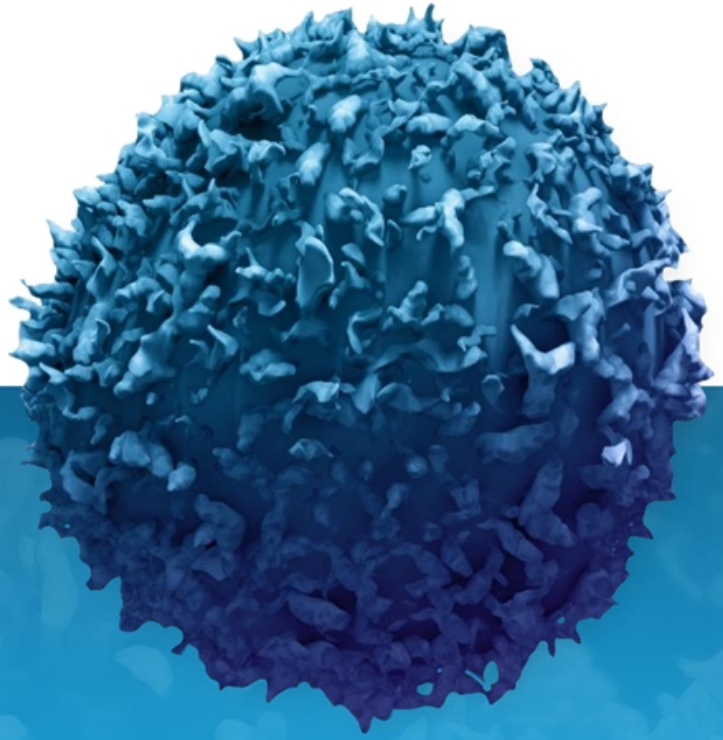
Exhibit 99.1



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Itolizumab Update

October 31, 2024

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This presentation contains forward-looking statements about Equillium, Inc. (the "Company"). In some cases, you can identify forward-looking statements by the words "will," "expect," "intend," "plan," "objective," "believe," "estimate," "potential," "continue" and "ongoing," or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements are based on Company management's current beliefs and expectations. These statements include but are not limited to statements regarding the Company's business strategy, the Company's plans to develop and commercialize its product candidates, the safety and efficacy of the Company's product candidates, the Company's plans and expected timing with respect to regulatory filings and approvals, size and growth potential of the markets for the Company's product candidates and cash runway. These statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. The Company may not actually achieve the plans, intentions or expectations disclosed in its forward-looking statements, and you should not place undue reliance on the Company's forward-looking statements.

Actual results or events could differ materially from the plans, intentions and expectations disclosed or implied in the forward-looking statements the Company makes due to the risks and uncertainties inherent in the Company's business, including without limitation, the risks described in the Company's filings with the Securities and Exchange Commission ("SEC"). You are cautioned not to place undue reliance on these forward-looking statements, which represent the Company's views as of the date of this presentation. The Company anticipates that subsequent events and developments will cause its views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company has no current intention of doing so except to the extent required by applicable law. These and other risks and uncertainties are described more fully under the caption "Risk Factors" and elsewhere in the Company's filings and reports, which may be accessed for free by visiting EDGAR on the SEC web site at http://www.sec.gov and on the Company's website under the heading "Investors." All forward-looking statements are qualified in their entirety by this cautionary statement. This caution is made under the "safe harbor" provisions of Section 21E of the Securities Exchange Act of 1934, as amended.

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Equillium Retains Rights to Itolizumab

Ono provided substantial non-dilutive funding for itolizumab through two key milestones:

1. **Positive interim data analysis in Phase 3 EQUATOR study of first-line aGVHD:**
   - "Study should proceed" recommendation from the IDMC
2. **Positive PoC data in Phase 1b EQUALISE study of lupus nephritis:**
   - Clinically meaningful, deep responses in highly proteinuric patients

Ono decision to allow itolizumab option to expire due to strategic business reasons

Itolizumab approaching two major data events:

1. Topline data from Phase 3 EQUATOR study in aGVHD: **potential acceleration to Q1 2025**
2. Topline data from Phase 2 ulcerative colitis study recently completed in India: **expected Q1 2025**

Equillium expects that its existing cash can fund operations into Q4 2025, based on recent operational changes and assuming acceleration of EQUATOR study completion: reduced enrollment to ~150 and unblinding after primary and key secondary endpoints at Day 29 (CR & ORR, respectively)

Equillium intends to meet with the FDA to review the EQUATOR study during Q1 2025

Abbreviations: aGVHD, acute graft-versus-host disease; CR, complete response; ORR, overall response rate; PoC, proof of concept; IDMC, independent monitoring data committee

