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R&D Day

Virtual Meeting

October 15, 2021

BREAKTHROUGH MEDICINES.
THE NEXT AGE OF BIOLOGICS.

Forward-Looking Statements

This presentation and any accompanying oral presentation contain 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,” “can be,” “plan,” “potential,” ”target,” “will,” “mission” 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. Such statements include, but are not limited to, the potential of, and expectations regarding the potential of, potential benefits of, and expectations regarding AMT’s technology platform, AMT-101 and AMT-126, statements regarding the market potential of AMT’s product candidates, statements regarding AMT’s Phase 2 clinical trials for AMT-101 and AMT’s Phase 1 clinical trials for AMT-126, including the timing of such trials, enrollment of such trials, milestones and expectations relating to data readouts from such clinical trials, and AMT’s ability to leverage its technology to expand its pipeline including our ability to expand our technology platform by developing therapies to treat respiratory diseases. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, among other things: the timing of the initiation, progress and potential results of our preclinical studies, clinical trials and our research programs; our ability to use and expand our technology platform to build a pipeline of product candidates; uncertainty of developing biologic therapeutics; our ability to advance product candidates into, and successfully complete, clinical trials; the timing or likelihood of regulatory filings and approvals; our estimates of the number of patients who suffer from the diseases we are targeting and the number of patients that may enroll in our clinical trials; the commercializing of our product candidates, if approved; our ability and the potential to successfully manufacture and supply our product candidates for clinical trials and for commercial use, if approved; future strategic arrangements and/or collaborations and the potential benefits of such arrangements; our estimates regarding expenses, future revenue, capital requirements and needs for additional financing and our ability to obtain additional capital; the sufficiency of our existing cash and cash equivalents to fund our future operating expenses and capital expenditure requirements; our ability to retain the continued service of our key personnel and to identify, hire and retain additional qualified personnel; the implementation of our strategic plans for our business and product candidates; the scope of protection we are able to establish and maintain for intellectual property rights, including our technology platform, product candidates and research programs; our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately; the pricing, coverage and reimbursement of our product candidates, if approved; developments relating to our competitors and our industry, including competing product candidates and therapies; negative impacts of the COVID-19 pandemic on our operations; and other risks. 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. Actual results may differ materially from those in the forward-looking statements as a result of a number of factors, including those described in the company’s filings with the Securities and Exchange Commission. 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.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

This presentation concerns product candidates that are under clinical investigation and which have not yet been approved for marketing by the U.S. Food and Drug Administration (FDA). Those product candidates are currently limited by federal law to investigational use, and no representation is made as to their safety or effectiveness for the purposes for which they are being investigated.

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Welcome

Tahir Mahmood, PhD
Chief Executive Officer and Co-Founder

Distinguished KOLs and AMT Presenters on Today's Call

Peter Lipsky, MD

Rheumatology Specialist
Former Scientific Director and Chief of the Autoimmunity Branch, NIAMS, National Institutes of Health

Brian Feagan, MD, FRCPC

Professor of Medicine, Departments of Medicine, Division of Gastroenterology, Epidemiology and Biostatistics Western University, Canada

Tahir Mahmood, PhD

Chief Executive Officer and Co-Founder

Randy Mrsny, PhD

Chief Scientific Officer and Co-Founder

Bittoo Kanwar, MD

Chief Medical Officer

Liz Bhatt

Chief Business and Strategy Officer

Today's Agenda

Topic	Presenter
Introductions and Corporate Vision	Tahir Mahmood, PhD
Technology Platform and Next Generation Applications	Randy Mrsny, PhD
Clinical Programs	
IL-10 and IL-22 Biology	Peter Lipsky, MD
Treatment Landscape in IBD	Brian Feagan, MD, FRCPC
Oral AMT-101 Overview	Bittoo Kanwar, MD
Oral AMT-101 Commercial Opportunity	Liz Bhatt
The Future / Conclusion	Tahir Mahmood, PhD
Q&A	

Our Mission is to Create Novel, targeted Oral biologic therapeutics with Enhanced efficacy and safety profiles in Patient-friendly formats

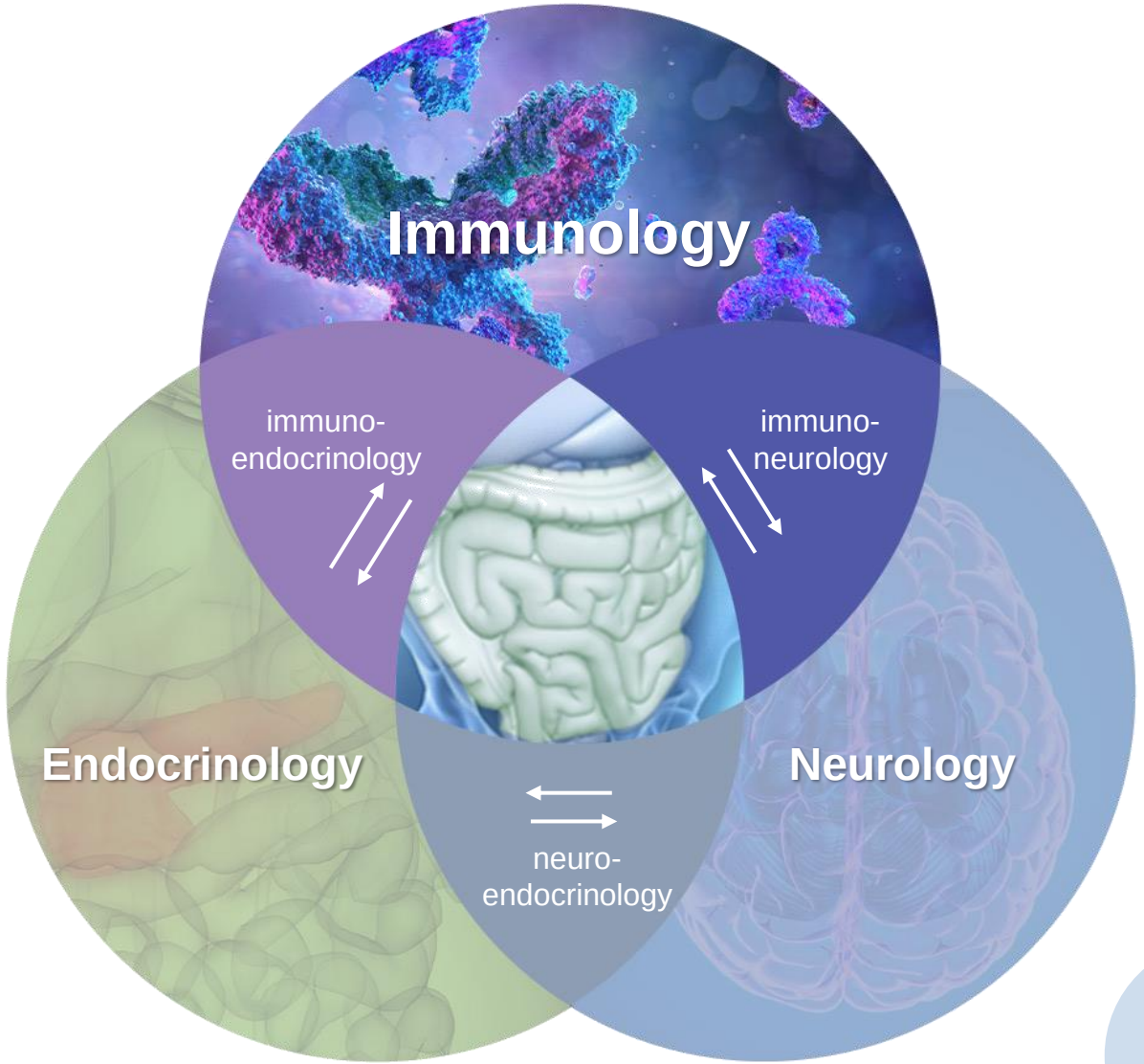
A CLINICAL STAGE COMPANY

WITH 2 PRODUCT CANDIDATES IN 5 CLINICAL TRIALS

ORAL ROUTE PROVIDES SIGNIFICANT BENEFITS

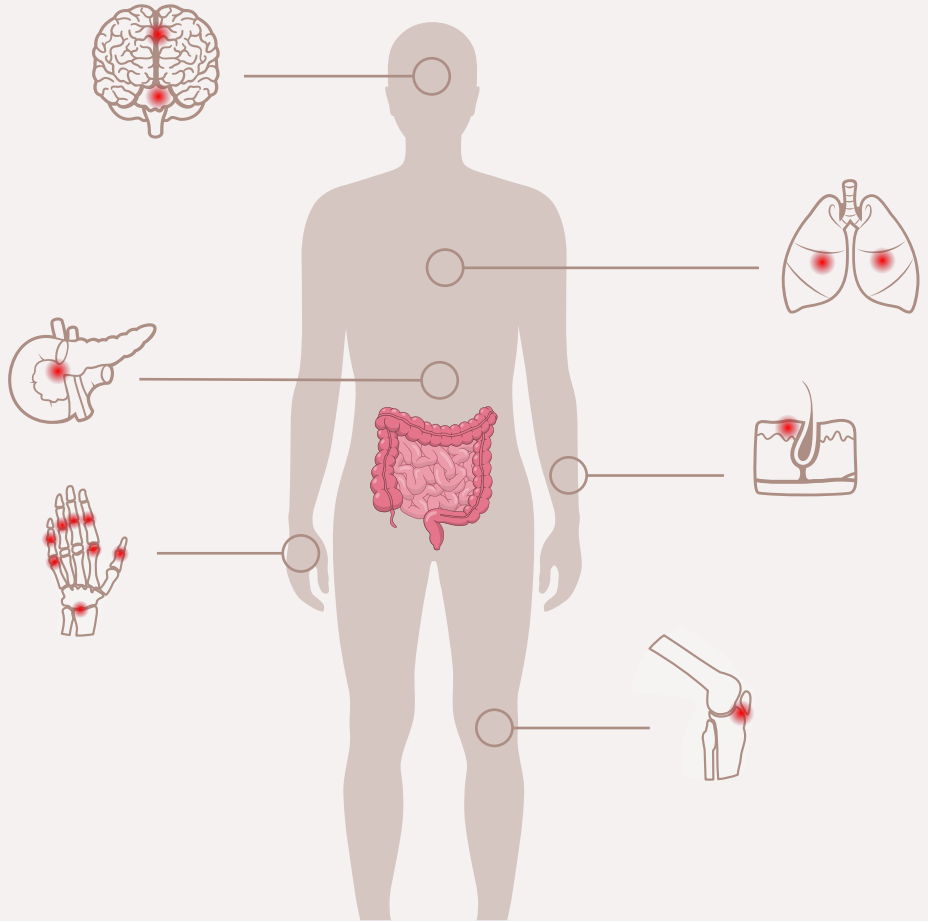
The gut is the primary site of convergence of core biology axes that impact virtually every organ system

~70% of the body's immune cells are housed in intestinal tissue



Oral Targeting of GI Mucosal Immune System for Local *and* Distal Diseases

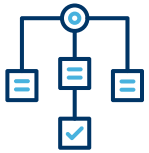
- Immune modulation and barrier defect repair
  - No immune suppression, minimal toxicity
- Multiple immune pathways to modulate in GI mucosa
  - Cell-trafficking, tolerance, autoimmunity
- Numerous immunological diseases:
  - Local: Ulcerative Colitis, Pouchitis, Crohn's Disease, Celiac Disease
  - Distal: Rheumatic Diseases, Multiple Sclerosis, Vaccines, Dermatology



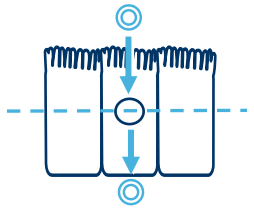
Gracey, Nat. Reviews Rheumatology (2020): pp 415-433

PLATFORM-BASED R&D

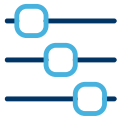
An Efficient Engine for Generating Differentiated Oral Biologic Products



Leverage known targets to minimize risk



Exploit normal biology of transcytosis



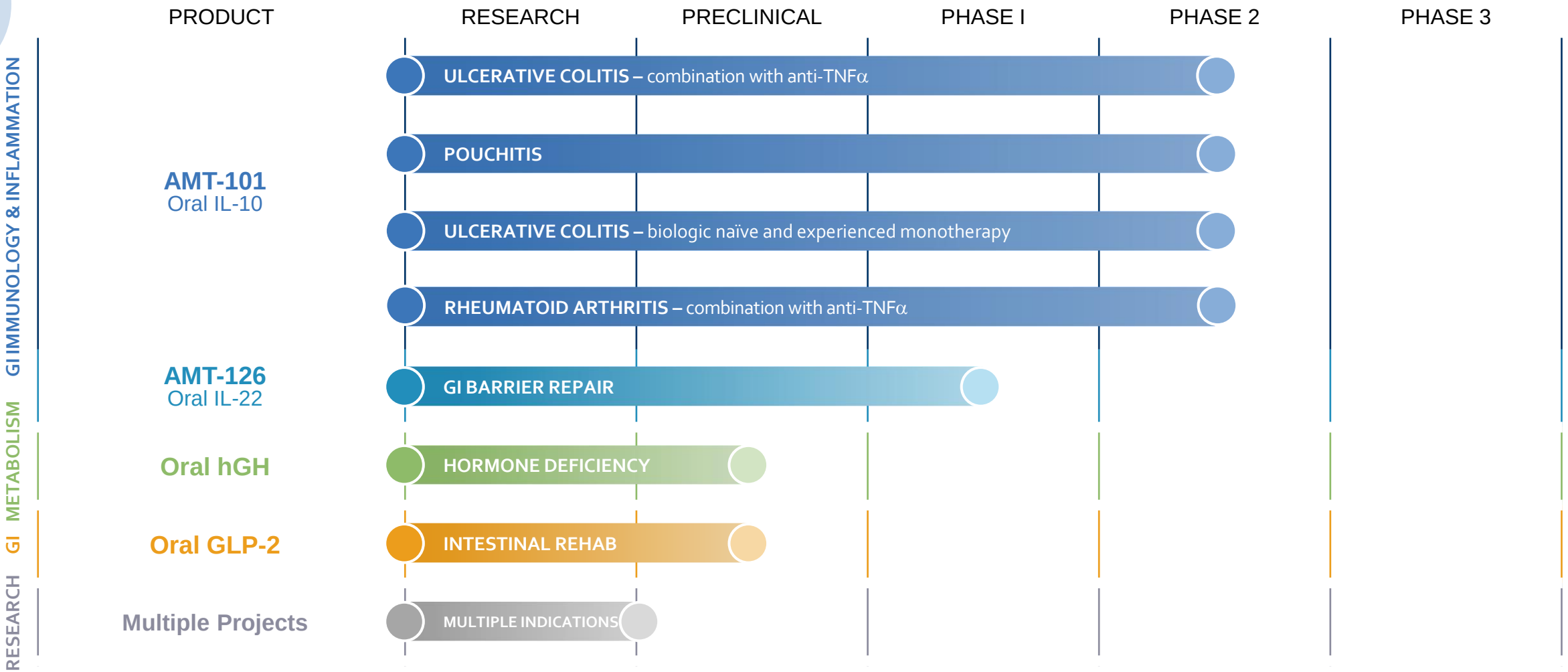
Maintain GI-selectivity to minimize any systemic safety concerns

Interrogate local biology directly for enhanced effects

Modulate systemic diseases via local GI effects

Select indications with unmet needs where oral administration is advantageous

AMT Pipeline: Two Oral Biologic Therapeutics in the Clinic



AMT maintains worldwide rights to all product candidates and research programs.

Significant Milestones Achieved Since IPO

2
Clinical Product Candidates

5
Active Clinical Trials

115+
Employees

Journal of Immunology Publication

ECCO Poster

IPO
$177M

Follow-on
$121M

AMT-101
Phase 2 Start

AMT-126
Phase 1 Start

Platform
Expansion

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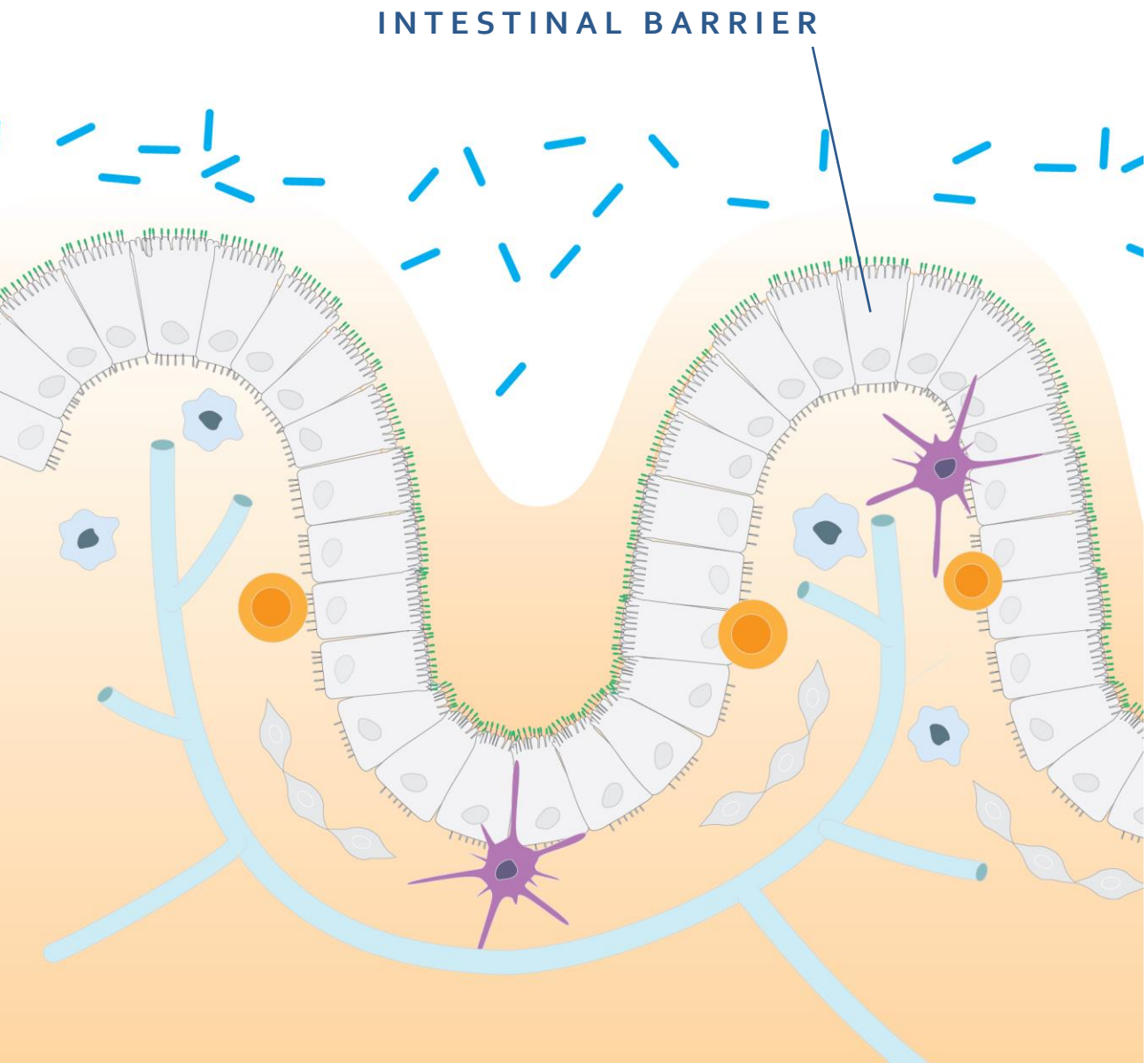
AMT Technology Platform

