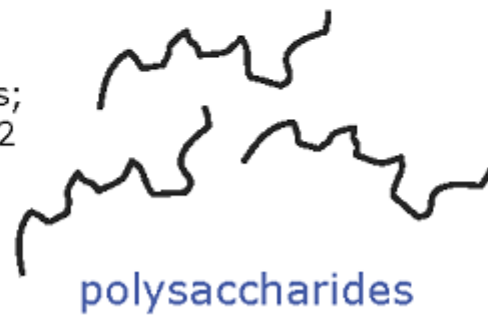


Oligosaccharide-based Vaccines

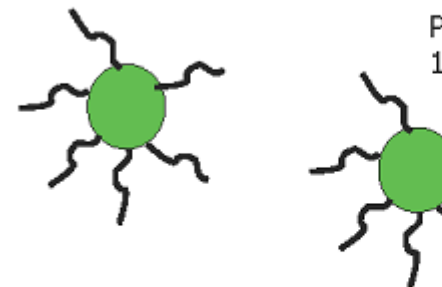
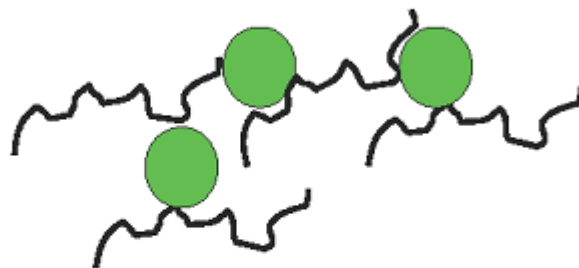
Description

Oligosaccharide-based vaccines against pathogenic bacteria

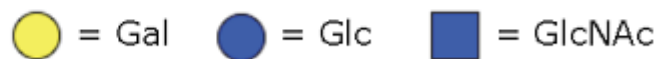
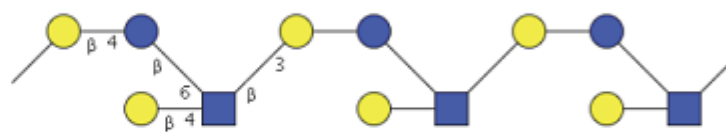
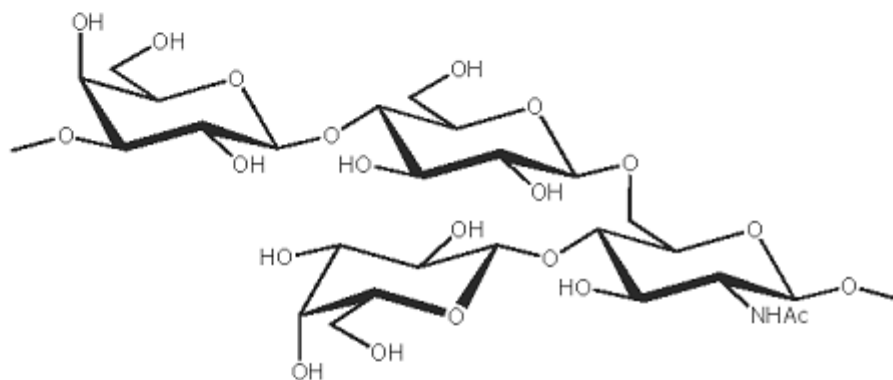
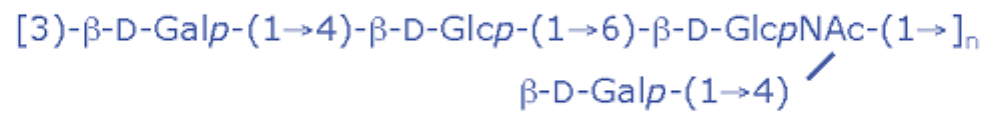
Poorly immunogenic in persons of high risk groups; thymus-independent type 2 antigens; IgM.



