



Recent development
& future direction



Protein Engineering CRO

DNA, protein, antibody, stable cell line

Engineering & production

Bioassays



Build Efficiency

Custom software and automation

Process standardization and streamline

Gene synthesis in house

High throughput cloning & production

Batch production of 96 recombinant antibodies



LakePharma DM

Project management system

Cloud-based

Real time team collaboration

Live client communication

LIMS, ERP, inventory, training records, data archive



LakePharma Bioanalytics Group

Started in 2013

LabChip CE on every protein produced

cIEF, DSC, DLS, HPLC, UPLC, Solo ...

Mass spec

de novo antibody sequencing

BA@lakepharma.com



CHO Stable Cell Line Development

CHO-GSN™ launched in 2015
Proprietary CHO GS knockout cell line
Complete lineage documentation
Freedom to operate
Open manufacturing platform

RCB@lakepharma.com



Antibody Engineering Group

Started in 2011

Antibody humanization

Affinity maturation

Immune library construction and screening

Antibody functional assays

Bispecific antibody engineering

AE@lakepharma.com



Antibody Discovery Group

Started in 2016

Immunization in house

Therapeutic antibody discovery campaigns

Trianni human antibody discovery platform

Discover human antibodies directly

AD@lakepharma.com



Blue Sky BioServices

Worcester, MA

In business since 2003

Merged with LakePharma in 2016

Microbial, baculo & mammalian protein production

Strong expertise in bioassays



LakePharma CMC Group

Being assembled right now

Natural extension from our existing discovery services

RCB, process and analytical development

Pilot Plant in Hayward, CA

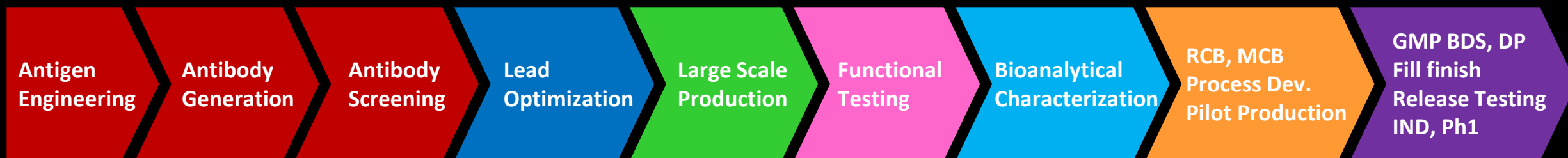
GMP manufacturing center planned in MA

Multiple partners

CMC@lakepharma.com



Biologics Drug Development



We provide the Integrated Solutions for our clients



LakePharma Sites



LakePharma Engineering
Belmont, CA



LakePharma Development
San Carlos, CA



LakePharma Biomanufacturing
Hayward, CA



Blue Sky BioServices
Worcester, MA



LakePharma

The Biologics Company

From Discovery, development, to manufacturing

One stop shop

Open technology platform

Our capabilities are yours

Our results are yours