Stanford



Dahham Alsoud, MD, MSc, PhD

Postdoctoral Scholar, Gastroenterology, Hepatology, and Nutrition

Bio

BIO

Dahham Alsoud, MD, MSc, PhD, is a physician-scientist and Postdoctoral Scholar in the Rosen Laboratory at Stanford University School of Medicine. His research seeks to make treatment decisions in inflammatory bowel disease more precise by understanding who benefits from a therapy, why others do not, and which treatment to consider next when a therapy fails or is not tolerated. Building on doctoral work spanning clinical prediction and molecular profiling, he leads cohort analyses and develops analytical strategies within CAPTURE-IBD, integrating multi-omics with longitudinal clinical and patient-reported data. His work connects disease biology with treatment trajectories to inform the selection, sequencing, and optimization of therapies for children and adolescents with IBD.

Dr. Alsoud also serves as Editorial Fellow for Basic and Translational Science at Inflammatory Bowel Diseases. His editorial and peer-review work complements his research interests in rigorous study design, biomarker validation, and the interpretation of translational evidence.

He earned his PhD in Biomedical Sciences at KU Leuven, where he developed a research program through three complementary first-author studies: evaluating and updating clinical decision support tools, investigating the molecular rationale for potential combination therapies, and developing and validating serum proteomic models of biologic response. His broader contributions span therapeutic drug monitoring, biomarker validation, less invasive disease assessment, and comparative effectiveness.

Dr. Alsoud also holds an MSc in Health Care Management and Policy from KU Leuven and an MD from Damascus University. His postdoctoral research has been supported by the Stanford Medicine Children’s Health Center for IBD and Celiac Disease and the Belgian American Educational Foundation.

HONORS AND AWARDS

- Postdoctoral Award, Stanford Medicine Children’s Health Center for IBD and Celiac Disease (2026–2027)
- Postdoctoral Research Fellowship, Belgian American Educational Foundation (2025)
- Travel Grant, Research Foundation – Flanders (FWO) (2022)
- Research Grant, Flanders Crohn’s and Colitis Patients Association (CCV VZW) (2020)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Editorial Fellow, Basic and Translational Science, Inflammatory Bowel Diseases (2026 - present)

PROFESSIONAL EDUCATION

- PhD, KU Leuven, Belgium , Biomedical Sciences (2026)

- MSc, KU Leuven, Belgium , Health Care Management and Policy (2024)
- MD, Damascus University, Syria , Medicine (2015)

LINKS

- Research website: https://dahhamalsoud.github.io
- ORCID: https://orcid.org/0000-0002-6795-6328

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research aims to move inflammatory bowel disease care toward a future in which treatment selection, sequencing, and optimization are guided by an understanding of each patient's disease biology and clinical trajectory. The central question driving my work is how to translate treatment-response heterogeneity into actionable knowledge: who benefits from a therapy, why others do not, and what should come next.

My doctoral research at KU Leuven established a foundation for this program through three complementary first-author studies. I evaluated and updated clinical decision support tools, investigated the molecular rationale for potential combination therapies using longitudinal transcriptomics, and developed and validated serum proteomic models of biologic response. Together, these studies connected clinical prediction with molecular mechanisms and demonstrated the importance of assessing calibration, clinical utility, and biological context when developing tools for precision medicine.

At Stanford's Rosen Laboratory, I am extending this foundation to pediatric IBD through CAPTURE-IBD. I lead cohort analyses and develop analytical strategies that integrate multi-omics with longitudinal clinical and patient-reported data. This work investigates the biological drivers of response heterogeneity, determinants of success and failure across treatment sequences, and the relationships between psychosocial distress, symptoms, and disease outcomes. My longer-term goal is to help develop and prospectively test treatment strategies that account for both disease biology and how a patient's course evolves over time.

My broader contributions provide complementary foundations for this vision: defining exposure-response relationships, investigating infliximab clearance, developing guidance for therapeutic drug monitoring, evaluating less invasive measures of inflammation, and testing prognostic biomarkers across clinical contexts. Real-world effectiveness studies, evidence synthesis, and work on therapeutic resistance and translational research standards further connect molecular discovery with the decisions clinicians face. Building on these contributions, I aim to bring treatment selection, monitoring, and timely adaptation into a more integrated approach to achieving durable remission.

