The Union

WORLD CONFERENCE ON LUNG HEALTH 2022

COMBATING PANDEMICS: TODAY & TOMORROW

Virtual Event November 8-11

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TREATMENT WITH CM-101 REDUCED INFLAMMATORY & FIBROTIC BIOMARKERS IN PATIENTS WITH COVID-19 DERIVED LUNG DAMAGE

Dr. Adi Mor, Chief Scientific Officer
Chemomab Therapeutics

CONFLICT OF INTEREST DISCLOSURE FORM

☐ I have no Conflict of Interest to report.

√ I have the following Conflict of Interest(s) to report:

Please tick the type of affiliation / financial interest and specify the name of the organisation:

√ Receipt of grants/research supports: _Chemomab_____

☐ Receipt of honoraria or consultation fees: _____

☐ Participation in a company sponsored speaker's bureau: _____

☐ Tobacco-industry and tobacco corporate affiliate: _____

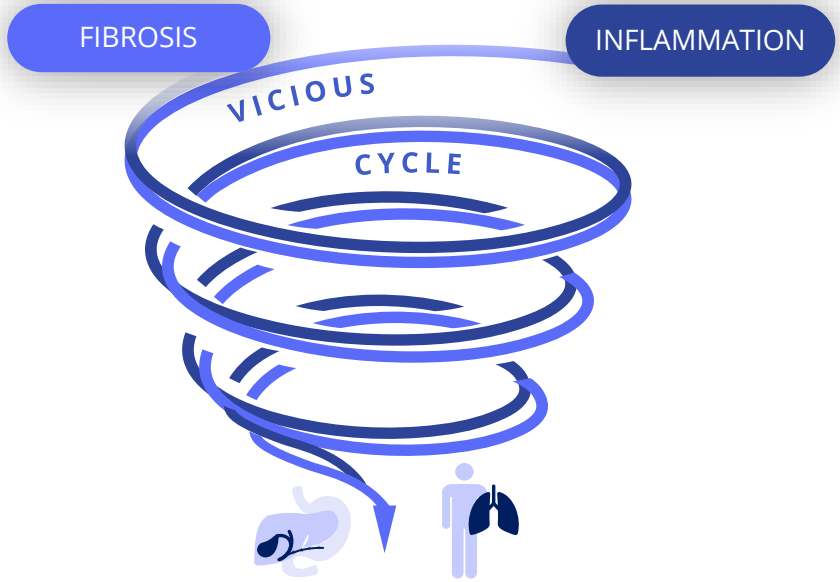
√ Stock shareholder: ___ Chemomab _____

☐ Spouse/partner: _____

☐ Other: _____

Chemomab Highlights

The Drug	**CM-101** First-in-class monoclonal antibody with disease modifying potential
The Target	**CCL24** Novel, broadly applicable, dual-acting target
The Science	**De-risked--extensive & rigorous preclinical package & early clinical validation of:** • CCL24 as driver of fibrosis-inflammation • CM-101's ability to attenuate fibrotic-inflammatory pathways to impact disease
Disease Focus	**Fibrotic-inflammatory with high unmet need & strong commercial potential** • Primary Sclerosing Cholangitis • Systemic Sclerosis including Interstitial lung disease related to SSc • Other fibro-inflammatory diseases



Fibro-Inflammatory Diseases
at the confluence of
Fibrosis & **Inflammation**

EXTENSIVE PRECLINICAL EVIDENCE VALIDATES CCL24 TARGET & CM-101 ACTIVITY

CCL24 Target Validation Ex-vivo Patient Samples

Primary sclerosing cholangitis
- Biomarker correlations
- Overexpression of CCL24 and CCR3

Liver fibrosis (NASH)
- Disease severity correlation
- Overexpression of CCL24 and CCR3

Systemic sclerosis
- Fibrotic biomarker correlation
- Disease deterioration correlation
- Overexpression of CCL24 and CCR3

CCL24 Target Validation In-vivo (Knockout Animal Models)

Systemic sclerosis
- CCL24 knock-out vs. WT (wild type) in Bleomycin-induced skin and lung fibrosis model (mice)

Liver metabolism and inflammation
- CCL24 knock-out vs. WT in MCD-induced NASH (mice)

Proof of Concept / Animal Models

Primary sclerosing cholangitis
- ANIT-induced cholestasis--chronic and acute (mice)
- Bile duct ligation (rat)
- MDR2 knock-out (mice)

Systemic sclerosis
- Bleomycin-induced skin fibrosis (mice)
- Bleomycin-induced lung fibrosis (mice)

Liver fibrosis
- TAA-induced liver fibrosis (rat and mice)

EXTENSIVE EVIDENCE

of CM-101 activity via CLL24 inhibition

ANIMAL MODELS

PATIENT SAMPLES

... across multiple organs
(liver, skin, lung etc.)

