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# Pradefovir

National Cancer Institute

## Source

National Cancer Institute. *Pradefovir*. NCI Thesaurus. Code C66453.

A cyclodiester antiviral prodrug with specific activity against hepatitis B virus (HBV). Pradefovir is specifically metabolized in the liver by hepatic enzymes, mainly by CYP4503A4, to adefovir. In turn, adefovir is phosphorylated by cellular kinases to its activated form adefovir diphosphate. By competing with the natural substrate dATP, the diphosphate form is incorporated into viral DNA and inhibits RNA-dependent DNA polymerase. This causes DNA chain termination and eventually results in an inhibition of HBV replication.