

CERTAINTY DISCOVERY CERTARA. Chemaxon

Aligning the early-stage discovery strategies across **Chemaxon and Certara**

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Unifying the Discovery Portfolio

Aligning the Early-Stage Discovery Software across

Chemaxon and Certara

Adrian Stevens Chief Product Officer, Chemaxon

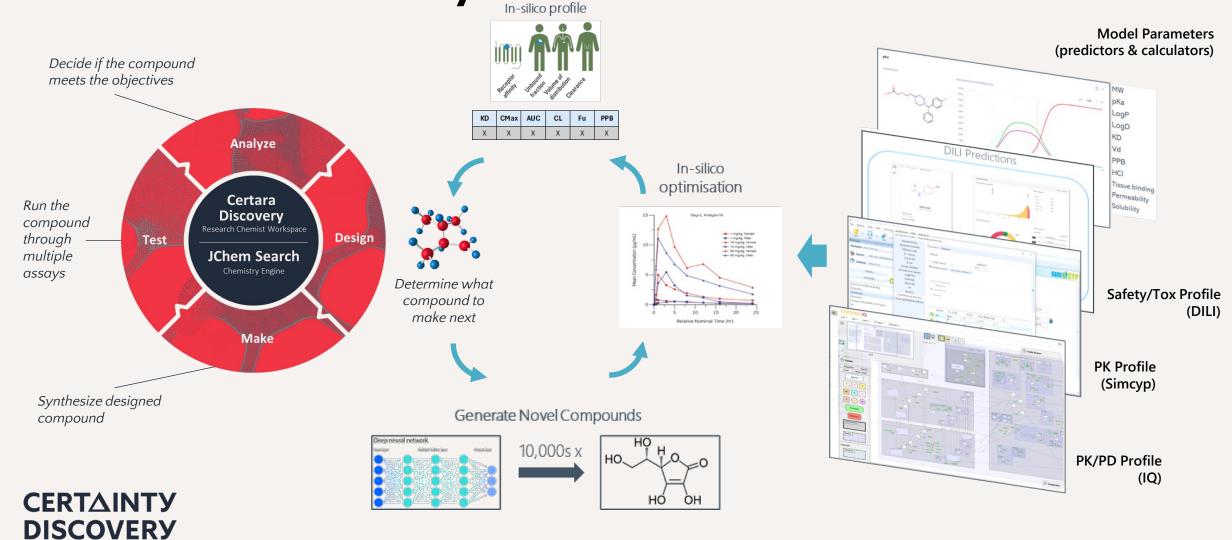
David Lowis
Executive Director, Certara Predictive Technologies

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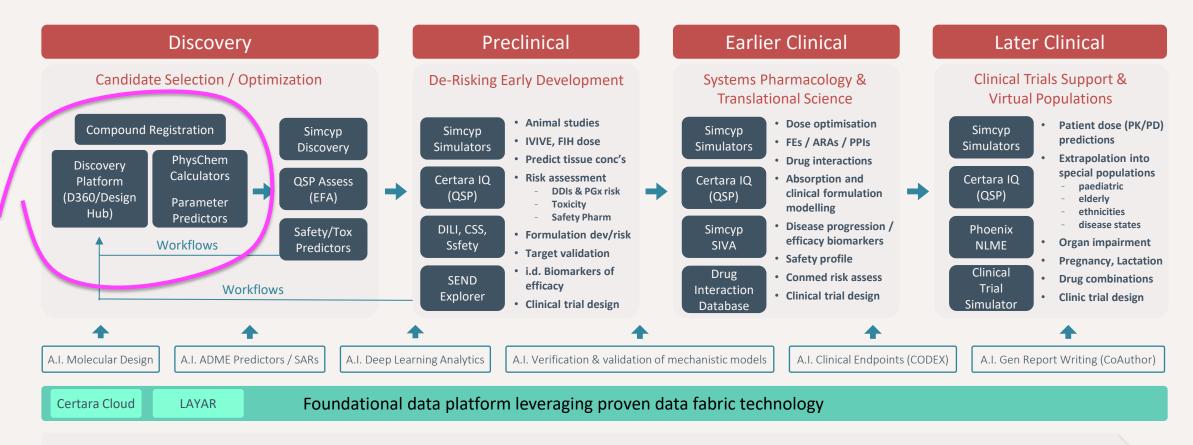


In-silico Models Can Enhance The Design Process in Discovery



Certara MIDD Platform

Data Integration & Predictive Analytics Delivering Certainty Across Drug Development



"In-Silico Profile" concept

- Unique library of data which defines/characterizes a specific compound and provides input parameters for in-silico
- Compound Profile 'file' will expand and transform over time as experimental data is generated and accumulated
- Standardized data formats will allow predictive models to be run as automated workflows across large numbers of compounds and test scenarios.

