

## Supplementary Information for

### Review

#### Carbohydrate-based drugs launched during 2000–2021

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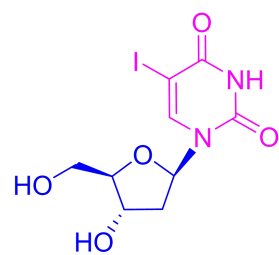
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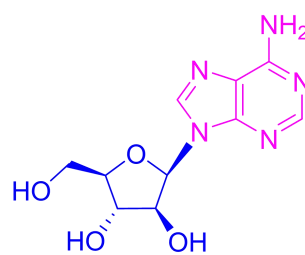
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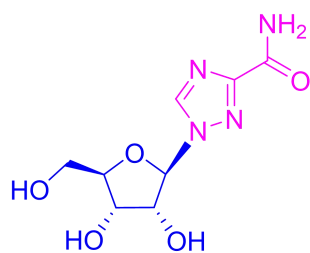
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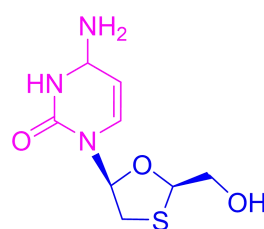
**60 Idoxuridine**



**61 Vidarabine**

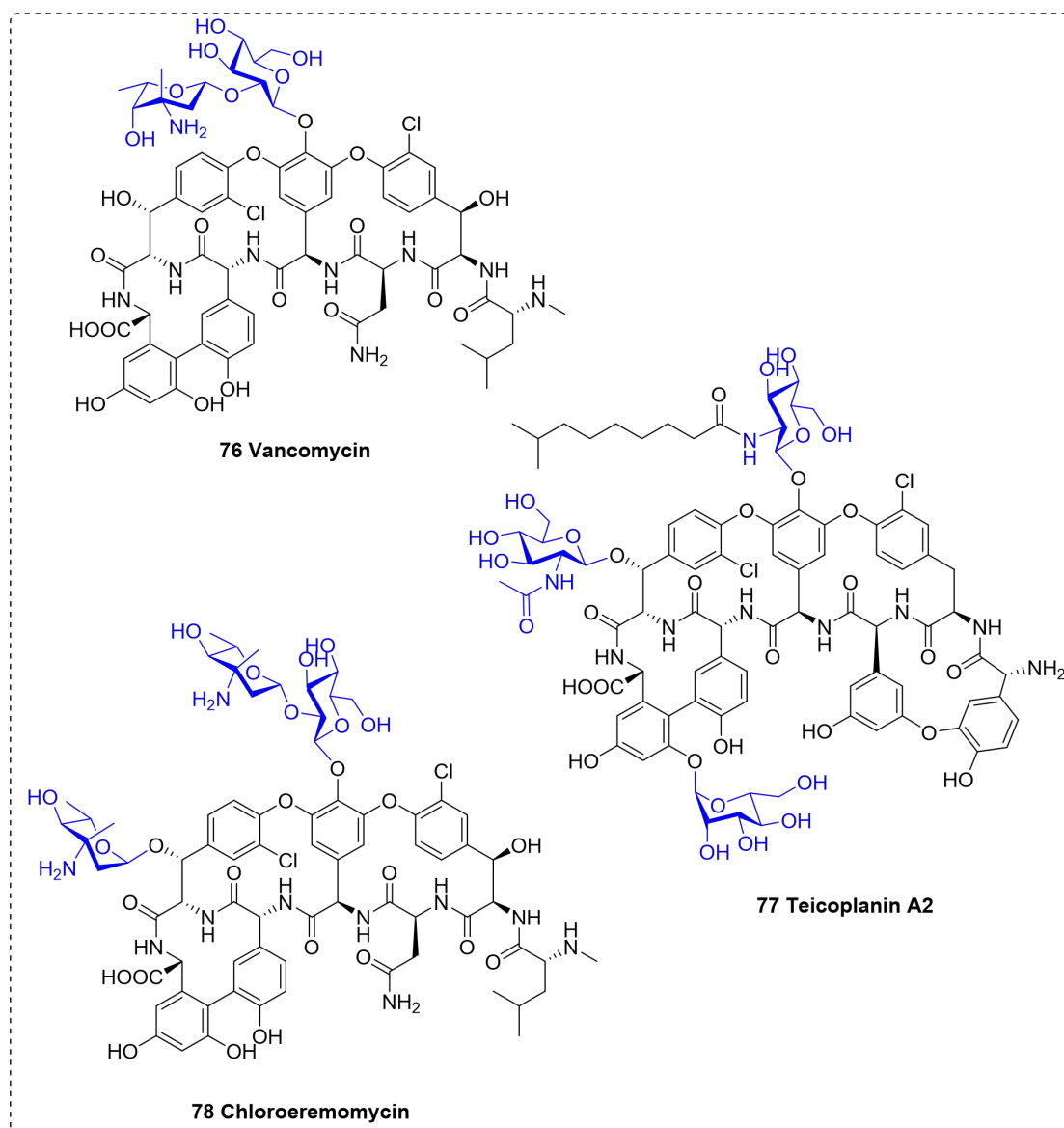


**62 Ribavirin**

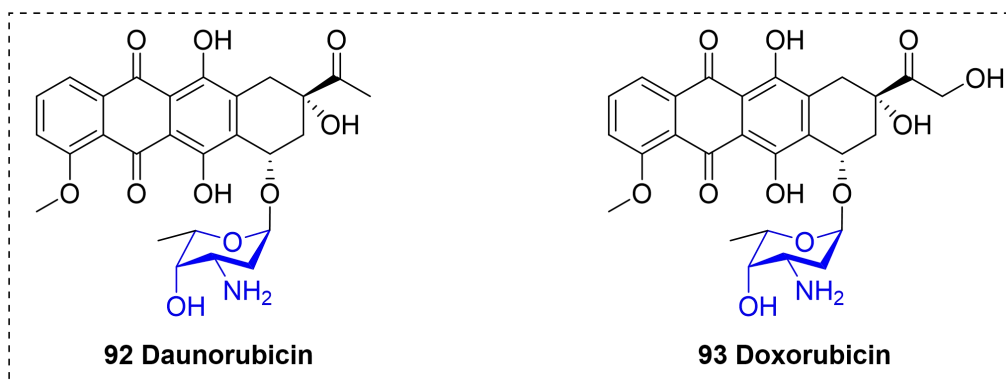


**63 Lamivudine**

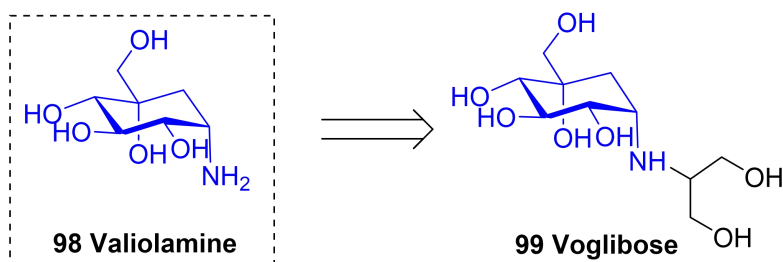
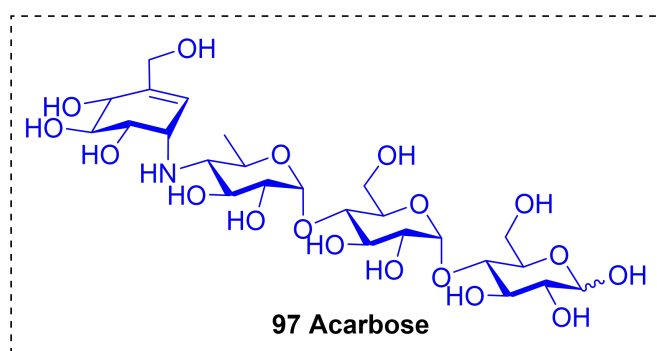
**Figure S1.** Representative antiviral nucleoside drugs (**60–63**) launched before 2000.



