Advancing First-in-Class Therapy with Disease-Modifying Potential in Fibro-Inflammatory Diseases

CORPORATE OVERVIEW
NASDAQ: CMMB

June 2024
Forward Looking Statements

This presentation contains forward-looking statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this presentation, including statements regarding our future financial condition, results of operations, business strategy and plans, and objectives of management for future operations, as well as statements regarding industry trends, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “estimate,” “intend,” “may,” “plan,” “potentially” “will” or the negative of these terms or other similar expressions.

We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, among other things: the clinical development pathway for CM-101; our future operations and our ability to successfully initiate and complete clinical trials and achieve regulatory milestones; the potential benefits of any of our product candidates; the market for our product candidates; our expectations regarding our gross margins, operating income and expenses; our ability to raise additional funds; and the intensity and duration of the current war in Israel, and its impact on our operations in Israel. These risks are not exhaustive. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation.

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Chemomab Highlights: Major Catalyst Expected Midyear 2024

**Novel Mechanism with Disease-Modifying Potential**
- Unique target central to biology of inflammation & fibrosis
- CM-101: disease-modifying potential in multiple fibro-inflammatory diseases

**Targeting Diseases with Large Commercial Potential**
- Primary Sclerosing Cholangitis (PSC) is deadly disease with no approved therapies
- Orphan & Fast Track designations; PSC represents more than $1 billion market opportunity
- Interest from potential partners

**De-risked with Extensive Preclinical & Early Clinical Data**
- Extensive preclinical validation of mechanism & activity
- CM-101 Phase 2 study confirmed anti-fibrogenic & anti-inflammatory activity
- 4 completed clinical trials show safety & consistent positive biomarker responses

**2 Upcoming Milestones with Major Catalyst Midyear 2024**
- PSC Phase 2 topline data Midyear 2024; Phase 2 Open Label data in late 2024/early 2025
- Cash runway through end Q1 2025
- Long-term holders include well-known investors: OrbiMed, Thiel, Apeiron
- No debt; clean capital structure
## Pipeline in a Drug: Targeting Rare Diseases

<table>
<thead>
<tr>
<th>Agent</th>
<th>Indication</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Anticipated Milestones</th>
<th>Global Rights</th>
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<tr>
<td>CM-101</td>
<td>Anti-CCL24 mAb</td>
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<td>Topline 15-Week Data Midyear 2024</td>
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### Anticipated Milestones

- **CM-101**: Orphan designation from FDA & EMA; FDA Fast Track designation; Patient enrollment completed
- **CM-101**: Orphan designation from FDA & EMA

### Global Rights

- **CM-101**: Orphan designation from FDA & EMA

### Four Completed Clinical Studies:

- **Phase 2a Liver Fibrosis in MASH patients--Safety, PK & positive biomarker response (2023)**
- **Lung injury investigator-initiated study--Safety, PK & positive biomarker response (2022)**
- **Phase 1b in MASLD patients--Safety, PK & positive biomarker response (2021)**
- **Phase 1a safety study in healthy volunteers--Safety, PK (2018, 2019)**
CCL24’s Dual Role in Inflammation and Fibrosis-related Pathology

- **INFLAMMATION**
  - Immune cell recruitment

- **FIBROSIS**
  - Fibroblast activation

**CCL24**
- The Target
- CCR3 The Receptor

**Regulated Cells**
- Monocytes
- Fibroblasts

**THE POWER OF CCL24**

- **Dual Role in Promoting Fibrosis & Inflammation**
  - Directly activates fibroblasts
  - Enhances local immune cell recruitment

- **Differentiated Activity**
  - Data shows unique role vs. other chemokines
  - Correlates with fibrotic biomarkers and disease outcome

- **Low in Healthy Tissue; Elevated in Fibrotic Tissue**
  - Liver, skin, lung, kidney, others
  - Wide therapeutic margin
CM-101 Reduces Inflammation and Fibrosis by Neutralizing CCL24

**CM-101 Reduces In Vivo Monocyte Recruitment**

Number of Migrated Monocytes (x1000)