Aligning the Discovery Portfolio

Starting with D360 and Design Hub



Compound Registration



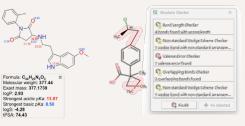
D360



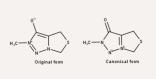
Design Hub



Simcyp Discovery



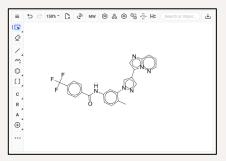
Calculators Structure Validation



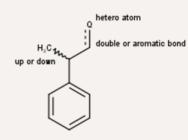
Tautomer handling



IUPAC Naming



Marvin



JChem Search

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Chemistry Toolkits

Key Areas of Product Development

Combining the Discovery capabilities of Certara and Chemaxon

Improved cross-modality support

- o Small molecules, peptides, oligos, Ab, ADC,
- Working groups set up to develop analysis best practises

Improved consistency in substance representation

- Consistent chemistry representation
- Consistent representation for other modalities (HELM, BILN)

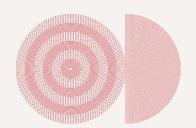
Improved access to Certara CPT science

- Inclusion of SimCyp PK prediction technologies
- Secondary Intelligence, DILI, ...

Transition towards product convergence in Discovery

- o Improve user workflow my connecting Analyze-Design-Make
- o An open web-based application within the MIDD platform with data orchestration layer



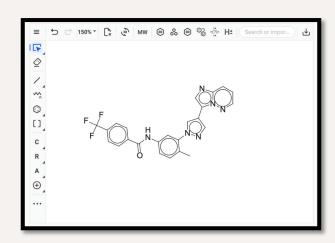


Near-term: Cross-Application Consistency

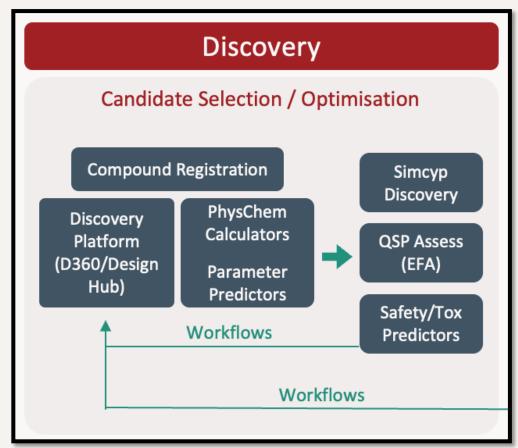


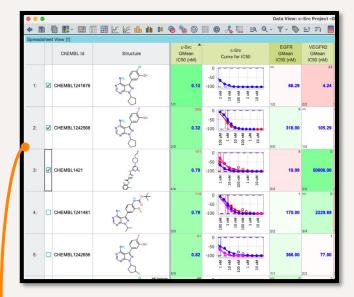
Near-term Goals

Greater consistency of entity and data handling

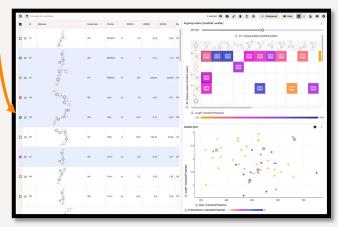


Standardized drawing





Improved data synch



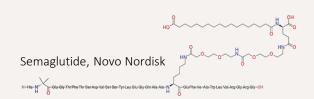
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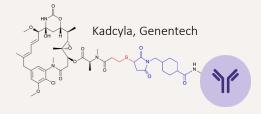
Marvin – An Awesome Drawing Product!

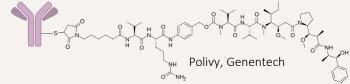
Expand on supported modalities

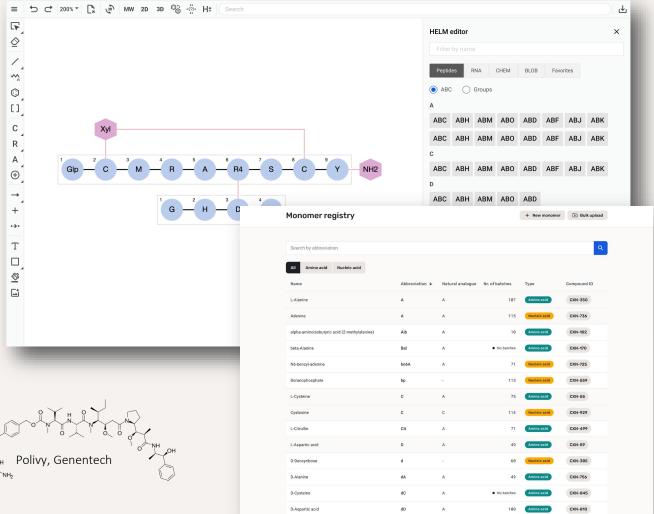
Coming soon:

- **Export CDXML**
- Monomer library
- **Support HELM**









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Cross-Platform Drawing Standard