Diversified Pipeline of Differentiated Immunology Assets

	Indication	Pre-Clinical Phase 1 Phase 2 Phase 3	Rights	Status
EQ001 itolizumab anti-CD6	**acute graft-versus-host disease**	FDA Fast Track & Orphan Drug Designations	equillium **US, CAN, AUS & NZ**	Enrollment paused: **Potential acceleration of topline data to Q1 2025**
	systemic lupus erythematosus (SLE) / lupus nephritis (LN)	FDA Fast Track Designation for LN		Positive data announced Q2 2024
	ulcerative colitis	Conducted by Biocon in India	Biocon **EU / Japan**	Topline data expected **Q1 2025**
EQ101 IL-2/9/15 inhibitor	**alopecia areata / CTCL** *(intravenously delivered peptide)*	PoC data & FDA/EMA Orphan Drug Designations for CTCL	equillium	Activities on hold pending additional resources
EQ302 IL-15/21 inhibitor	**gastrointestinal indications** *(orally delivered peptide)*			Activities on hold pending additional resources

Abbreviations: SLE, Systemic lupus erythematosus; LN, lupus nephritis; PoC, proof-of-concept; CTCL, Cutaneous T-cell lymphoma

Itolizumab: Critical Mass of Safety Data and Positive Clinical Results

Over 1,000 subjects dosed with itolizumab across numerous clinical studies

EQUATOR

Acute GVHD - Pivotal Phase 3 (ongoing)
IDMC Interim Review @ 100 patients in July 2024; recommended study should proceed

EQUATE

Acute GVHD - Phase 1b (completed)
Study demonstrated high rates of rapid and durable complete response

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equalise

Lupus nephritis - Phase 1b (completed)
Study demonstrated clinically meaningful responses in highly proteinuric subjects

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Ulcerative colitis - Phase 2 (topline data – expected Q1 2025)

Additional Biocon Studies

- Healthy volunteers
- Rheumatoid arthritis
- Psoriasis (approved in India)
- COVID-19 CRS (approved EUA in India)

Biocon

Abbreviations: GVHD, graft-versus-host disease; IDMC, independent data monitoring committee; CRS, cytokine release syndrome, EUA, emergency use authorization

Itolizumab

First-in-Class immune-modifying mAb targeting the CD6-ALCAM signaling pathway

CD6-ALCAM Pathway is Central to Immuno-Inflammation

CD6 is a **co-stimulatory receptor overexpressed on T_{eff}** and down-regulated on T_{reg}

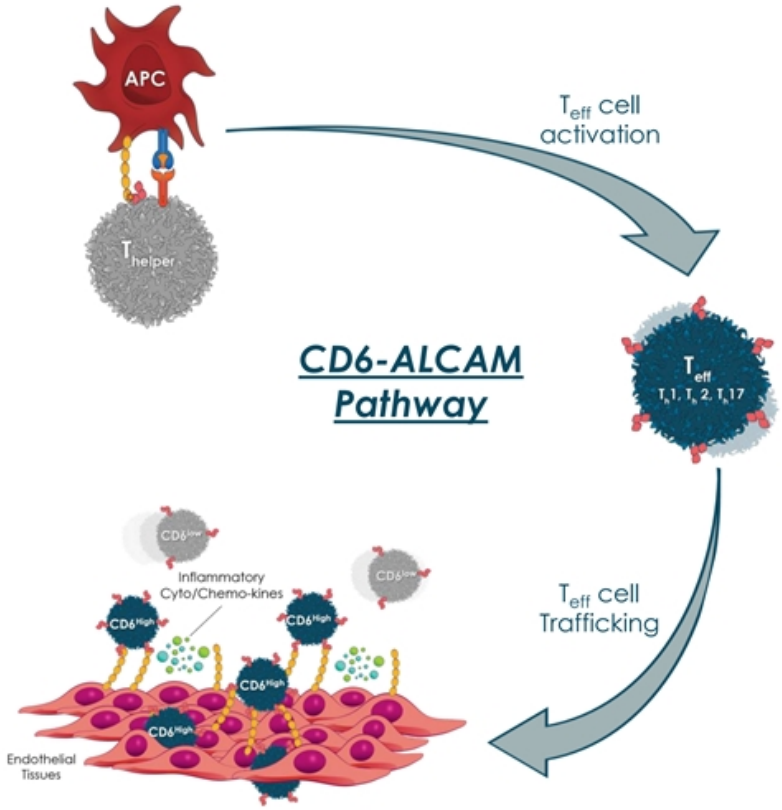
$CD6^{High}$ cells exhibit greater pathogenic capacity

Activated leukocyte cell adhesion molecule (ALCAM), is expressed on both antigen-presenting cells and tissues including BBB, skin, gut, lung, liver and kidney

The binding of CD6-ALCAM is important for:

- Immune **synapse formation**
- Optimal **co-stimulation and activation of T_{eff}**
- **Trafficking** into tissues

