

## Toulouse Sample Management (SM): a custom, dedicated, state-of-the-art facility



Over 25 years of innovative compound management support to R&D, enabling expertise in sample management, automation and project management  
Building designed for optimized sample flow, temperature and humidity control, fire and flood detection, zone access control for enhanced safety and security

### Customer

- Compound specifications:
- Biological activity/Structural diversity
  - Quantity/concentration/purity

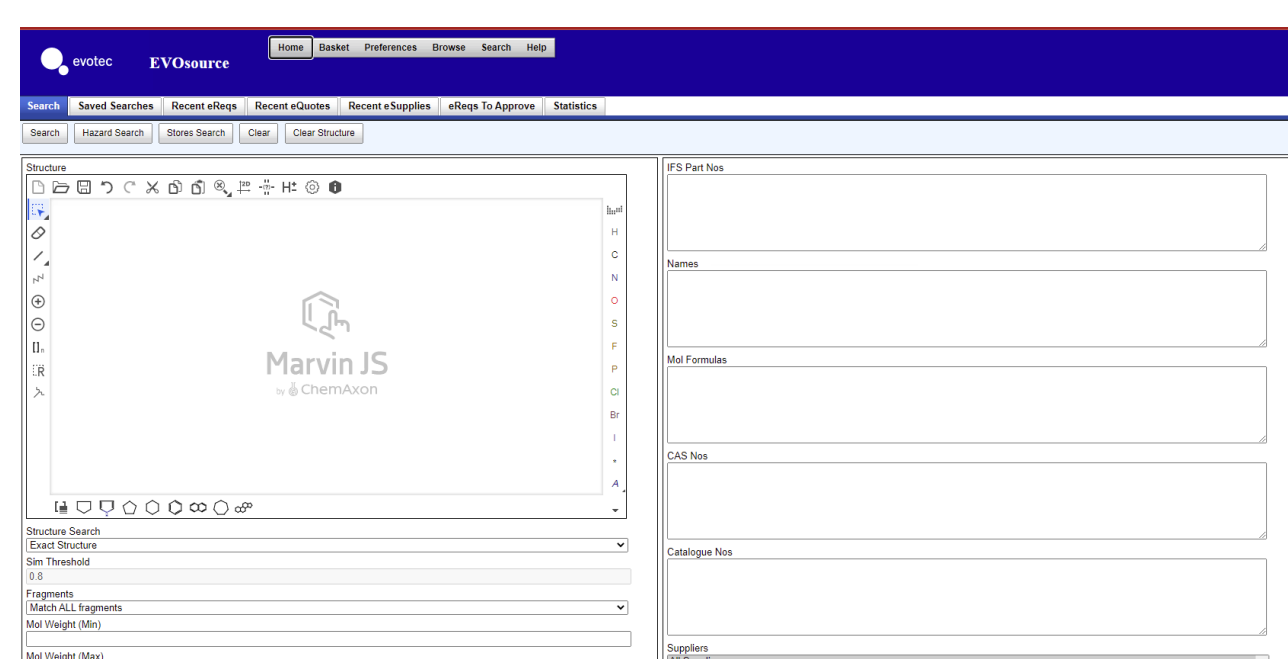
### EVOTEC Abingdon Sourcing Team

### Compound acquisition

#### A) Small compound request < 500 compounds

##### Proprietary Evosource Database

- Access to 45+M commercially available compounds from >350 vendors
- Automatic quote request
- Search based on structure
- Compliance check



#### B) Large compound request > 500 compounds

- Selection of best suppliers
  - Availability & Purity & Delivery time
  - Price negotiation
- Compliance check
- Labware management