All Chemaxon applications standardized on Marvin

Consistent drawing application

2025: Design Hub, Compound
 Registration, Compliance Checker

Design Hub

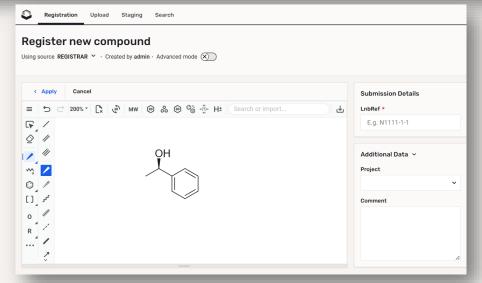
Early 2026: D360

Expansion of modality support

- 2025: Peptides, Oligonucleotides, Oligosaccharides
- 2026: Monomer library,
 HELM notation support, registration of
 peptides, oligonucleotides, followed by
 the handling of conjugates

Compound Registration

Design set



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Design Hub

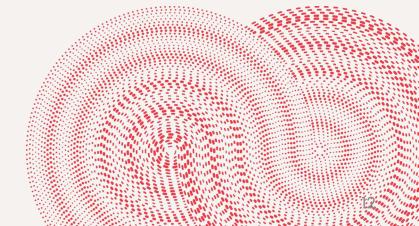
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2025 Highlights

- Matched Pair Searching
- SAR Matrix
- Enhanced support for external collaborations
- Registry workflow improvements

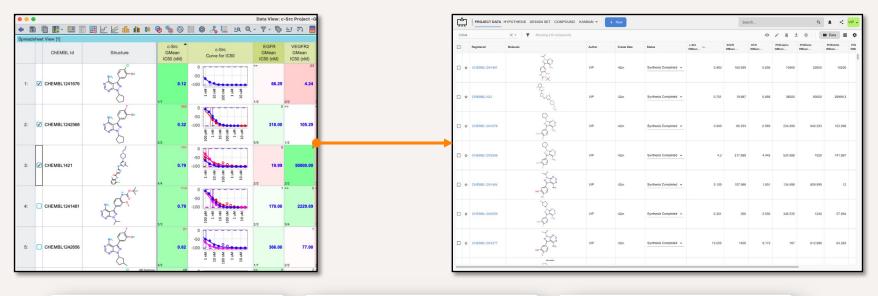
Next: Near-term Plans

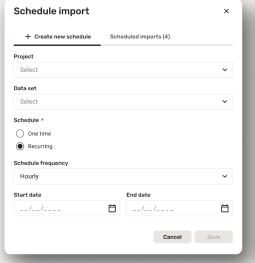
- Improved data synchronization with D360
- Complete the migration to (new) Marvin
- Image support for spreadsheet view



Next: Improved D360 Data Synchronization

CERTAINTY DISCOVERY



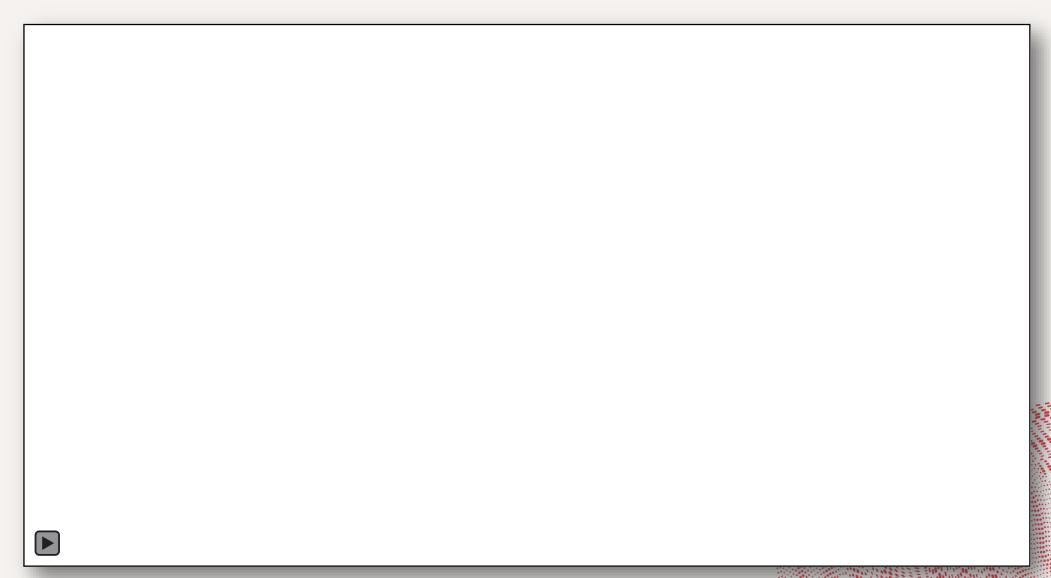


+ Create new schedule	Sche	eduled imports (4)	
Project			
Project A			~
Data set			
Data set A			~
Schedule *			
One time			
Recurring			
Schedule frequency			
Weekly			~
Start date		End date	
16 /06 /2025		//	