The **CD6-ALCAM pathway modulates T cell activity and trafficking** central to the pathogenesis of multiple immuno-inflammatory diseases



Cytokines reduces Including but not limited to IFN-γ, TNF-a, IL-4, IL-5, IL-6, IL-13 and IL-17. Consuegra-Fernandez et al., Cellular & Molecular Immunology 2018; Ma et al., Journal of Crohn's and Colitis 2019
Abbreviations: ALCAM, activated leukocyte cell adhesion molecule; BBB, blood brain barrier

CD6^{High} Cells Exhibit Greater Pathogenic Capacity

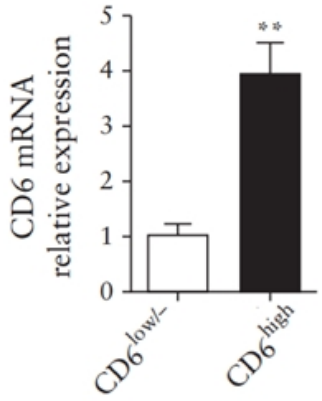
Highest levels of CD6 are found on activated T effector cells (T_{eff}) and associated with amplification of the auto-reactive cascade

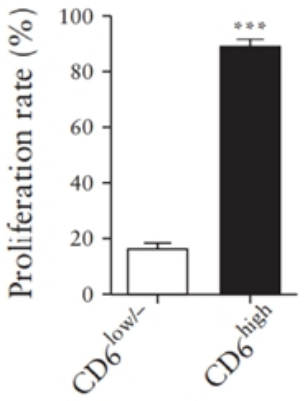
CD6$^{low/-}$

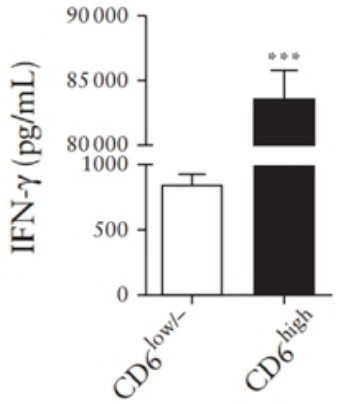
- Low proliferation
- Regulatory phenotype
- Anti-inflammatory cytokines

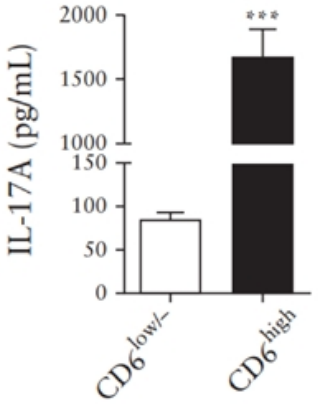
CD6^{high}

- High Proliferation
- Pathogenic Phenotypes
- Pro-inflammatory cytokines









Consuegra-Fernandez et al., Cell Mol Immunol 2018; Ma et al., J Crohns & Colitis 2019
***p < 0.01, and ***p < 0.001*

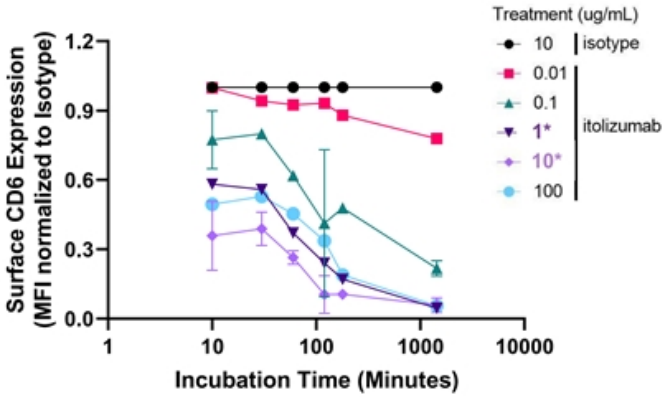
Itolizumab-induced Loss of Cell Surface CD6 Inhibits T_{eff} Cells

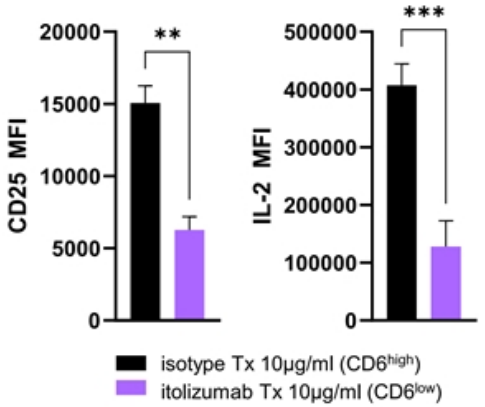
Pathogenic T_{eff} Cells

Antigenic Modulation (shedding)