Randy Mrsny, PhD
Chief Scientific Officer and Co-Founder

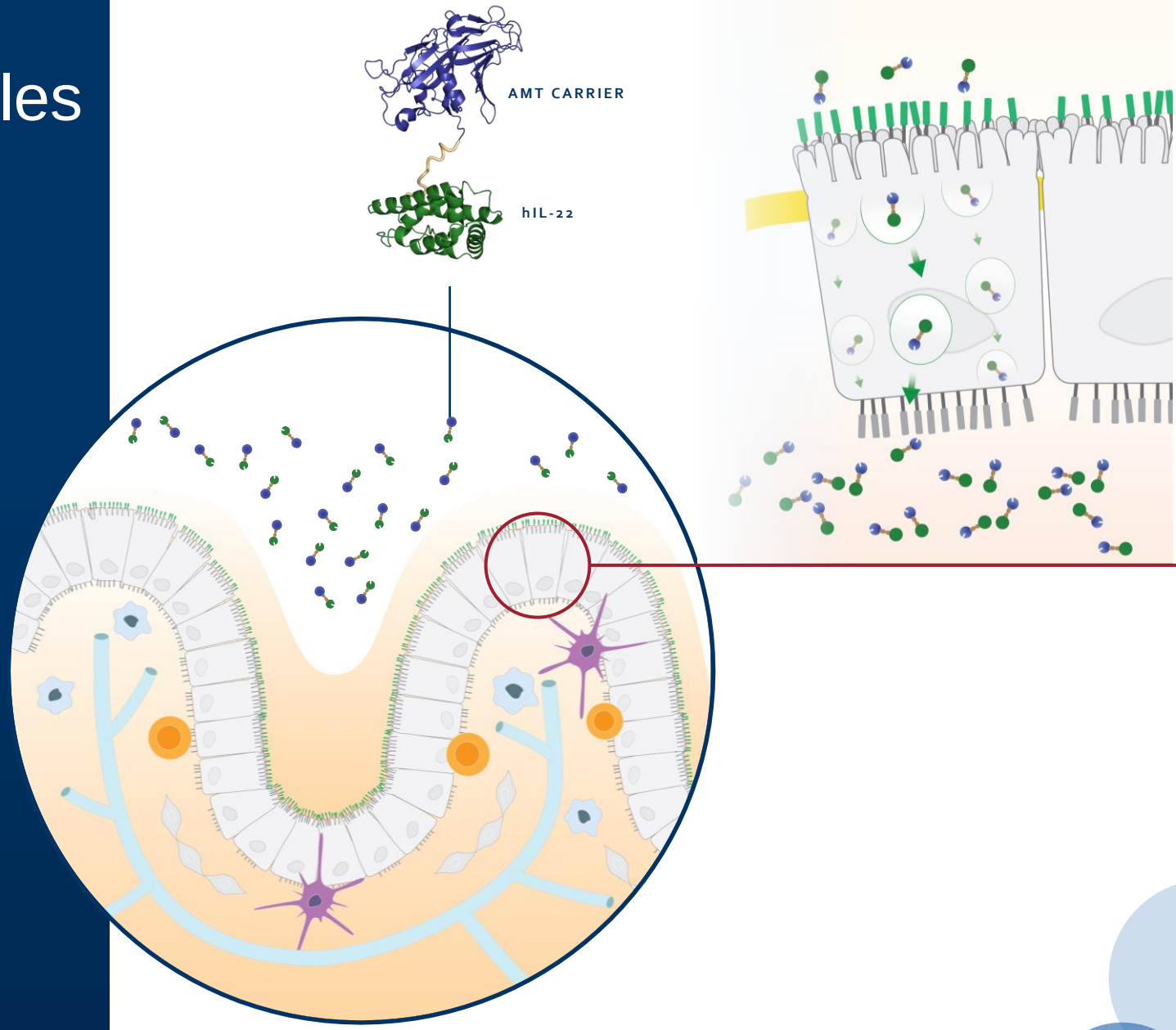


THE CHALLENGE:

Intestinal epithelium
is a natural barrier against
protein, virus and bacterial entry

Bioengineering Novel Molecules to Leverage Transcytosis - Nature's Transport System Through the Cell

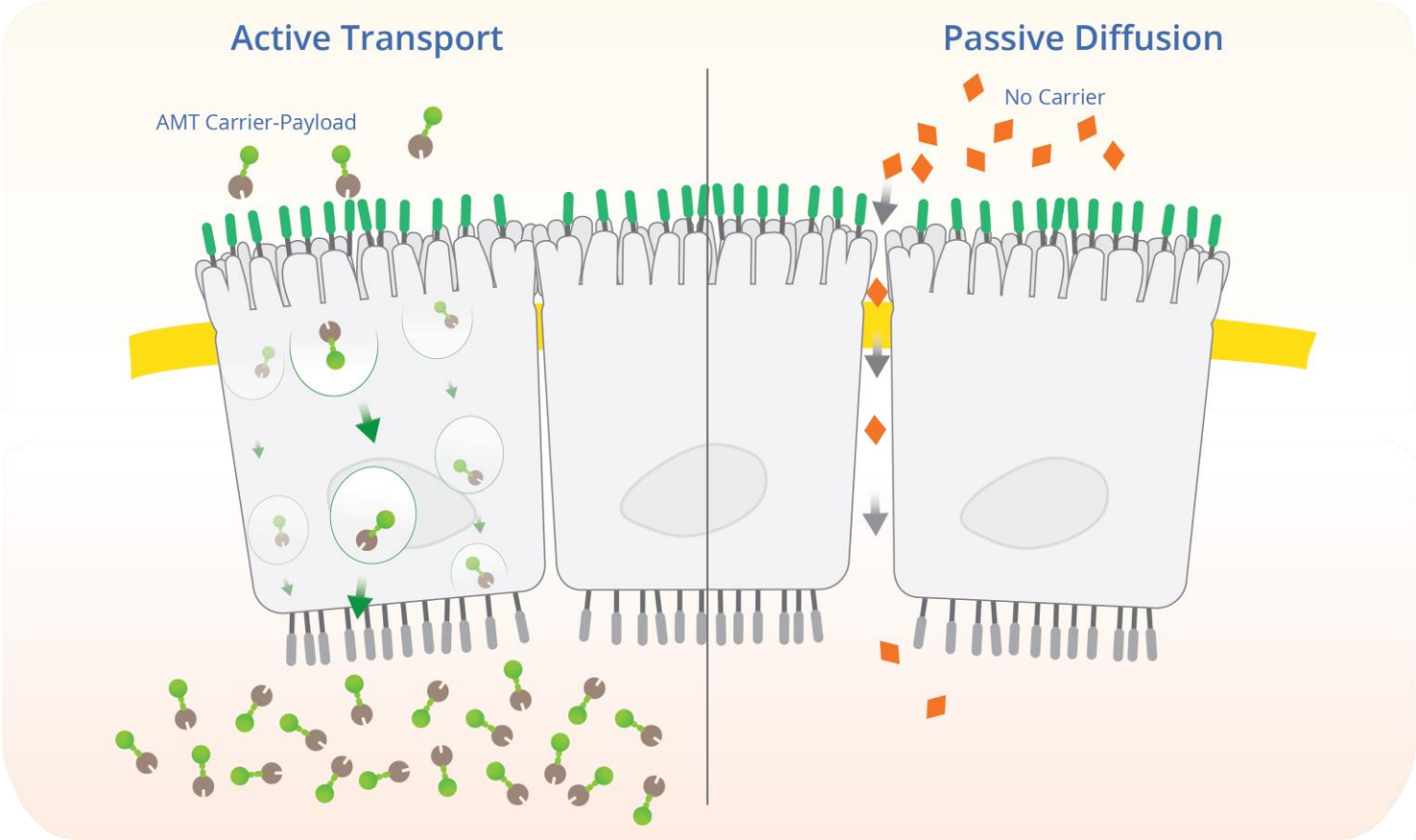
- Trafficking domain is derived from Cholix protein, that is secreted by *Vibrio cholerae,* and combined with a therapeutic payload
- Utilizes normal cellular machinery for moving select molecules through epithelial cells
- Active, rapid transport across GI epithelial barrier



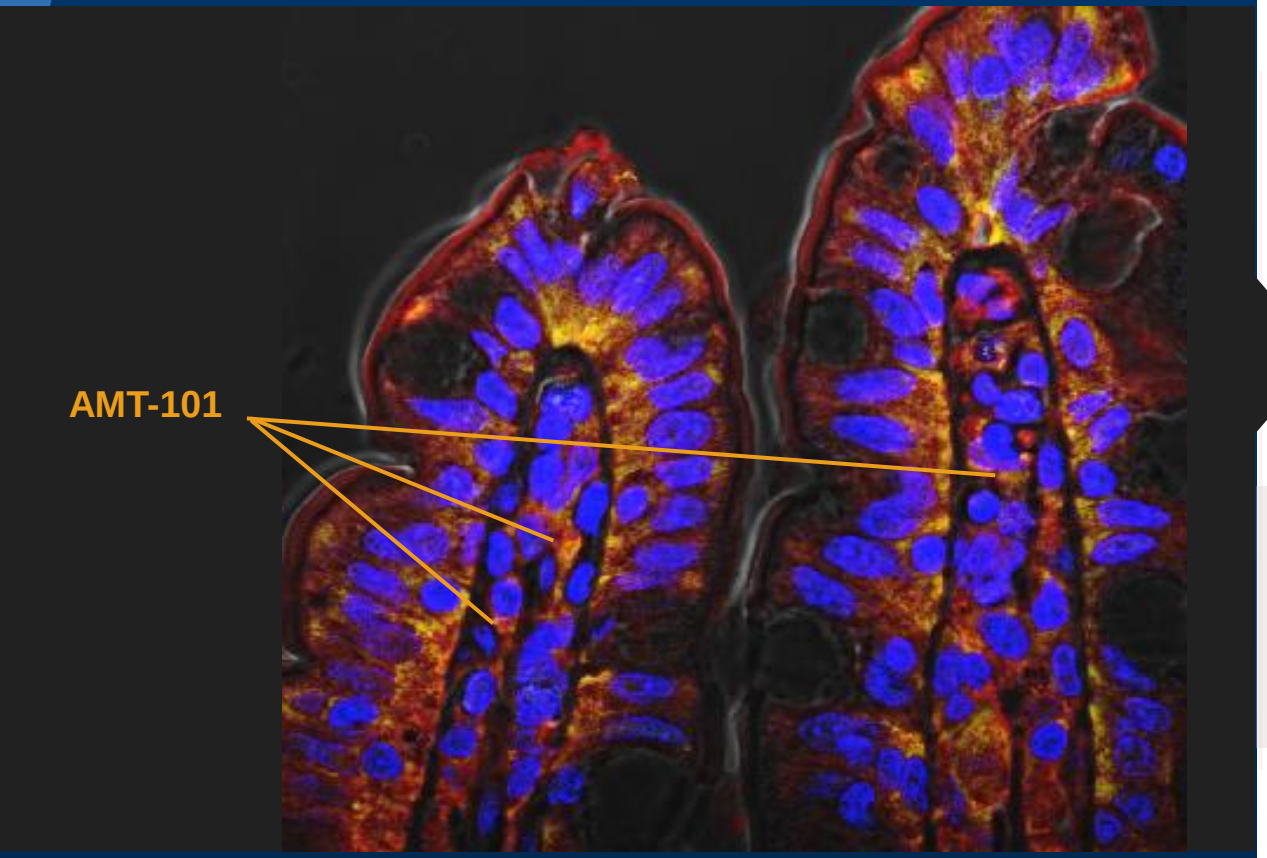
Advantages of Our Active Transport Mechanism

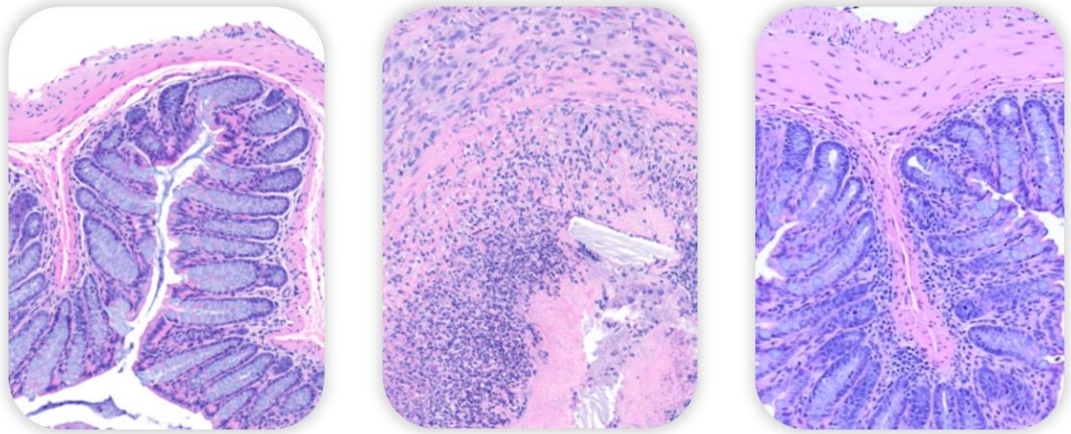
Active Transport Vesicle-Mediated Trafficking

- High-capacity privileged pathway
- Rapid uptake across barrier
- Trafficking pathway accessible along entire length of GI tract
- Ability to localize in lamina propria tissue or release into circulation
- Compatible with multiple therapeutic modalities



AMT's Carrier Drives Active Transport Through the Intestinal Epithelium within Minutes

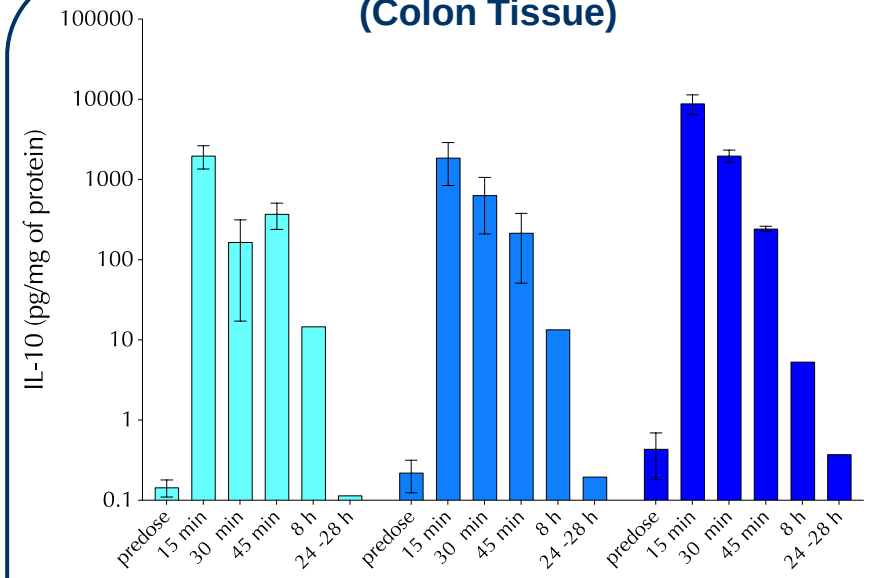




AMT-101 is trafficked in active form and acts locally in GI tissue, with efficacy observed in colonic tissue in murine models of colitis.

AMT-101 (IL10-carrier fusion) In Vivo Localization and Activity in GI Tissue – Examples from Non-Human Primate (NHP)

Total IL-10 Concentration (Colon Tissue)



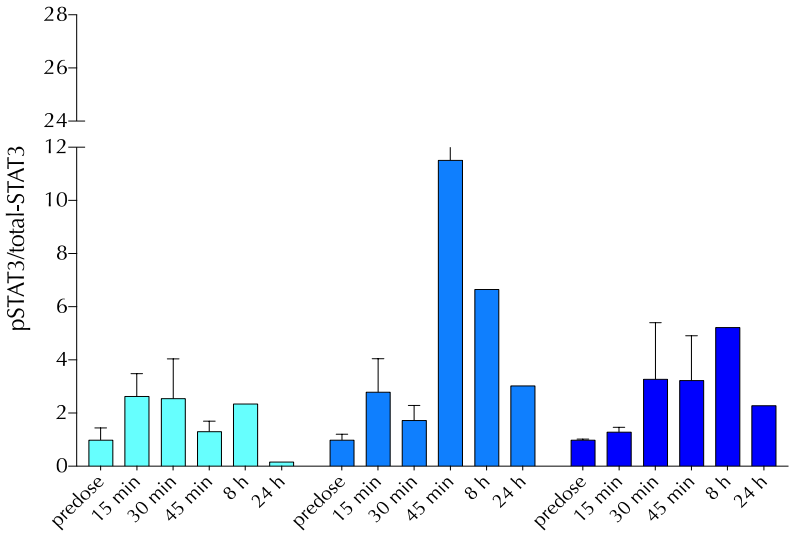
1 mg

3 mg

10 mg

>100-fold higher localization was observed in GI tissue vs. blood (systemic circulation) – by design

pSTAT3 / Total-STAT3 (Colon Tissue)

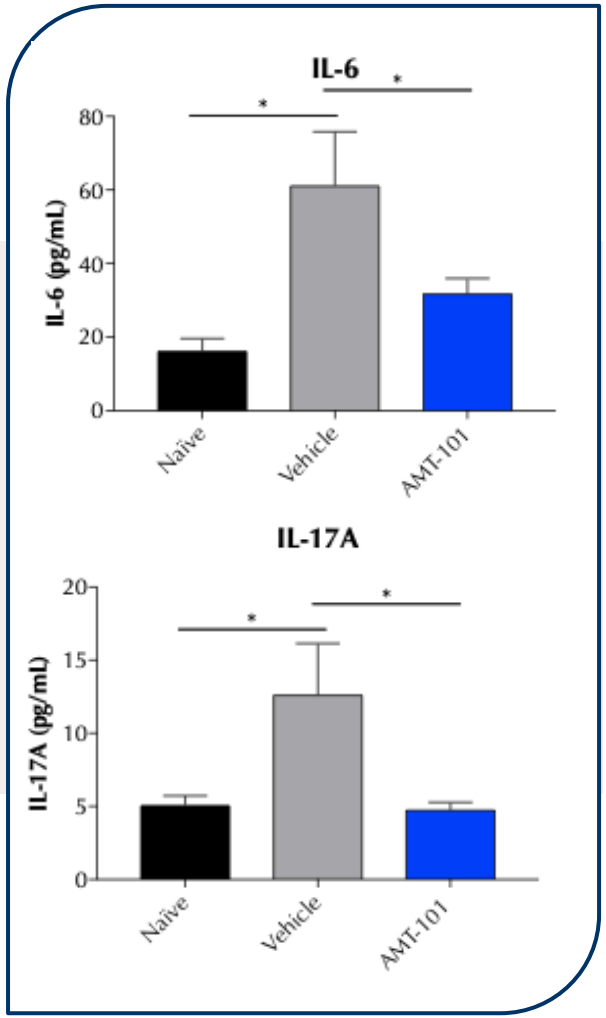


NHP Colon Gene Expression:

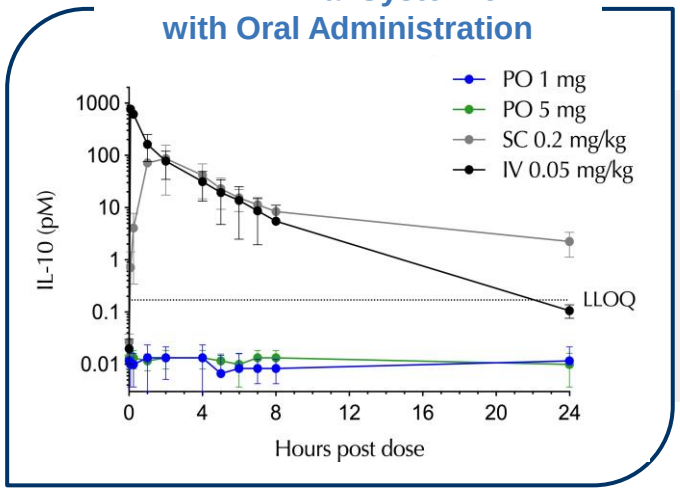
- Decrease **pro**-inflammatory gene expression and co-stimulatory molecules
- Increase **anti**-inflammatory genes

Oral AMT-101 Regulates Systemic Markers of Inflammation and Immune Dysregulation Despite No Systemic PK

Serum levels of pro-inflammatory markers after treatment with AMT-101 in murine model of colitis

