Ludger News

March/April 2023

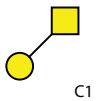
Three new standards now available

Unlabelled Alpha-Gal, Core 1 & Sialylated Core 1

We are happy to announce the **launch of these three new unlabelled standards**:

1) **CO-C1-10U** (10 µg) & **CO-C1-20U** (20 µg):

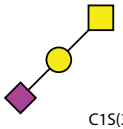
Core 1 O-glycan, 2-Acetamido-2-deoxy-3-O-(b-D-galactopyranosyl)-D-galactopyranose (also known as galacto-N-biose, GNB and T antigen) is a β 1-3' linked disaccharide.



C1

2) **CO-C1(S3)1-10U** (10 µg) & **CO-C1(S3)1-20U** (20 µg):

Sialylated Core 1 Glycan, The sialylated core 1 glycan has one terminal NeuAc sialic acid linked α-3 to the galactose of the core 1 glycan, sialylated-Tn antigen.



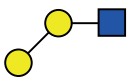
C1S(3)1

Applications of these Core 1 standards include utilising them as:

- **System suitability standards** (LC system, GU values as pass criteria)
- **Process standards** (labelling and clean-up)
- **Reference standards** (aid in characterisation)

3) **CN-ALPHA-GAL-10U** (10 µg) & **CN-ALPHA-GAL-20U** (20 µg):

Gal alpha 1-3 Gal beta 1-4 GlcNAc, truncated N-Glycan trisaccharide containing alpha-gal epitope.



Alpha-Gal

This glycan standard is used as a **process control** during the detection and relative quantitation of the Galα1-3Gal as it validates the fuction of α-galactosidase.

Contact us at **info@ludger.com** to find out how to incorporate these standards in your workflow or request a quotation.

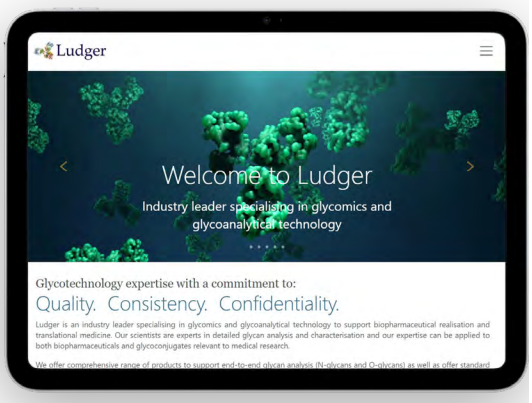
Our new online shop is coming soon!

Browse for products

Add to cart

Pay Online

Track your order



Publication in Journal of Crohn's and Colitis (JCC): *Serum N-Glycomic Biomarkers Predict Treatment Escalation in Inflammatory Bowel Disease*

Inflammatory bowel disease [IBD] is an idiopathic chronic inflammatory disease of the gastrointestinal tract predominantly consisting of Crohn's disease and ulcerative colitis, where many patients experience a progressive disease with frequent flares and complications. There is no cure for this disease and as prognosis is met with diagnostic uncertainty, the patients need to undergo invasive endoscopies or colonoscopies for stratification and treatment management. As a result, the clinical management of IBD would benefit from disease course-specific biomarkers allowing treatment choices to be optimised for each individual patient.

We are proud to announce that the article published by Shubhakar et al in JCC exemplifies that serum N-glycan signatures have shown to **accurately predict treatment escalation in IBD**. Serum samples from 422 individuals from a discovery cohort were characterized after procainamide labelling (LT-PROC-VP24) of released glycans using UHPLC, wherein, escalation of medical treatment escalation prediction was proven. This finding was successfully validated in an independent replication cohort (n=54). (See Figure 1)

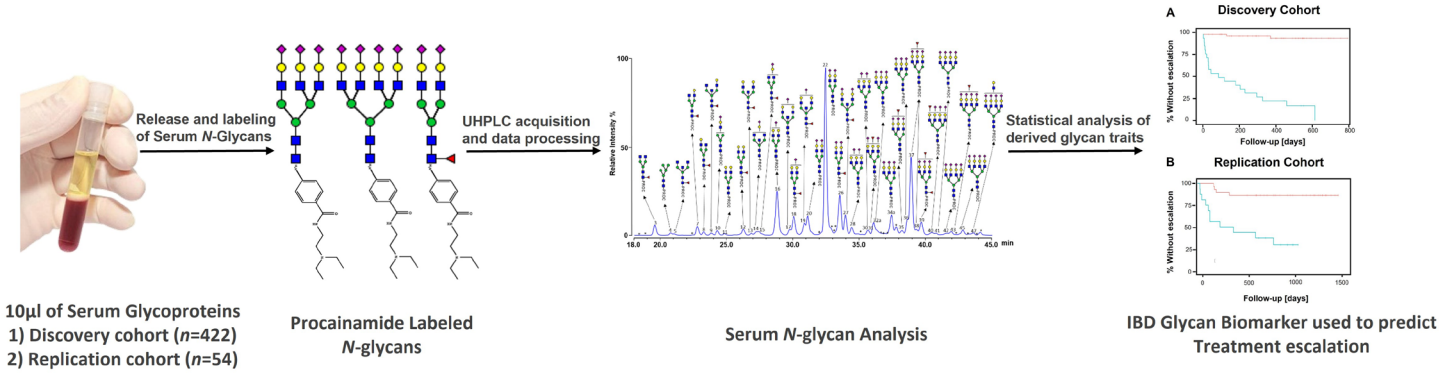


Figure 1: Overview of the cohort analysis and statistical analysis for glycan biomarker discovery.

Ludger in collaboration with IBD-BIOM [Grant number # 305479] and IBD CHARACTER [Grant number # 2858546] consortiums, we were able to investigate and validate a composite N-glycomic biomarker which predicts response to primary treatment following diagnosis.Therefore, our validated glycomics biomarkers presented for prediction of treatment escalation of IBD patients could help bring about an era of personalised care in IBD and can provide insight into future response to treatment.

To find out more about our exciting IBD biomarker discovery or precision medicine programmes please visit **R&D and medical glycomics** projects at Ludger and for more information about this article visit our Publications webpage.