Mechanism of Action

CM-101 effects on fibroblast activation
- Dermal, hepatic and lung fibroblast activation
- Dermal and liver fibroblast transition to myofibroblast
- Hepatic fibroblast motility

Toxicology

- **Short-term GLP** in rodents
- **Long-term GLP** in non-human primates
- ***Ex vivo* safety**: ADCC, CDC, cytokine secretion
- **Tissue cross reactivity**

Phase I clinical studies

- **Single ascending dose study** in healthy volunteers
- **Multiple ascending dose study** in non-alcoholic fatty liver disease patients

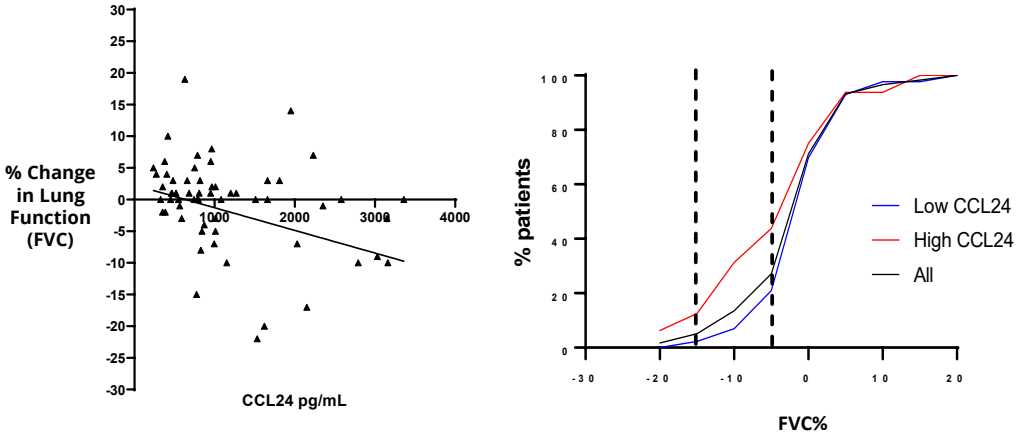
TARGETING CCL24: A CRITICAL NODE POTENTIATING LUNG INFLAMMATION & FIBROSIS

CCL24 IN COVID-19 PATIENTS

	Comparison between health and early COVID-19 in patients who did not meet the primary outcome	Comparison between health and early COVID-19 in patients who met the primary outcome
CCL4	Upregulated	No change
IL-12	Upregulated	No change
IFN-γ	Upregulated	No change
IL-4	Upregulated	No change
CCL13	Upregulated	No change
IL-2	Upregulated	No change
IL-6	Upregulated	No change
CXCL9	Upregulated	Downregulated
IL-10	No change	Downregulated
IL-13	No change	Downregulated
GM-CSF	No change	Downregulated
CCL24	No change	Upregulated
VEGF	Downregulated	No change

CCL24 in the nasal mucosa of Covid-19 patients is the only mediator that was increased in patients who clinically deteriorated and was associated with a persistent Th2 inflammatory response
(Baker et al, ; Lancet Respir Med 2022; 10: 545–56)

CCL24 LEVEL vs LUNG DISEASE PROGRESSION



CCL24 serum level correlates with worsening of lung function in systemic sclerosis patients

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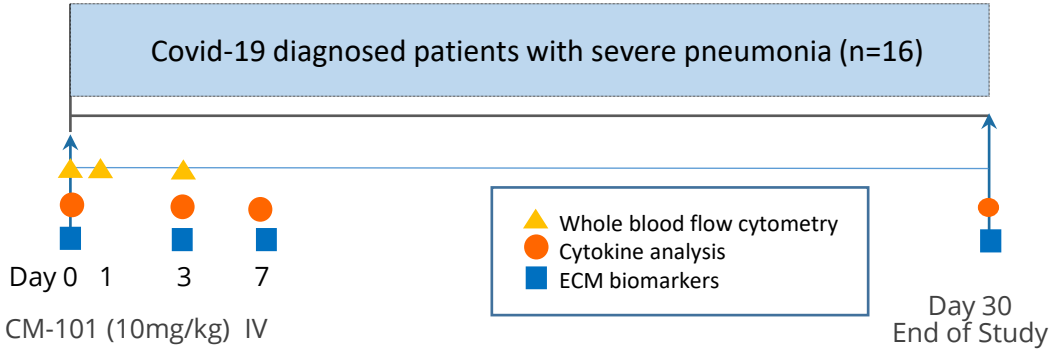
OPEN LABEL STUDY EVALUATING THE SAFETY AND ACTIVITY OF CM-101 IN PATIENTS WITH LUNG DAMAGE DERIVED FROM COVID-19

