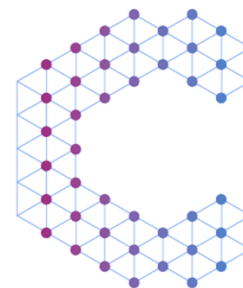


Dementia  
Discovery  
Fund



DDF  
CNS  
Library

# DDF CNS-Biased Small Molecule Library

Contact: [ddfchemco@svhealthinvestors.com](mailto:ddfchemco@svhealthinvestors.com)

Tel: +44 20 7421 7070



HEALTH INVESTORS

- The Dementia Discovery Fund has acquired a CNS-focused, 500,000 compound, small molecule library
- The DDF CNS Library will enable DDF companies, partners and collaborators, to rapidly, cost-effectively test novel discovery hypotheses, towards the DDF goal of increasing the breadth and number of therapeutic approaches in development for dementia
- The DDF CNS Library is housed in Basel at the HTS (Aptuit) site of Evotec, an integrated drug discovery CRO with expertise in compound library management, high throughput screening, selectivity testing, and hit characterization. Evotec will perform and facilitate screens against the library on behalf of DDF CNS Library customers
- If you are interested in screening against the DDF CNS Library as part of a DDF investment in your company/project or on a fee-for-service basis, please contact [ddfchemco@svhealthinvestors.com](mailto:ddfchemco@svhealthinvestors.com)

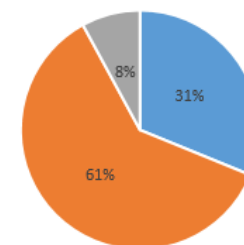
- >500,000 compounds
- Diversity-driven
- Proven source of HTS hits on diverse targets, from which drug candidates have been developed.
- 53 screens have been conducted using this library, each identifying effective hits suitable for moving into lead ID efforts

## Library composition:

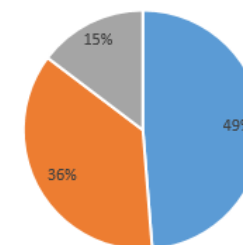
- Reference and novel compounds, including 4,480 compounds that are drugs, clinical candidates and known pharmacologically active compounds
- 1,892 known kinase-targeting compounds, including allosteric modulators, ATP-site compounds, novel and literature compounds
- 175,000 compounds make up the 'Diversity Representative Subset', computationally-selected to capture the diversity of the full collection for capacity-limited screens
- Cherry picking of compound subsets from the full library can be performed by Evotec for targeted screens

Subsets	Size	Use
'High value'	320,000	Widespread screen
Diverse representation set	175,000	HTS 'elite' set
Kinase library	2,000	Kinase specific
Drug library	4,500	'Serendipity' screen

'High value' set (320k)



Diversity representative set (175k)

