

Anti-Hepatitis B Virus Activity of New *N*⁴-β-D-Glycoside Pyrazolo[3,4-*d*]pyrimidine Derivatives

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The reaction of 6-hydrazinyl-1,3-dimethylpyrimidine-2,4-(1*H*,3*H*)-dione (**1**) with ethoxymethylenemalononitrile afforded 5-amino-1-(1,3-dimethyl-2,6-dioxo-1,2,3,6-tetrahydropyrimidin-6-yl)-1*H*-pyrazole-4-carbonitrile (**2**). The latter was reacted with formamide and urea affording the corresponding 4-aminopyrazolo[3,4-*d*]pyrimidines **3** and **4**. The reaction of monosaccharide aldoses with **3** and **4** gave stereoselectively the β-*N*-glycosides **5a–d** and **6a–d** which were treated with acetic anhydride in pyridine to afford the corresponding acetylated derivatives **7a–d** and **8a–d**. The prepared compounds were tested for their anti-viral activity against hepatitis B virus (HBV) and showed moderate to high activities.

Key words: Pyrazolo[3,4-*d*]pyrimidines, *N*-Glycosides, Anti-Hepatitis B Virus