Study Objectives:

- Primary objective is to determine the safety, and activity of the anti CCL24 monoclonal antibody CM-101 in adult patients with Covid-19 related severe pneumonia
- Secondary objective is to determine the association between CM-101 treatment and the chemokine and cytokine profile in patients



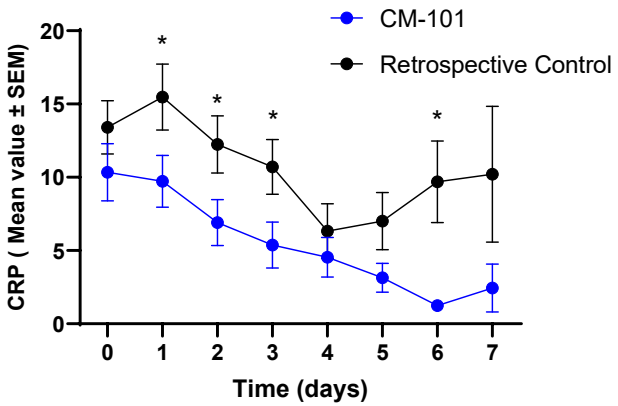
Retrospective control group with similar clinical characteristics and SOC (n=25)

* All patients received standard of care (SOC), including remdesivir and/or dexamethasone

OPEN LABEL STUDY EVALUATING THE SAFETY AND ACTIVITY OF CM-101 IN PATIENTS WITH LUNG DAMAGE DERIVED FROM COVID-19

- CM-101 was safe and well tolerated in Covid-19 patients with severe lung disease
- One possibly drug related SAE was reported and classified as moderate
- Similar PK-Target engagement profile compared to previous studies
- CM-101 demonstrated stronger and faster CRP reductions compared to retrospective Covid-19 control group with similar clinical characteristics