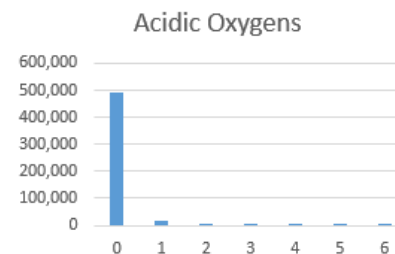
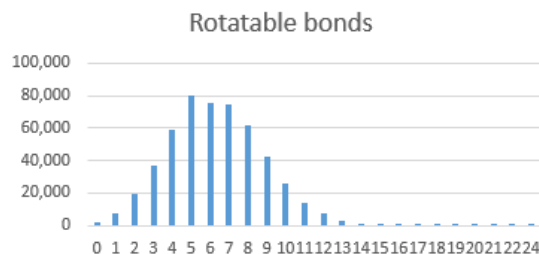
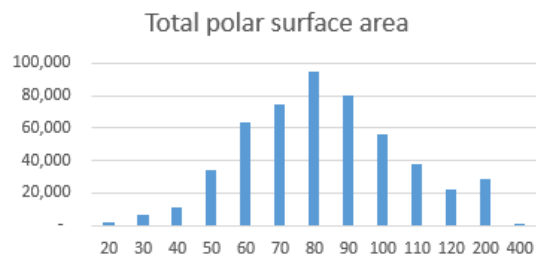
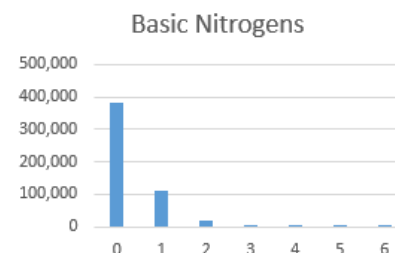
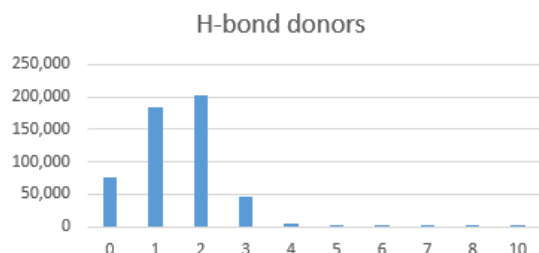
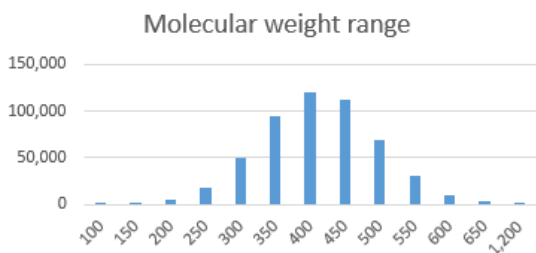
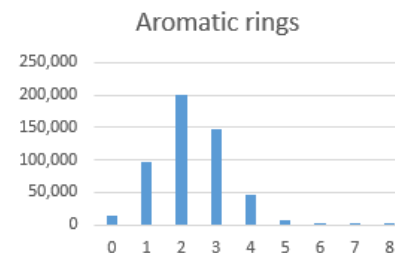
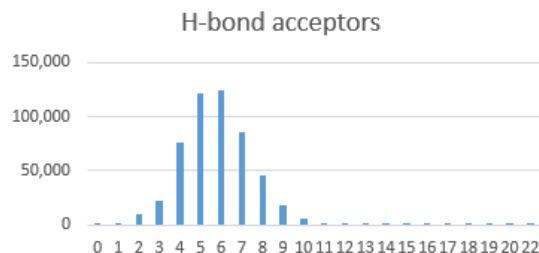
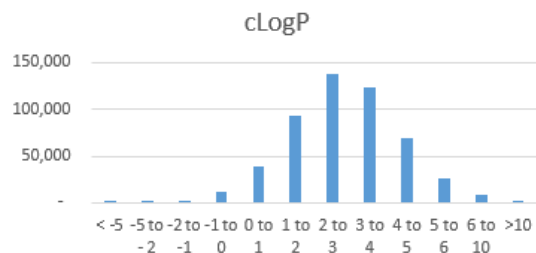


