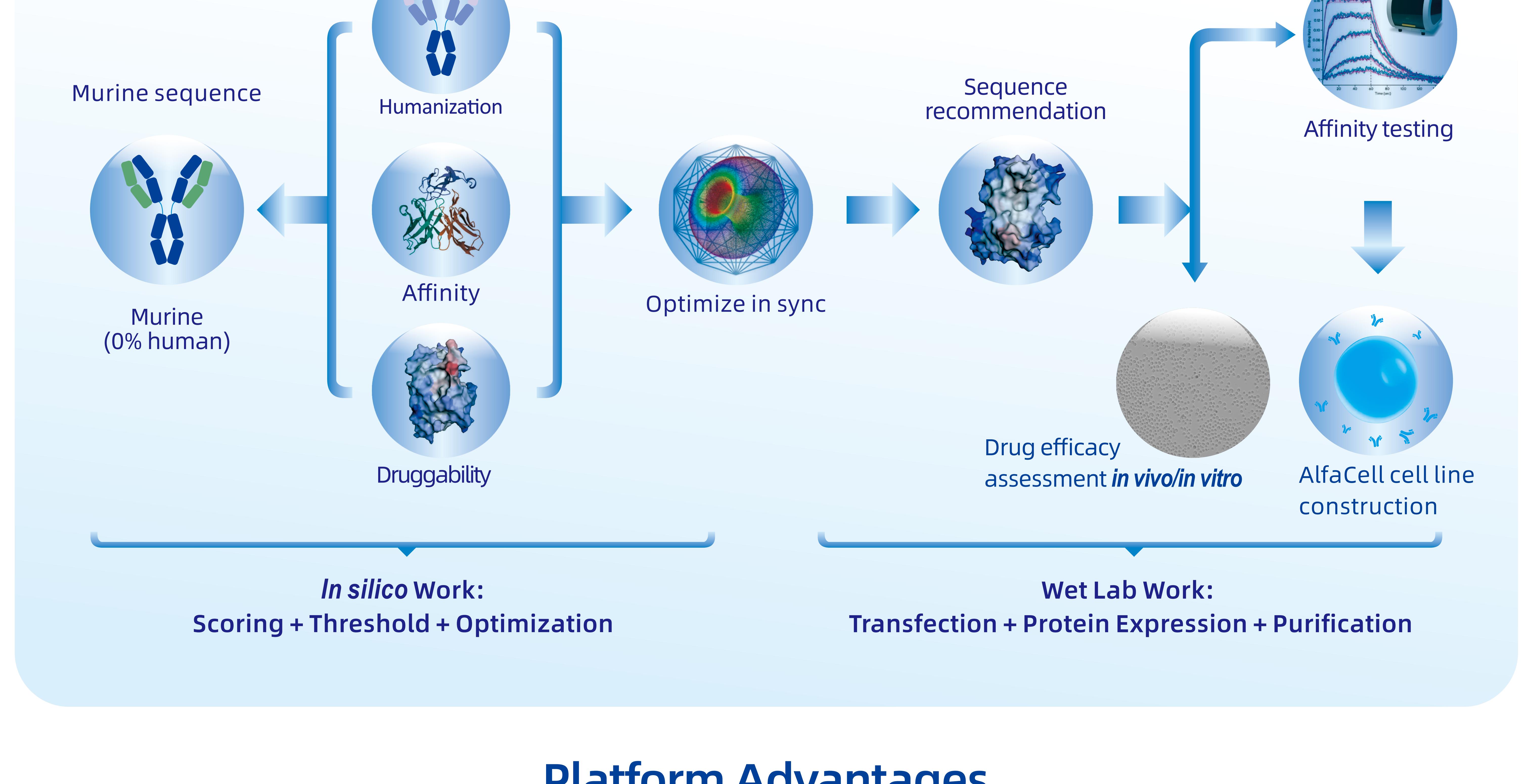




LinkedIn

AlfaDAK

Bio-product Molecule Design and Optimization Platform



Platform Advantages

5 mins - Assessment report

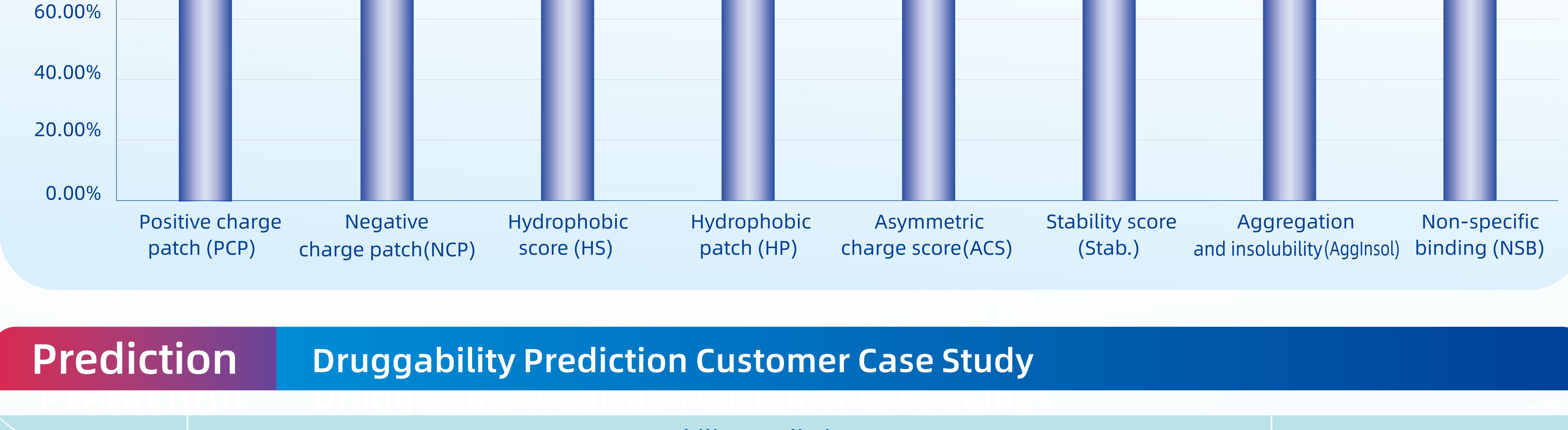
5 days - Optimization report

Optimized 3 to 1 package (Humanization + Affinity + Druggability)

In silico work instead of wet lab work

Accuracy

Provide Verified Cut-off Value for Antibody Druggability



Prediction

Druggability Prediction Customer Case Study

Parameter Sample	Druggability prediction						Wet lab validation		Wet lab results	In silico prediction vs Wet lab results
	Humanization score (Normal: 0.5~1)		Non-specific binding (Normal: < 1)		pI	Structure stability (Normal: > 56)	Viscosity score (Normal: < 1)	Aggregation score (Normal: < 1)		
	(Normal: 0.5~1)	(Normal: < 1)	(Normal: > 56)	(Normal: < 1)		(Normal: < 1)	(Normal: < 1)	(Normal: < 1)		
A001	0.72	0.16	9.02	54.1 ↓↓	54.1 ↓↓	1.49↑	1.49↑	1.5↑↑	Precipitation	Identical
