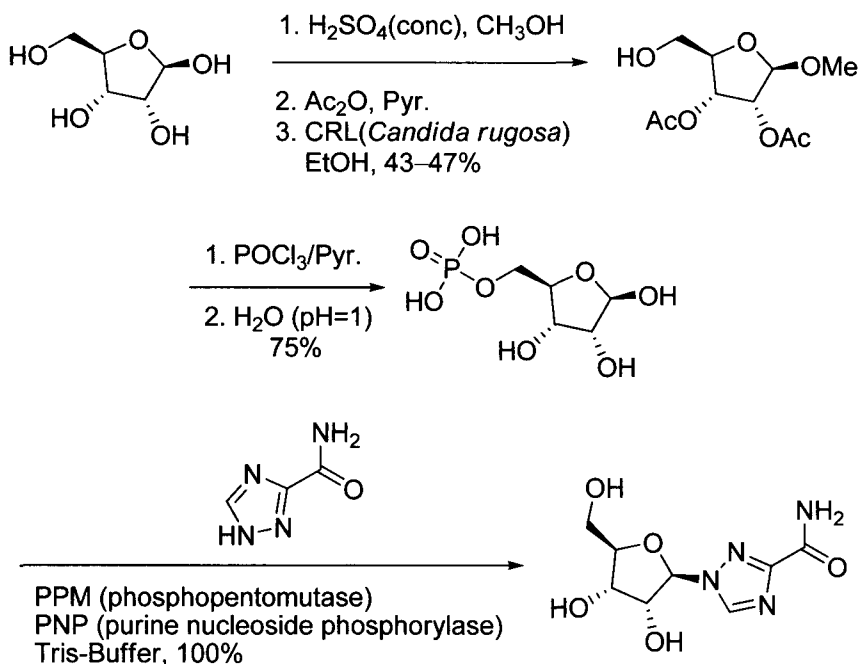


Ribavirin is an anti-viral drug that acts like nucleoside anti-metabolite to interfere with RNA metabolism. It is used for severe RSV infection, hepatitis C infection, and other viral infections but with hemolytic anemia as a major side effect. The synthesis of ribavirin can be derived from the chemoenzymatic method. The synthesis begins with simple ribose, using CRL (*Candida rugosa*) as a lipase can selectively remove the 5-acetyl group. Then the phosphorylation at the 5-hydroxyl group is taken by phosphorous oxychloride and followed by deprotection of the OH group. The last step involves enzymatic catalysis of triazole coupling with high yield.<sup>20</sup>



Terconazole is an anti-fungal agent used to treat vaginal fungal infections. The synthesis of terconazole starts with pre-synthesized compound **2** and then is followed by alkylation of the 1,2,4-triazole followed by ether formation.<sup>21</sup>