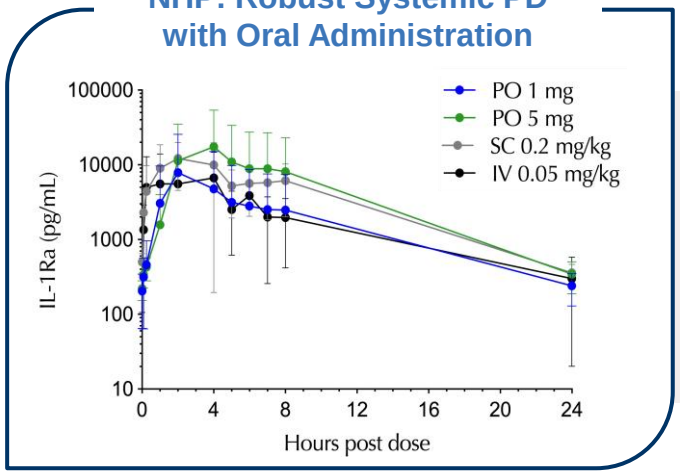


NHP: Minimal Systemic PK with Oral Administration



By design, AMT-101 remains in the lamina propria and acts locally

NHP: Robust Systemic PD with Oral Administration



In addition to acting locally, pharmacodynamic effects are observed in the blood compartment

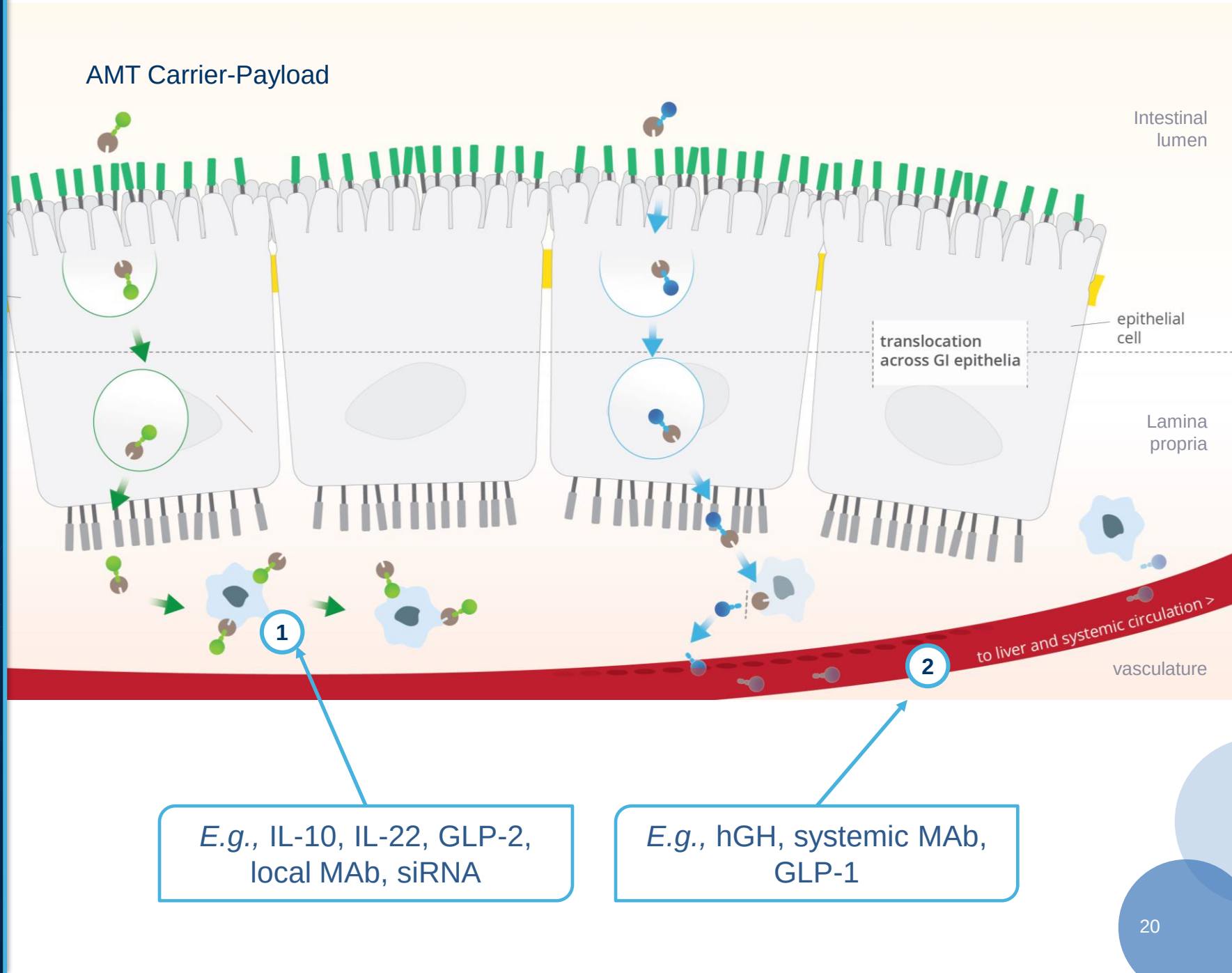
Data shown from preclinical NHP work.

AMT's Technology Platform can be Applied Across a Broad Spectrum of Therapeutic Modalities

Endogenous cellular trafficking vesicles diameter ~150 nanometers.
As a result, the large vesicle size enables a broad range of therapeutic modalities.

AMT's Oral Biologic Therapeutics Can Act Locally Along GI Tissue or Enter into Circulation

1. Targeting to lamina propria to impact enteric immune system and GI tissue
2. Directed to the portal and systemic circulation



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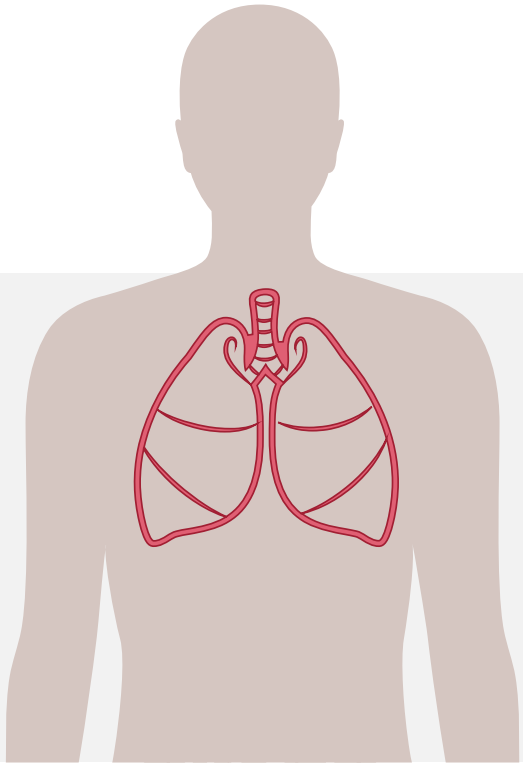
Expanding AMT's Technology Platform: Transformational Therapies in Respiratory Diseases

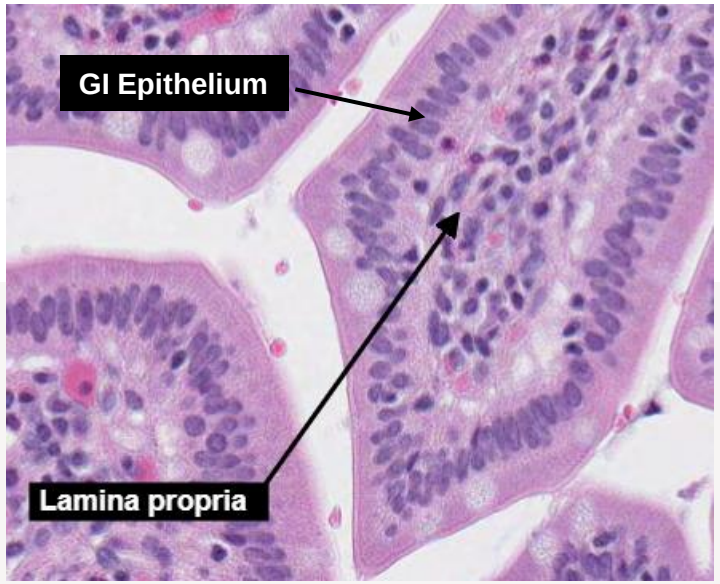


- Pulmonary columnar epithelial cells exhibit transcytosis in a similar manner as intestinal epithelium
- Cells in the pulmonary lamina propria tissue provide a rich source of novel targets
- Local, targeted inhaled biologics provide a novel opportunity in multiple areas of high unmet medical need

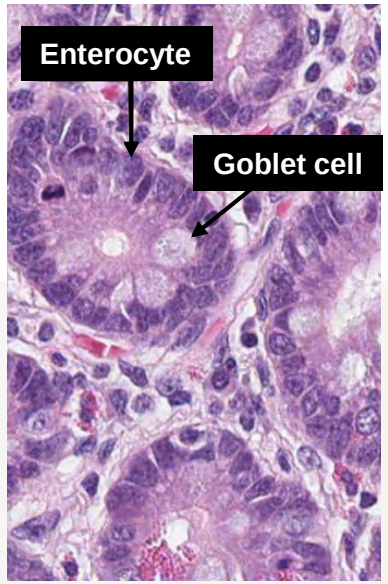
Similarities of Epithelial Surfaces in the GI & Respiratory Tracts

GI Tract

Mucosa

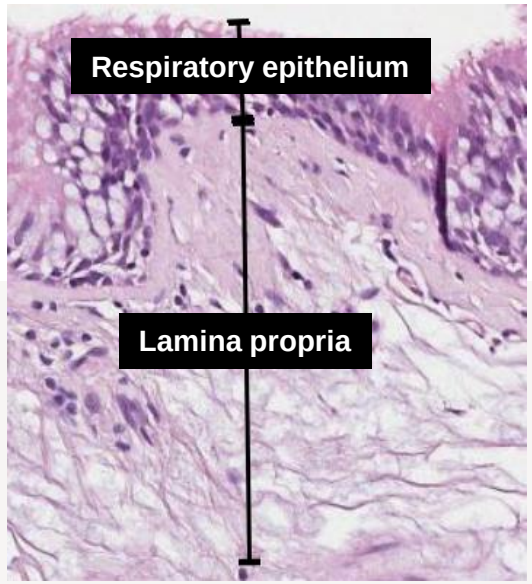


GI Epithelium

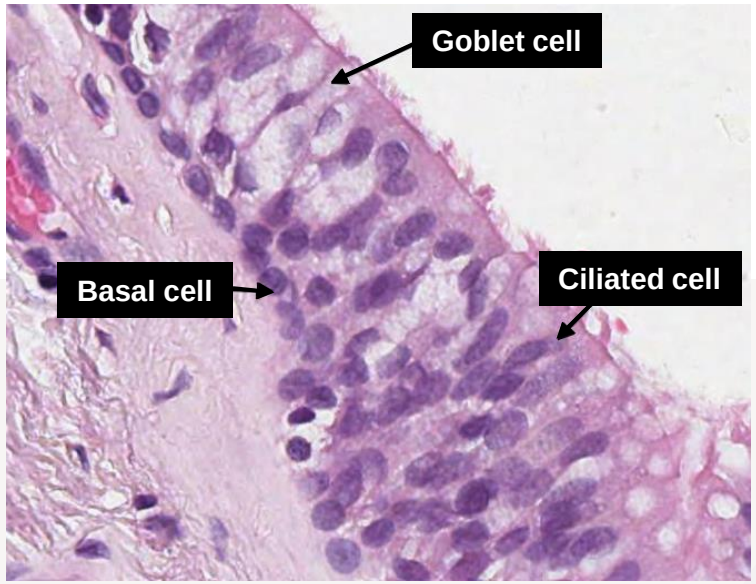


Respiratory Tract

Mucosa



Airway Epithelium

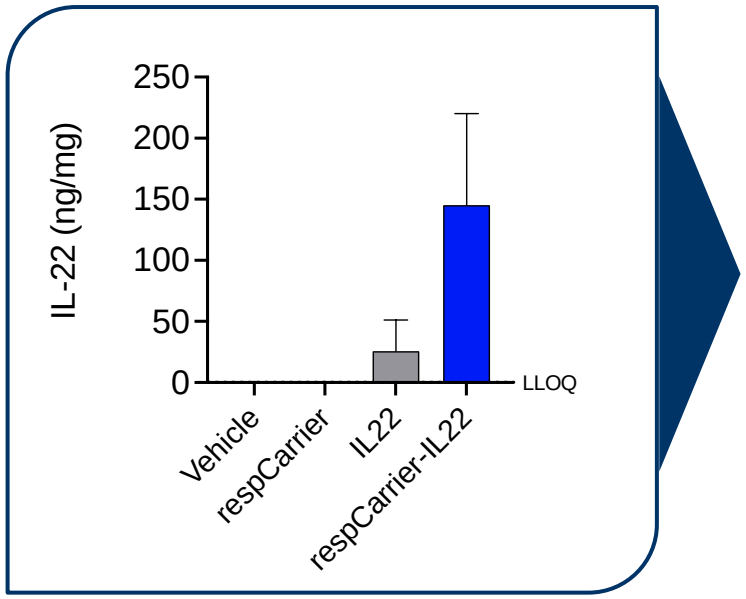


AMT's respCarrier System Traffics Biologic Therapeutics Across Respiratory Epithelial Barrier In Vivo

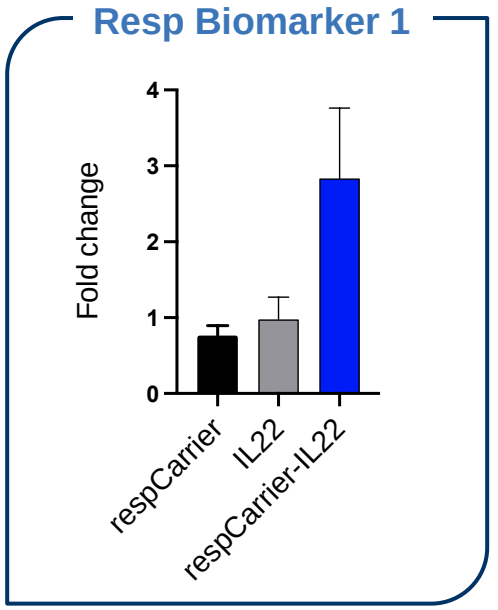
- respCarrier:
  - Based on natural trafficking pathway evolutionarily optimized for respiratory epithelium
  - Distinct carrier from oral (cholix-based) system

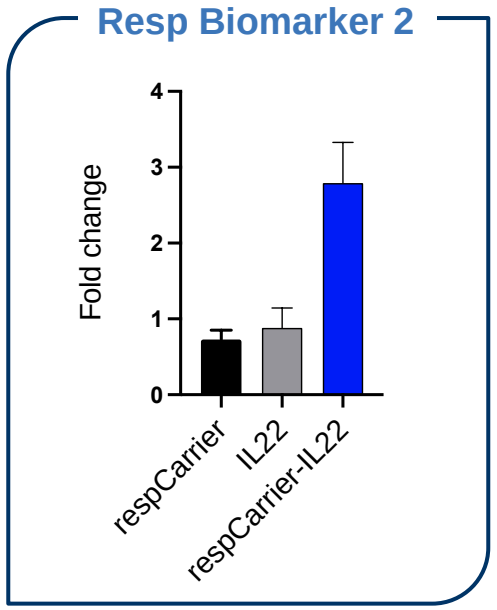
Example: respCarrier-IL22 fusion biologic – lung PK and PD

Tissue (lung) PK



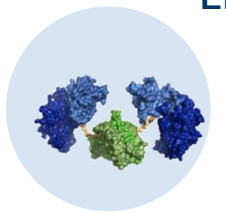
Upregulation of Respiratory Tract Barrier Function Genes





Mouse;4 hours post-dose.

Broad Biologics Platform Enabled by Internal Core Capabilities



INTERNAL PROTEIN ENGINEERING

GMP MANUFACTURING

INTESTINAL EPITHELIUM

TECHNOLOGY PLATFORM

RESPIRATORY EPITHELIUM

ORAL BIOLOGIC DOSAGE FORM DEVELOPMENT & MANUFACTURING

IN VITRO, IN VIVO MODELS TO SCREEN FOR TRANSPORT, ACTIVITY

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Clinical Programs

Bittoo Kanwar, MD
Chief Medical Officer

Two Complementary Oral Product Candidates in the Clinic

2 Product candidates in the clinic

AMT-101 (Oral fusion, IL-10; Four Phase 2 clinical trials)

AMT-126 (Oral fusion, IL-22; One Phase 1 clinical trial)

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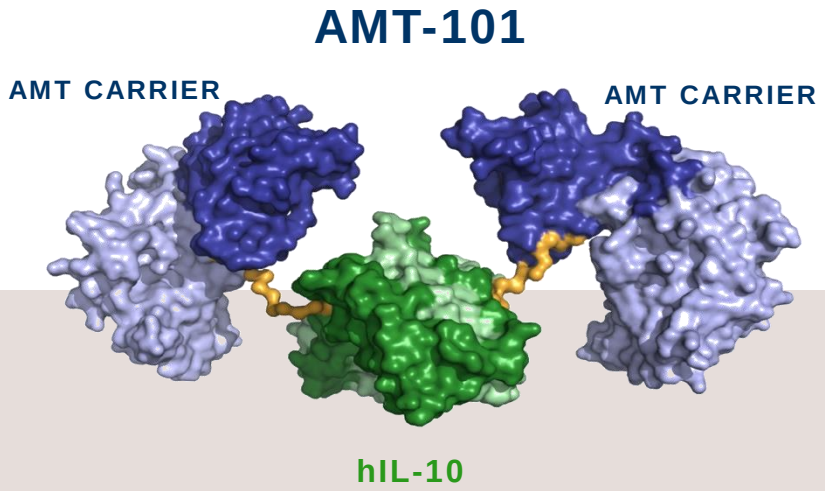
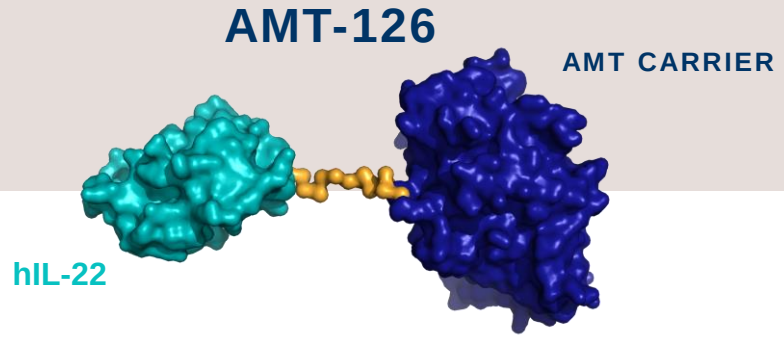
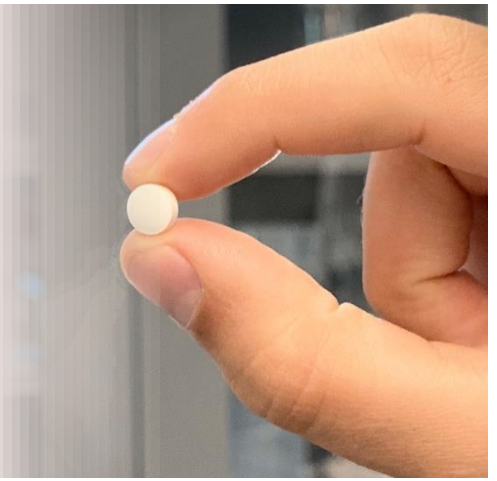
5 Active global clinical trials







Distinguished IBD and Rheumatology Key Opinion Leaders

Peter Lipsky, MD

Rheumatology Specialist
Former Scientific Director and Chief of the Autoimmunity Branch, NIAMS, National Institutes of Health

Brian Feagan, MD, FRCPC

Professor of Medicine, Departments of Medicine, Division of Gastroenterology, Epidemiology and Biostatistics
Western University, Canada