A002	0.03↓↓	0.56	6.97	51.7 ↓↓	51.7 ↓↓	1.11↑	1.11↑	1.11↑	Precipitation	Identical
A003	0.55	0.41	8.16	58.3	58.3	0.14	0.4	No precipitation	No precipitation	Identical
A004	0.72	0.43	8.12	54.1 ↓↓	54.1 ↓↓	1.49↑	1.49↑↑	1.49↑↑	Precipitation	Identical
A005	0.03↓↓	1.125↑	9.02	58.2	58.2	0	0.5	No precipitation	No precipitation	Identical
A006	0.72	0.28	8.51	54.1 ↓↓	54.1 ↓↓	1.49↑	2.5↑↑	2.5↑↑	Precipitation	Identical
A007	0.97	0.75	7.78	56.2	56.2	0.85	0.98	0.98	Precipitation	Identical
A008	0.42↓	1.25↑	8.92	55.6↓	55.6↓	0.44	1.08↑	1.08↑	Precipitation	Identical

Data fill in red, indicating that the value exceeds the normal range.

Maturation

Improve in Affinity Customer Case Study

WT	Variant-1	Variant-2	Variant-3
Sample ID	ka (1/Ms)	kdis (1/s)	KD (M)
WT	6.767E05	1.967E-03	2.907E-09
Variant-1	2.815E05	1.733E-04	6.166E-10
Variant-2	4.808E05	1.854E-05	3.856E-11
Variant-3	3.918E05	5.426E-07	1.385E-12
Ratio			
			1
			4.7
			75.4
			2098.9