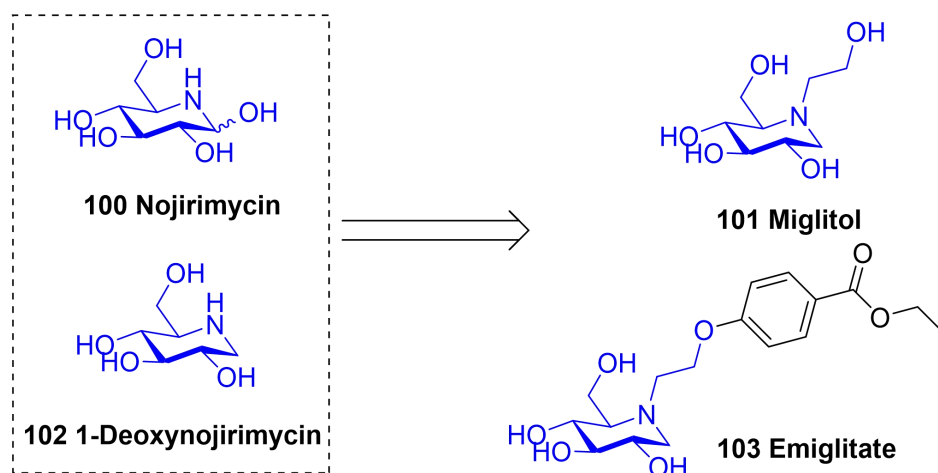
**Figure S2.** The representative early glycopeptide antibiotics **76–78**.



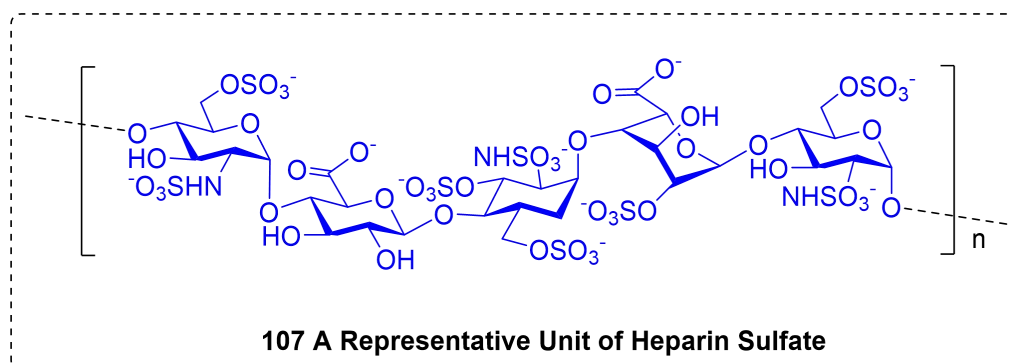
**Figure S3.** The chemical structure of Daunorubicin (**92**) and Doxorubicin (**93**).