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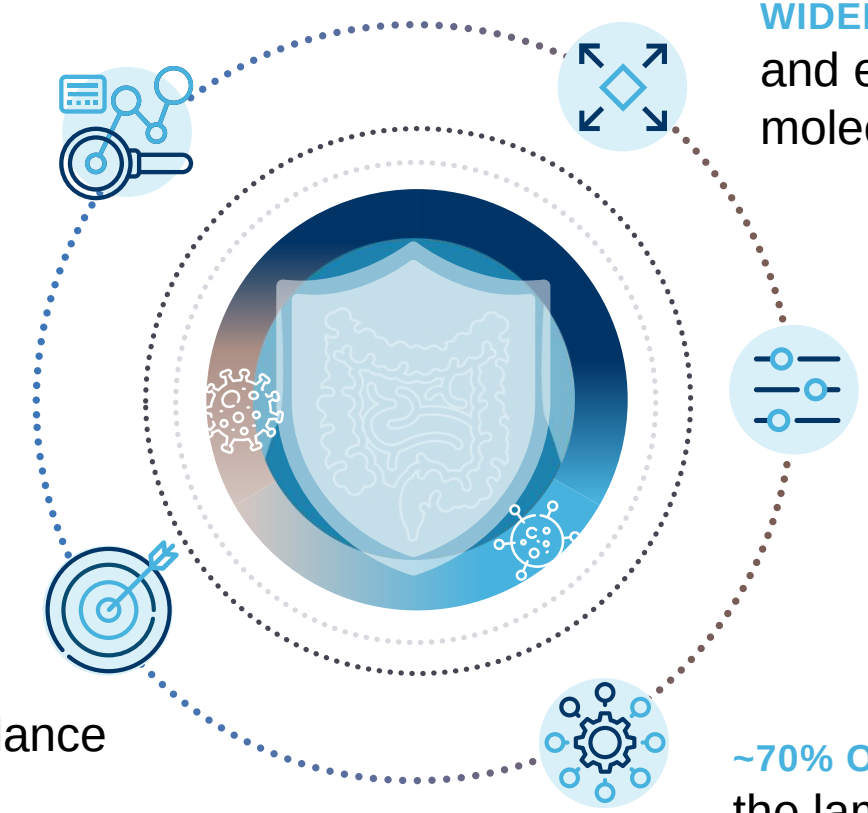
IL-10 and IL-22 Biology

Peter Lipsky, MD

Critical Role of the Immune System… and its Importance as a Therapeutic Target in the GI Tract

CONSTANT SURVEILLANCE
Tolerance or effector response: cellular differentiation, proliferation, circulating mediators, and cell trafficking



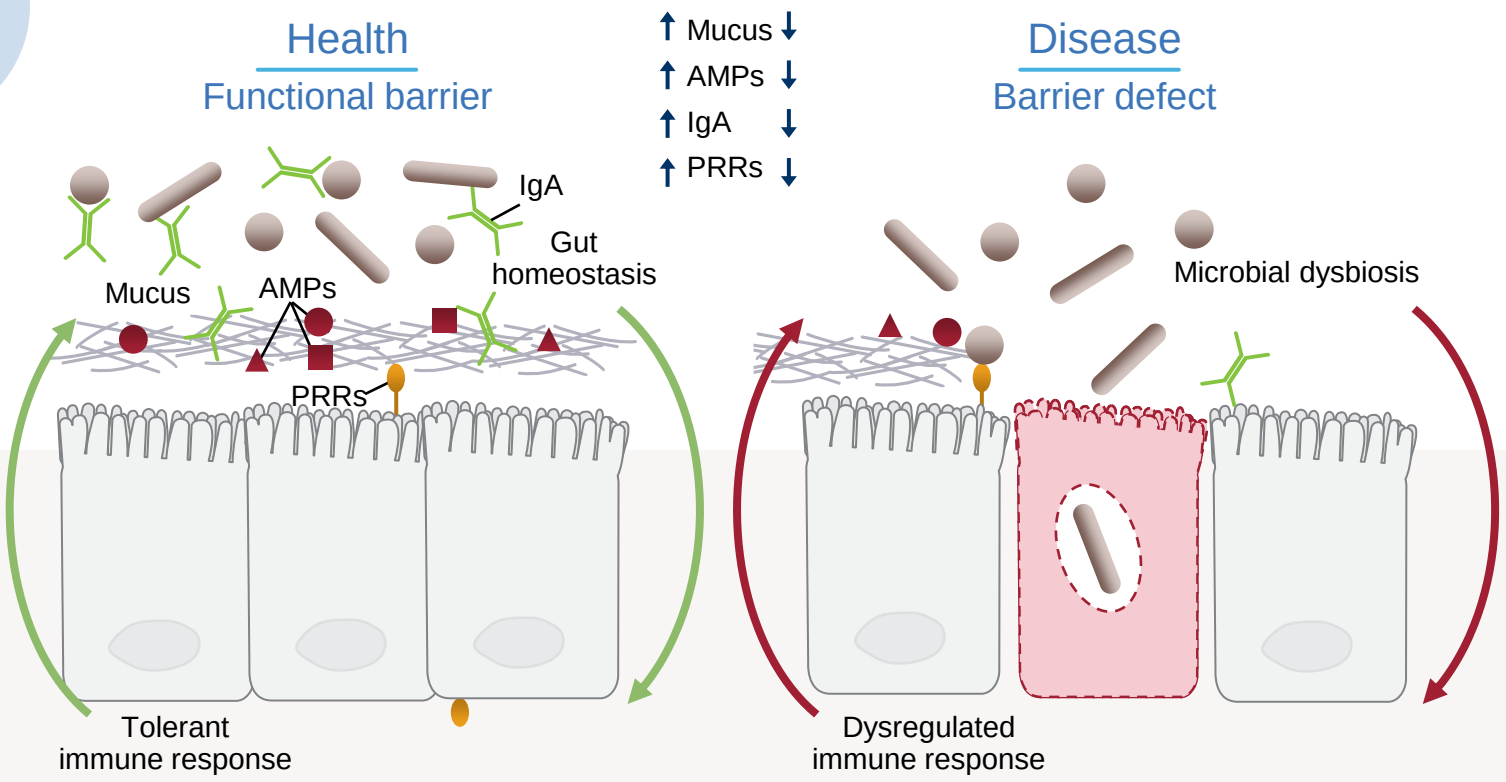
WIDELY DISTRIBUTED to have easy and early access to incoming molecules and organisms

LEARNS AND REMEMBERS what is dangerous/safe, available and working at all times

TARGETING THE LP precisely accesses the immune surveillance system

~70% OF THE IMMUNE SYSTEM is in the lamina propria (LP), at the basal side of the epithelium

Aberrant Immune Activation and/or Disruption of Mucosal Epithelial Barriers Lead to Local and Systemic Disease



Epithelium	↑ TGF-β, IL-33, TSLP, BAFF, APRIL
CD103⁺ DCs	↑ TGF-β retinoic acid
T_{reg} cells	↑ IL-10, TGF-β
Rorγt⁺ ILCs	↑ IL-22
Macrophages	↑ IL-10
B cells	↑ Commensal-specific IgA

Epithelium	↑ IL-6, IL-1
DCs	↑ IL-12, IL-23
T_H1 cells	↑ IFN-γ
T-bet⁺ ILCs	↑ IFN-γ
T_H17 cells	↑ IL-17A
Macrophages	↑ TNF, IL-12
B cells	↑ Commensal-specific IgG

- Loss of epithelial barrier integrity
- Dysregulated immune response
- Microbial dysbiosis
- Mucosal inflammation and tissue destruction

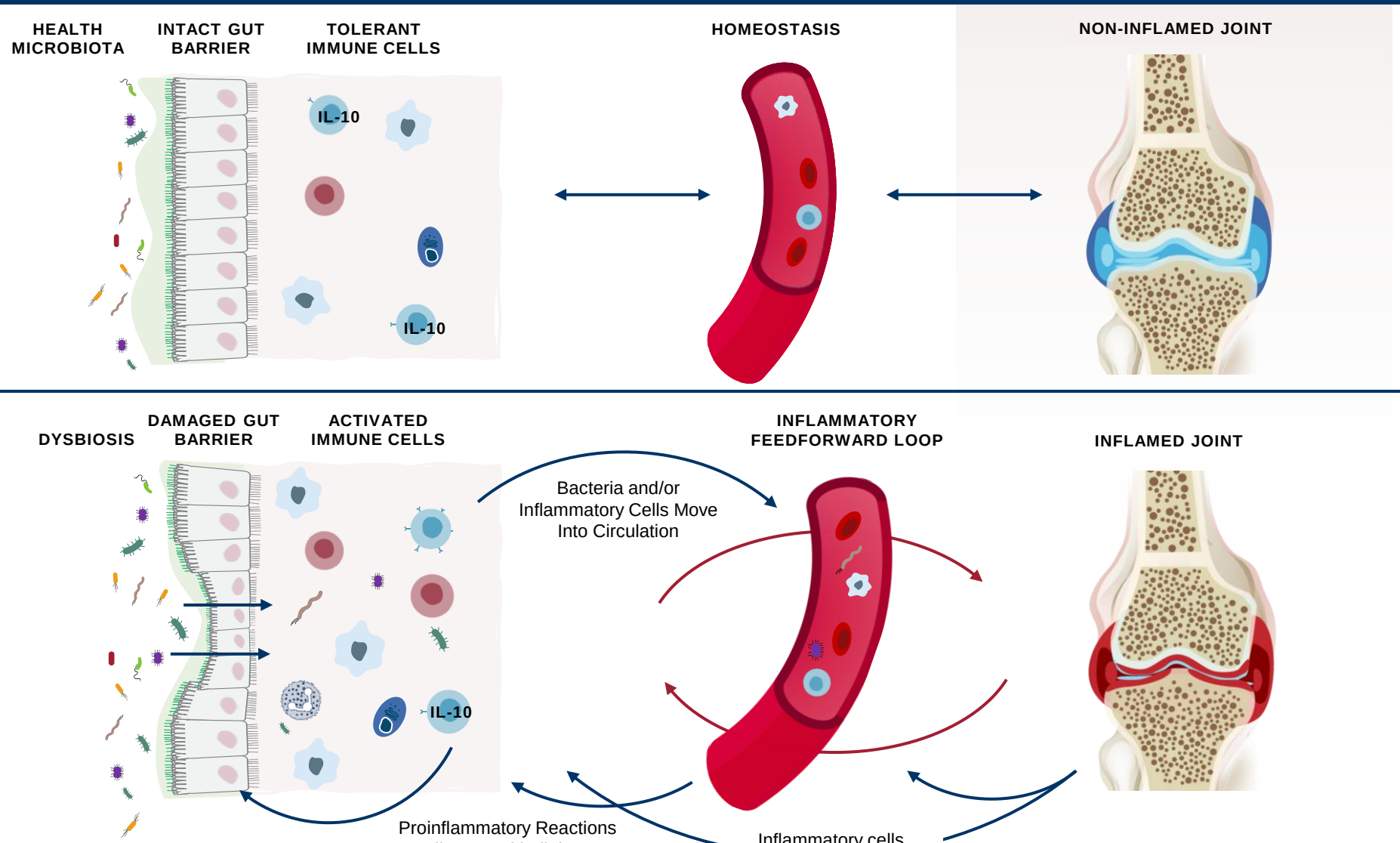
Immune tolerance
Microbial metabolites
Cell trafficking

Systemic *pathologies*…

Repairing epithelial barrier function and aberrant immune activation can have both local and systemic effects

from Brown, et al. Nat Immunol, 14:660, 2013

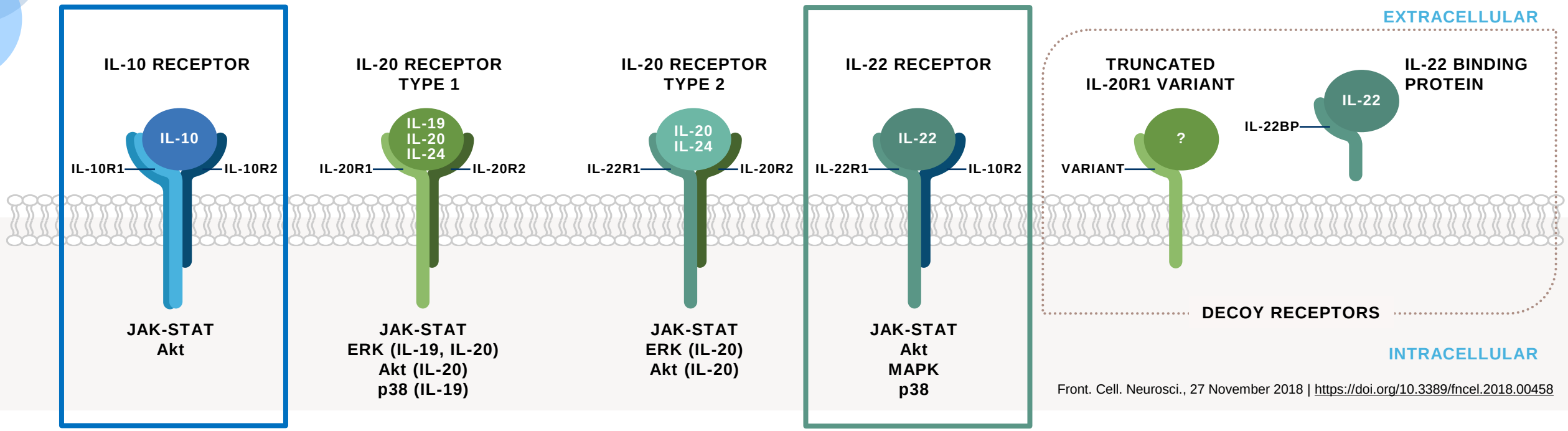
Immune Dysregulation Can Also Affect Peripheral Locations (*e.g.*, Joint, Skin, Brain)



Matei et al 2021 https://doi.org/10.1016/j.medj.2021.04.013

Role of IL-10 and IL-22 in the Immune System

IL-10 and IL-22 are Members of the Larger IL-10 Family and Share a Receptor Component



Front. Cell. Neurosci., 27 November 2018 | https://doi.org/10.3389/fncel.2018.00458

IL-10

- Maintains immune homeostasis
- Bridges innate and adaptive immune system cells

IL-22

- Maintains epithelial barrier function
- Regulates microbiome

Clinical Consequences of Low or Absent IL-10

IL-10 KO Mice or IL-10 Receptor Mutations

- Spontaneous development of colitis essentially irrespective of background, though severity varies
- Disease expression varies with microbiome

Humans- IL-10 Deficiency and IL-10R Loss of Function Mutations

- Early onset/pediatric IBD, severe and intractable, fistula formation, perianal disease https://doi.org/10.1016/j.jaci.2012.09.025

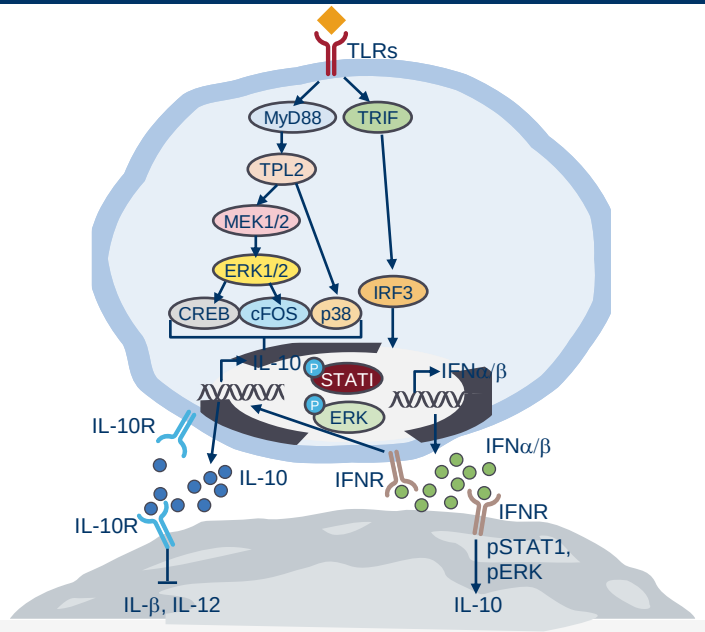
Immunomodulation Induced by IL-10 has Demonstrated Improvement in Arthritis in Animals and RA Patients

- Systemic administration of IL-10 associated with AE's

EW St. Clair Rheum 1999 38:293-297

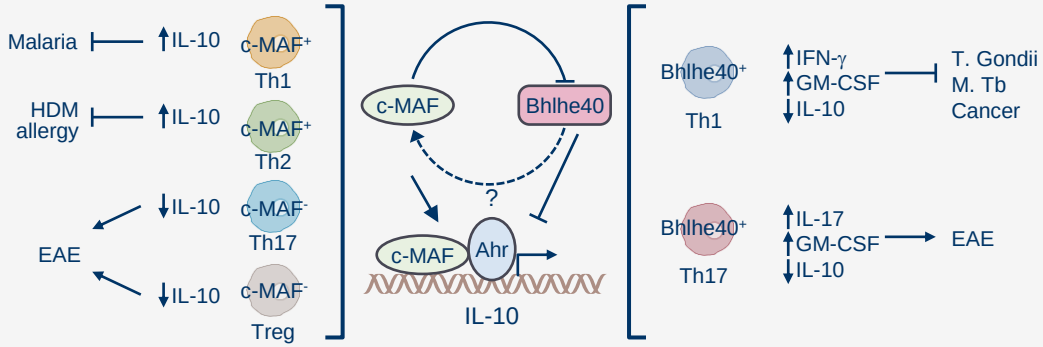
Maini et al: Arthr Rheum 40 suppl 9 S224 1997

Regulation of IL-10 Expression in Myeloid Cells and T Cells



IL-10 and Type 1 IFNs are induced in myeloid via several different pathways; TLR engagement and signaling through TLR2-MSK-CREB, and TPL-2-ERK.

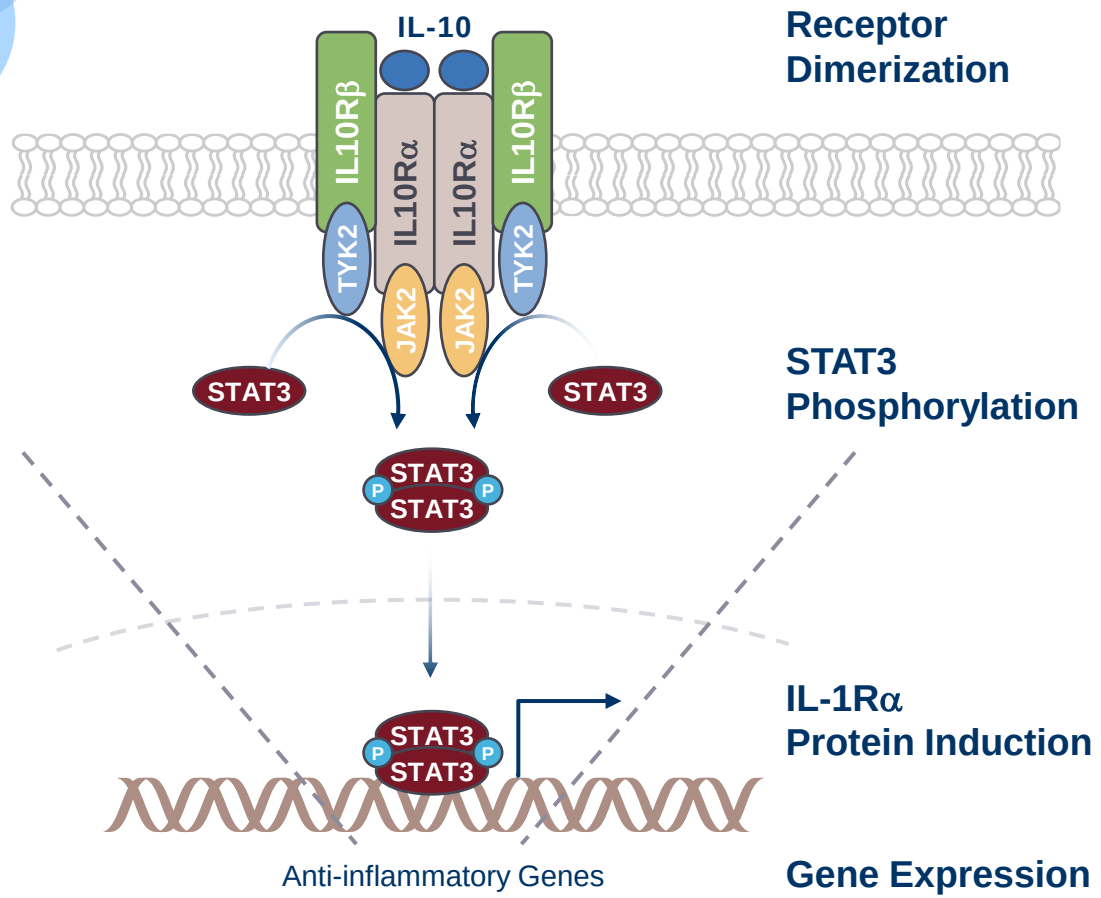
Type 1 INFs also induce IL-10 production and work synergistically with IL-10 to regulate downstream inflammatory responses.



