## **Chemical Development of Adafosbuvir**

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Nucleoside analogues have emerged over the last decades as a well-established platform to treat cancer and viral infections. Phosphoramidate prodrug strategy was applied to 4'-fluoro-2'-C-methyluridine, a potent inhibitor of hepatitis C virus RNA-polymerase, leading to clinical candidate Adafosbuvir (AL-335). The route definition, the initial scale-up route, and the optimization towards large-scale production will be discussed.

$$(S_p)$$
  $(S_p)$   $O$   $N$   $O$   $O$   $N$   $O$   $N$ 

## adafosbuvir

[1] Cao, T.; Dyatkina, N.; Lemaire, S.; Prhavc, M.; Wagschal, S. Complete Accounts of Integrated Drug Discovery and Development: Recent Examples from the Pharmaceutical Industry, Volume 4 (ACS Symposium Series), in press.