A switch to T-cell dependent response



CPS of *S. pneumoniae* serotype 14 (Pn14PS)

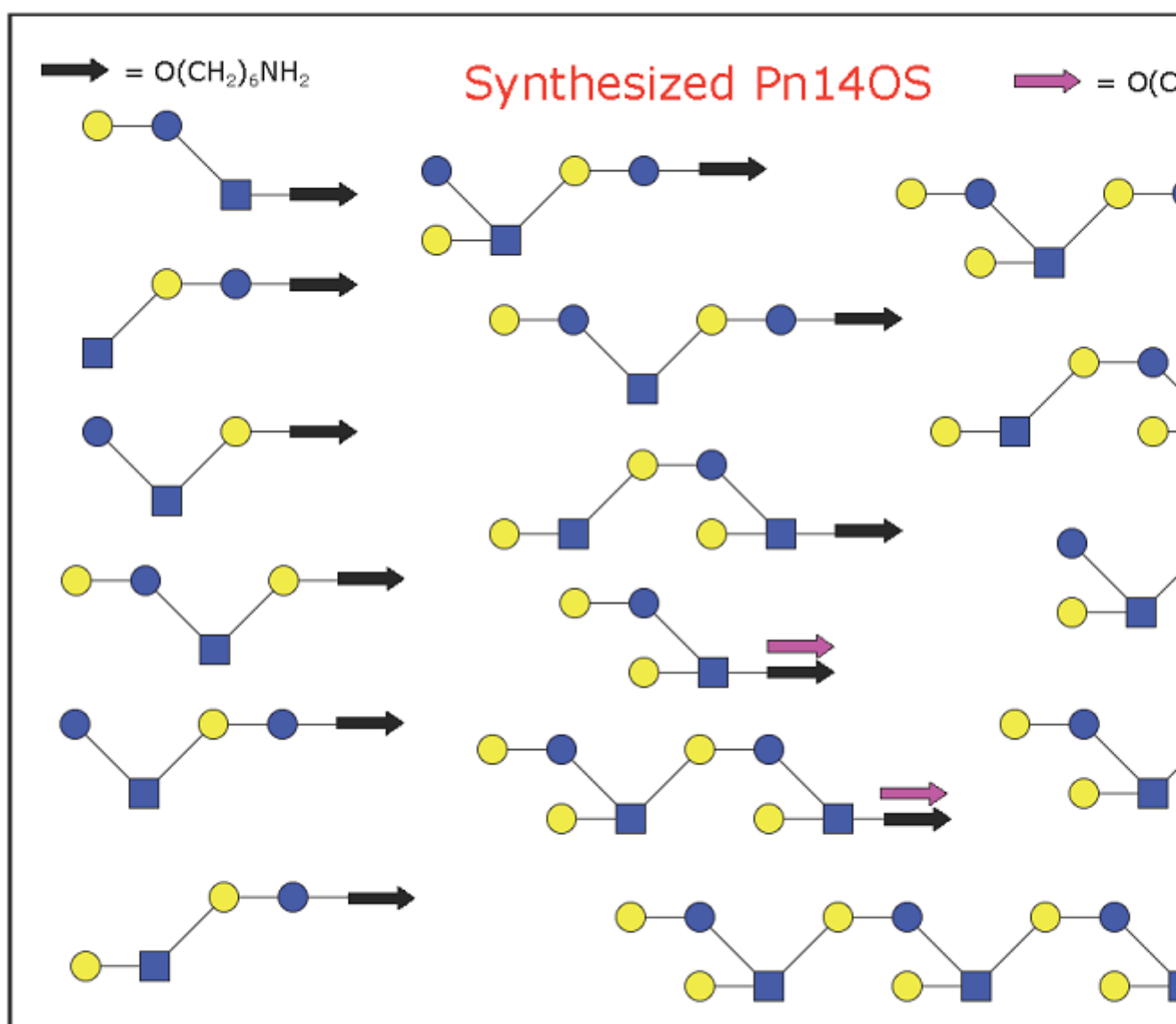


Oligosaccharide approach:

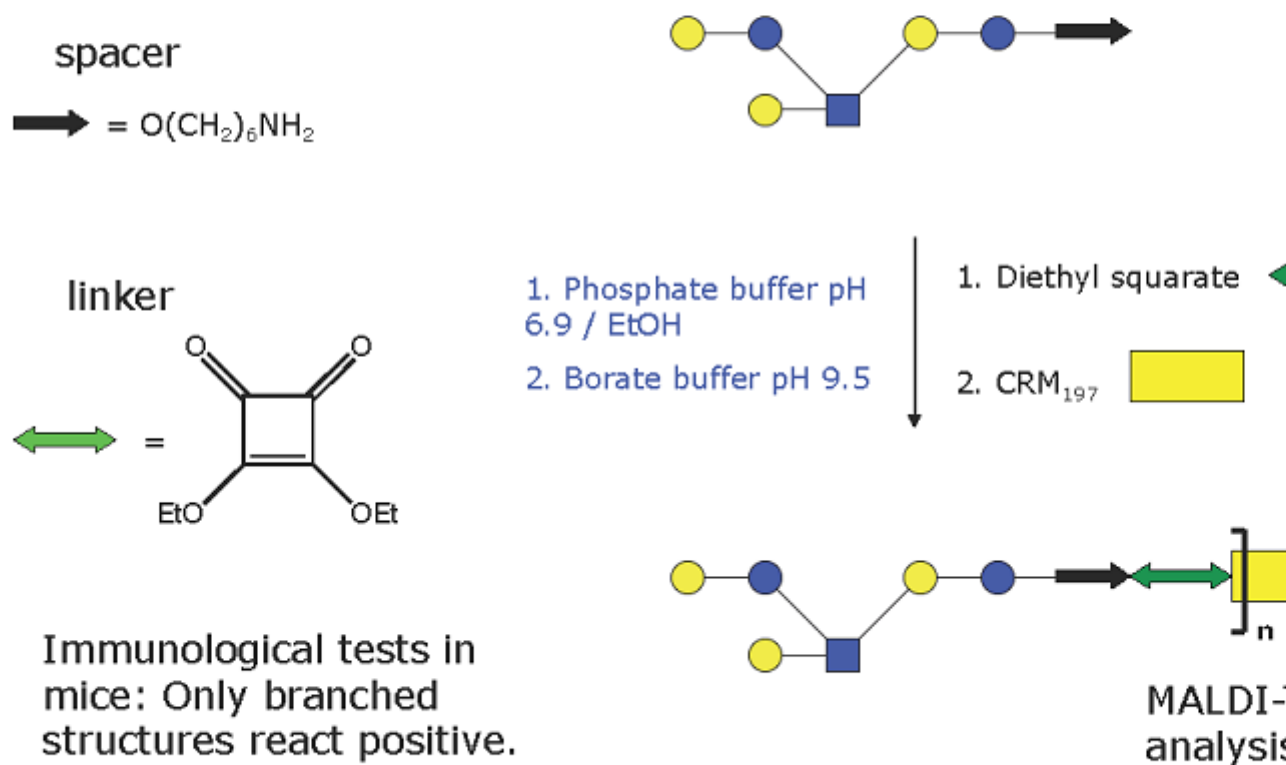
From CPS: Hydrolysis mixtures of oligosaccharides with respect to chain length and presented epitopes for conjugation.

From CPS: Isolation of specific fragments followed by hydrolysis mixtures for conjugation.

Our approach: Via enzymatic synthesis (eventually combined with enzymatic synthesis) of oligosaccharides from monosaccharides.



Synthesis of Pn14OS-protein conjugates using series of synthetic Pn14OS



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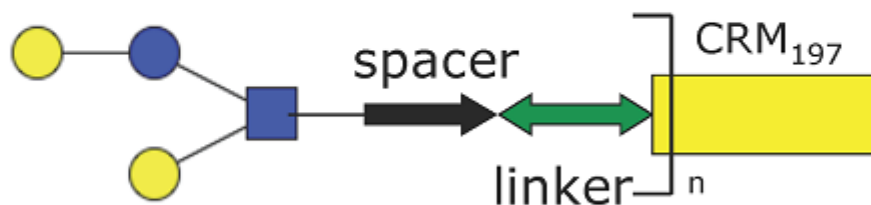
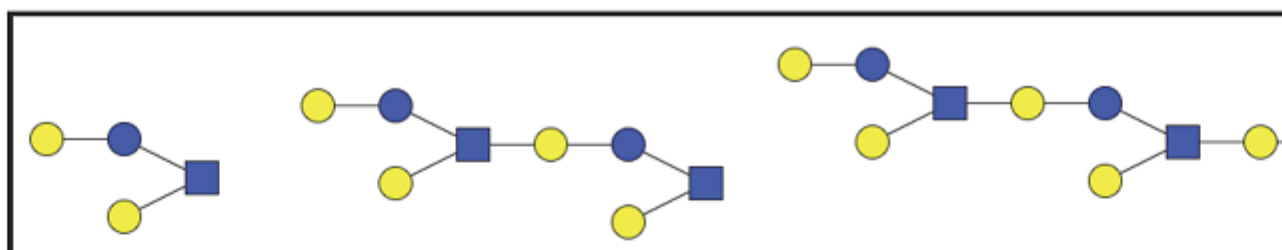
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Identification of the Smallest Structure Capable of Evoking Opsonophagocytic Antibodies against *Streptococcus pneumoniae* Type 14⁷

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Similar IgG antibody response in immunization experiments with Pn14PS conjugate. Similar phagocytosis as Pn14PS conjugate.

Category

1. News