PROJECTS

- CAPTURE-IBD: Understanding Treatment Heterogeneity in Pediatric IBD - Stanford University School of Medicine
- From Clinical Prediction to Molecular Treatment Selection in IBD - KU Leuven
- Infliximab Clearance and Therapeutic Drug Monitoring - Stanford University; KU Leuven
- Drug Exposure and Molecular Effects as Determinants of Treatment Response - KU Leuven
- Less Invasive Monitoring of Inflammation and Therapeutic Response - KU Leuven; Stanford University
- Prognostic Biomarker Validation and Reliable Clinical Prediction - KU Leuven
- Real-World Effectiveness and Comparative Treatment Strategies in IBD - KU Leuven and collaborating centers
- Evidence Synthesis and Critical Appraisal of Emerging IBD Therapies - KU Leuven and international collaborators
- Therapeutic Resistance, Multi-Omics, and Standards for Translational Research - KU Leuven and international collaborators

Publications

PUBLICATIONS

- **Interleukin 12/23 and interleukin 23 inhibitors for moderate-to-severe ulcerative colitis: a systematic review and network meta-analysis.** *Annals of gastroenterology*

  Sawaf, B., Hayek, M. A., Kassem, A., Alsoud, D., Alom, M., Salam, A. H., Shembesh, R. H., Beshr, M. S., Hallak, Y., Abbarh, S., Batikh, E., Shibani, M., Elhadi, et al

  2025; 38 (6): 648-660

- **Assessment of PredictSURE IBD Assay in a Multinational Cohort of Patients With Inflammatory Bowel Disease.** *United European gastroenterology journal*

  Alsoud, D., Noor, N. M., Chen, L. A., Abadom, V., Anderson, S. H., Ardolli, L., Axelrad, J., Bossuyt, P., Croitoru, K., Damas, O. M., Deng, L., Deepak, P., Negro, et al

  2025; 13 (8): 1525-1540

- **Comparative Efficacy of IL-12/23 and IL-23 Inhibitors for Induction and Maintenance Therapy in Moderate-to-Severe Crohn's Disease: A Systematic Review and Network Meta-Analysis.** *Inflammatory intestinal diseases*

  Al Hayek, M., Sawaf, B., Beshr, M. S., Kassem, A., Alsoud, D., Alom, M., Shembesh, R. H., Salama, A. H., Hallak, Y., Abbarh, S., Batikh, E., Shibani, M., Elhadi, et al

  2025; 10 (1): 265-284

- **Anti-IL 12/23 versus Anti-Tumor Necrosis Factor-α in Patients with Biologically Naïve Crohn's Disease: A Systematic Review and Meta-analysis.** *Inflammatory intestinal diseases*

  Al Hayek, M., Sawaf, B., Abbarh, S., Hallak, Y., Alsabbagh Alchirazi, M., Elhadi, M., Alsoud, D., Afzali, A., Regueiro, M.

  2025; 10 (1): 169-179

- **Calibration, Clinical Utility, and Specificity of Clinical Decision Support Tools in Inflammatory Bowel Disease.** *Clinical gastroenterology and hepatology : the official clinical practice journal of the American Gastroenterological Association*

  Alsoud, D., Sabino, J., Ferrante, M., Verstockt, B., Vermeire, S.

  2025; 23 (7): 1216-1227.e14

- **Mirikizumab for Ulcerative Colitis: A Game-Changer or Just Another Incremental Advance?** *Digestive diseases and sciences*

  Sawaf, B., Abbarh, S., Alsoud, D.

  2025; 70 (6): 1946-1947

- **Drug tissue concentration and STAT3 modulation as determinants of tofacitinib response in ulcerative colitis.** *Journal of Crohn's & colitis*

  Verstockt, B., Alsoud, D., van Oostrom, J., Verstockt, S., Smith, J., Stylli, J., Singh, S., van Gennep, S., Rahimian, P., Sabino, J., Ferrante, M., Kelman, A., Singh, et al

  2025; 19 (5)

- **Expert recommendations to standardize transcriptomic analysis in inflammatory bowel disease clinical trials.** *Journal of Crohn's & colitis*

  Linggi, B., Azucena, S., Steere, B., Verstockt, B., Alsoud, D., Casero, D., McGovern, D., Chan, E., Smith, M. I., Ungaro, F., Rieder, F., Aden, K., Shackelton, et al

  2025; 19 (5)

- **Real-world Effectiveness and Safety of Risankizumab in Patients with Moderate to Severe Multirefractory Crohn's Disease: A Belgian Multicentric Cohort Study.** *Inflammatory bowel diseases*

  Alsoud, D., Sabino, J., Franchimont, D., Cremer, A., Busschaert, J., D'Heygere, F., Bossuyt, P., Vijverman, A., Vermeire, S., Ferrante, M.

  2024; 30 (12): 2289-2296

- **Beyond Discrimination: A Call for Comprehensive Assessment of Clinical Prediction Models in Inflammatory Bowel Disease.** *Inflammatory bowel diseases*

  Alsoud, D., Van Calster, B.