Project: Project A, Data set: Data se Next import scheduled: 2025.06.23. 13:		Weekl	y II	Û

Next: Improved D360 Data Synchronization





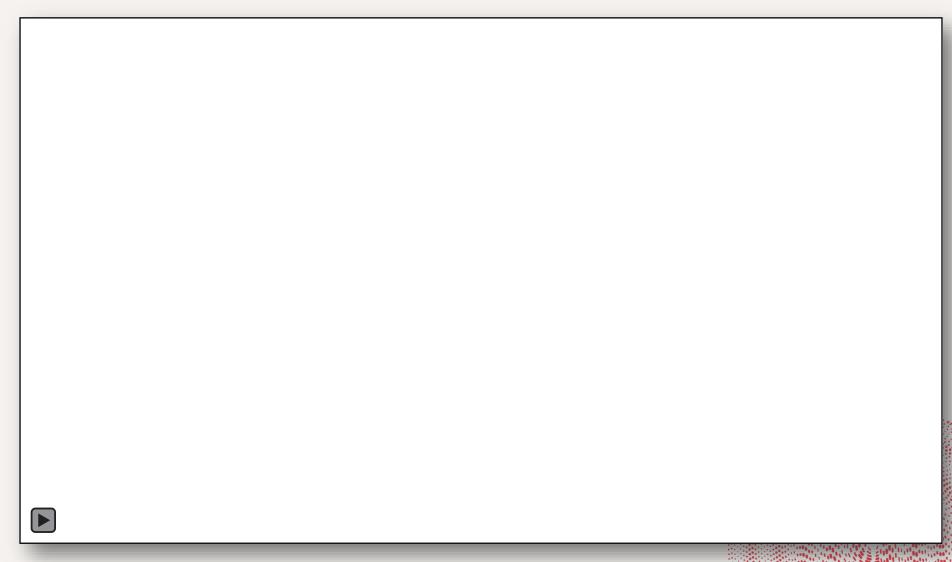
Next: Marvin!





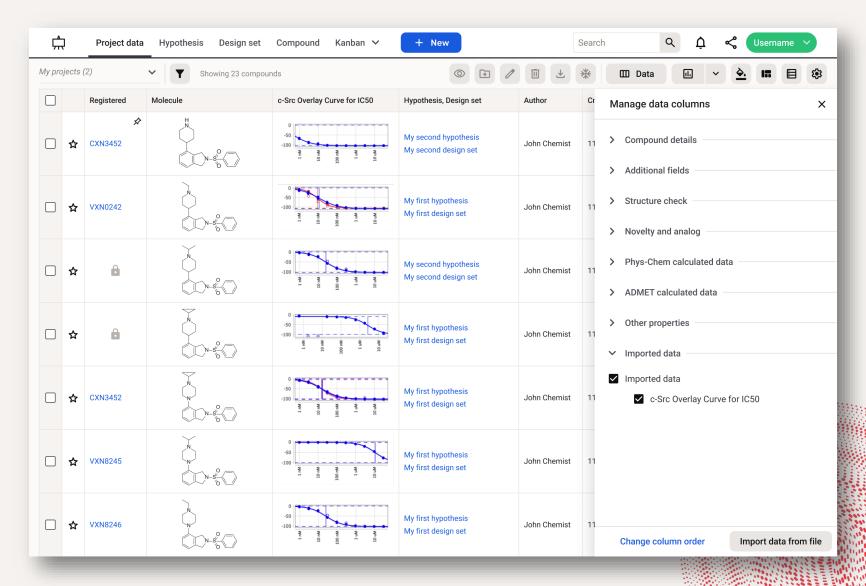
Next: Include Simcyp Results





Next: Image in Spreadsheet

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D360: Recent Highlights and Plans

2025 Highlights (D360 25.0 & 25.5)

Other modalities: Enhancement of sequence alignment

- Alignment of sequence subsets
- Manual sequence editing
- Undo and realignment

Data visualization

- Dynamic data subset viewers
- Chart error bars
- Overlaid dose-response curves from different assays

Workflow:

- Active filter gadget display
- Contains constraints with multiple values
- Elimination of blocking progress dialogs
- Improved spreadsheet row/column navigation

Next: Near-term Plans (D360 26.0 & 26.5) Antibodies and ADCs

- Display of sequence annotation
- Improved ADC data configuration capabilities

Design of Peptides

- Design of peptides in context of sequence alignment
- Capture of Design Peptides
- Use of external reference sequence