<table>
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<tr>
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<th>PBS</th>
<th>CCL24</th>
<th>CCL24 + CM-101</th>
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<tbody>
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<td><strong>Mean</strong></td>
<td>0</td>
<td>8.8</td>
<td>1.8</td>
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<tr>
<td><strong>Standard Error</strong></td>
<td>±1.0</td>
<td>±1.0</td>
<td>±0.5</td>
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**CM-101 Inhibits Primary Fibroblast Activation**

Proliferation: Relative Change from Baseline

<table>
<thead>
<tr>
<th></th>
<th>PBS</th>
<th>CCL24</th>
<th>CCL24 + CM-101</th>
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</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>1.0</td>
<td>1.6</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Standard Error</strong></td>
<td>±0.1</td>
<td>±0.1</td>
<td>±0.05</td>
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</tbody>
</table>

Neutralizing CCL24 Has Advantages Over Blocking the Receptor

- Avoids context dependence of CCR3 receptor
- Efficacy of direct approach
- Favorable safety profile; retains normal repair functions

PBS-phosphate buffered saline used as placebo; *** p ≤0.001
**Broad & Diverse Preclinical Data De-risks Clinical Development**

**Mechanism of Action**
- Primary sclerosing cholangitis
  - Biomarker correlations
  - Expression of CCL24 and CCR3
- Liver fibrosis (MASH)
  - Disease severity correlation
  - Expression of CCL24 and CCR3

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

**Liver fibrosis** (MASH)
- Expression 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 fibrosis model (mice)
- Liver metabolism and inflammation
  - CCL24 knock-out vs. WT in MCD-induced NASH (mice)

**EXTENSIVE DATA SUPPORTING**
**CM-101 activity via CCL24 inhibition**

**CCL24 Target Validation**
- Ex-vivo Patient Samples
  - CM-101 effects on fibroblast activation
    - Dermal, hepatic and lung fibroblast activation
    - Dermal and liver fibroblast transition to myofibroblast
    - Hepatic fibroblast motility
  - CM-101 effects on immune cell migration and recruitment
    - Dermal fibroblast migration
    - Monocyte polarization
    - Monocyte recruitment

**Proof of Concept: Animal Models Concordant with Patient Data**

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

**~12 Different Animal Disease Models**

**AND**

**300+ Patient Samples**
# Anti-Fibrotic Mechanisms Demonstrated Across Clinical Trials

CM-101 appeared safe in 4 clinical trials in healthy volunteers & in patients:
- Safe & well-tolerated in 4 clinical trials
- Adverse Events mostly mild; NO drug-related SAEs
- Consistent PK & target engagement profiles
- No anti-drug antibodies detected

CM-101 improved multiple biomarkers in 3 clinical trials in patients:
- Reduced fibrosis-related biomarkers in fatty liver, liver fibrosis, MASH & acute lung inflammation\(^1\)
- Demonstrated anti-inflammatory effects in MASH & acute lung inflammation\(^1\)
- Produced greater response in MASH patients who had greater risk of disease progression
- Improved biomarkers associated with PSC

Clinical trials to date have demonstrated CM-101’s safety & its anti-fibrotic & anti-inflammatory effects in varied organs and diseases

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1. Treatment with CM-101 Reduced Inflammatory & Fibrotic Biomarkers in Patients with COVID-19-Derived Lung Damage, Dr. Adi Mor, Union World Conference on Lung Health, Nov. 9, 2022

MASH: metabolic dysfunction-associated steatohepatitis; PSC: primary sclerosing cholangitis; AE: adverse event; SAE: serious adverse event; PK: pharmacokinetic
CM-101: Potential Treatment for Primary Sclerosing Cholangitis (PSC)
PSC Has High Unmeet Need & Large Commercial Potential

