WORLD CONFERENCE ON LUNG HEALTH 2022

COMBATING PANDEMICS: TODAY & TOMORROW

Virtual Event  November 8-11
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 sclerotic cholangitis
  • Biomarker correlations
  • Overexpression of CCL24 and CCR3
- Systemic sclerosis
  • Fibrotic biomarker correlation
  • Disease deterioration correlation
  • Overexpression of CCL24 and CCR3
- Liver fibrosis (NASH)
  • Disease severity 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)

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

Proof of Concept / Animal Models
- Systemic sclerosis
  • Bleomycin-induced skin fibrosis (mice)
  • Bleomycin-induced lung fibrosis (mice)
- Liver fibrosis
  • TAA-induced liver fibrosis (rat and mice)

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

ANIMAL MODELS
PATIENT SAMPLES

EXTENSIVE EVIDENCE of CM-101 activity via CCL24 inhibition

worldlunghealth.org @UNIONCONFERENCE #UNIONCONF
TARGETING CCL24: A CRITICAL NODE POTENTIATING LUNG INFLAMMATION & FIBROSIS

CCL24 IN COVID-19 PATIENTS

<table>
<thead>
<tr>
<th></th>
<th>Comparison between health and early COVID-19 in patients who did not meet the primary outcome</th>
<th>Comparison between health and early COVID-19 in patients who met the primary outcome</th>
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<tr>
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</tr>
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<td>Downregulated</td>
</tr>
<tr>
<td>VEGF</td>
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<td>Downregulated</td>
</tr>
</tbody>
</table>

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

www.thelancet.com/respiratory Published online April 7, 2022 https://doi.org/10.1016/S2213-2600(22)00002-9
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.

* All patients received standard of care (SOC), including remdesivir and/or dexamethasone.
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
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, ** p≤0.01, *** p≤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

* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.005$

%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, ** p ≤ 0.01, *** p ≤ 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
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
ACKNOWLEDGMENTS

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