# Article information:

Poly-N-acetyllactosamine Extension inN-Glycans and Core 2- and Core 4-branchedO-Glycans Is Differentially Controlled by i-Extension Enzyme and Different Members of the β1,4-Galactosyltransferase Gene Family - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S0021925819803721>

# Article summary:

1. Poly-N-acetyllactosamines are important glycans that provide functional oligosaccharides such as sialyl LewisX.

2. iGnT and distinct members of the β4Gal-T gene family control poly-N-acetyllactosamine synthesis in N-glycans and core 2- and core 4-branched O-glycans.

3. The efficiency of poly-N-acetyllactosamine extension varies depending on the acceptor molecule, with competition between donor substrate and acceptor affecting galactosylation and N-acetylglucosaminylation.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

作为一篇科学研究论文，该文章并没有明显的偏见或宣传内容。然而，它可能存在一些片面报道和缺失的考虑点。

首先，文章只关注了多N-乙酰乳糖胺在不同类型的糖基中的合成机制，并没有探讨其在生物学过程中的具体功能和意义。这可能会导致读者对于该研究结果的实际应用和意义产生困惑。

其次，文章提到了iGnT和β4Gal-T家族成员在多N-乙酰乳糖胺合成中的不同作用，但并没有详细说明这些酶如何被调节和协同作用。此外，文章也没有探讨其他可能影响多N-乙酰乳糖胺合成的因素，例如细胞类型、环境因素等。

最后，在方法部分中提到使用了高压液相色谱（HPLC）进行分析，但并没有说明具体的分析条件和标准品。这可能会影响结果的准确性和可重复性。

总之，尽管该文章并未明显存在偏见或宣传内容，但仍需要更全面地考虑相关问题，并提供更详细的实验方法和数据分析。

# Topics for further research:

* Biological functions and significance of multiple N-acetylglucosamine synthesis
* Regulation and coordination of iGnT and β4Gal-T enzymes in multiple N-acetylglucosamine synthesis
* Other factors affecting multiple N-acetylglucosamine synthesis
* such as cell type and environmental factors
* Specific analysis conditions and standards for HPLC analysis
* Limitations and potential biases in the study
* Future directions for research on multiple N-acetylglucosamine synthesis and its biological implications.

# Report location:

<https://www.fullpicture.app/item/aa273ac1b05f282ab023a5545d2b9d1f>