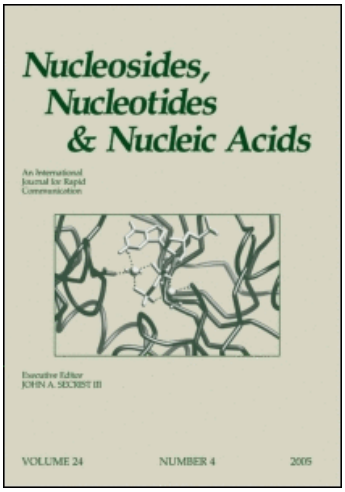

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Synthesis of Imidazo[1, 2-a]pyrazine Nucleoside Analogues

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SYNTHESIS OF IMIDAZO[1,2-a]PYRAZINE NUCLEOSIDE ANALOGUES

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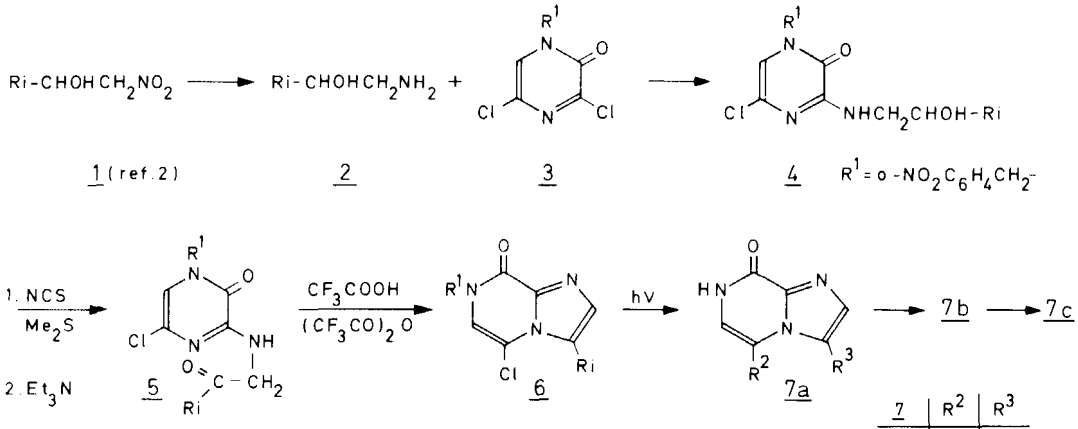
SUMMARY - A synthesis of imidazo[1,2-a]pyrazine nucleoside analogues is described.

Using the recently developed halogenated 2(1H)-pyrazinones 3 (ref.1) some imidazo[1,2-a]pyrazine nucleosides 7b,c were synthesised.

While the condensation of a ribosylated α-haloaldehyde with a 3-amino-2(1H)-pyrazinon failed, a multistep synthesis via the α-amino-alcohol 2 was succesful and yielded 6.

Removal of the photolabile R^1-group (o-$NO_2C_6H_4CH_2$-) and the OH-protecting benzoyl groups, gave product 7b, which was further hydrogenolysed to yield 7c. Compounds 7b,c, which are analogues of ribavirine and formycin B, were tested for antiviral and antitumoral activity.



7	R^2	R^3
a	Cl	Ri
b	Cl	Ri'
c	H	Ri'

SCHEME 1

0732-8311/85/0401-0231$3.50/0

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