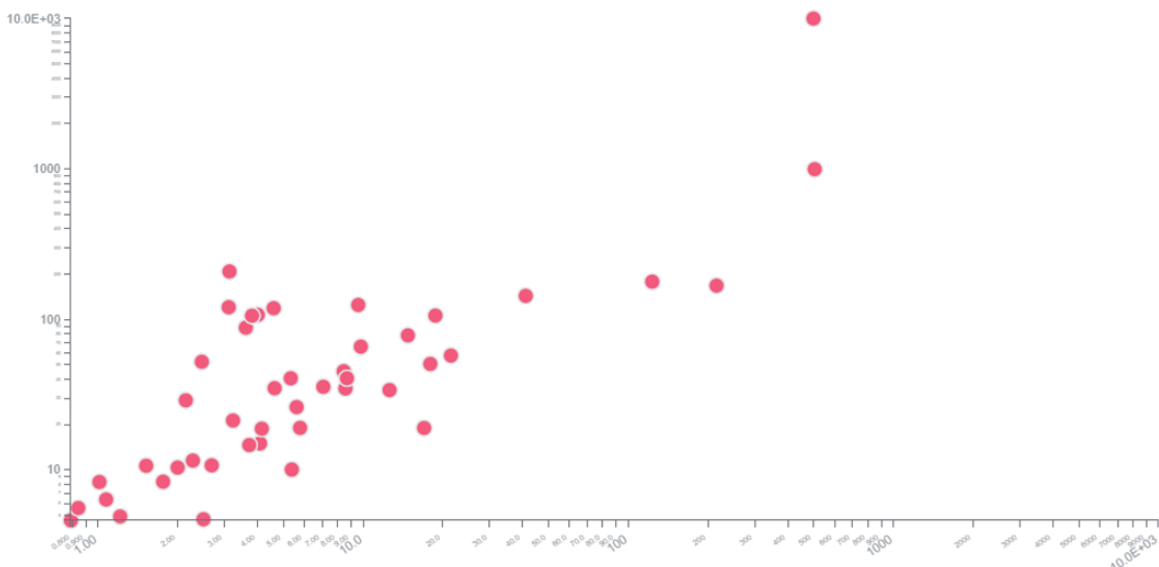
“Having CDD Vault is such an improvement in terms of trust in the data compared to trying to find the most recent spreadsheet or tracking other decentralized sources,” Deval says. “In addition to serving as our central repository, we

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also value the layers of quality control that are built into the import and registration processes for CDD Vault.”

As an example, Deval notes that the process of entering a Vault will flag mistakes that could otherwise enter into the database.

“The process of importing data into CDD Vault gives another layer of quality control that results in identifying mistakes or issues that we wouldn’t have identified if we hadn’t uploaded the data into the database,” Deval says. “The built in QC layers provide a way for the chemists to review the information they have on the chemistry side of things, and the same thing



Bluejay Therapeutics values the CDD Vault Visualization tool.

happens on the biology side. This QC process builds the trust into the compounds themselves. The result is that we have a source of common truth, which isn't there when dealing with spreadsheets or in the other common ways of viewing data."

Enhancing Collaboration Between Biologists and Chemists

Bluejay Therapeutics finds that CDD Vault enhances collaboration between biologists and chemists.

"CDD Vault helps us to collaborate. As a biologist, it helps me interface with the chemist and it helps the chemist interface with the biology," Deval says. "We use it regularly in terms of checking things like an assay data value, and verifying if a compound has been tested and registered. Most importantly, CDD Vault ensures we are all working with the most current data. Working from our central repository simplifies collaboration between chemistry and biology."

Exploring Data with the CDD Vault Visualization Tool

Biologists and chemists at Bluejay Therapeutics take advantage of the CDD Visualization tool, a component of CDD Vault.

"For both biology and chemistry we use CDD Visualization in a number of ways, including correlation analysis," Deval says. "Visualization is important when we're looking for trends, or at how one variable affects another. Typically, we compare data coming from multiple assays to see how the data correlates. Visualization also helps us identify outliers that maybe perform well in one assay, but not necessarily well in a different assay. Visualization also helps in correlating LogD and other properties in terms of biological activity."

Faster Time to Discovery

The combination of CDD Vault's central repository providing trusted data, along with its visualization, and ease of use, combine to help

Bluejay Therapeutics achieve a faster time to discovery.

“CDD Vault accelerates the drug discovery process by shortening the iteration time between a compound being made and tested and using the data to make the next round of compounds,” Deval says. “Drug discovery, especially medicinal chemistry, is highly iterative. So it becomes a question of how fast can you iterate your cycles of optimization, from one compound on cycle one to the next compound on cycle two to the next compounds on cycle X—whatever number of cycles you need to have all the properties optimized.”

CDD Vault helps reduce the time required for this cycle of iterations.

“One of the advantages with CDD Vault is that we don't have to wait for a formal weekly or bi-weekly meeting to communicate findings,” Deval says. “The biologist and chemists can see data as soon as it is uploaded into CDD Vault, which I can upload myself. The same day biology data is uploaded, the chemist can begin working on the next iterative cycle using that data to continue to optimize their molecules.”

The result is faster time to discovery. Deval continues: “We save a lot of time because we can make decisions really quickly through using CDD Vault to share data between biologists and chemists.”

Attractive Pricing Makes CDD Vault an Even Easier Choice

Bluejay Therapeutics sees CDD Vault as a great value—providing a wealth of benefits at an attractive price point.

“CDD Vault is very cost effective, which is why I would recommend it for groups and startups

“The pricing, combined with the ease of use and solid central repository and visualization tool makes for an easy argument to be made to management of small, and even medium-sized organizations. The ease of use adds to the value because you don’t need a specialized IT person to administer it.”

- Jerome Deval, Vice President of Biochemistry, Bluejay Therapeutics

that are dealing with tight budgets,” Deval says. “The pricing, combined with the ease of use and solid central repository and visualization tool makes for an easy argument to be made to management of small, and even medium-sized organizations. The ease of use adds to the value because you don’t need a specialized IT person to administer it. I was nervous about administering a database, but I actually enjoy working with CDD Vault.”

Protecting Intellectual Property with CDD Vault

Protecting intellectual property is always a top concern in drug discovery. Bluejay Therapeutics values the many ways in which CDD Vault helps protect their IP.

“A lot of the data that we generate constitutes intellectual property,” Deval says. “CDD Vault provides a secure repository for our data including for proprietary molecules that we make, along with all the analytics and QC on the

chemistry side as well as the biologics. We have a proof of record, including the date when each molecule was made, and when they were tested. All of this is important from an IP standpoint.”

CDD Provides Exceptional Customer Support

In addition to CDD providing a great product, Bluejay Therapeutics has found that the company also provides exceptional customer support.

“The customer support that CDD provides is really exceptional,” Deval says. “Their entire team is exceptional—from pre-sales demos, right through to customer support. They're very fast. They always make time for us, and they're knowledgeable. Especially in this day and age, having great customer support is greatly appreciated.”

About Collaborative Drug Discovery

Collaborative Drug Discovery provides a modern approach to drug discovery informatics that is trusted globally by thousands of leading researchers. Our CDD Vault is a hosted informatics platform that securely manages both private and external biological and chemical data. It provides core functionality including chemical registration, structure activity relationship, inventory, visualization, and electronic lab notebook capabilities. For more information, visit us at www.collaborativedrug.com.