IL-10 expression in T cells is highly regulated with cMAF increasing IL-10 in various Th cells and Bhlhe40 repressing IL-10 in Th1 and Th17 cells. Of note, cMaf and Bhlhe40 may negatively regulate the expression of one another.

Ouyang and O'Garra https://doi.org/10.1016/j.immuni.2019.03.020

IL-10 Functions and Mechanism of Action



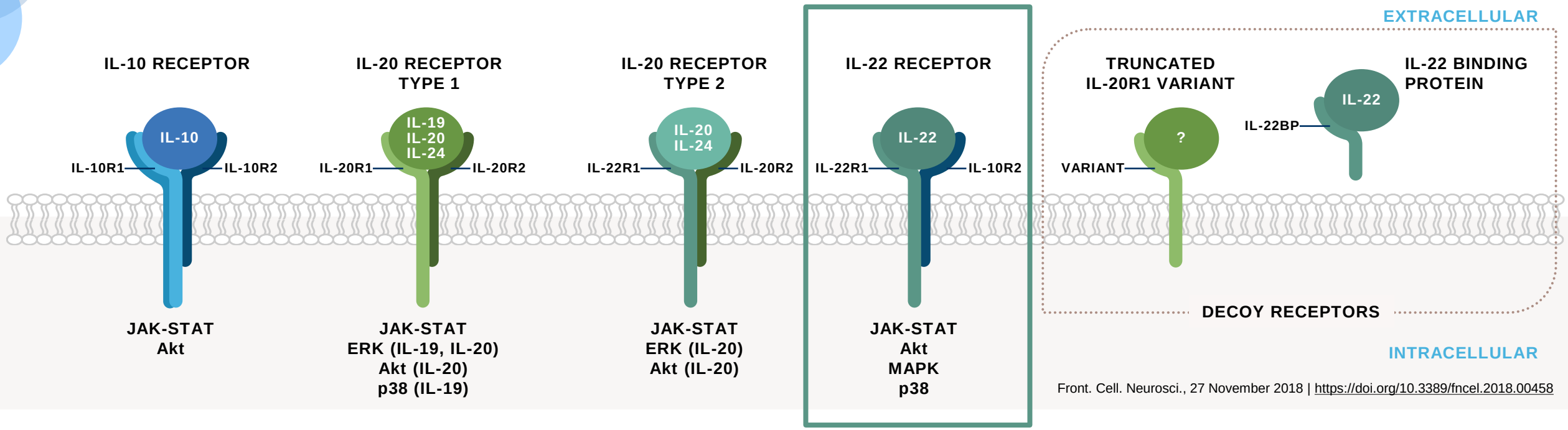
- Deactivates inflammatory macrophages
- Decreases APC- and T cell produced cytokines
- Suppresses T cell proliferation and inflammation
- Promotes tolerogenic dendritic cells→T regulatory cell development (Tr1)
- Role for IL-10 in the NLRP3 pathway: Inhibits inflammasome-mediated caspase 1 activation

  → Important player in the control of sterile inflammation

https://doi.org/10.1016/j.jaci.2012.09.025

Role of IL-10 and IL-22 in the Immune System

IL-10 and IL-22 are Members of the Larger IL-10 Family and Share a Receptor Component



Front. Cell. Neurosci., 27 November 2018 | https://doi.org/10.3389/fncel.2018.00458

IL-10

- Maintains immune homeostasis
- Bridges innate and adaptive immune system cells

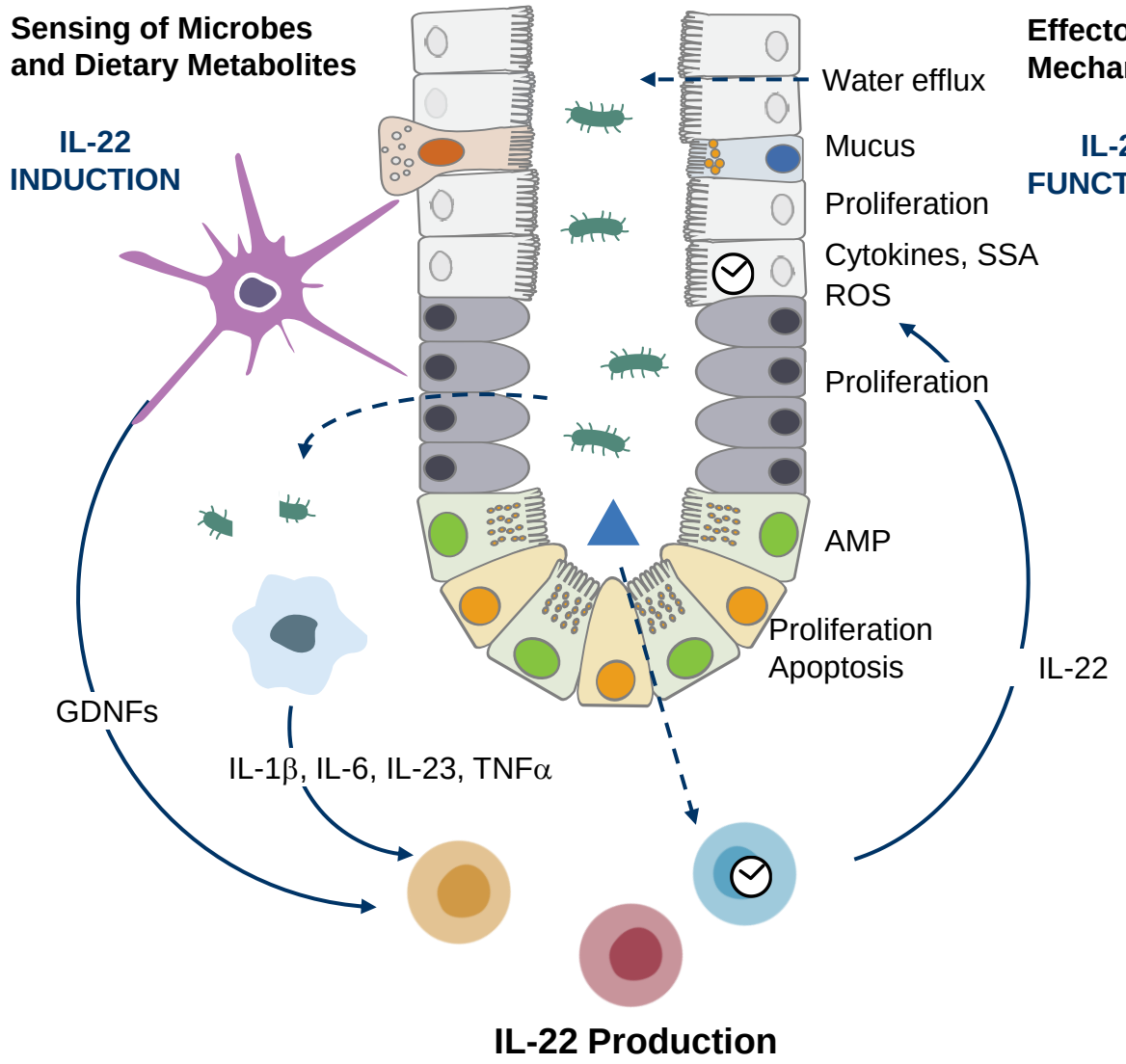
IL-22

- Maintains epithelial barrier function
- Regulates microbiome

IL-22 Promotes a Healthy Epithelial Barrier

Roles of IL-22

- Restores epithelial barrier integrity and homeostasis
- Promotes cell proliferation and supports mucosal healing
- Regulates microbiome via mucins and antimicrobial peptides



From Keir et al, JEM 2020

Endogenous Cytokines and Validated Therapeutic Targets:
IL-10 and IL-22 Play Critical Roles in Immune Homeostasis and Disease

IL-10

Net positive effect is to restore immune homeostasis and reduce inflammation

- Re-establish homeostasis
- Enable local repair processes
- Decrease inflammation
- Reduce local induction of inflammatory mediators that can act at a distance
- Reduce trafficking of proinflammatory cells
- Naturally occurring endogenous cytokines

IL-22

Net positive effect is to reduce ingress of microbial antigens and organisms, reduced inflammatory response, local repair

- Strengthen tight junctions and reduce gut leakiness
- Induce endogenous antimicrobial peptides and reduce dysbiosis
- Induction of mucins to restore barrier function at epithelial surface
- Naturally occurring endogenous cytokines

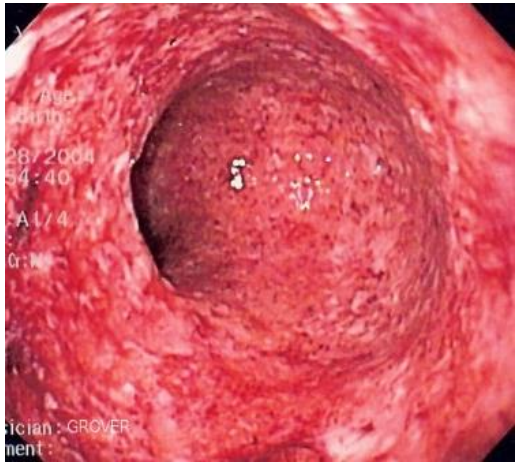
APPLIED | MOLECULAR | TRANSPORT

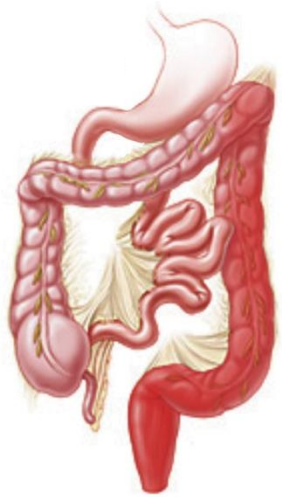
Treatment Landscape in IBD

Brian Feagan, MD, FRCPC

Inflammatory Bowel Disease (IBD)

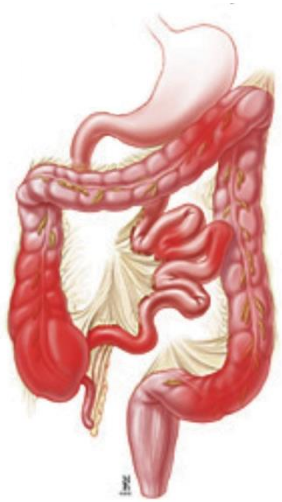
Ulcerative Colitis

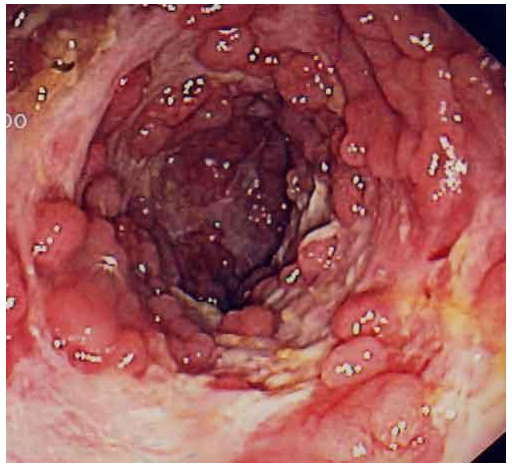




- Limited to colon
- 50% mod/severe disease
- Increased risk of CRC

Crohn's Disease





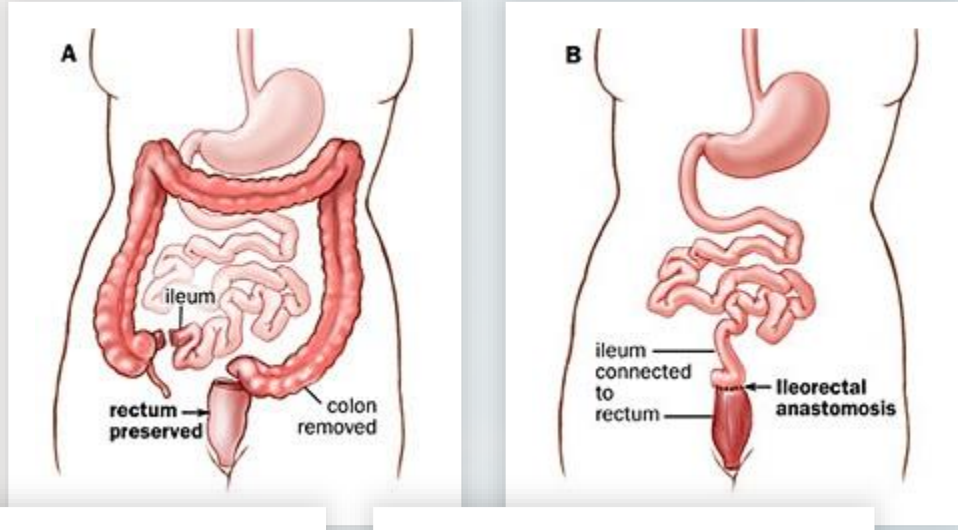
- Any region of GI tract
- 30% limited to terminal ileum
- 70% require surgery

Baumgart DC, et al. Lancet 2012;380:1590-605; Danese S, et al. N Engl J Med 2011;365:1713-25.

Pouchitis - Ileal Pouch Anal Anastomosis (IPPA)

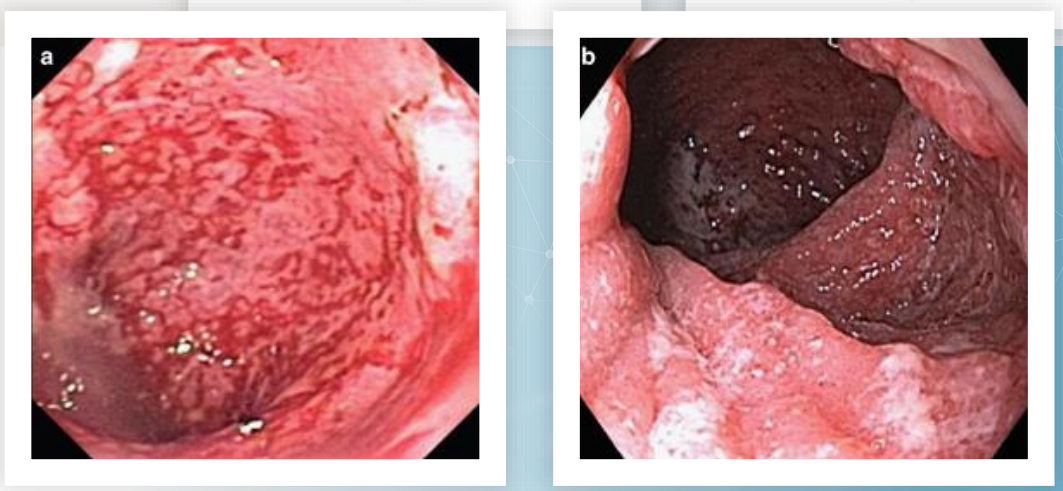
Prevalence

- Up to 30% of UC patients will require colectomy at some point
- Majority will have an ileal pouch anal anastomosis (IPAA)
- 50% will develop at least one episode of pouchitis within 10 years
- 25% of those will develop chronic pouchitis



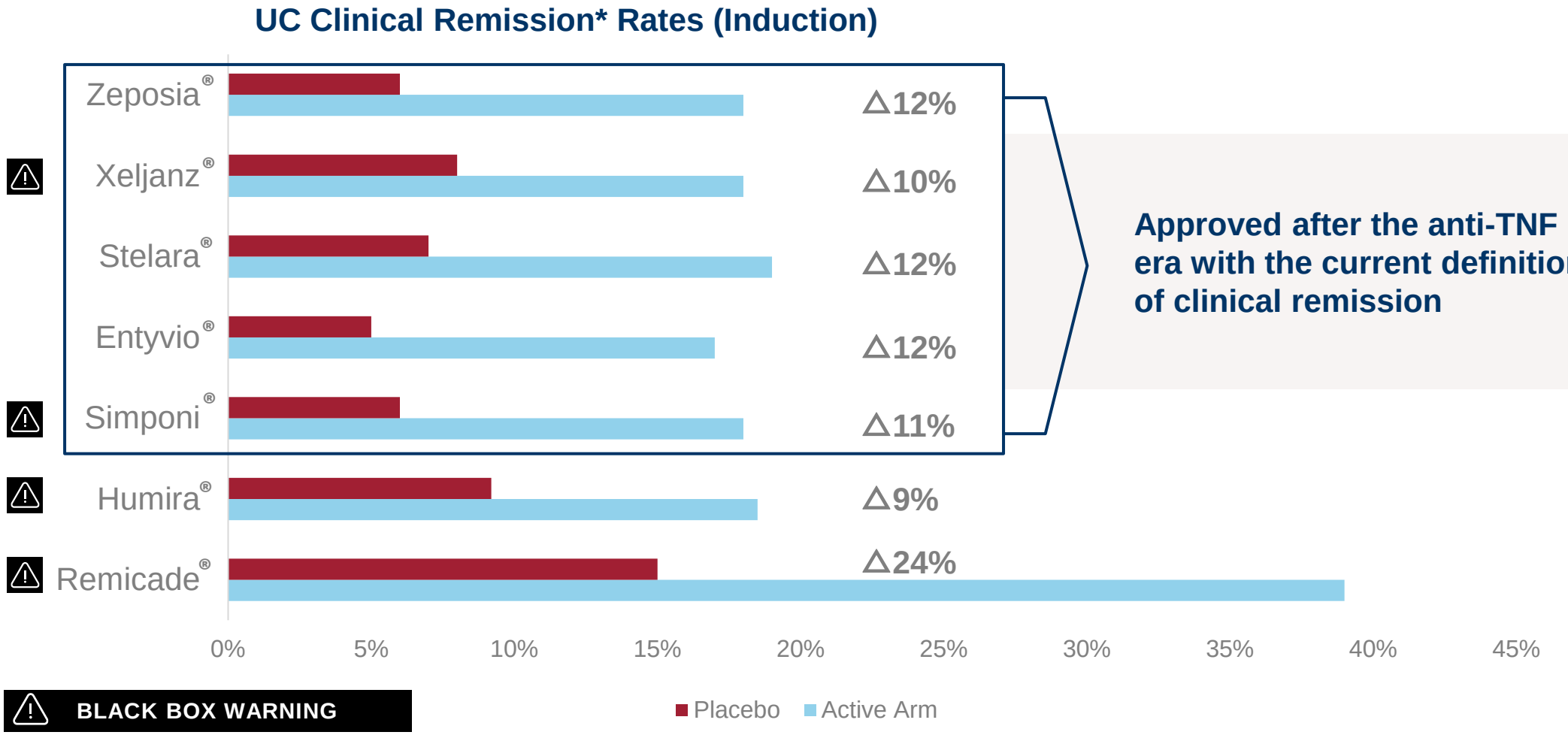
Epidemiology

- 20-40K in US & EU (each)
- Orphan population with no approved therapies



Outtier A, Ferrante M, Clin Exp Gastroenterol; Volume 2021:14; 277-290

UC Monotherapy Rates of Remission Are Sub-Optimal with Current Approved Therapies and Have Safety Concerns



Approved after the anti-TNF era with the current definition of clinical remission

BLACK BOX WARNING

**Clinical Remission defined as as Mayo score ≤ 2 with no individual subscores > 1 for Remicade, Humira, Simponi, Entyvio, Stelara, and Xeljanz. For Zeposia, Clinical Remission defined as rectal bleeding subscore = 0, stool frequency subscore = 0 or 1 (and a decrease from baseline in the stool frequency subscore of ≥ 1 point), and endoscopy subscore = 0 or 1 without friability.*

Source: Full Prescribing Information for Remicade, Humira, Simponi, Entyvio, Stelara, Xeljanz, and Zeposia data (Accessed September 2021).