Shipment of 5000 compounds to the Toulouse Sample Management facility



### EVOTEC Toulouse SM Team

### Reception, Registration, Plating

#### 1) Data Workflow

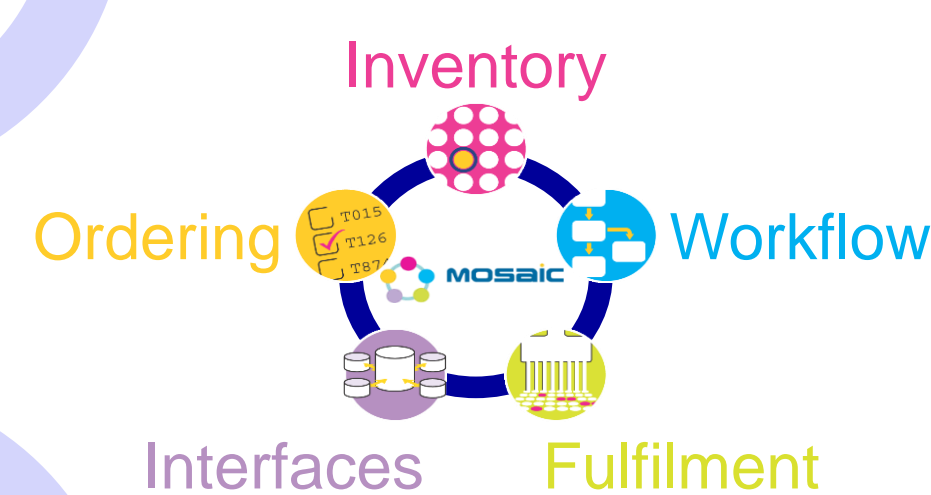
##### i – Compound registration

Dotmatics

- Webservices push data to Mosaic
- Compound information
  - Barcodes



##### ii - Inventory and guided order fulfilment in Mosaic



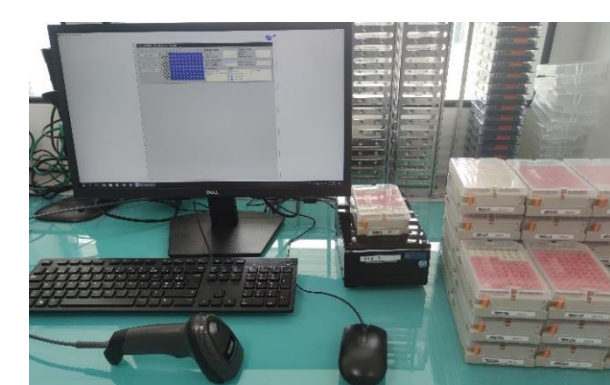
##### iii - Platemap generation by SM TLS



#### 2) Physical Compound Flow

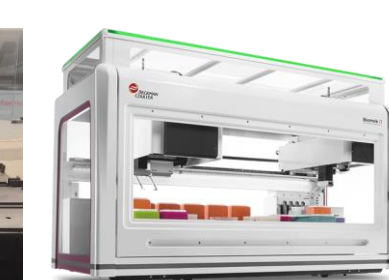
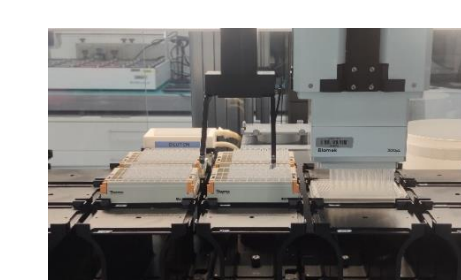
##### Compound physical reception

- Physical integrity check
- Barcode check
- Dedicated layout for plating



##### Plating out 5k compounds in 8 copies

- On the fly dilution
- Dedicated layout, format and platetype
- Beckman I7 pipetting head platform



##### Lead time of 3 days

- 2 robotic runs for 96wp and 384wp outputs
- 1 FTE for 2 days



### EVOTEC Toulouse SM – QC team

### Quality control by UPLC-MS

#### Compound QC

- Method used: generic method pH=3 global analysis time of 3 mn
- Column Acquity CSH C18 0=55°C
- Gradient:

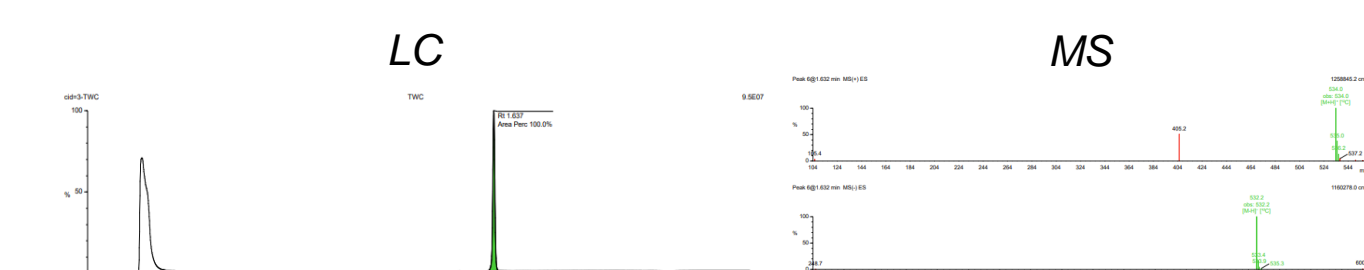
Time ( min )	% A	% B
0	95	5
2	0	100
2,5	0	100
2,6	95	5
3	95	5

Solvent A:  
H<sub>2</sub>O + 0.02% HCOOH  
Solvent B:  
CH<sub>3</sub>CN + 0.02% HCOOH