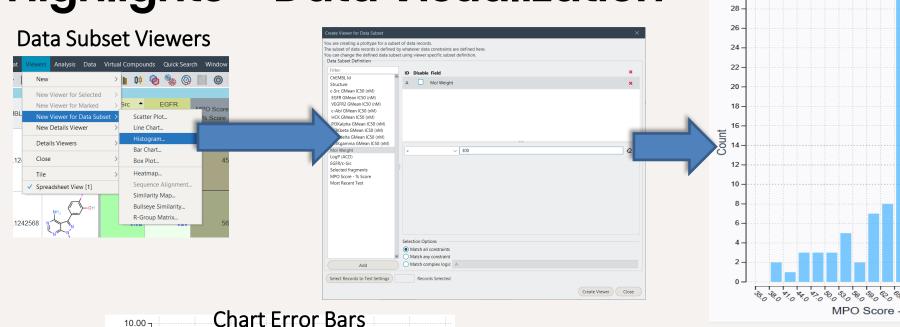
Workflow

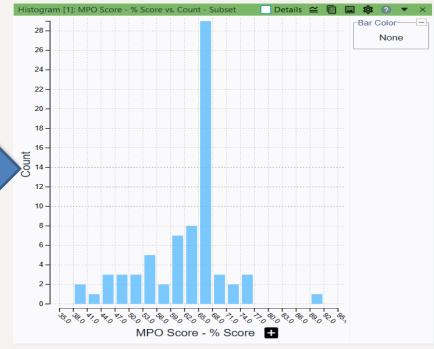
- Integration of Marvin
- Dynamic data series
- Integration of Secondary Intelligence

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Highlights – Data Visualization

Data Subset Histogram





9.00-8.00-7.00 Abl GMean IC50 (nM) 6.00 4.00 3.00 -2.00 -1.00 -0.00 -1.00 **CERTA** DISCO

-2.00

-1.00

0.00

1.00

c-Src GMean IC50 (nM)

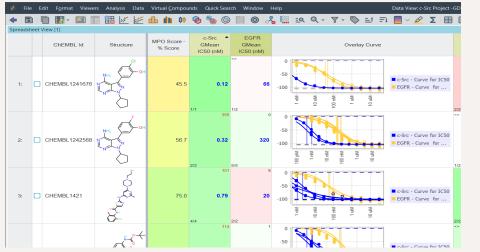
2.00

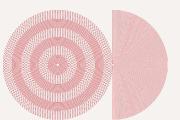
3.00

4.00

10.00 -

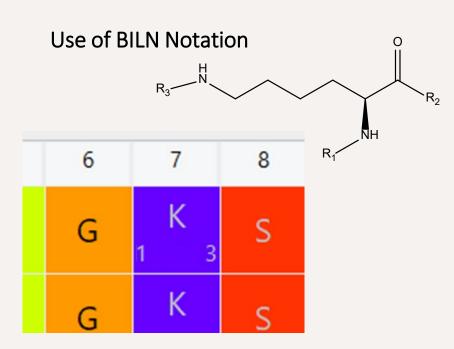
Overlaid Dose-Response Curves for Different Assays