Non-pathogenic T_{eff} Cells

Itolizumab leads to loss of CD6 in both a dose and time-dependent manner resulting in T cells that are hyporesponsive to TCR stimulation†





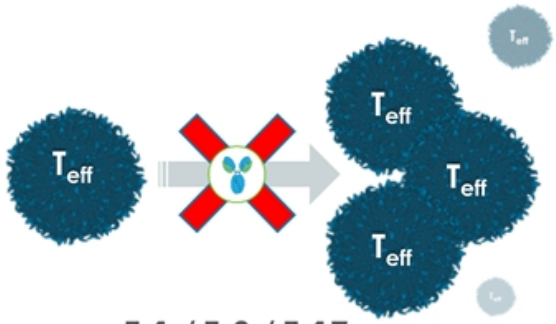
- Itolizumab binds to domain-1 of CD6 causing dose-dependent loss of CD6^
- Itolizumab-induced loss of CD6 results in hyporesponsive T cells
- Loss of CD6 is a pharmacodynamic marker that can be monitored in patients^

†Chu, D., Ampudia, J., Connelly, S., & Ng, C. (2021). American Association of Immunologists 104th annual meeting. See Equillium website for details.
**clinically relevant doses, **p<0.01, ***p<0.001*
^detected with a non-competing anti-CD6 antibody
Abbreviations: TCR, T-cell receptor

A Differentiated Approach to Treating Immuno-Inflammatory Disease

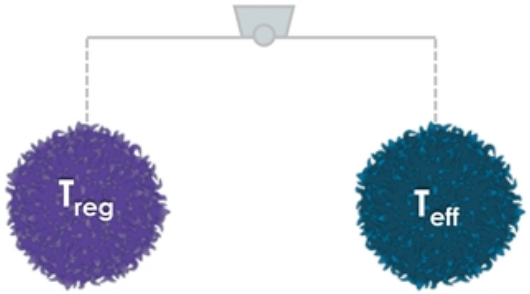
Selectively targets auto-reactive effector T cells, while sparing regulatory T cells to promote immune tolerance and homeostasis, resulting in durable disease remission

Synergistic inhibition of multiple T_{eff} cells and cytokines*



Inhibition of T_{eff} trafficking into key target organs

Restoration of immune regulation without broad immunosuppression



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* *including but not limited to IFN-γ, TNF-α, IL-4, IL-5, IL-6, IL-13 & IL-17*

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Itolizumab

Acute Graft-Versus-Host Disease

Itolizumab in GVHD: Executive Summary

- Positive topline data from Phase 1b EQUATE study in acute graft-versus-host disease
  - Achieved CR and ORR at Day 29 of 61% and 67%, respectively*
  - Response at Day 29 was associated with improved progression-free survival through 1 year
  - Responders were able to taper steroids by 70% at Day 29 and 99% at Day 169
  - Itolizumab continued to demonstrate favorable safety, tolerability and efficacy profile
- Positive data from Phase 3 EQUATOR study is expected to support registration
- **Currently no drugs approved for first-line aGVHD**
- Commercial scale manufacturing in place (Biocon)
- Significant market: 2021 *JAMA Oncology* study estimated ~10,000 patients receive allo-HSCT annually
  - ~ 20-40% of HSCT patients develop acute GVHD**
  - ~ 40-50% develop chronic GVHD**
  - Approved therapies in 2L aGVHD & 2L cGVHD approaching $1 billion in revenue
- Attractive commercial opportunity: ability to launch independently with small commercial team
- Opportunities for rapid indication expansion through single Phase 3 studies