Clinical Decision-Making Strategy to Enable Remission: Significant Unmet Needs in IBD Development

Start with Simplest Rx

- New patients, biologic naive patients, patients failing a biologic
- Seeking clinical remission, adherence, QoL, safety, durable response

Proceed to Combo Rx

- Add new MoA to enhance response
- Safe, convenient
- Unlike other combos, doesn't carry added toxicity

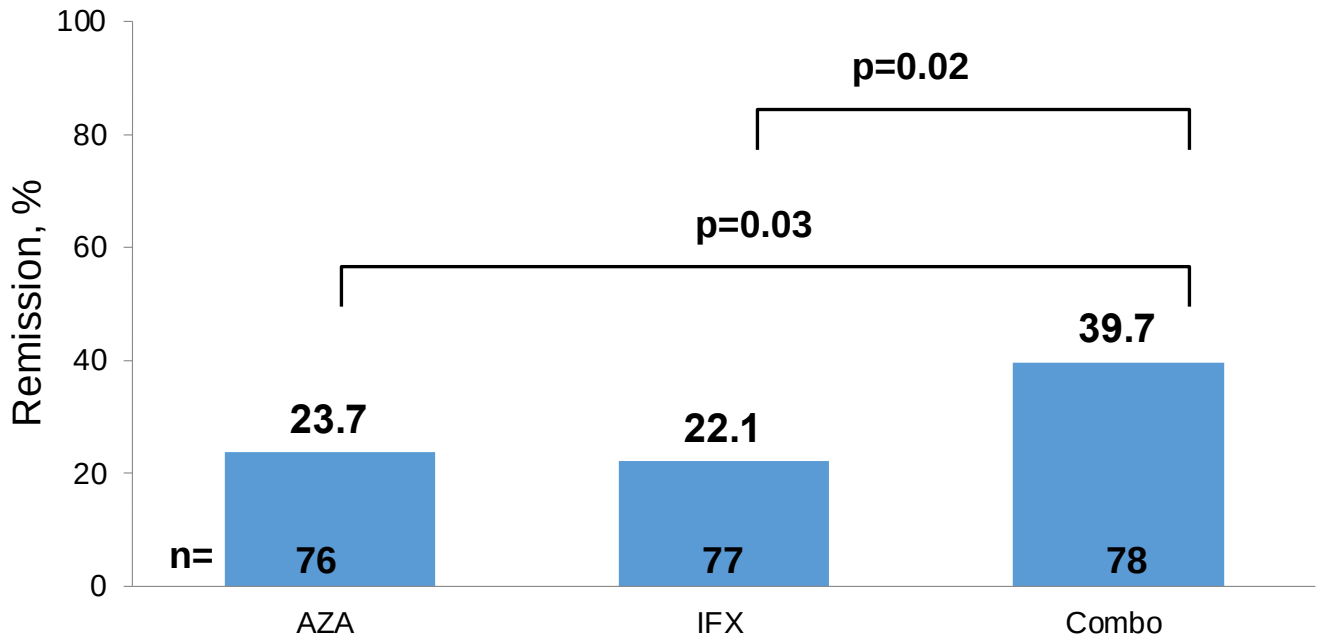
Synergistic Combo Rx

- Literature: TNF-α responses lower in patients with low IL-10
- Safe, convenient
- Unlike other combos, doesn't carry added toxicity

Combination Treatment Regimens Have Demonstrated Improved Efficacy Along with Safety Concerns

Infliximab + Azathioprine

- Randomized, double-blind study
- Mayo score of 6–12 at baseline
- AZA/TNF-naïve population
- Primary endpoint: corticosteroid-free remission at Week 16
- Increased rate of serious infections and lymphoma observed with combination therapy



Panaccione et al. Gastroenterology 2014;146:392-400.

AMT-101 Phase 2: Key IBD Endpoints

AMT-101 Phase 2 trials have been designed with comprehensive and state-of-the-art endpoints

- Enables clear signal detection and decision making for pivotal trials

Mayo Score (3-Component)

- Current definition of clinical remission (endoscopic and stool frequency sub score of 0/1 and rectal bleeding sub score of 0)

Importance of UC-100 Endpoint

- 100-point composite scale incorporating stool frequency, endoscopy, and histology
- Designed to optimize treatment effect in early phase/smaller trials for efficient development

UC Mayo Clinic Scoring System (Previous Definition of Remission)

Score	Mucosal Appearance at Endoscopy	Rectal Bleeding	Stool Frequency	Physician Rating of Disease Severity
0	Normal/ inactive disease	No blood with bowel movements	Normal number of stools/day	Normal
1	Mild disease (erythema)	Blood <50% of time	1–2 > normal/day	Mild
2	Moderate disease (ulcers/friable)	Blood >50% of time	3–4 > normal/day	Moderate
3	Severe disease (active bleeding)	Passing blood alone	>4 > normal/day	Severe

- Moderate to Severely active disease defined as a score of 6-12
- Remission defined as a score ≥ 2

Current UC Definition of Remission (Key Topline Efficacy Readout in AMT-101 Phase 2 UC Trials)

(1°Endpoint):

Endoscopic Score ≤1
+
Stool Frequency Score ≤1
(with 1+ pt reduction)
+
Rectal Bleeding Score 0

Mucosal Appearance at Endoscopy	Rectal Bleeding	Stool Frequency	Physician Rating of Disease Severity
Normal/ inactive disease	No blood with bowel movements	Normal number of stools/day	Normal
Mild disease (erythema)	Blood <50% of time	1–2 > normal/day	Mild
Moderate disease (ulcers/friable)	Blood >50% of time	3–4 > normal/day	Moderate
Severe disease (active bleeding)	Passing blood alone	>4 > normal/day	Severe

Physician Rating not part of the primary endpoint

APPLIED | MOLECULAR | TRANSPORT

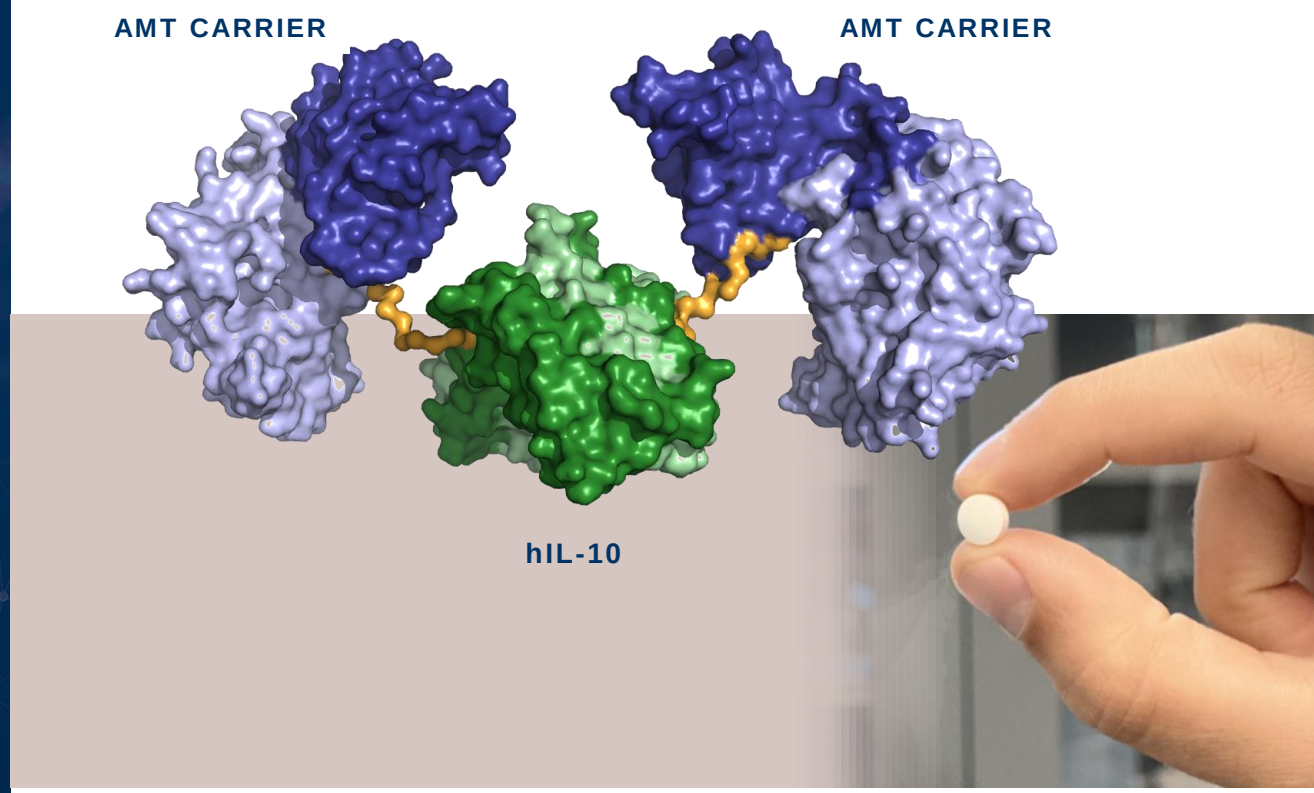
Oral AMT-101 Overview

Bittoo Kanwar, MD
Chief Medical Officer

AMT-101

- Oral, GI-selective once-daily biologic
- Unique product profile with potential use as single agent or in combination
- Ongoing comprehensive Phase 2 program in multiple UC populations and RA

Oral IL-10 Fusion Biologic



The Journal of Immunology

A Novel Fusion of IL-10 Engineered to Traffic across Intestinal Epithelium to Treat Colitis

Nicole C. Fay, Baby-Periyanayaki Muthusamy, Linh P. Nyugen, Radhika C. Desai, Alistair Taverner, Julia MacKay,et al

Interleukin-10 (IL-10): A Clinically-Validated Inflammation Target

Clinical efficacy in IBD with systemic rhIL-10

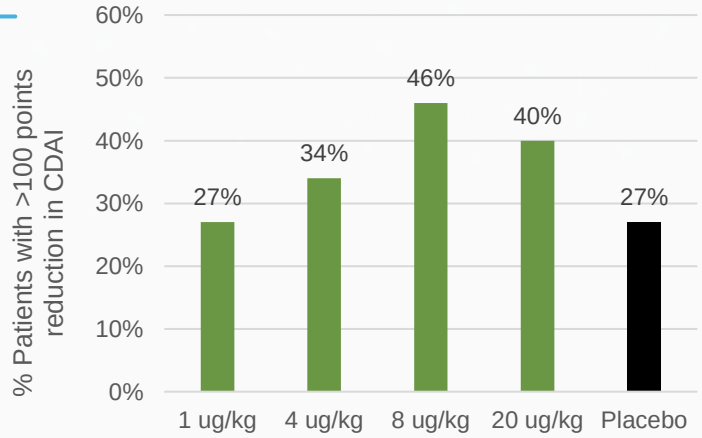
(SAEs: anemia and thrombocytopenia due to systemic administration)

Interleukin-10 is a Clinically Validated Target Limited by Parenteral Toxicity

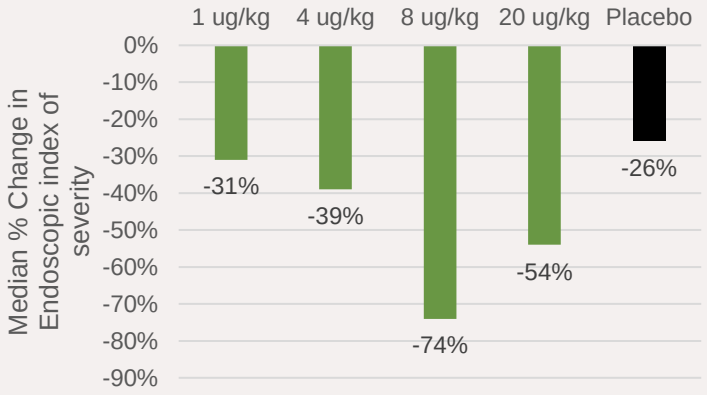
Prior Clinical Trial (2000) in Moderate-to-Severe Crohn's Disease Patients

- N=329 patients, 28 consecutive days of dosing with rhuIL-10 or placebo via sub-Q injection
- 45 patients discontinued due to AEs
- Limiting toxicities (anemia and thrombocytopenia) **observed at all doses** due to systemic exposure/PK
- Systemically administered recombinant human IL-10 shows bell-shaped dose-response curve

CDAI



CDEIS



Safety and efficacy of recombinant human interleukin 10 in chronic active Crohn's disease. Schreiber, Stefan et al. *Gastroenterology*, 2000, Volume 119, Issue 6, 1461 - 1472

Completed Successful Phase 1a/b Trial for AMT-101

Phase 1a HV SAD

AMT-101 was well-tolerated in all doses with no differences in TEAEs observed between active and placebo

Phase 1b UC MAD

- Adults with Active UC
- Baseline mean Mayo score 7.2
- 14-day treatment period
- 4 dose levels:1, 3, 10, 30 mg
- Placebo-controlled 3:1

Multiple Ascending Dose

16 UC Patients

Trends of improvement in objective measures of disease activity including fecal calprotectin, CRP, central read histology in only 14 days of treatment

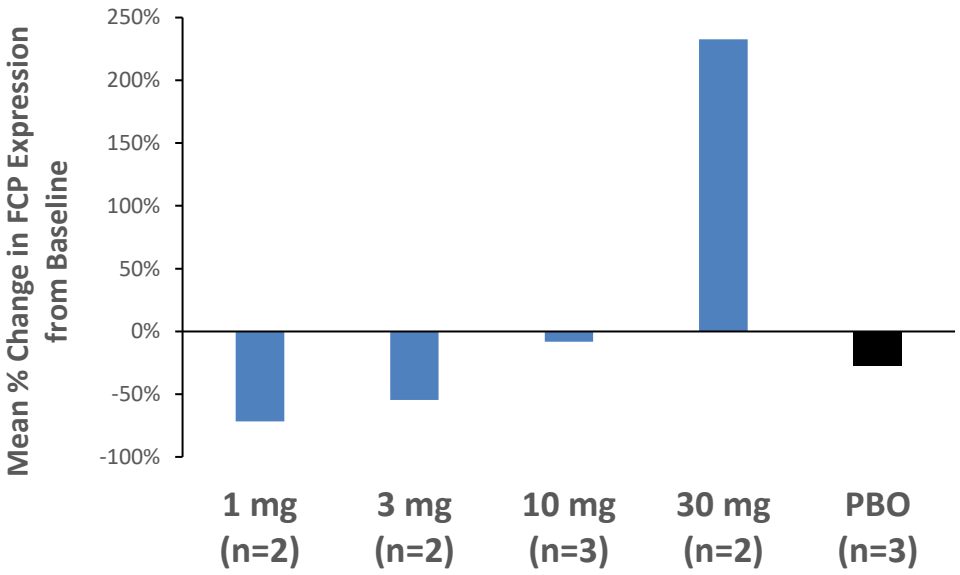
No IL-10 related AEs as previously seen with systemic administration

Informed Phase 2 dose selection at **3mg** and **10mg**

Confirmed no systemic PK by design

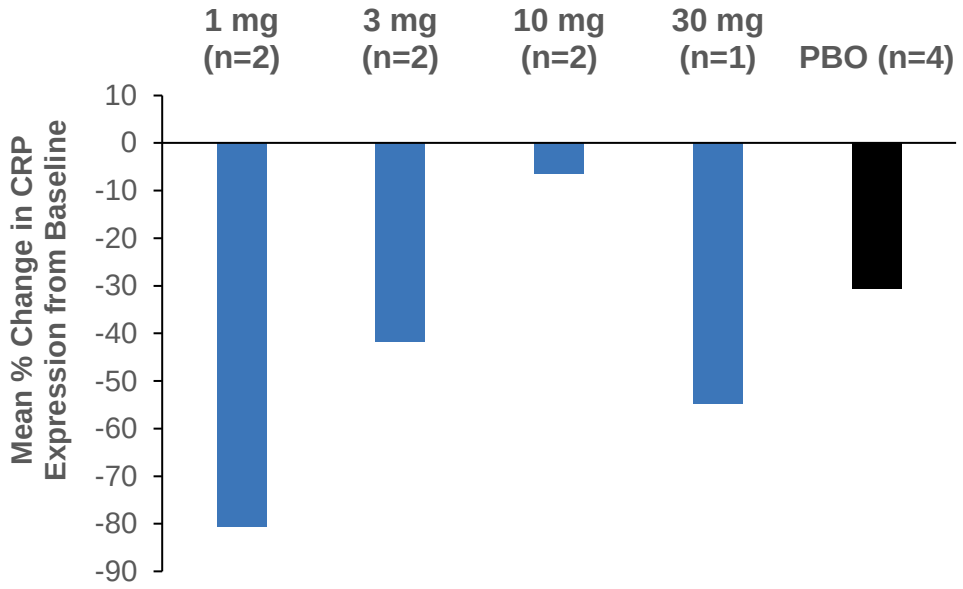
Changes in Fecal Calprotectin (FCP) and C-Reactive Protein (CRP) Were Observed After 14 Days of Oral Treatment with AMT-101

Patients with Baseline FCP > 150 ug/g



Placebo adjusted mean reductions of 44% and 27% in the 1 mg and 3 mg dose groups

Patients with Baseline CRP > 5mg/L



Local gut delivery of IL-10 may result in localized as well as systemic immunomodulatory effects

Histopathology Improvement in UC Patients After 14 Days of Treatment with AMT-101

Blinded central read

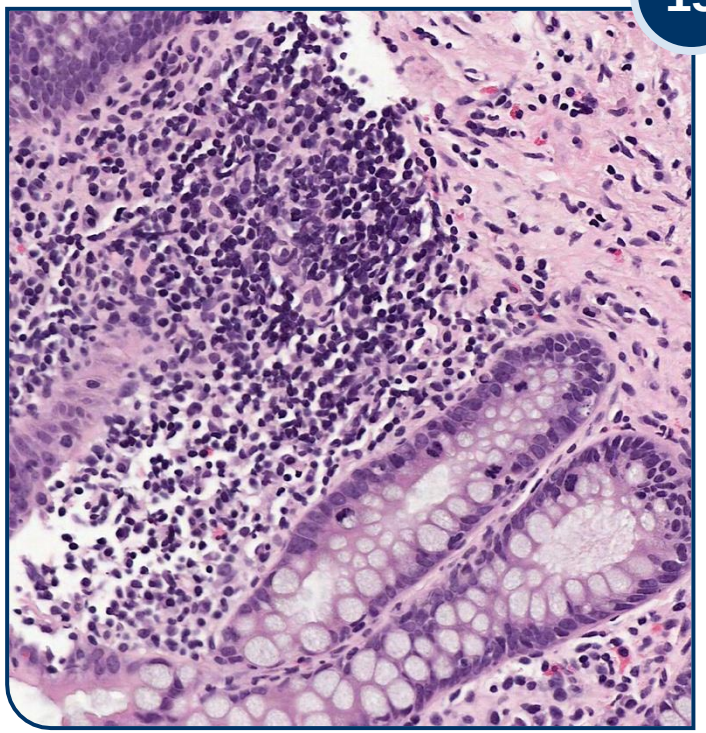
AMT-101

60% (6/10) of patients on active showed a reduction in total Geboes score

PLACEBO

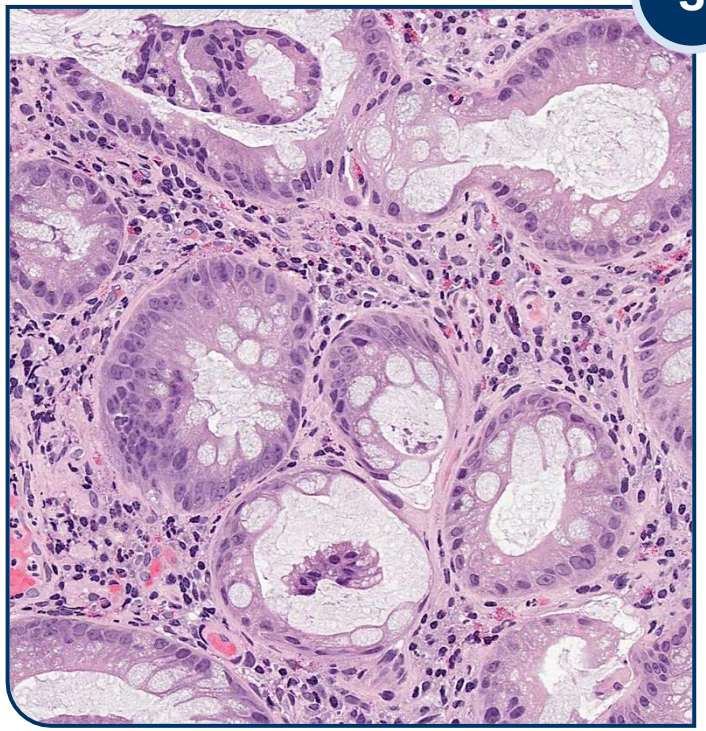
0% (0/2) of patients had a reduction in total Geboes score

Baseline



15
Geboes score

AMT-101 for 14 days



3
Geboes score

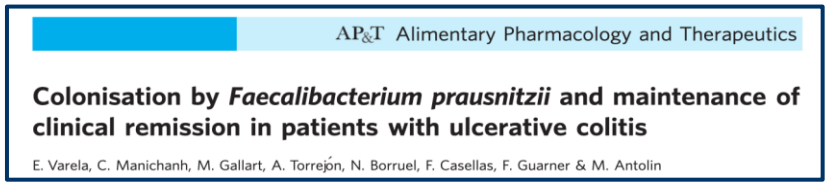
Images: 10 mg dose patient

Geboes score[1]: 0 (normal) to 22 point scale.