Debilitating orphan liver disorder with no FDA-approved therapies

- Primarily affects men in their 40's
- Symptoms include fatigue, pruritis, abdominal pain and jaundice
- Diagnosed via serum liver enzyme abnormalities, cholangiography
- Unknown cause; associated with IBD in ~70% of patients
- 50% of patients require liver transplantation; PSC re-occurs in ~20% of recipients
- Leads to end-stage liver disease and cancer, which causes half of all deaths
- Median transplant-free survival is 10-20 years

Progressive disease characterized by inflammation and fibrosis

Sizeable Market Opportunity, Orphan & Fast Track Incentives

- ~80,000 PSC patients in 7 major markets: U.S., Europe and Japan
- Commercial opportunity worldwide estimated at ~$1 billion

References:
## CM-101’s Unique Dual Activity Has Disease-Modifying Potential

<table>
<thead>
<tr>
<th>Company</th>
<th>Candidate</th>
<th>Mechanism</th>
<th>Disease Modifying Potential</th>
<th>Stage</th>
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<tbody>
<tr>
<td>Chemomab</td>
<td>CM-101</td>
<td>Anti-CCL24; Inhibits key inflammatory AND fibrotic processes</td>
<td>✓</td>
<td>Phase 2 Recruitment completed. Midyear 2024 readout</td>
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<tr>
<td>Pliant</td>
<td>PLN-74809</td>
<td>Fibrosis-focused selective integrin inhibitor</td>
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<td>Phase 2 Safety; activity; No dose response. High dose 24-wk data mid-2024</td>
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<tr>
<td>NGM Bio</td>
<td>Aldafermin</td>
<td>FGF19 analog-regulates bile acid synthesis &amp; metabolic components</td>
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<td>Phase 2 Completed. Safety &amp; dose-dependent response in ELF. In discussions with FDA for Phase 3 design</td>
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<tr>
<td>Dr Falk</td>
<td>norUDCA</td>
<td>UDCA homologue--metabolic bile acid mechanism</td>
<td>—</td>
<td>Phase 3 Enrollment completed. 2-yr trial with no interim data. Only in Europe</td>
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<td>Mirum</td>
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<td>Ileal bile acid inhibitor Targeting pruritis</td>
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<td>Elafibranor</td>
<td>PPAR dual agonist Metabolic focus</td>
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<td>Phase 2 Recruiting. Topline data end 2024</td>
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</table>
CCL24 Levels Are Elevated in PSC Patients and Associated with Protein Expression in Key PSC Pathways

CCL24 LEVELS IN HEALTHY VS PSC PATIENT LIVER TISSUE

Healthy Liver

CCL24 Staining

PSC Livers

CCL24 (brown) overexpressed in damaged bile duct area

CCL24 (red) overexpressed in bile epithelial cells (green) and immune cells (yellow)

CCL24 LEVELS ARE ASSOCIATED WITH KEY PSC PATHWAYS

Mean protein expression (NPX)

Hepatic Cholestasis

Hepatic Fibrosis / HSC Activation

Immune cell

CCL24 expression is significantly & selectively elevated in PSC livers
Elevated serum CCL24 levels in patients are associated with key PSC pathways

Greenman et al JCI insight 2023; "Serum proteomics reveals association of CCL24 with key aspects of primary sclerosing cholangitis", EASL 2023. abstract 2178
Low CCL24=levels below median; high CCL24=levels above median; HSC-hepatic stellate cells; NPX-or Normalized Protein eXpression, is a way of measuring how much of a protein is present in a sample
CM-101 Reduces Liver Fibrosis by >80% Preclinically

Dramatically reduced liver collagen using therapeutic design (treatment starts after fibrosis is established)

Segal-Salto et al, JHEP reports 2020
TAA- thioacetamide
CM-101 Demonstrated Sizeable Reductions in PSC-Related Pathology*

CM-101 Reduces Liver Injury & Fibrosis in Multiple PSC Models

Reduction in INFLAMMATION: Mdr2-/- + CM-101

ATTENUATED LIVER COLLAGEN DEPOSITION: Sirus Red

REDUCED BILE EPITHELIAL PROLIFERATION: Cholangiocytes (pan-ck)