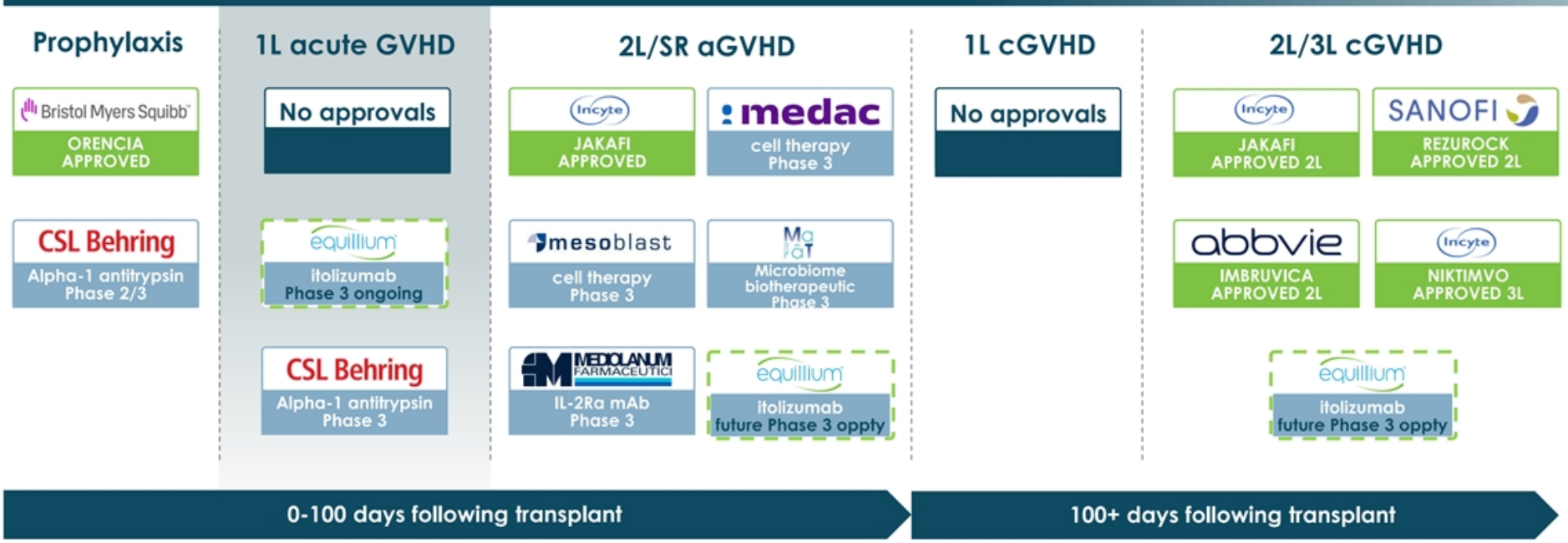
** All subjects dosed within 72 hours of corticosteroid administration*
*** 2022 Dana-Farber Report*
Abbreviations: CR, complete response rate; ORR, overall response rate; GVHD, graft-versus-host disease; HSCT, hematopoietic stem cell transplant

GVHD Competitive Landscape

Growing strategic interest in GVHD with recently demonstrated market potential:

JAKAFI: US sales in SR-aGVHD and 2L cGVHD estimated at **$500M**

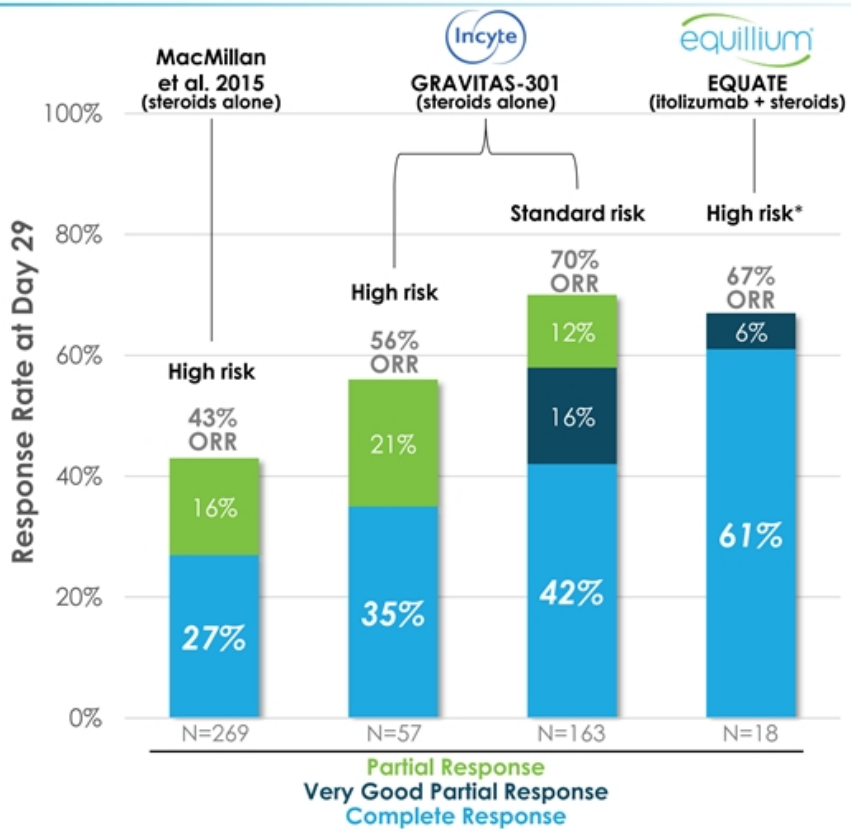
REZUROCK: US sales in 2L cGVHD estimated at **$425M**, ~3 years into launch *(acquired by Sanofi $1.9B in 2021)*



2024 revenue estimates, sources Evaluate Pharma & Incyte report, July 2024

Abbreviations: SR-aGVHD, steroid refractory acute graft-versus-host disease; cGVHD, chronic graft-versus-host disease; 1L, first-line; 2L, second-line; 3L, third-line

