Inventors/Applicants: LAS, CRUZES, A.; Cruces, S. (Mexico); AMERICK, Burton, A.; Connally Bove Lodge & Hut LLP, 1875 Eye Street, NW, Suite 1100, Washington, DC 20006 (US).

(21) International Application Number: PCT/US2007/078139

(22) International Filing Date: 11 September 2007 (11.09.2007)

(25) Filing Language: English

(26) Publication Language: English


(72) Inventors; and

(75) Inventors/Applicants (for US only): AMERICK, Burton, A.; Connally Bove Lodge & Hut LLP, 1875 Eye Street, NW, Suite 1100, Washington, DC 20006 (US).

(43) International Publication Date 5 June 2008 (05.06.2008) ENGLISH

(51) International Patent Classification: A61K 31/70 (2006.01); C07H 37/00 (2006.01); C07H 19/044 (2006.01); C07H 5/04 (2006.01); C07H 19/056 (2006.01); C07H 5/06 (2006.01)


Published: without international search report and to be republished upon receipt of that report

(48) Date of publication of this corrected version: 12 September 2008

(15) Information about Correction: see Notice of 12 September 2008

(54) Title: AZOLE NUCLEOSIDES AND USE AS INHIBITORS OF RNA AND DNA VARIAL POLYMERASES

(57) Abstract: Azole nucleosides represented by the formulae (I) and (II); wherein A = C or N B = C or N X = H; C₇₋₈ alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, aryl, heterocyclyl, halogen such as F, Cl, Br; and I; OH, NH₂, NH-(C = C alkyl, cycloalkyl, aryl, or heterocyclyl); Z = H; C₇₋₈ alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, aryl, heterocyclyl, halogen such as F, Cl, Br, I; OH, NH₂, NH-(C = C alkyl, cycloalkyl, aryl, or heterocyclyl); E = (CH₂)HONHR; n is an integer from 0-6 and more typically 0-3; R = aryl or heterocyclyl; each of W, Y, R is individually selected from the group consisting of H; C₁₋₄ alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, aryl, heterocyclyl; halogen such as F, Cl, Br, I; O, OH, Oalkyl, Oaryl, NH₂, NH-(C = C alkyl, cycloalkyl, aryl, or heterocyclyl); or, each of W, Y, R is other than H and wherein both W and Y together can be =O; and each D individually is OH, Oalkyl, Oaryl, or pharmaceutically acceptable salts thereof; prodrugs thereof and mixtures thereof are provided. Compounds of this disclosure are useful as inhibitors of viral RNA and DNA polymerases such as, but not limited to, Influenza, Hantaan Virus, Crimean Congo hemorrhagic fever virus, hepatitis B, hepatitis C, Polio, Coxsackie A and B, Rhino, Echo, orthopoxvirus (small pex), HIV, Ebola, and West Nile virus polymerases; and especially orthopoxvirus, HTV, and hepatitis B.