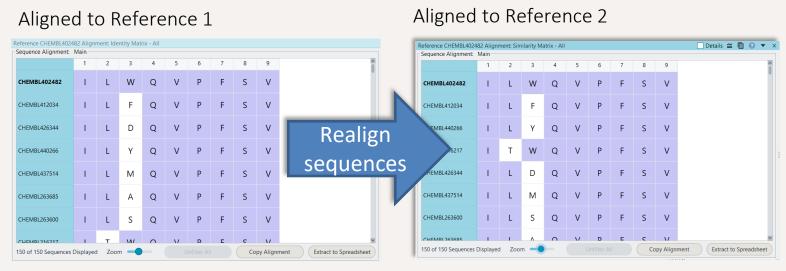


Highlights - Sequence Alignment



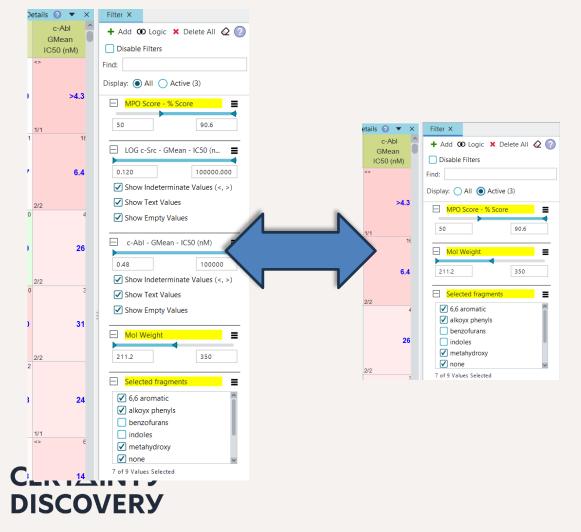


Realign Sequences

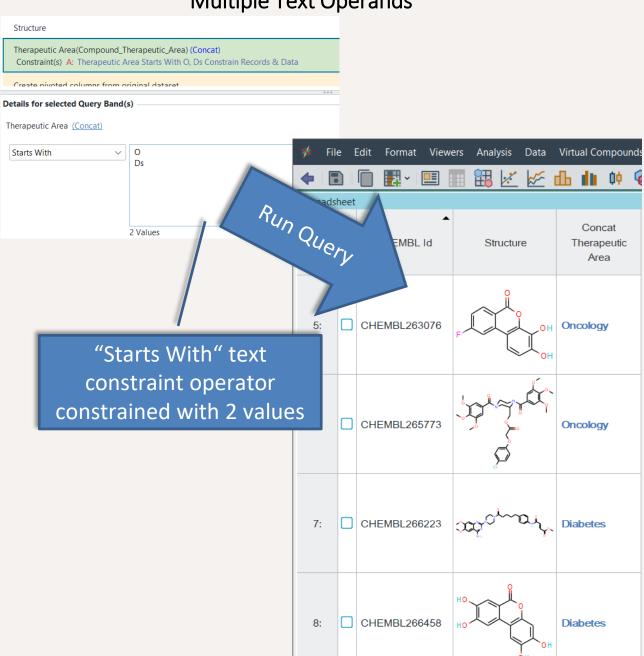


Highlights - Workflow

Active Filter Gadgets

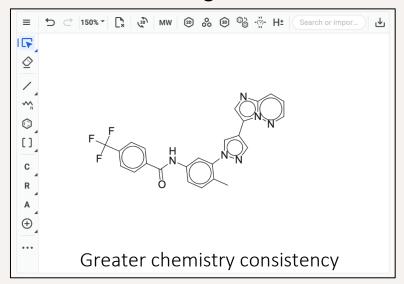


Multiple Text Operands

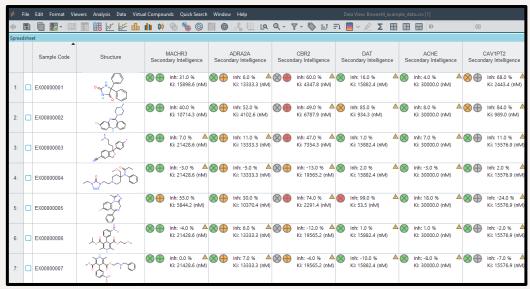


Near Term Plans: Workflow

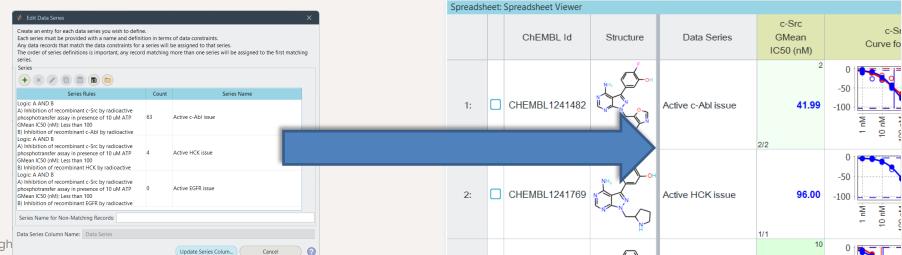
Marvin as an Integrated Sketcher



Secondary Intelligence Integration



Dynamic Data Subsets



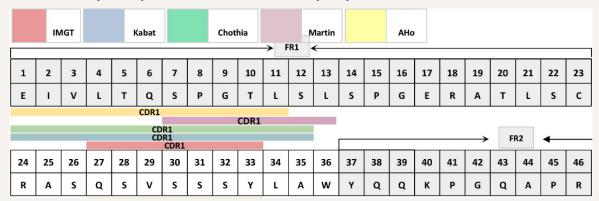
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Near Term Plans: Antibody and ADC Representation

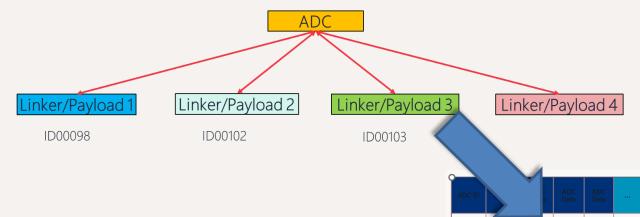
Antibody Sequence Feature Display

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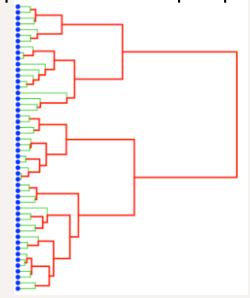
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Handling of Multiple Linker-Warheads