Standard of Care: High-Dose Steroids Achieve Poor CR Outcomes



Steroids alone yield poor Complete Response rates

Complete Reponses are associated with improved long-term clinical outcomes

Clinicians indicate a 10% improvement in Complete Response rate is clinically meaningful

EQUATE

Phase 1b open-label, dose escalation study of itolizumab in patients with high risk aGVHD

- **61% of patients on itolizumab achieved a Complete Response** at Day 29 when dosed within 72 hours of steroid
- Early responses allowed for **rapid steroid tapering**
- Adverse events, including SAEs, are consistent with high-risk aGVHD population
- **Overall survival of 67%** at 6 months in subjects across treatment groups ¥

** EQUATE high-risk is defined as Grade III-IV by MAGIC criteria and Grade II with Ann Arbor Score of 2 or 3; 76% of subjects also met Minnesota high-risk criteria used by MacMillan and GRAVITAS-301; data shown for subjects dosed with 72 hours of steroid administration. ¥ Only subjects that have met the endpoint or have been studied for 6 months (up to 4 months post-treatment) are included. Data with cut-off date of 13 Oct 2021.*

Abbreviations: ORR=CR+VGPR+PR, ORR = overall response rate; PR = partial response; CR = complete response; VGPR = very good partial response defined as achieving all the criteria for skin, liver, and gut involvement per Martin 2009 Consensus criteria without meeting the criteria for CR. MacMillan et al. BBMT 2015; Zeiser et al. EHA Abstract Library 2020.

EQUATOR Study: First-line Treatment of High-Risk aGVHD

EQUATOR

Over 50 US clinical sites active, including 9 of top 10 U.S. allogeneic HSCT centers

High exposure of itolizumab to key hospital systems and KOLs

Phase 3 randomized, double-blind, global pivotal study of itolizumab in ~ 200 patients

John Koreth, MD, Dana-Farber Cancer Institute, Principal Investigator

Eligible Patients:
Grade III-IV & Grade II with lower GI

Dosing: concomitant within 72 hours of high-dose corticosteroid treatment (2 mg/kg)

R

Itolizumab:
IV 1.6 mg/kg loading dose followed by 0.8 mg/kg Q2W x 6 doses (n=100)

Steroid tapering recommendation

Placebo:
(n=100)

Day 1 | Day 15 | **Day 29** | Day 43 | Day 57 | Day 71 | Day 85

Dosing Schedule: patients followed out to Day 365

Primary Outcome
- **CR at Day 29**

Key Secondary Outcomes
- **ORR at Day 29**
- Durability of Complete Response from Day 29 through Day 99

Interim IDMC Review @ 100 patients
- Futility and efficacy
- Completed 31 July 2024
- Result: study should proceed

Abbreviations: aGVHD, acute graft-versus-host disease; GI, gastrointestinal; HSCT, hematopoietic stem cell transplant; KOL, key opinion leader

