

Human Therapeutic Antibody Platform

Accelerate the development of next-generation biotherapeutics

Company

YUMAB is a privately-held German CRO with a subsidiary in the US and develops therapeutic antibodies using one of world's largest natural human antibody libraries (>10e11), patient derived or immune libraries (also from different animal species).

YUMABs integrated discovery and engineering platform offers highest success-rates to all types of antigens including "difficult" targets such as GPCRs or ion channels. YUMAB provides all technologies from target to optimized lead in one hand. Our technologies include fast track in vitro antibody selection and screening (also directly on cells), antibody engineering and bioinformatic lead optimization.

YUMAB is active in a number of collaborations and in its spin-out CORAT Therapeutics, which developed the novel safety optimized human antibody COR-101 to treat COVID-19 in hospitalized patients. The project took only 4.5 months from target to final lead and 11 months from target to the clinics.



YUMAB - At a glance

Ultra-fast hit discovery

- natural antibody sequences from superior universal human germline libraries
- direct, targeted in vitro selection on target molecules and/or cells within weeks
- no animal use, low toxicity and immunogenicity

Advanced research

- versatile, universally applicable technology
- smooth translation from bench to bedside
- innovative research and diagnostic tools

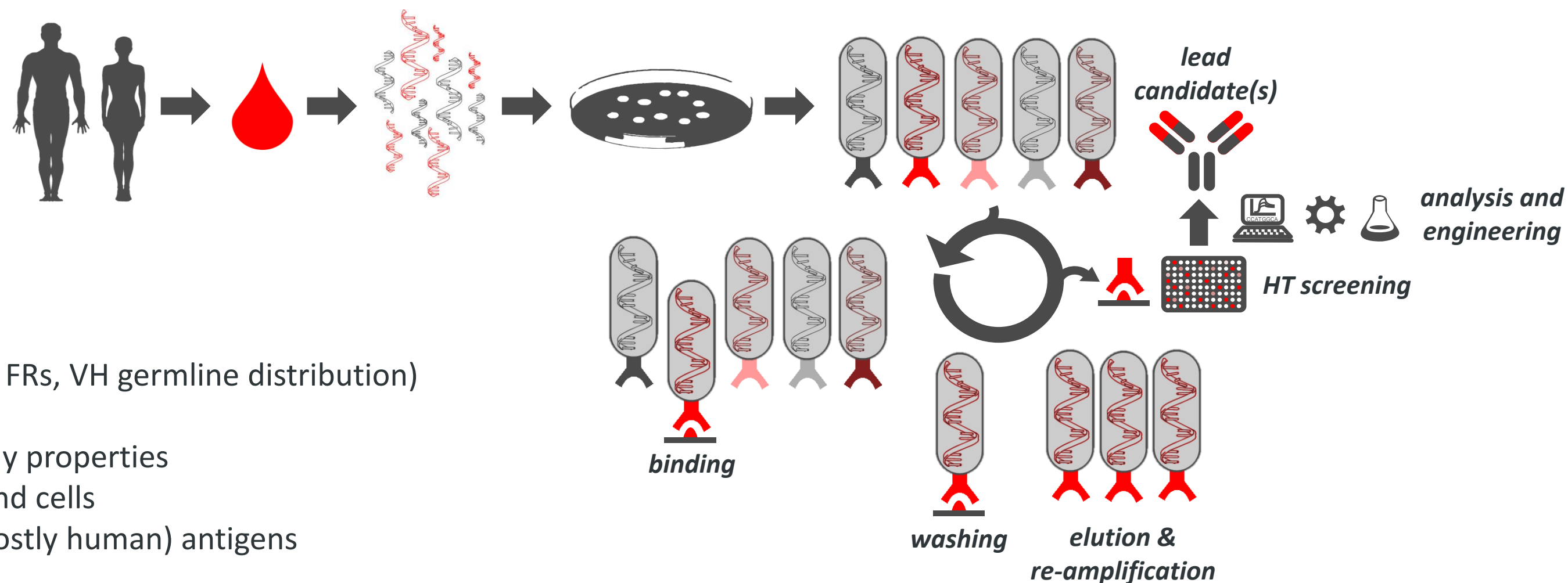
Efficient lead development

- close-to-germline candidates
- all antibody formats, all therapeutic indications
- robust process, high success rates

