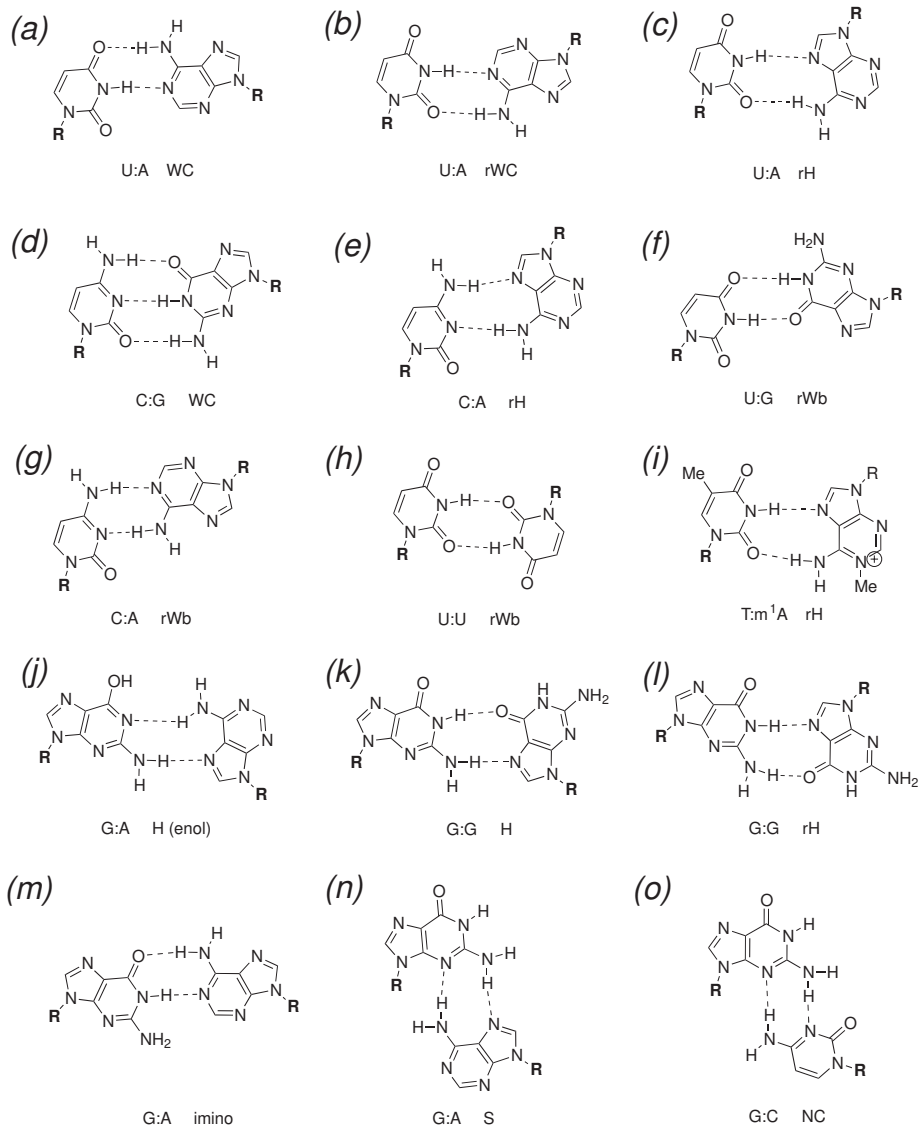

LPTL lonepair nomenclature and conformations (Saenger, W. (1984). *Principles of Nucleic Acid Structure* (Cantor C.R., ed.), pp. 116-158; Burkard, M.E., Turner, D.H., & Tinoco, I. Jr. (1999). *The RNA World* (Gestland, R.F., Cech, T.R., & Atkins, J.F., eds.), 2nd edit., pp. 675-680) (see T**able 1**); NC in (o) G:C NC stands for "non-canonical," is not defined in these nomenclature systems and is defined as trans Sugar-edge/WC using the Leontis and Westhof system (Leontis, N.B. & Westhof, E. (2001). *RNA*, **7**, 499-512). Following is the alternative nomenclature in the Leontis and Westhof system: (a) U:A cis WC/WC, (b) U:A trans WC/WC, (c) U:A trans WC/Hoogsteen, (d) C:G cis WC/WC, (e) C:A trans WC/Hoogsteen, (f) U:G trans WC/WC, (g) C:A trans WC/WC, (h) U:U trans WC/WC, (i) T:m1A trans WC/Hoosteen, (j) N/A, (k) G:G cis WC/Hoosteen, (l) G:G trans WC/Hoogsteen, (m) G:A cis WC/WC, (n) G:A Hoosteen/Sugar-edge, and (o) G:C trans Sugar-edge/WC.