[1]B. Lemmens, et al. May 2013.

Microbiome Improvement Observed in AMT-101 Treatment Groups in UC Patients

Certain species (such as *F. prausnitzii)* ferment dietary fiber into metabolites (e.g. butyrate) that are associated with IL-10 production, immune stasis, and improved gut health [1]

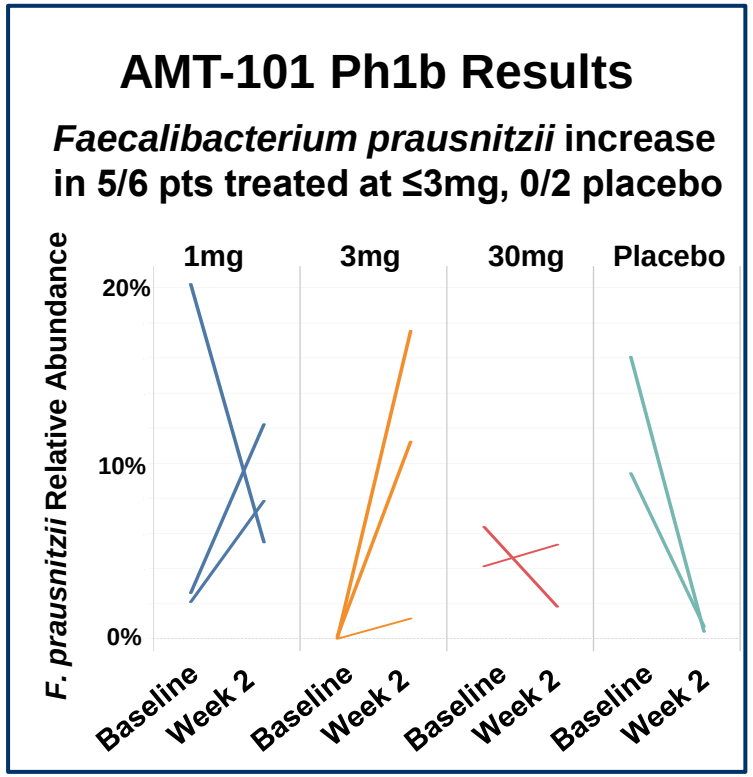


Analysis of Phase 1b with active UC patients

Shotgun sequencing for species-level resolution was conducted on baseline and end of treatment stool samples

Changes to gut microbiome observed with lower doses of AMT-101 (1mg and 3mg cohorts):

- Increase in 'beneficial' species belonging to the Firmicutes phyla (e.g. *F. prausnitzii*)
- Observe similar increases to Bacteroidetes; decreases in Actinobacteria



1. Lopez-Siles M, et al. Faecalibacterium prausnitzii: from microbiology to diagnostics and prognostics. ISME J 11, 841–852 (2017).
*Note: 10mg cohort not evaluated due to sampling

Totality of Oral AMT-101 Data to Date are Compelling

- Well-tolerated
- Early trends of improvement in objective measures of disease activity
  - Fecal calprotectin
  - CRP
  - Central read histology
- Potential rapid onset of action
  - Objective measured after only 14 days of treatment

APPLIED | MOLECULAR | TRANSPORT

Oral AMT-101 Trial Design

Bittoo Kanwar, MD
Chief Medical Officer

Enrolling Comprehensive Phase 2 Plan for Oral AMT-101

market-uc combo

UC Combination with anti-TNFα

- Local disease
- Moderate-to-severe UC patients
- ~30 patients: biologic naïve
- 8-week oral daily dosing

fillmore-pouchitis

Pouchitis

- Local disease
- Chronic pouchitis patients
- ~20 patients: biologic naïve and experienced
- 12-week oral daily dosing

lombard-uc

UC Monotherapy

- Local disease
- Moderate-to-severe UC patients
- ~100 patients: biologic naïve and experienced
- 12-week oral daily dosing

castro-ra combo

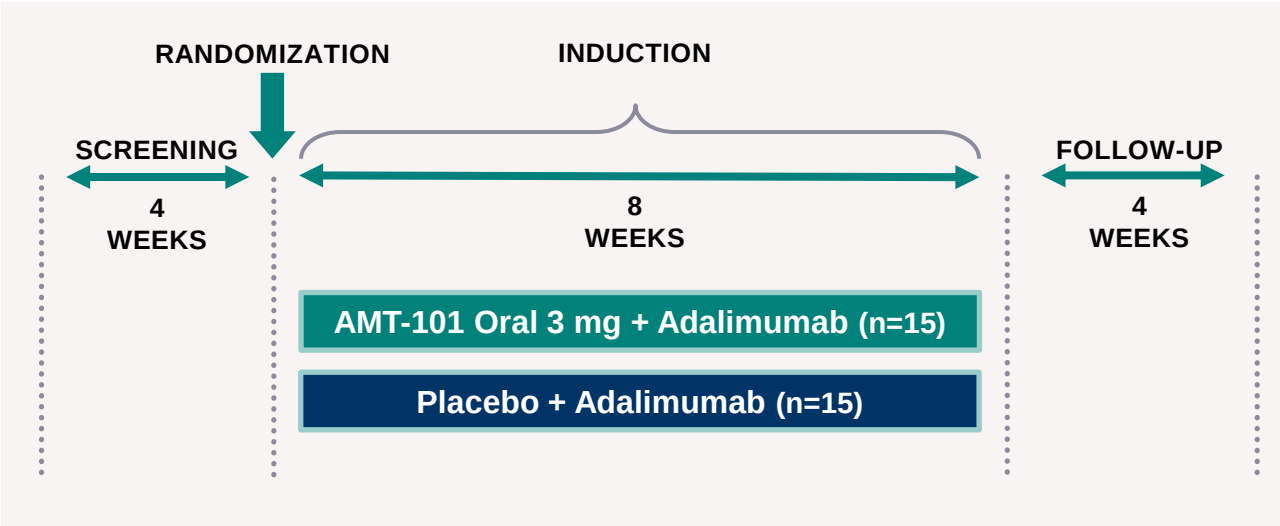
RA Combination with anti-TNFα

- Distal disease
- Patients with active RA who had an inadequate response to anti-TNFα therapy
- ~20 patients: biologic experienced
- 12-week oral daily dosing

AMT-101: Phase 2 MARKET Study Design: UC Combination (8-week Induction Trial)

- Patient Population: Biologic naïve with moderate to severe UC
- AMT-101 Oral 3mg
- Baseline Mayo score of 6-12 with central read endoscopy of 2/3
- **Key efficacy endpoint: Mean change in UC-100**

market-uc combo

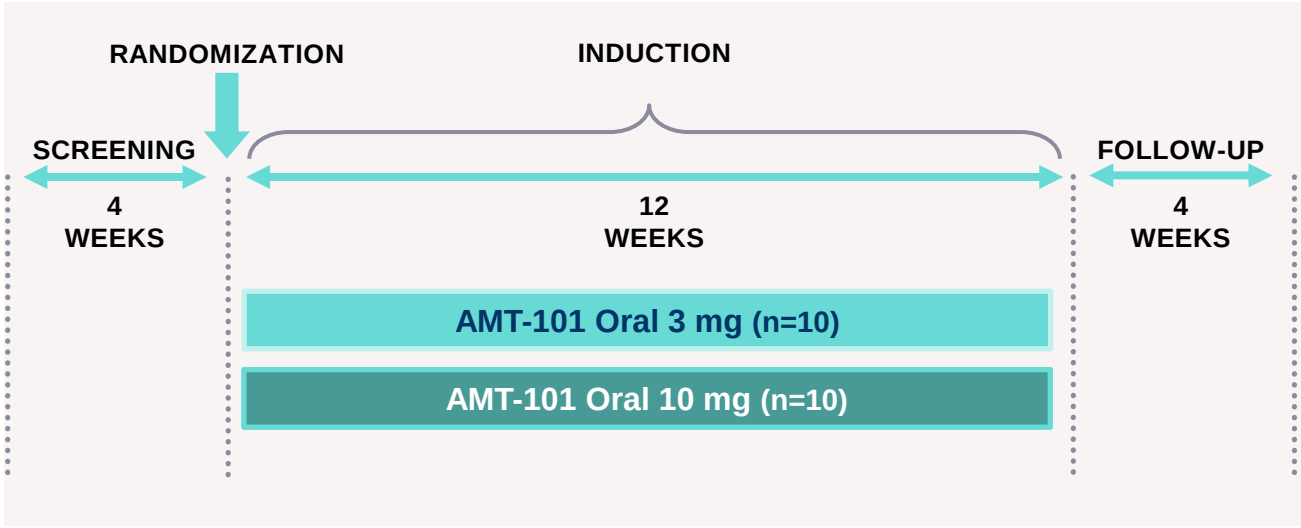


- Key Secondary/Exploratory Endpoints:
  - Clinical Remission (Endoscopic subscore of 0/1, rectal bleeding 0, stool frequency 0/1)
  - Endoscopic response and remission
  - Histologic remission
  - Safety, PK, PD

AMT-101: Phase 2 FILLMORE Study Design: Chronic Pouchitis (12-week Induction Trial)

- Patient Population: UC patients s/p colectomy with chronic inflammation of the pouch
- Patients must have failed AT LEAST one round of antibiotic therapy
- Inclusion criteria based upon central read histology and stool frequency
- **Co-Primary endpoint:**
  - **Reduction of stool frequency of ≧ 3 AND 30% reduction from baseline or to post-colectomy normal**
  - **Histologic Healing (Geboes <3.1)**

fillmore-pouchitis

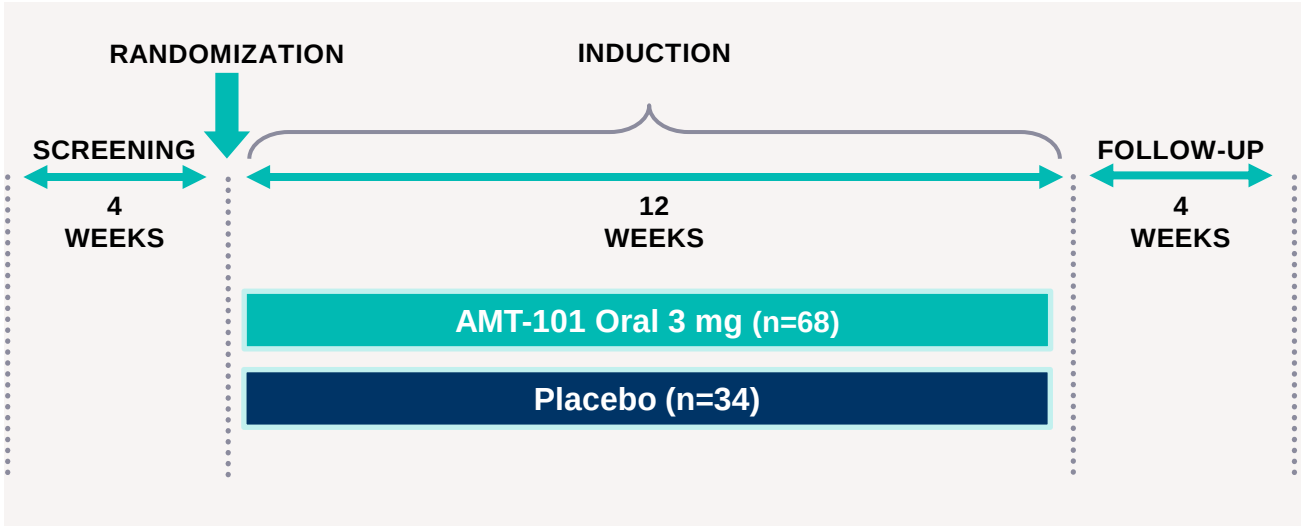


- Key Secondary/Exploratory Endpoints:
  - Histologic response
  - Endoscopic response
  - Safety, PK, and PD

AMT-101: Phase 2 LOMBARD Study Design: UC Monotherapy (12-week Induction Trial)

- Patient Population: Biologic naïve and experienced with moderate to severe UC
- Baseline Mayo score of 6-12 with central read endoscopy of 2/3
- **Primary endpoint: Mean change in endoscopic subscore**
- **Key efficacy endpoint: Clinical remission**

lombard-uc

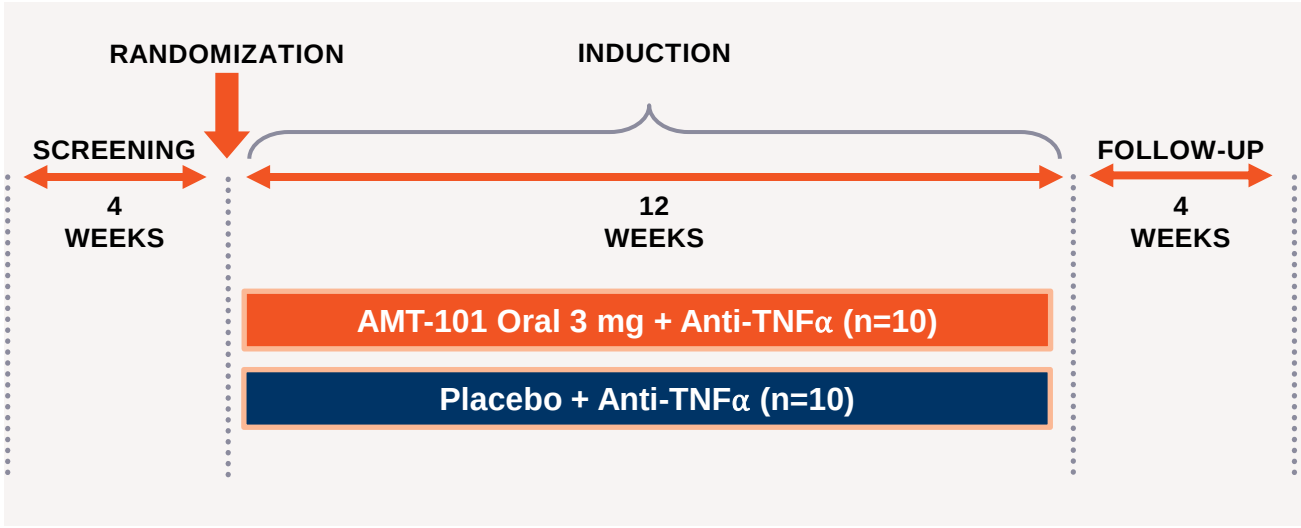


- Key Secondary/Exploratory Endpoints:
  - Clinical Remission (Endoscopic subscore of 0/1, rectal bleeding 0, stool frequency 0/1)
  - Endoscopic response and remission
  - Histologic remission
  - Safety, PK, PD

AMT-101: Phase 2 CASTRO Study Design: RA Combination (12-week Induction Trial)

- Patient Population: Active RA with an inadequate response to anti-TNF therapy for ≧16 weeks
- Key inclusion criteria based upon DAS28 disease activity
- Must have minimum of 2 swollen joints for objective analysis of disease activity/response
- **Primary endpoint: Safety**
- **Key efficacy endpoint: DAS28CRP and ACR 20, 50, 70**

AMT 101 castro-ra



- Key Secondary/Exploratory Endpoints:
  - DAS28(CRP)
  - ACR 20, 50, 70
  - Ultrasound evaluation of swollen joint
  - PK, PD

Summary of Anticipated AMT-101 Phase 2 Endpoints and Top-line Readouts

AMT-101 Phase 2 Trial	Summary Description	Key Efficacy Endpoints at Top-line Readout	Anticipated Top-line Data
market-uc combo	UC combination with anti-TNFα +3mg AMT-101 or PBO	Clinical remission	Jan 2022
fillmore-pouchitis	Pouchitis monotherapy 3mg or 10mg AMT-101	Reduction in stool frequency	H1 2022
lombard-uc	UC monotherapy 3mg AMT-101 vs PBO	Clinical remission	H1 2022
castro-ra combo	RA combination with anti-TNFα +3mg AMT-101 or PBO	DAS28/CRP ACR20/50/70	H2 2022

APPLIED | MOLECULAR | TRANSPORT

Oral AMT-101 Commercial Opportunity

Liz Bhatt
Chief Business and Strategy Officer

IBD: A Large and Growing Market Opportunity

There are approximately 1.5M people living with IBD in the US

- ~300,000 IBD patients are treated with targeted therapies
- Growing market across all geographies

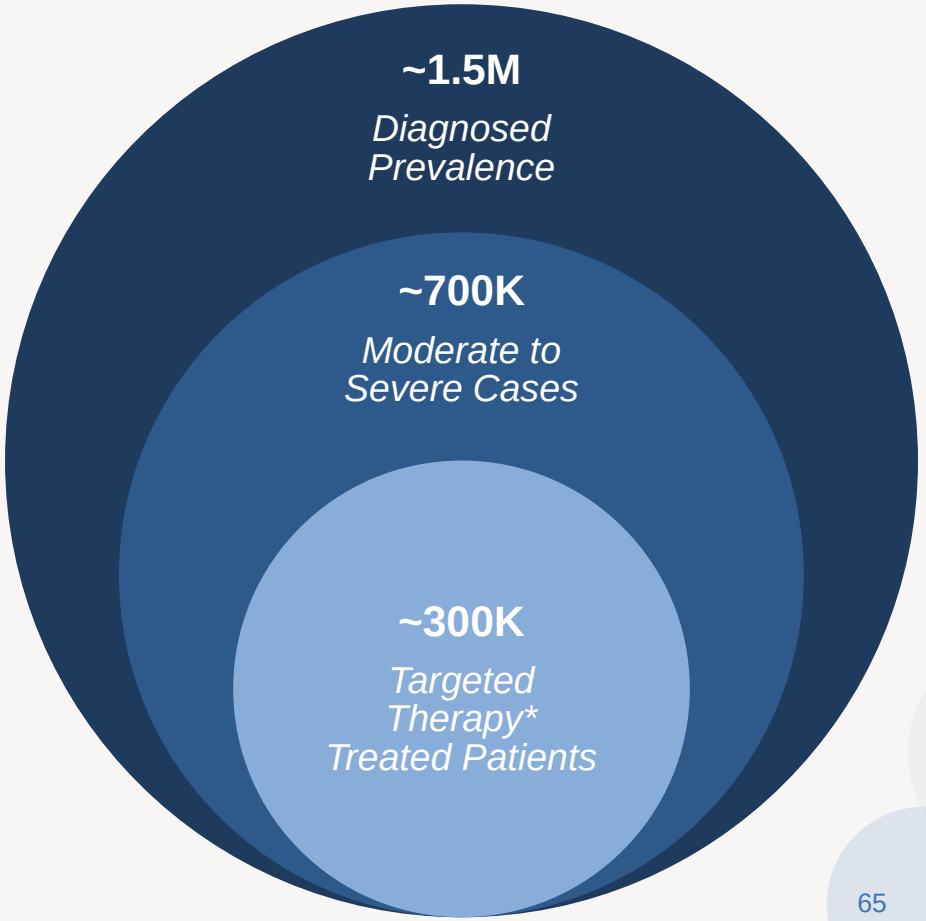
Targeted therapy use is growing but adoption is still <50% in moderate to severe patients

- Lack of safe, effective, and convenient oral options

A large majority of IBD patients not in remission at 1 year with today's treatment options

- Low response rates and/or loss of response
- Safety concerns, including black box warnings

UC & CD Market Potential (US, 2020)



Source: AMT Primary Market Research, 2021; Dahlhamer JM, et al. MMWR Morb Mortal Wkly Rep 2016;65:1166–1169; Schreiber, S. et al. J. Crohn's and Colitis 2013;7, 497-509; GlobalData, Ulcerative Colitis: Global Drug Forecast and Market Analysis to 2029, 2020; GlobalData, Crohn's Disease: Global Drug Forecast and Market Analysis to 2029, 2020.