  2024; 30 (6): 1050-1051

- **Best Practice for Therapeutic Drug Monitoring of Infliximab: Position Statement from the International Association of Therapeutic Drug Monitoring and Clinical Toxicology.** *Therapeutic drug monitoring*

  Alsoud, D., Moes, D. J., Wang, Z., Soenen, R., Layegh, Z., Barclay, M., Mizuno, T., Minichmayr, I. K., Keizer, R. J., Wicha, S. G., Wolbink, G., Lambert, J., Vermeire, et al

  2024; 46 (3): 291-308

- **Ustekinumab and Vedolizumab Exposure Is Unaffected by Pharmacogenetic Determinants of Anti-TNFs Pharmacokinetics.** *Inflammatory bowel diseases*
  Alsoud, D., Verstockt, B., Vermeire, S.
  2024; 30 (5): 874-875
- **Utility of the Serum-Based Endoscopic Healing Index in Monitoring Therapeutic Response in Ulcerative Colitis.** *The American journal of gastroenterology*
  Alsoud, D., Ho, J., Sabino, J., Ferrante, M., Vermeire, S., Verstockt, B.
  2024; 119 (3): 477-485
- **The Serum-Based Endoscopic Healing Index Can Monitor Therapeutic Response in Crohn's Disease.** *Journal of Crohn's & colitis*
  Alsoud, D., Ho, J., Verstockt, B.
  2023; 17 (10): 1703-1704
- **Evaluation of serum cytokines and acute phase proteins as possible pharmacodynamic biomarkers to monitor endoscopic remission during ustekinumab therapy in patients with Crohn's disease.** *Therapeutic advances in gastroenterology*
  Van den Berghe, N., Alsoud, D., Verstockt, B., Vermeire, S., Declerck, P., Thomas, D.
  2023; 16: 17562848231189110
- **Comparative Effectiveness Research to Position Therapies in Ulcerative Colitis: How Fair Are the Comparisons?** *Clinical gastroenterology and hepatology : the official clinical practice journal of the American Gastroenterological Association*
  Alsoud, D., Verstockt, B., Vermeire, S.
  2023; 21 (5): 1372-1373
- **Real-world Endoscopic and Histological Outcomes Are Correlated with Ustekinumab Exposure in Patients with Ulcerative Colitis.** *Journal of Crohn's & colitis*
  Alsoud, D., De Hertogh, G., Compernolle, G., Tops, S., Sabino, J., Ferrante, M., Thomas, D., Vermeire, S., Verstockt, B.
  2022; 16 (10): 1562-1570
- **Adalimumab versus ustekinumab as first-line biological in moderate-to-severe Crohn's disease: real-life cohort from a tertiary referral center.** *European journal of gastroenterology & hepatology*
  Moens, A., Alsoud, D., Verstockt, B., Sabino, J., Ferrante, M., Vermeire, S.
  2022; 34 (10): 1015-1020
- **Tailoring Multi-omics to Inflammatory Bowel Diseases: All for One and One for All.** *Journal of Crohn's & colitis*
  Sudhakar, P., Alsoud, D., Wellens, J., Verstockt, S., Arnauts, K., Verstockt, B., Vermeire, S.
  2022; 16 (8): 1306-1320
- **Translating Results from VARSITY to Real World: Adalimumab vs Vedolizumab as First-line Biological in Moderate to Severe IBD.** *Inflammatory bowel diseases*
  Moens, A., Verstockt, B., Alsoud, D., Sabino, J., Ferrante, M., Vermeire, S.
  2022; 28 (8): 1135-1142
- **Longitudinal monitoring of STAT3 phosphorylation and histologic outcome of tofacitinib therapy in patients with ulcerative colitis.** *Alimentary pharmacology & therapeutics*
  Verstockt, B., Volk, V., Jaeckel, C., Alsoud, D., Sabino, J., Nikolaus, S., Outtier, A., Krönke, N., Feuerhake, F., De Hertogh, G., Rosenstiel, P., Vermeire, S., Schreiber, et al
  2022; 56 (2): 282-291
- **Letter: immunogenicity is not the root cause for loss of response to anti-TNF agents in patients with IBD in TDM era.** *Alimentary pharmacology & therapeutics*
  Alsoud, D., Verstockt, B., Vermeire, S.
  2022; 55 (7): 885-886
- **Biomarker discovery for personalized therapy selection in inflammatory bowel diseases: Challenges and promises.** *Current research in pharmacology and drug discovery*
  Alsoud, D., Vermeire, S., Verstockt, B.
  2022; 3: 100089
- **The effect of aging on infliximab exposure and response in patients with inflammatory bowel diseases.** *British journal of clinical pharmacology*

Kantasiripitak, W., Verstockt, B., Alsoud, D., Lobatón, T., Thomas, D., Gils, A., Vermeire, S., Ferrante, M., Dreesen, E.
2021; 87 (10): 3776-3789

- **Breaking the therapeutic ceiling in drug development in ulcerative colitis.** *The lancet. Gastroenterology & hepatology*
  Alsoud, D., Verstockt, B., Fiocchi, C., Vermeire, S.
  2021; 6 (7): 589-595

- **Monitoring vedolizumab and ustekinumab drug levels in patients with inflammatory bowel disease: hype or hope?** *Current opinion in pharmacology*
  Alsoud, D., Vermeire, S., Verstockt, B.
  2020; 55: 17-30