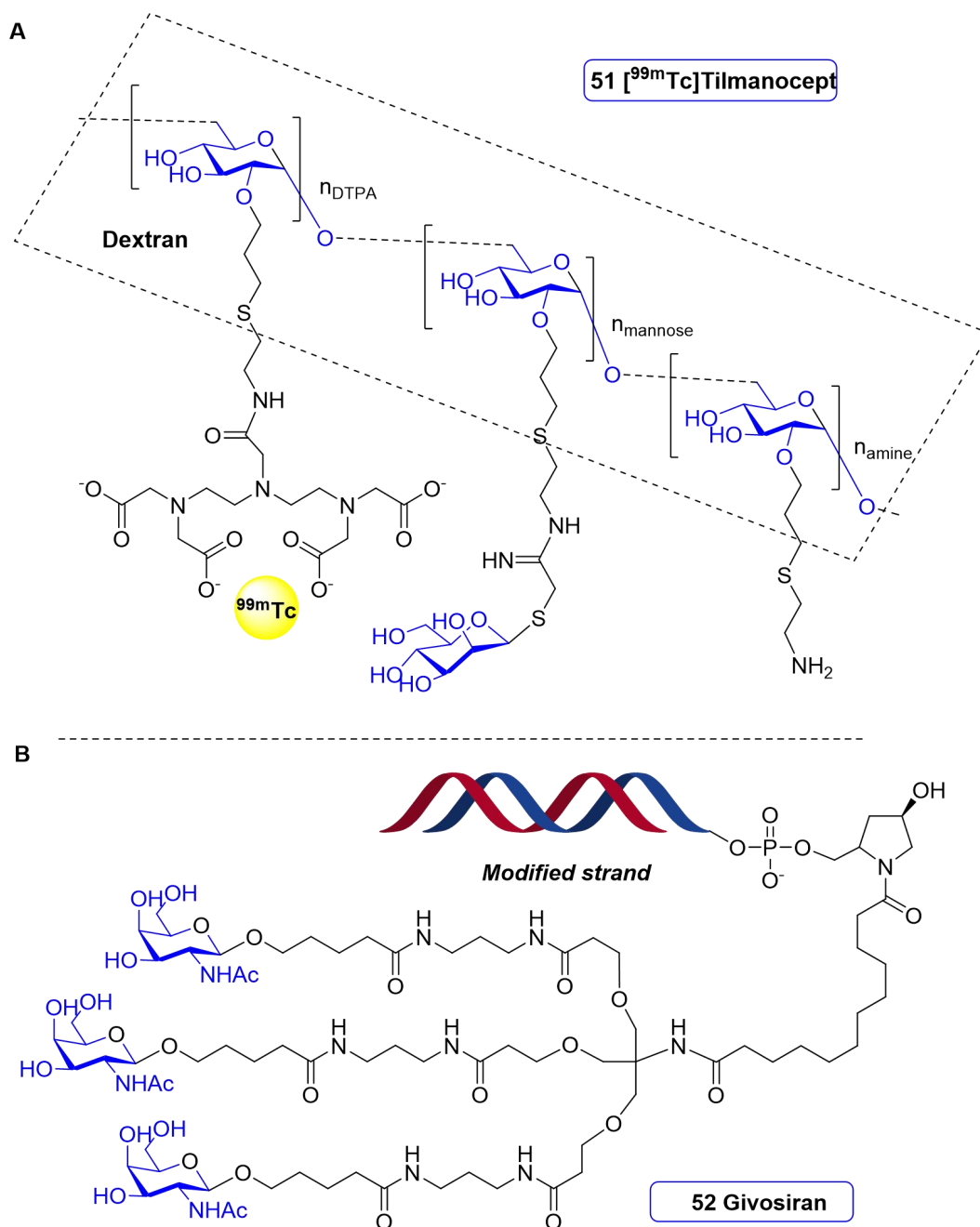
**Figure S4.** The conventional  $\alpha$ -glucosidase and  $\alpha$ -amylase inhibitors Acarbose (**97**) and Voglibose (**99**).



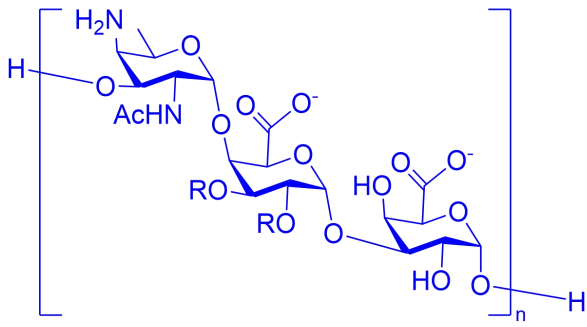
**Figure S5.** The  $\alpha$ -glucosidase inhibitors Miglitol (**101**) and Emiglitate (**103**) derived from natural iminosugars.



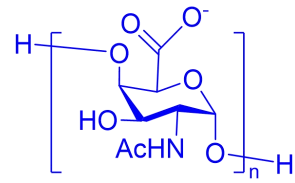
**Figure S6.** A representative pentasaccharide unit of Heparin Sulfate (**107**).



**Figure S7.** [<sup>99m</sup>Tc]Tilmanocept and Givosiran. (A) The lymphatic mapping agent [<sup>99m</sup>Tc]Tilmanocept (**51**) derived from dextran. (B) The structure diagram of the carbohydrate-enhanced siRNA drug Givosiran (**52**).



***S. pneumoniae* serotype 1 antigen**



**Typhi Vi antigen**

**Figure S8.** Representative glycan antigens for glycoconjugate vaccines.