CM-101 interferes with the 3 major pathways that drive PSC pathology

Greenman et al JCI insight 2023; * In MDR2-/- Mouse model
Phase 2a Positive Biomarker Readout in MASH Supports CM-101 as Potential Treatment for Liver Fibrosis

CM-101-TREATED PATIENTS DEMONSTRATED CONSISTENT PATTERN OF POSITIVE RESPONSES ACROSS INFLAMMATION & FIBROSIS BIOMARKERS

CM-101 Demonstrated a Greater Biomarker Response Compared to Placebo

~60% were Multiple Responders*

Liver Stiffness Improvement

(≥1 Grade-% patients showing reduction of at least 1 grade in FibroScan)

*Multiple responders defined as patients who responded in at least 3 fibrotic parameters at Week 20 (PROC18L, ELF, PRO-C3, TIMP1, PROC4)

N=12 active, 8 placebo per protocol population analysis; p=p value (T test)

MASH=Metabolic dysfunction-associated steatohepatitis, formerly known as NASH

F0-F1 | F2 | F3 | F4
---|---|---|---
2 - 8.5 | 8.5 - 9.5 | 9.5 - 13.5 | >13.5

16 weeks
Fibrosis Grading by FibroScan (kPa)
Phase 2a liver fibrosis trial of CM-101 in patients with metabolic dysfunction-related steatohepatitis (MASH).

*Heatmap of significant (p<0.05, by linear mixed model) proteins altered in the CM-101 treatment group compared to placebo. Values are centered and scaled.

**Boxplots of key pathways showing mean fold change (NPX values) across all proteins in a given pathway, for each treatment group (p<0.05: *, <0.01: **, < 0.001: ***).

***Ingenuity pathway analysis (IPA): Diseases & Bio Functions and Toxicity Functions, filtered for liver & hepatic related pathways & their corresponding activation z-score & p values.
**Patient Enrollment Completed in CM-101 Phase 2 PSC Trial**

**RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED--INCLUDES DOSE-FINDING & OPEN LABEL EXTENSION**

### CM-101 Primary Sclerosing Cholangitis SPRING Trial

<table>
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<tr>
<th>Screening</th>
<th>CM-101 10 mg/kg IV Q3W (n=25)</th>
<th>CM-101 10 mg/kg IV Q3W</th>
<th>CM-101 20 mg/kg IV Q3W (n=25)</th>
<th>CM-101 20 mg/kg IV Q3W</th>
<th>Placebo IV Q3W (n=18)</th>
<th>Safety Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>CM-101 10 mg/kg IV Q3W</td>
<td>CM-101 10 mg/kg IV Q3W</td>
<td>CM-101 20 mg/kg IV Q3W</td>
<td>CM-101 10/20 mg/kg IV Q3W</td>
<td></td>
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</tr>
</tbody>
</table>

### Key Enrollment Criteria
- PSC patients with large duct disease of >24 weeks duration
- ALP > 1.5 ULN
- Stable IBD allowed
- Stable UDCA treatment allowed

### Outcome Measures
**Primary** - Safety and tolerability
- Serum alkaline phosphatase
- ELF score
- FibroScan®
- Fibrotic biomarkers/liver enzymes (e.g., AST, ALT, Pro-C3, Pro-C5)
- Pharmacokinetics
- Pharmacodynamic parameters

**Secondary** - Change from baseline to Week15 in:
- Serum alkaline phosphatase
- ELF score
- FibroScan®
- Fibrotic biomarkers/liver enzymes (e.g., AST, ALT, Pro-C3, Pro-C5)
- Pharmacokinetics
- Pharmacodynamic parameters

### Territories:
- US, UK, Germany, Spain, Israel
- Orphan Drug designations in US & EU
- Fast Track designation in US

Targeting 15-Week topline data readout Midyear 2024 & Open Label topline data readout late 2024/early 2025
CM-101: Potential Treatment for Systemic Sclerosis (SSc)
*Phase 2-Ready*
Liver
Gallbladder
Stomach
Fibrotic Structure of Bile Duct
Inflammation of Duct Wall