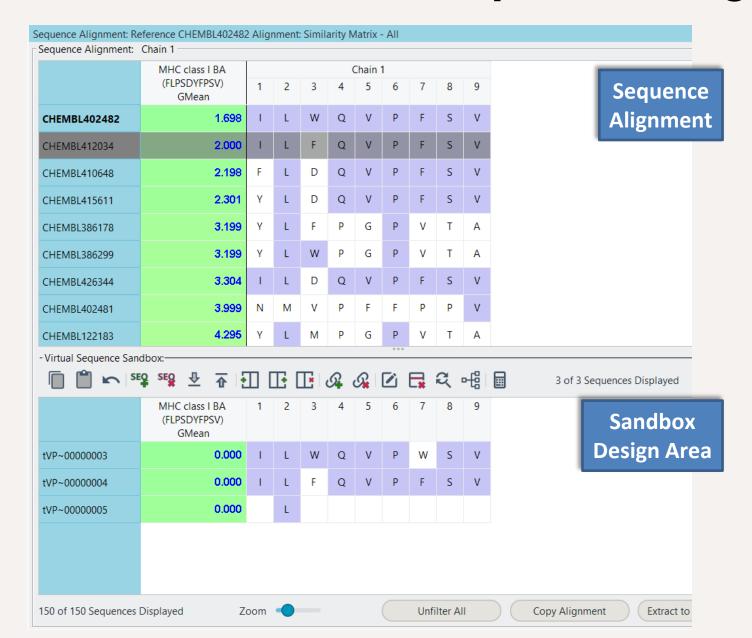


Antibody Sequence Relationship Display



ADC ID		Ca	ADC Data	ADC Data	 Data Target A ID1	Data Target A ID2	Data Target A ID3	Data Target B ID1	Data Target B ID2	Data Target B ID3	Data Target C ID1	Data Target C ID2	Data Target C ID3	Data Target D ID1	Data Target D ID2	Data Target D ID3	
O ID0025 6	** Freedom	123. 6	0.63	1.5													5
ID0098	Tre-man	160	>10	0.07													

Near Term Plans: Peptide Design



Key Capabilities

- Add/Delete Sandbox sequences
- Edit Monomers
- Add/Remove Chains
- Copy/Paste of sequences/monomers
- Sequence Calculations
- Find/Replace motifs
- Enumerate (e.g. ALA scan)

Workflow

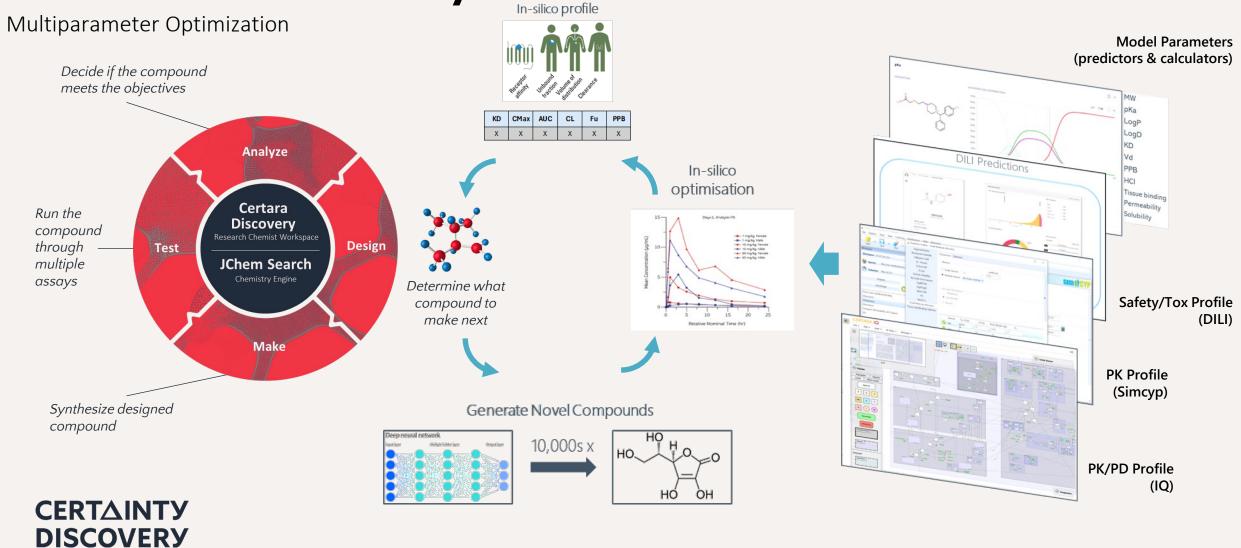
- Create and evaluate new sequences in the Sandbox
- Promote to dataset for further analysis
- Capture in database as Design peptides
- Retrieve in regular D360 queries

Long-term: A Convergent User Experience

..........