REDUCED CRP LEVELS FOLLOWING TREATMENT WITH CM-101

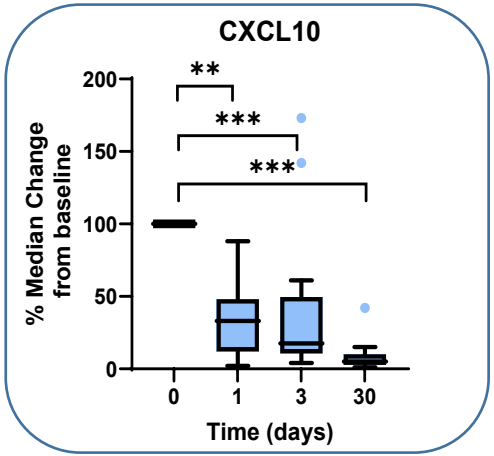


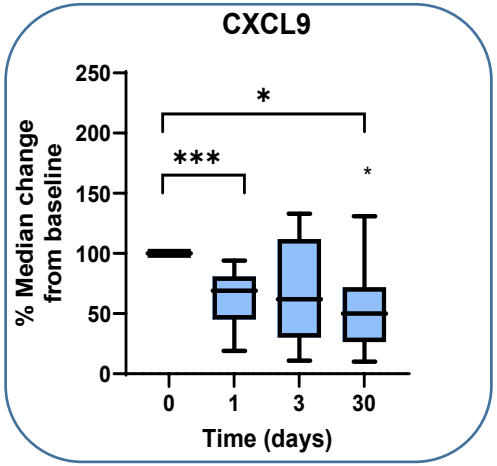
PATIENT CHARACTERISTICS

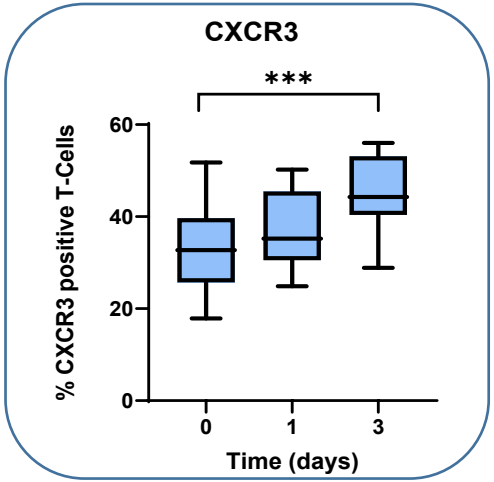
Demographics	CM-101 (n=16)	Retrospective Control (n=25)
Mean Age (±SD)	55.5 ± 13.6	59.3±15
Male (n)	56% (9)	60% (15)
Caucasian	100% (16)	100% (25)
Respiratory status		
O2 supplementation	100% (16)	100% (25)
Mechanical ventilation	6% (1)	16% (4)
hospitalization		
Median (days)	4.5	6
Transfer to ICU	18% (3)	16% (4)
Death	6.25% (1)	12% (3)
Medications for Covid		
Remdesivir	93% (15)	100% (25)
Clexane	62% (10)	100% (25)
Dexamethasone	100% (16)	100% (25)
Vitamin D	100% (16)	100% (25)
Actemra	0	20% (5)
Baricitinib	0	4%(1)

*p≤0.05

REDUCTION IN SERUM BIOMARKERS OF LUNG INFLAMMATION OBSERVED POST-TREATMENT WITH CM-101



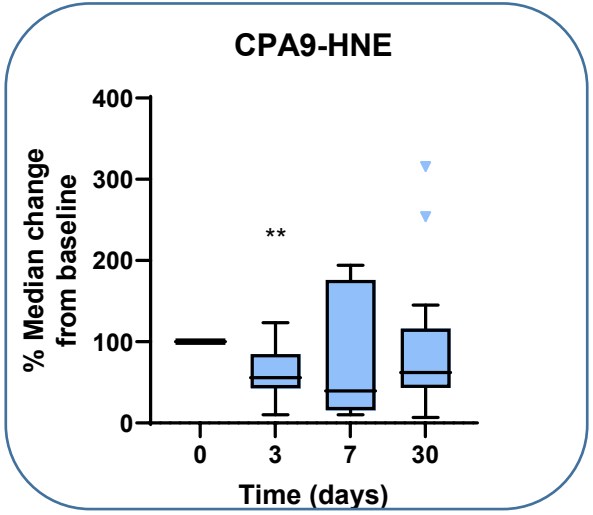


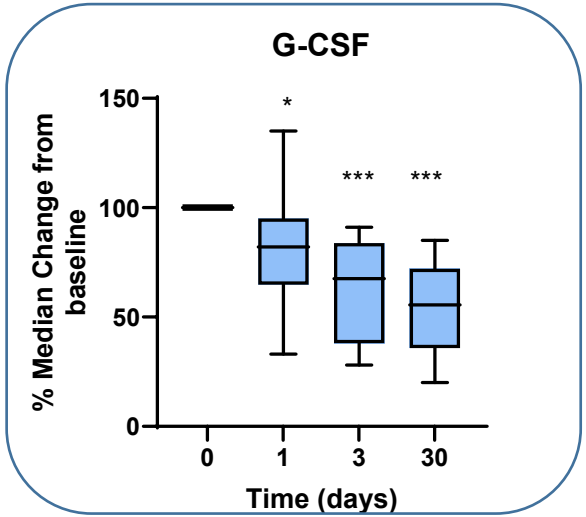


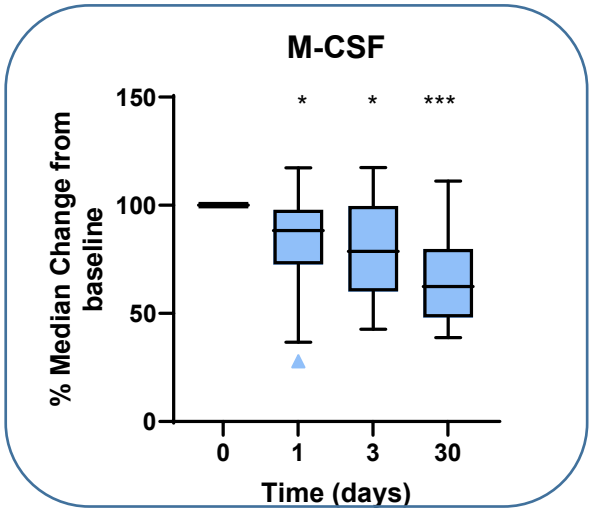
- CXCR3 is the receptor for CXCL9 & CXCL10, which are known biomarkers for lung inflammation
- Both biomarkers are strongly correlated with respiratory severity in lung disease and are associated with disease severity in COVID-19