**Targeted Therapy defined as the group of treatments that include both targeted biologics (e.g., aTNFs) and targeted oral treatments (e.g., JAKi).*

Significant Unmet Need Across UC Treatment Landscape

Significant Remaining Unmet Need

Safe targeted therapies, no immunosuppression

Higher response and long-term durable remission

+

Oral dosing

Rapid onset of activity

"We need to have drugs that have high efficacy and safety, and drugs that don't increase the rate of serious infection and malignancy as much." – IBD KOL

"Wish list for UC…tofacitinib efficacy + vedolizumab safety + oral + early onset of activity + fixed duration of treatment + prespecified patient population/responders" – IBD KOL

Source: AMT Primary Market Research, 2021; Danese, S et al. Unmet Medical Needs in Ulcerative Colitis. Dig Dis 2019;37: 266-283; GlobalData, Ulcerative Colitis: Global Drug Forecast and Market Analysis to 2029, 2020.

Compelling Product Profile for AMT-101 to Address Significant Unmet Needs

AMT-101 IS AN ORAL BIOLOGIC ENGINEERED TO DELIVER BEST-IN-DISEASE SAFETY AND EFFICACY IN A CONVENIENT ONCE-DAILY TABLET

EFFICACY

- Immunomodulator that restores immune homeostasis and promotes mucosal healing
- Rapid onset of action

SAFETY

- Low systemic exposure resulting in favorable safety and tolerability profile

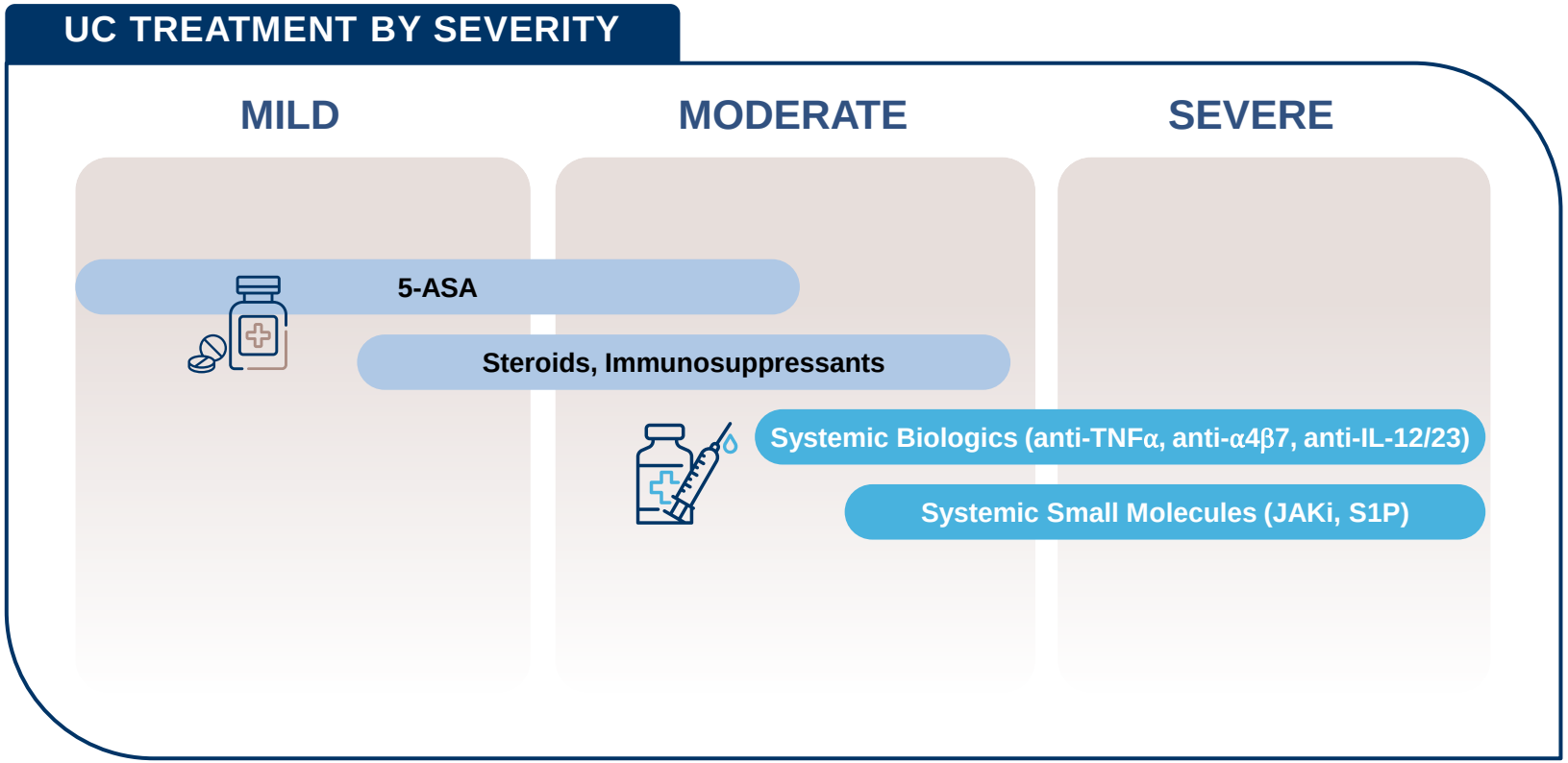
DOSING

- Convenient, once-daily oral tablet

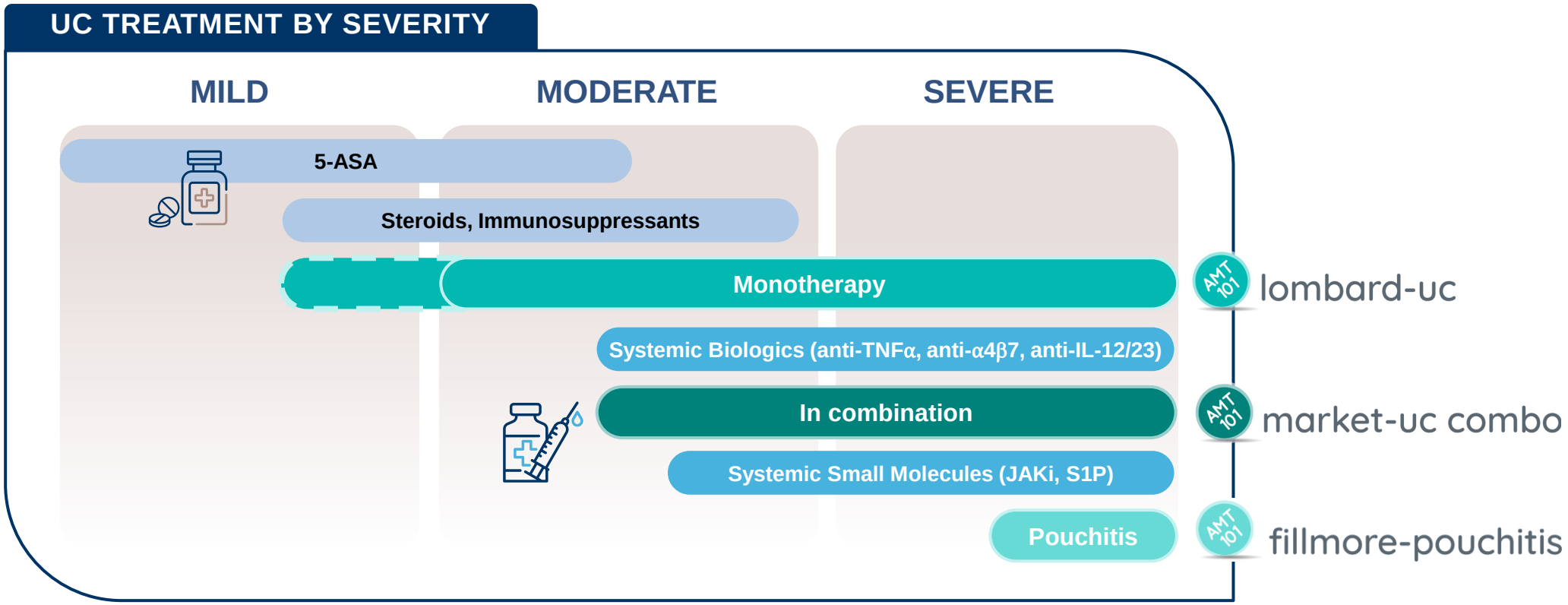
PATIENTS

- Mono- and combination therapy options support early use across patient subgroups

Opportunities Remain for New Therapies Across UC Disease Severity

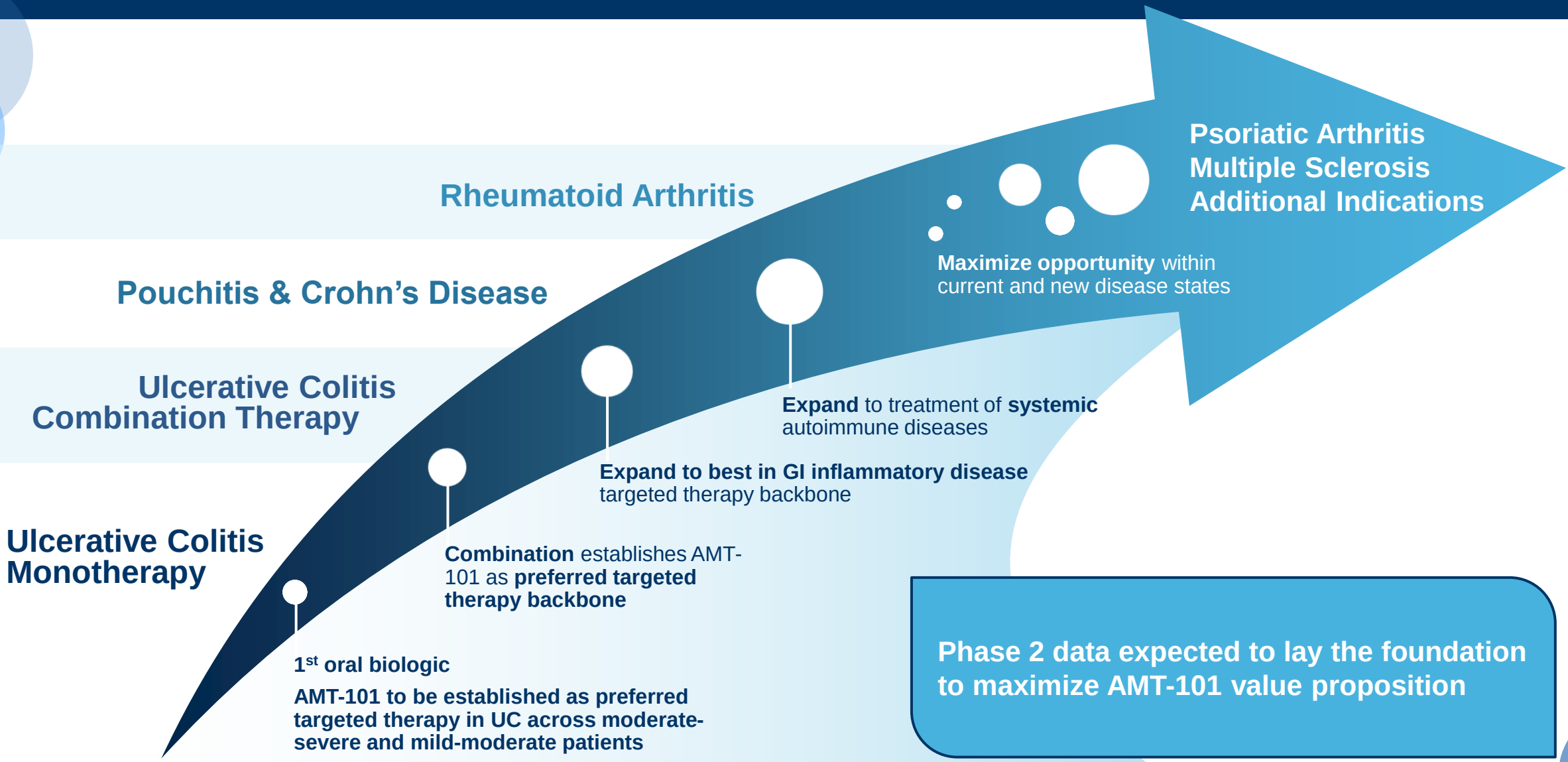


Potential for AMT-101 Across UC Patient Populations



AMT-101 has the potential to redefine patient & physician experiences of biologic treatments

AMT-101: Potential to Unlock a New Era of Patient Experiences Across Autoimmune and Inflammatory Diseases



Phase 2 data expected to lay the foundation to maximize AMT-101 value proposition

APPLIED | MOLECULAR | TRANSPORT

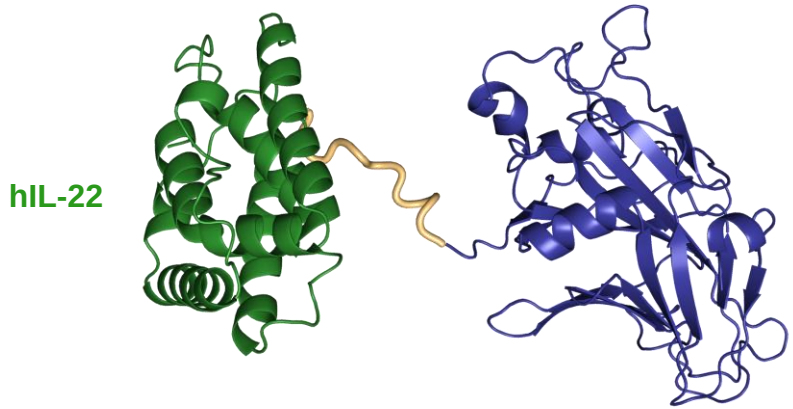
The Future / Conclusion

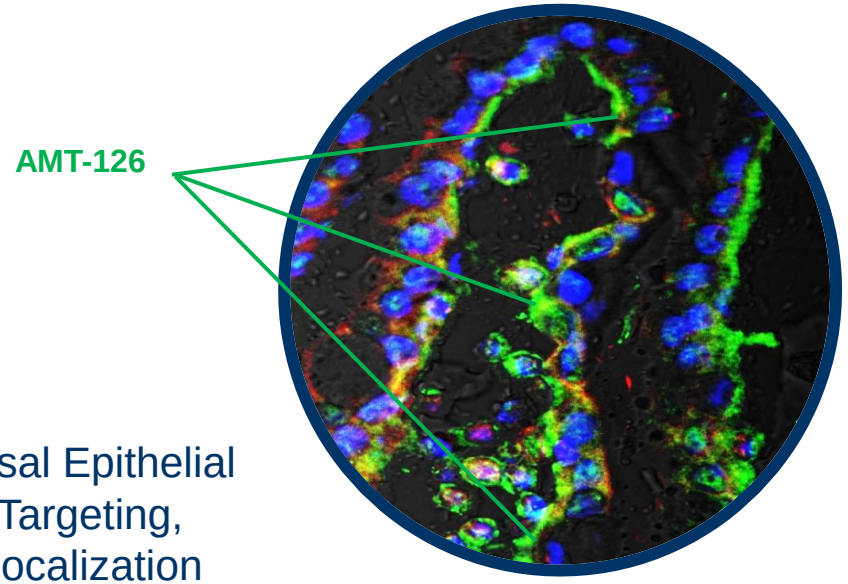
Tahir Mahmood, PhD
Chief Executive Officer and Co-Founder

AMT-126: Phase 1 Trial Ongoing

- Oral, GI-selective daily biologic targeting repair and maintenance of epithelial barrier
- Clinically-validated mechanism of action
- Unique product profile with potential as single agent or in combination
- Program update in H1 2022

Oral IL-22 Fusion Biologic





Basal Epithelial Targeting, Localization

IL-22 is a Clinically Validated Target

UTTR1147A (Genentech/Roche)

- Systemic delivery of IL-22Fc showed therapeutic activity in a 12-week Ph 1b in UC patients[1]

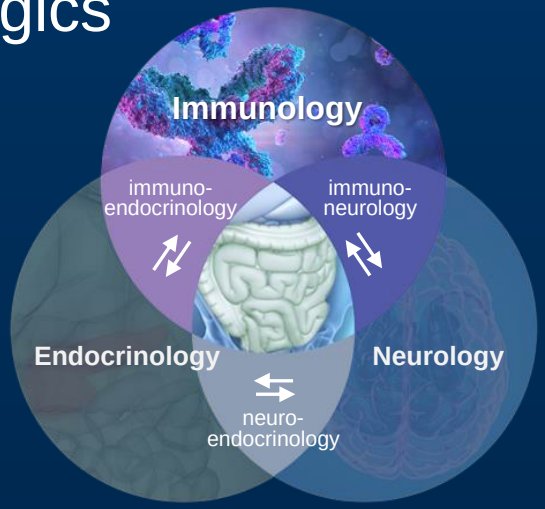
	UTTR1147A	PLACEBO
Clinical Response	7/18 (39%)	1/6 (17%)
Clinical Remission	5/18 (28%)	0/6 (0%)

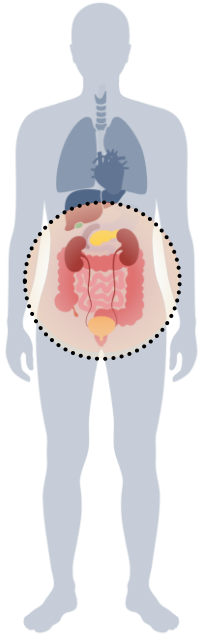
- Induced increases in serum PD biomarkers REG3A and C-reactive protein (CRP)
- Most common AEs were mechanism-related: dry skin, erythema, dry lip, skin discomfort, skin exfoliation, pruritis (1 subject withdrew due to treatment AE)

[1] Wagner et al. JCC 14:S382 2020

GOAL OF TARGETED THERAPEUTICS IS TO PROVIDE SIGNIFICANT BENEFITS

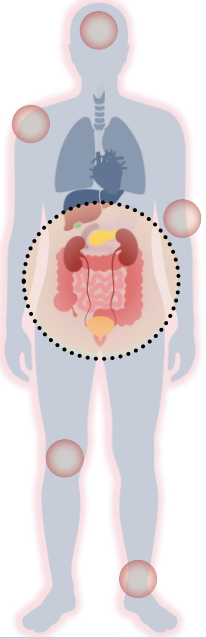
- Improved efficacy
- Better safety profile
- Ability to access pathways in a unique way
- Selectivity of biologics





Local Target, Local Disease

UC, CD, CeD

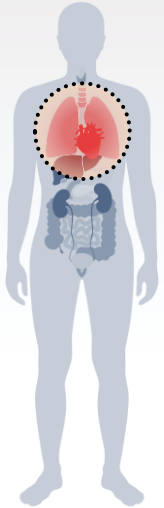


Local Target, Distal Disease

RA, PsA, MS, T2D

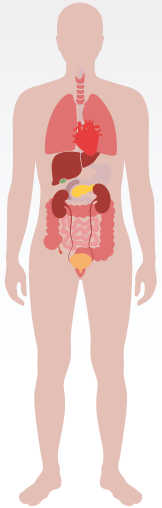
CURRENT CLINICAL FOCUS

RESEARCH PIPELINE



Respiratory Target, Respiratory Disease

Asthma, Infections, ARDS



Systemic Target, Systemic Disease

GHD, Hemophilia, Oncology

Gracey, Nat. Reviews Rheumatology (2020): pp 415-433

SUMMARY

Clinical Stage, Transformational Targeted **Oral Biologics** – **Validated Targets** for Significant Unmet Medical Needs

Rich **Data Catalyst** Readout Calendar

Goal of Enhanced **Efficacy & Safety**

End-to-End, Scalable R&D and Manufacturing Capabilities

Accomplished, **World-class** Leaders and Team

Well-Capitalized

Anticipated Oral AMT-101 Milestones in 2022

market-uc combo

AMT-101 Ph2
MARKET
UC Combo
Top-line data

JAN

fillmore-pouchitis

AMT-101 Ph2
FILLMORE
Chronic Pouchitis
Top-line data

H1

lombard-uc

AMT-101 Ph2
LOMBARD
UC Monotherapy
Top-line data

H1

castro-ra combo

AMT-101 Ph2
CASTRO
RA Combo
Top-line data

H2

Thank you and Q&A

Breakthrough Medicines.
The Next Age of Biologics.

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