



How is Edelris making it possible?

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Introduction

In 2013, Edelris set up the production tool required to meet the target of assembling a collection of 40,000 compounds within the E.L.F. consortium, based on a Lean 6 Sigma approach. For 2017, a diminution of validated scaffolds from our productive academic partners (Univ. of Leeds & DTU) was anticipated due to budget reallocation. A plan of action was implemented and taken forward, to maintain the high and demanding production rate required to deliver the Public Compound Collection.

The Lean Six Sigma approach

This powerful approach relies on a collaborative effort to improve performance by systematically removing non-value adding tasks and reducing variation of the process. It combines 2 philosophies:

- Lean to increase productivity (eliminating waste) by identifying influential factors
- Six Sigma to improve quality (minimizing variability) by using descriptive and inferential statistics









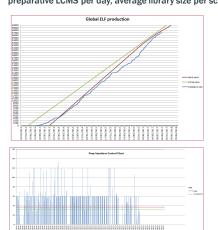






Monitoring our production

Different Key Performance Indicators have been introduced to monitor our performance and adjust the production, depending on external factors: Production Success Rate (P.S.R. is equivalent to Rolled Throughput Yield), number of injections in preparative LCMS per day, average library size per scaffold, etc.



	average # cpds / closed project
	,
634 cpds	

	72%	2013
	78%	2014
P.S.R.	82%	2015
	78%	2016
	85%	2017

	#projects	#w/o matrix and repurif
LEEDS	34	18717
DTU	16	8004
EDELRIS	18	8309
EXT	1	177
TOTAL	68	

32 injections

Conclusion

We have showcased the Lean Six Sigma approach for systematically improving the performance and consistency of our production. A series of actions ranging from scaffold design to delivery were implemented to smoothly manage the endgame of the project. The 40,000th compound will be successfully delivered to the Public Compound Collection on time, by the end of the year .

Delivering 40,000 compounds from 70+ scaffolds

In 2016, the 40K Compound Initiative was set up to define the endgame strategy to maintain the project pace until the end of the European Lead Factory project. 5 key actions were implemented:

1) Edelris' scaffold proposals

Scientists could submit a scaffold idea, which was reviewed by an internal selection



2) Produced scaffolds boost

Straightforward and successful libraries were identified and their potential expansion



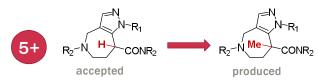
3) Repurification

A significant number of final compounds did not meet the E.L.F. validation criteria after isolation. The potential success of being validated after repurification was evaluated.



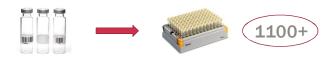
4) Rescaffolding

A few scaffolds accepted by the Library Selection Committee did not result in an experimentally successfully validated project. Therefore, our scientific committee analysed and ranked these projects, brainstormed and came up with suitable changes.



5) From vial to Matrix tube

Sharing and understanding our respective processes with BioAscent enabled us to ship final compounds complying with ELF criteria in optimised quantities.













































Nottingham M.C.



