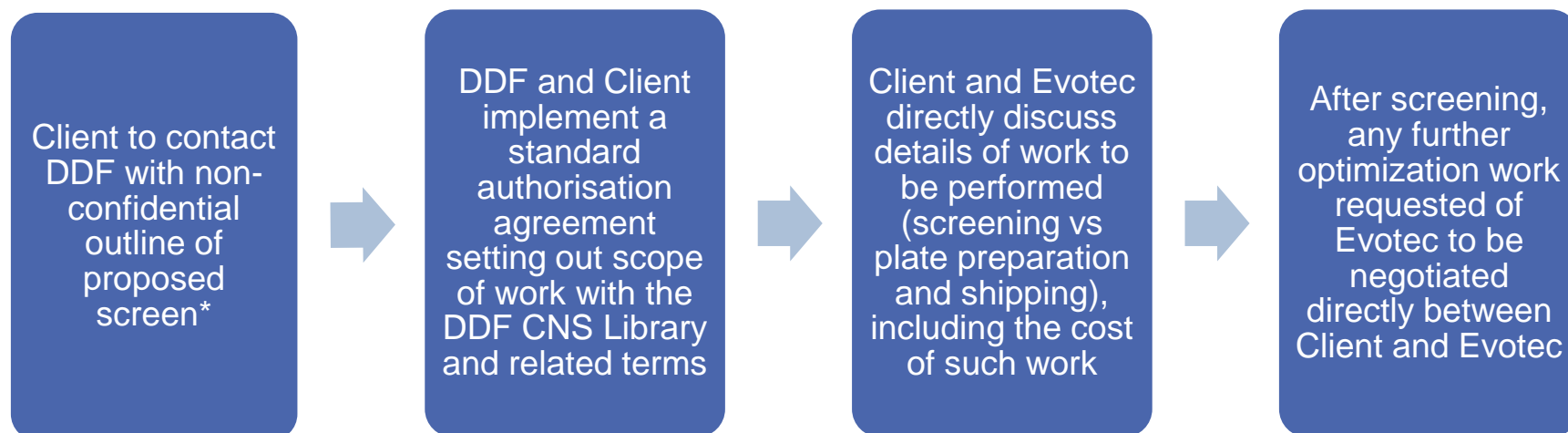
■ Category 1 ■ Category 2 ■ Category 3

Filters	Category 1	Category 2	Category 3	Category 4
	pass:	not within Cat 1, but pass:	not within Cat 1 or 2, but pass:	outside Cat 1-3
MWt	150-375	150-475	150-600	
Heavy atom count	11-25	11-32	11-40	
cLogP	1-4	-1.5-5	-2-7	
H-bond acceptors	0-7	0-9	0-11	
H-bond donors	0-2	0-3	0-4	
H-bond acceptors + donors	1-7	1-10	1-13	
Rotatable bonds	0-5	0-8	0-12	
Total polar surface area	0-80	0-120	0-160	
Pos charge	0-1	0-1	0-2	
Neg charge	0	0-1	0-1	
Rings	1-3	1-4	1-6	
Aromatic rings	0-3	0-4	0-5	

# Library characteristics

The library shows good distributions across drug-like ranges for key properties:





\*Contact [ddfchemco@svhealthinvestors.com](mailto:ddfchemco@svhealthinvestors.com)

Useful information to include:

- Whether screening requested to be run at Aptuit or elsewhere (i.e. request for plated compounds to be shipped)
- Nature of the assay (e.g. biochemical, phenotypic, current format/throughput)
- Screening of entire library or selected subset

- **Screening practicalities**
  - **How much stock is there and at what concentrations?** For a fee, you may request a daughter set of echo-compatible plates at 10mM in 100% DMSO with sufficient volume to create assay ready plates for an HTS, hit confirmation, and follow on dose response curves. Assay ready plates at the appropriate concentrations (as high as 100uM) may also be requested. We are unable to supply large quantities of compounds such as those required for synthesis purposes
  - **What are the limits to the number of times we could screen as part of a collaboration?** DDF CNS Library will function as a fee-for-service company, in principle with no limit to the number of screens any customers may request
  - **What are the considerations for stock depletion by various groups using the library?** There is sufficient stock for dozens of HTS per year; we will re-synthesise as required
  - **What sort of plating is available? Assay ready or daughter plates requiring further dispensing?** Either can be made available
  - **Does Evotec have the capacity for acoustic dispensing?** Yes
  - **My assay is difficult to transfer – can I screen in my own lab?** Yes, you can either have your screening performed at Evotec or plated compounds provided
- **Can we cherry pick compounds of interest to be plated for screening?** – Yes – Evotec has the capability to cherry pick compounds for targeted screens. This can be compound based or plate based, depending on number of compounds to be cherry picked, budget and compound distribution.

- **What is the down-stream process should a series be identified from the library? What happens if two groups independently find the same compounds and wish to optimise, and ultimately create CoM patent applications?**
  - The DDF CNS Library is a non-exclusive resource and we do not plan to remove compounds that have been identified as hits from the library. We would consider offering reasonable lead time to enable both parties to achieve their goals should two groups independently identify the same hit compounds and wish to optimize them
- **Am I able to screen the library if DDF is not invested in my company?**
  - Yes, the DDF CNS Library is available to customers whether or not DDF is an investor
- **Am I able to access the SD file?**
  - Yes, free of charge
  - To access the SD file please write to [ddfchemco@svhealthinvestors.com](mailto:ddfchemco@svhealthinvestors.com) including the following details:
    - Name
    - Institution/Company
    - Reason for requesting SD file access
    - Interest in screening the DDF CNS Library
    - Primary indication/disease area
  - The SD file can be made available to you through our secure site, behind a click-through CDA

- **What are the ballpark costs for screening the library?**
  - Ballpark costs are below, based on a generic HTRF assay format and exclusive of shipping and assay specific reagents and consumables costs
  - Final pricing for particular programs may deviate from ballparks depending on scope, magnitude, workflow and other factors

Ballpark prices		\$'000		
# Compounds plated/screened	<i>In Silico</i> * (full library)	Up to 50k	51 - 100k	101k+
Plated compounds	0	45	65	132
Screening at Aptuit	18**	81	110	214

*\*Reasonable follow up compounds can be accessed at cost. E.g. 100 – 1,000 compounds at \$2-3.5k excluding shipping*

*\*\*For virtual screening, a typical target with 3D structure (pharmacophore or structure-based) and 513,000 compounds is envisaged (exclusive of compound provision or experimental work)*