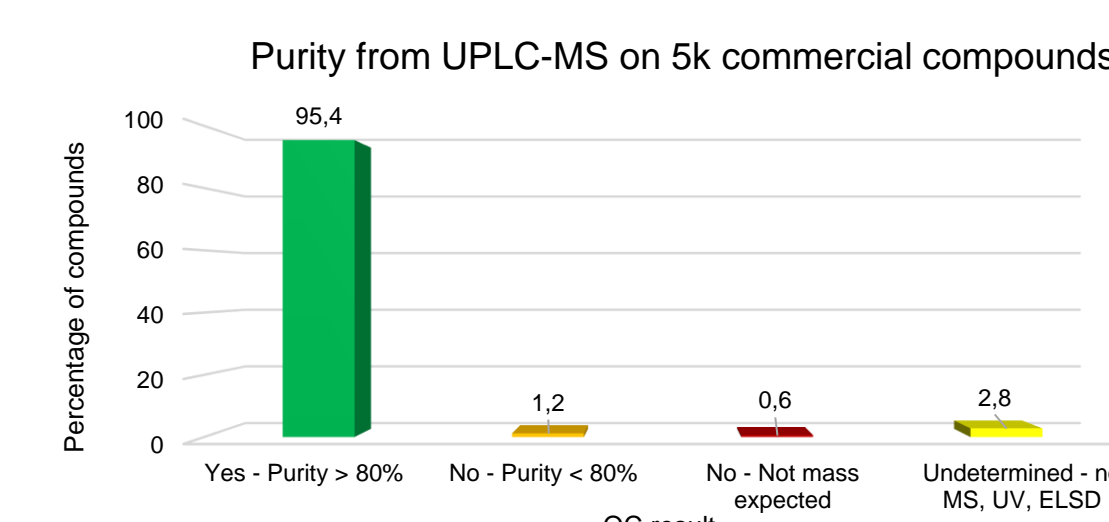
**The most efficient method & adapted to the majority of pharmaceutical research molecules**  
MW from 90 to 1000 kDa

Waters™

- Mass detection: Electrospray + and -
- UV detection wavelength: 210-400 nm
- ELSD detection



- Data recording and analysis
  - High throughput method
  - 2 UPLC-MS in parallel 24/6 for 12 days
  - 1 FTE for a month

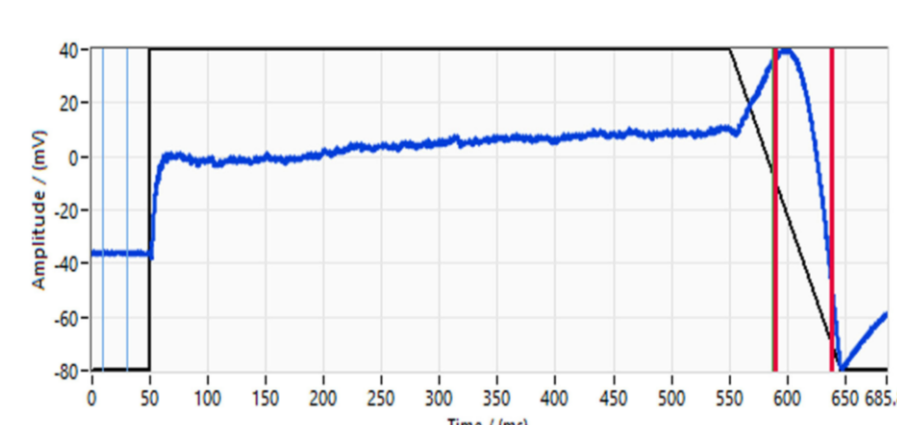


### EVOTEC ADME-T & IVB teams

### Biological assays

#### Evotec Verona

- hERG inhibition assay
  - 10µM compounds
  - % inhibition reported



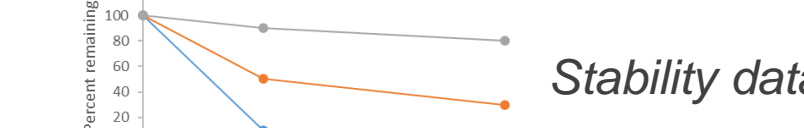
#### Evotec Alderley Park

- Thermodynamic solubility
- CHI – LogD pH7.4
- Plasma protein binding
- Mouse microsomal clearance



#### Evotec Framingham

- MDR1-MDCK permeability
- Human hepatocyte stability
- CYP reversible inhibition
- CYP3A4 TDI



## Lead optimization

Day 1 Day 2 Day 3 Day 4 Day 6 Day 10

CRO from India

- ~30 compounds
- Weekly Shipment

Evotec logistic team:

- Dedicated broker
- Customs documentation

Evotec TLS – RI:

- Data registration

Reception in TLS:

- Solubilization
- Plating in 7 copies
- Shipment to 3 EVT sites

ADME-T:

- Biological Assays

Results available for customer



Evotec set up an optimized process based on customers requirements and a dedicated logistic workflow to minimize cycle times



**Evotec demonstrates its versatility, efficiency and adaptability at the service of drug discovery for customer's projects**