*p≤0.05, ** pv≤0.01, *** pv≤0.005
%Median ± whiskers tukey - interquartile range (IQR), outliers are plotted when value > 75th percentile plus 1.5 IQR or below 25th percentile minus 1.5 IQR

CM-101 REDUCES NEUTROPHIL AND MONOCYTE-RELATED BIOMARKERS IN PATIENTS WITH SEVERE LUNG INJURY







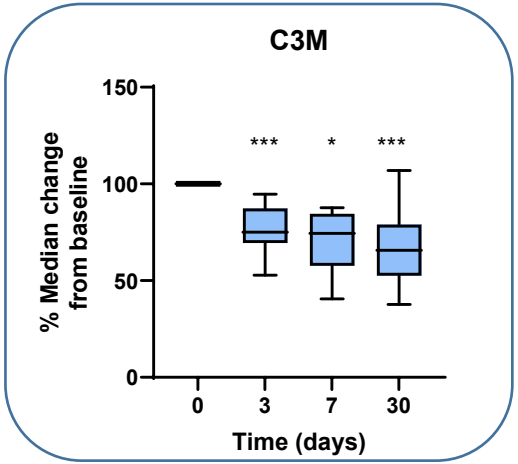
CPA9-HNE represents neutrophil activity; Elevated in IPF and in COVID-19 patients

G-CSF is a potent neutrophil chemotactic cytokine; significantly correlated with neutrophil count and FVC in IPF patients

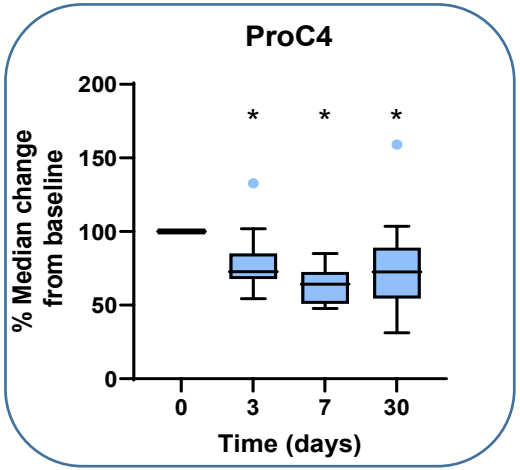
M-CSF is a survival and recruitment factor of monocytes and macrophages that contributes to the pathogenesis of pulmonary fibrosis

*p≤0.05, ** pv≤0.01, *** pv≤0.005
%Median ± whiskers tukey - interquartile range (IQR), outliers are plotted when value > 75th percentile plus 1.5 IQR or below 25th percentile minus 1.5 IQR

SERUM BIOMARKERS OF COLLAGEN SYNTHESIS WERE REDUCED IN PATIENTS RECEIVING CM-101



C3M is a Protein Fingerprint marker of matrix metalloproteinase degraded III collagen; **Elevated in patients with progressive pulmonary fibrosis**; Supportive of previous data seen in clinical trials with CM-101



Proc4 is a prominent basement membrane type IV collagen; Prone to substantial remodeling especially during early fibrosis; **Considered early marker of fibrosis;** Supportive of previous data seen in clinical trials with CM-101

*p≤0.05, ** pv≤0.01, *** pv≤0.005
%Median ± whiskers tukey - interquartile range (IQR), outliers are plotted when value > 75th percentile plus 1.5 IQR or below 25th percentile minus 1.5 IQR

SUMMARY

- Chemomab is a Phase 2 biotech company focused on diseases at the confluence of inflammation and fibrosis
- CM-101 is a first-in-class mAb blocking CCL24, representing a novel and differentiated dual mechanism of action
- Single infusion of CM-101 was found to be safe and well tolerated in Covid-19 patients with severe pneumonia
- CM-101 demonstrated strong and rapid reductions in biomarkers associated with:
  - Lung inflammation
  - Fibrogenesis
  - Neutrophil activity
- These results further confirm the potential of CM-101 to attenuate inflammation and fibrosis
- They contribute to a growing body of evidence demonstrating CM-101's anti-fibrotic and anti-inflammatory effects in varied organs including the lung, liver and skin

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