Flexible collaboration

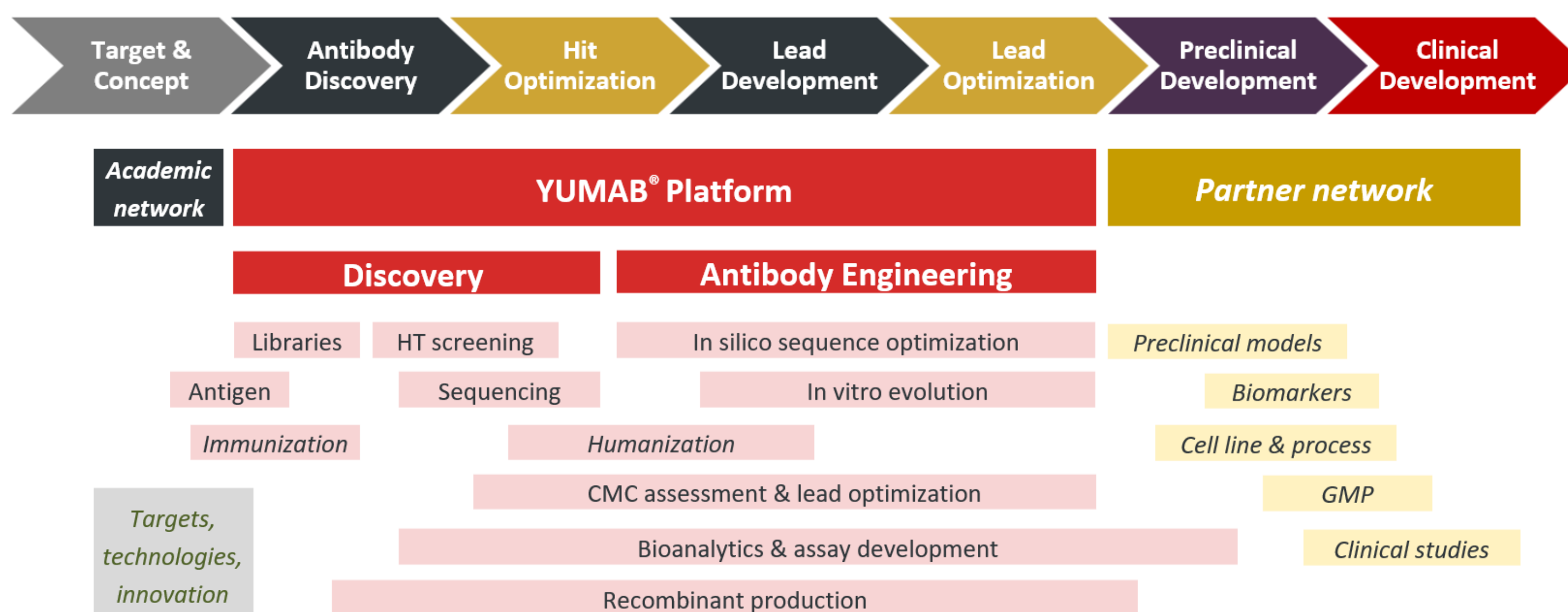
- CRO: Fee-for-service projects and flexible license options
- collaborative development
- out-licensing of internal lead candidates

Technology: Fully human derived antibody libraries combined with powerful in vitro selection



- natural and fully human antibody repertoire (CDRs, FRs, VH germline distribution)
- highly diverse (10^{11})
- in vitro antibody selection for pre-designed antibody properties
- HT screening with soluble antibodies on antigens and cells
- proven functionality to more than 600 different (mostly human) antigens

Platform: Connecting target innovation with clinical development



Services: Rapid – Robust – Reliable



Custom-made state-of-the-art antibody libraries

- universal and fully human
- huge diversity, in vivo or variable germline distribution
- library stocks, antibody-phage and manuals provided



Customizable antibody formats

- fully human IgG
- recombinant formats
- all isotypes and chimeric variants



Antibody analysis

- biological activity
- biochemical characterization



Human antibody discovery by antibody-phage display

- in vitro antibody selection for pre-designed antibody properties
- all antigen types
- HT screening with soluble antibodies on antigens and cells



Production & purification

- in house throughput antibody production
- purification
- testing & validation



Antibody engineering

- in vitro evolution technologies (light chain shuffling, mutagenesis)
- rational design
- bioinformatic optimization