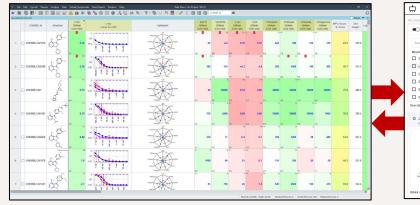
In-silico Models Can Enhance The Design Process in Discovery

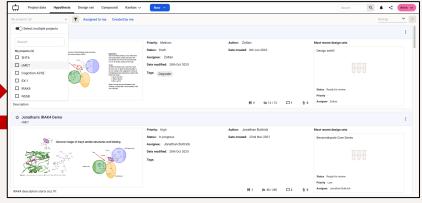


Today: Different Applications & Data Sources

Trying to build workflows is time consuming

D360





Design Hub

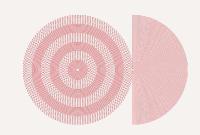
- Different data models
- Different back-end architectures
- Different user experiences



- Manual data exports and imports
- Manual data formatting & normalization
- Expertise required to run each application

We want to make it more streamlined & technologically robust





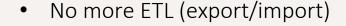
Future: Integrated Design and Analysis Application

D360 and Design Hub converging into a single design and analysis application

Dasign Hub

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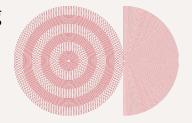
- Applications converge into a single solution
- Single solution for workflow integration
- Common set of features



- Enabling Automation
- Business efficiency and Scaling



Single holistic view of all your project data – Real, Design & Ideas



Future: Integrated Design and Analysis Application

Key Features and Benefits

Web-based

- Offered either as a SaaS solution or self-hosted
- Team-based project data access

Consistent chemistry model

Using Marvin and Chemaxon toolkit (CCL)

Improved workflow and data sharing

Utilizing our data orchestration layer

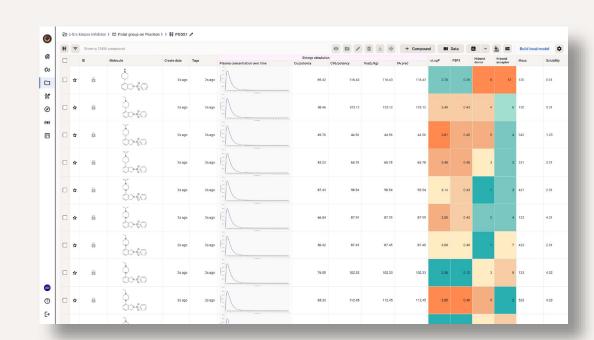
Comprehensive access to AI services throughout

Throughout aspects of Analysis, Design and Make

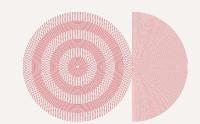
Simplified deployment and set-up

- Improved connectivity to customer and third-party apps
- Reduce the time to Go-Live

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Certara Discovery



Future: Integrated Design and Analysis Application

Certara Development Investment

Focus will shift to the new software solution

- Ensure existing workflows from each product are preserved
- Combine the best features from each product
 - E.g., Web application, Query interface, Kanban board, Hypothesis capture
- Merge duplicate features between Design Hub and D360
 - E.g., SAR table, MMP Analysis, library enumeration

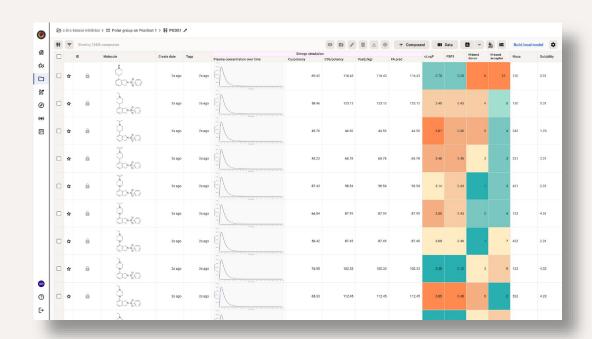
Target 1st commercial release: Q4 2027

Early access opportunity for interested customers

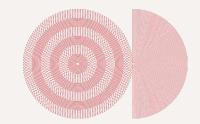
Customers can continue to use our existing applications

- Continue to support and maintain D360 and Design Hub
 - Until the new solution reaches appropriate functional level
- Will formulate a transition plan

To support current customers of each product CERTAINTY
DISCOVERY



Certara Discovery



Portfolio Timeline*

* Disclaimer: As with all timelines, this is a plan, not a commitment!

2025

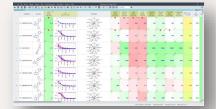
2026

2027

Design Hub:



D360



Certara Discovery



- Synch data with D360
- Marvin integration
- Image support for spreadsheet view
- Support customer deployments
 Maintenance & support only
- Maintain product

- Dynamic Data Subset viewers
- Manual sequence editing/undo
- Chart Frror Bars
- Active Filter gadgets

- Peptide Design
- 2º Intelligence Integration
- Ab: Sequence features
- Marvin integration

Other modality analytics

- First Alpha
- Beta testing

 First commercial release (V1.0)

Acknowledgements

With grateful thanks to colleagues that have helped prepare this presentation

With Special Thanks to

Rob Aspbury
Roland Knispel
Richard Jones
Csaba Peltz
Andras Stracz
Luca Szabo
Anna Tomin











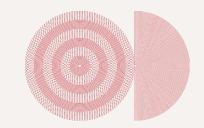












Thank You!