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Itolizumab

Ulcerative Colitis

Biocon

Itolizumab in Ulcerative Colitis: Executive Summary

Strong mechanistic rationale in GI disease

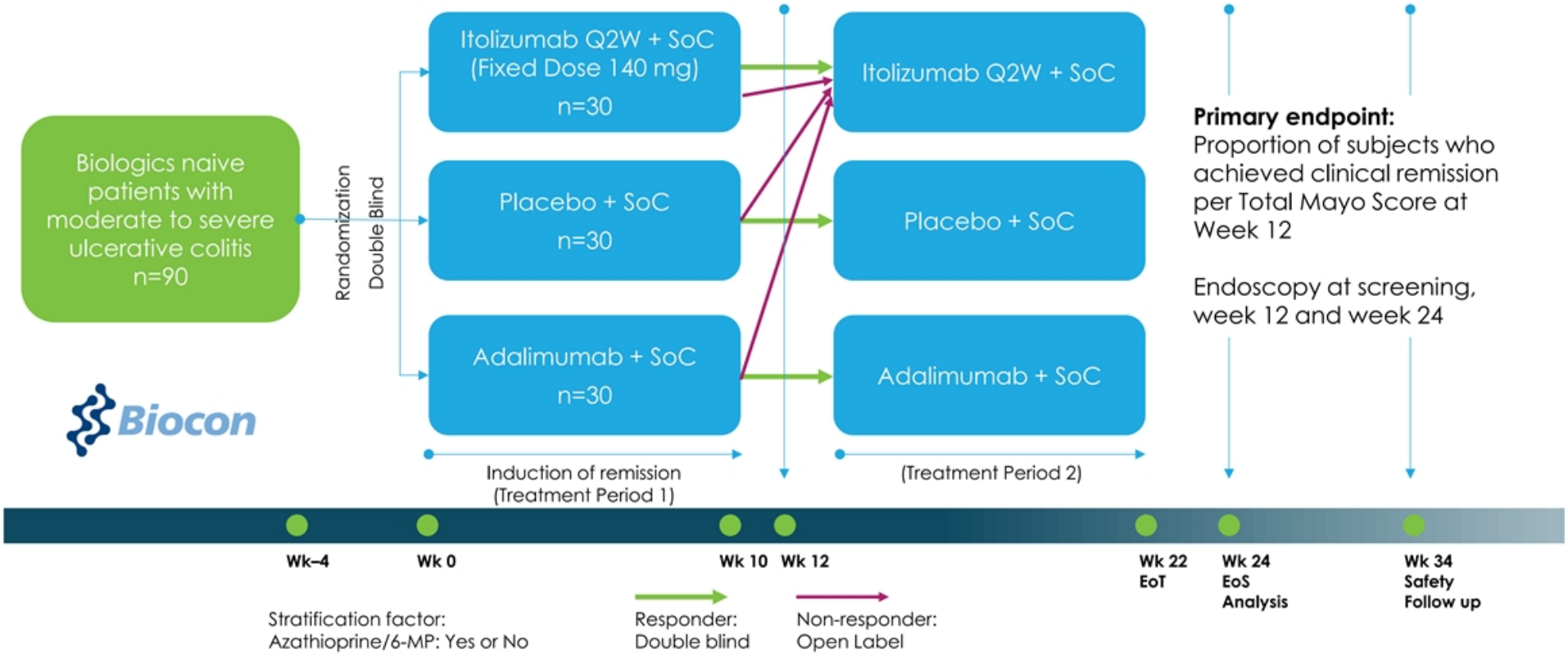
- $CD6^{high}$ T_{eff} cells have greater pathogenic potential and are associated with GI inflammation
- The CD6-ALCAM pathway is upregulated in inflammatory lesions of patients with GI inflammation and correlates with disease severity
- Itolizumab shown to be effective in treating GI inflammation in multiple models of GI disease

Near term Phase 2 clinical data read out

- Itolizumab vs. placebo vs. adalimumab study complete (n=90)
- Topline data expected in Q1 2025
- High concentration formulation developed to enable delivery of pre-filled syringe

Abbreviations: GI, gastrointestinal

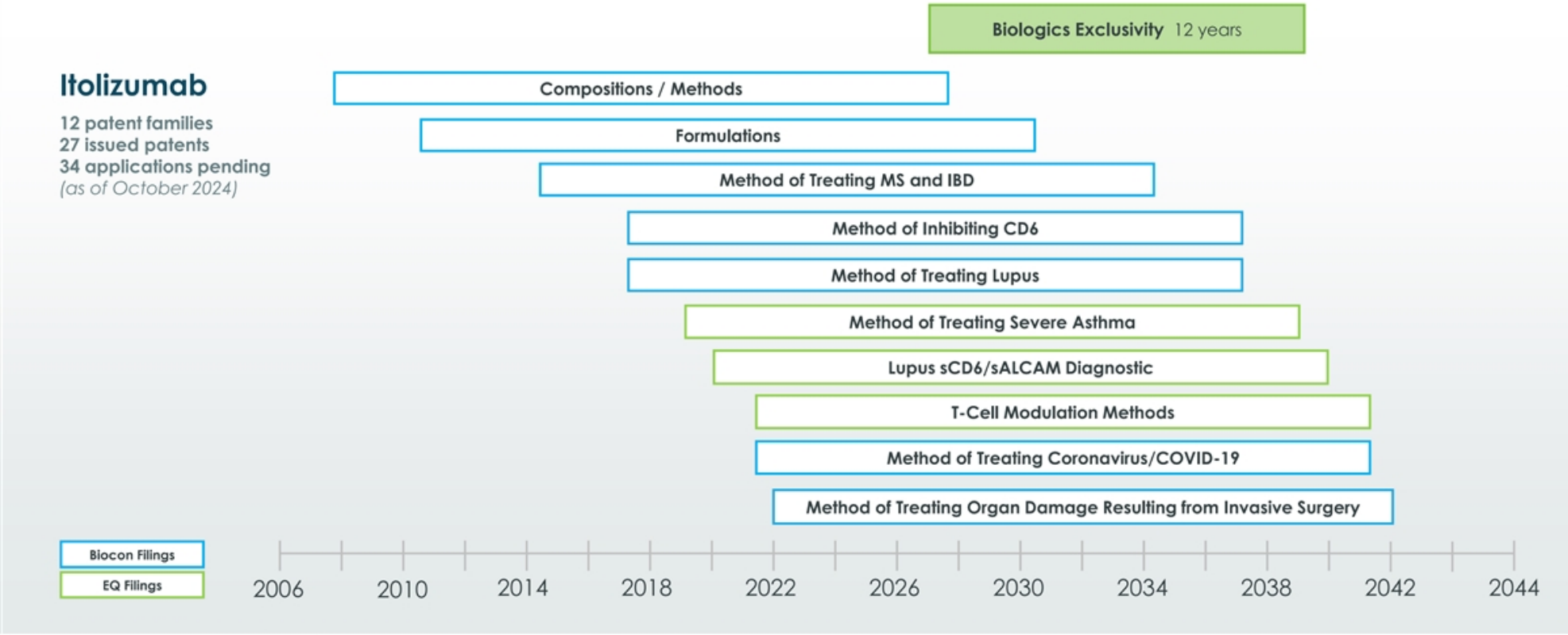
UC Phase 2 Study – Conducted by Biocon in India