+ Blocks Bile Duct — backup damages liver

Debilitating disease characterized by inflammation and fibrosis

• Strong association with IBD; present in 70% patients
• Diagnosis between 30-40 years of age
• Leading indication for liver transplantation; 50% patients have a transplant
• Median transplant-free survival is 10-20 years
• Long-term outcomes include end-stage liver disease and malignancy

RARE AUTOIMMUNE RHEUMATIC DISEASE
NO DISEASE MODIFYING THERAPY

Median Survival: 10 years
Diagnosis: between 30-50 years
Population: 3:1 female/male
Current Rx: nintedanib & tocilizumab FDA-approved but only treat pulmonary symptoms; NOT disease modifying

SKIN manifestations impact Quality-of-Life & daily function
Skin fibrosis (>90%)
Calcinosi (25%)
Telangiectasia (75%)
Raynaud’s phenomenon (90%)
Ulcers (40%)

LUNG involvement is leading cause of death

Source: See Endnote 4
7 Major Markets – USA, SEU (UK, Germany, France, Italy, Spain), Japan

~170K patients in 7 major markets
>$1.5B est. commercial opportunity

CM-101 SSc program is Phase 2-ready, with an open US IND
CCL24: A Critical Target in Systemic Sclerosis

CCL24 Elevated in SSc Skin

- **CCL24** overexpressed in serum of dSSc patients compared to healthy

CCL24 Overexpressed in SSc Serum

- **CCL24** serum levels predict 5-year SSc-related mortality

High CCL24 in SSc Serum Predicts Mortality

- Extensive animal model & patient sample data support potential therapeutic utility of CM-101 in Systemic Sclerosis

**dSSc** – diffuse systemic sclerosis; Mor A et al., Annals of Rheumatic Diseases, 2019

*** p < 0.001
CCL24 Blockade or Knockout Ameliorates SSc in Mouse Model

CCL24 BLOCKADE REDUCES SSc-LIKE INFLAMMATION & FIBROSIS IN LUNG & SKIN

Immune Cell Lung Infiltration

Dermal Thickness++

α SMA Expression in Skin Lesions

Mor A et al., Annals of Rheumatic Diseases, 2019; BLM-bleomycin; WT-wild type; KO-knock-out, BAL-bronchoalveolar lavage, PBS-phosphate-buffered saline; IT-intrathecal; SC-subcutaneous

*p ≤0.05; **p ≤0.01
++ Thickness measures taken at multiple locations on samples. Arrows on graphic are for illustrative purposes only
Experienced Management with Extensive Biopharma Experience

- **Adi Mor, PhD**  
  Co-founder, Chief Executive Officer & Chief Scientific Officer

- **Sigal Fattal, CPA**  
  Chief Financial Officer

- **Jack Lawler**  
  Senior Vice President, Global Clinical Development Operations

- **Matthew Frankel, MD**  
  Chief Medical Officer & Vice President, Drug Development

- **Ilan Vaknin, PhD**  
  Vice President, Research & Development

- **Revital Aricha, PhD**  
  Vice President, Translational Science

**Deep Experience**
- Capital efficient
- Translational science & global clinical development
- Focused on delivering value to stakeholders

**Chemomab Therapeutics**
CM-101 is Potential Breakthrough in Fibro-Inflammatory Diseases

**DUAL MECHANISM OF ACTION**
Disease-modifying potential with unique target

**FOCUSED ON HIGH UNMET NEED, LARGE POTENTIAL RARE DISEASES**
With substantial partnering interest

**PRECISION TARGETING**
Selective mAb enhances potential safety & efficacy

**SAFE AND WELL-TOLERATED**
In multiple clinical studies to date

**INDICATION EXPANSION**
Into other diseases

**UPCOMING CATALYSTS**—Phase 2 PSC topline data Midyear 2024 & PSC Open Label data Late 2024/Early 2025, with Cash Runway through End Q1 2025
Advancing CM-101: Novel Target with Disease-Modifying Potential for Fibro-Inflammatory Diseases

Thank you!

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