Abbreviations: Q2W, once every two weeks; EoS, end of study; EoT, end of therapy; SOC, standard of care
Total Mayo Score: rectal bleeding, stool frequency, physician assessment, and endoscopy appearance. Each rated 0 to 3, total score of 0 to 12
Clinical remission defined as Total Mayo Score ≤ 2 and no subscore >1

Corporate

Itolizumab Intellectual Property & Regulatory Exclusivity



Assumptions:
- Listed applications will issue
- Biologics Exclusivity will be granted and will begin at NDA approval
- Potential patent term extensions not shown

Itolizumab filings under exclusive license to Equillium for US, CA, AU, NZ

Equillium Financial Overview

Key Financial Metrics

Total Cash and Investments (as of June 30, 2024)	$33.3 M
Q2 2024: Net Cash Generated (as of June 30, 2024)	$0.7 M
Shares Outstanding (as of August 5, 2024)	35.4 M
Market Cap (as of close October 30, 2024)	$48.9 M

Please refer to the Form 10-Q filed on August 8, 2024 for complete financials of the company as of June 30, 2024

Equillium funded into Q4 2025*

** Assuming acceleration of EQUATOR study completion to Q1 2025 and other operational adjustments*

Equillium Summary

Anticipated Major Milestones

- Phase 3 aGVHD topline data – potential to accelerate to Q1 2025 (modified study)
- Phase 2 Ulcerative Colitis data expected Q1 2025

Itolizumab Derisked

- EQUATOR Phase 3 interim safety and efficacy review July 2024: IDMC recommended study to proceed as planned
- Positive topline LN data reported
- Commercial-scale manufacturing in place w/ Biocon

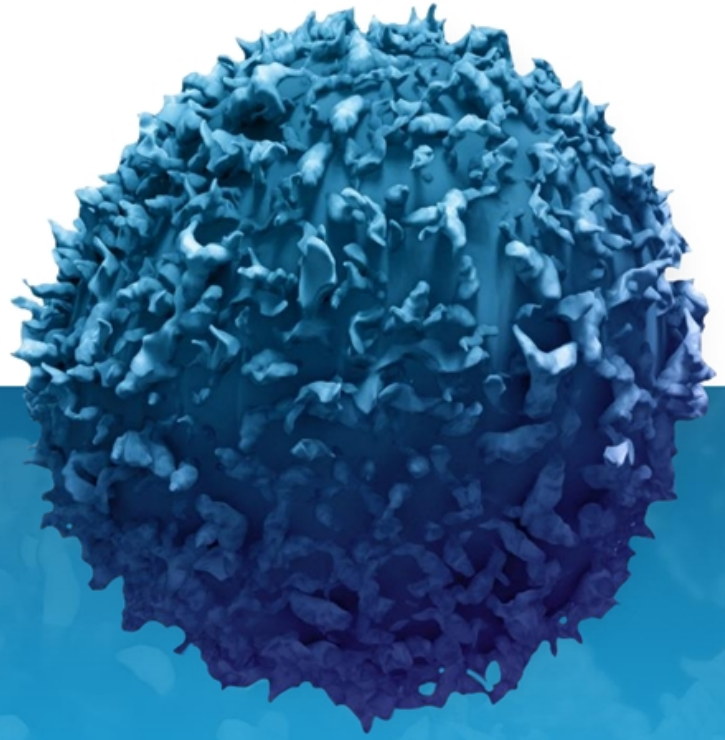
Commercial Rights to Itolizumab

- Full commercial rights to all indications
- EQ Territories: US, Canada, Australia & New Zealand

Attractive Market Opportunity

- No drugs approved in 1L aGVHD
- Approved GVHD drugs approaching $1B in US sales
  - JAKAFI® 2L aGVHD /cGVHD (Incyte)
  - REZUROCK® 2L cGVHD (Sanofi)
- Ability to market independently with small commercial team

Abbreviations: aGVHD, acute graft-versus-host disease; cGVHD, chronic graft-versus-host disease; IDMC, independent data monitoring committee; LN, lupus nephritis; 1L, first-line; 2L, second-line



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Thank you

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