Evolution of the Asian H5 Hemagglutinin

Average "within" group percentage nucleotide divergence of <1.5%

Expansion of second

Expansion of first, second and third order clades into additional second, third and

fourth order clades

Average "between" group percentage nucleotide divergence of >1.5%

When discrete monophyletic groups begin to appear within a specific clade and those groups meet the nucleotide divergence criteria (as well as having bootstrap values >60), they are split into second order clades (but still considered part of the original first order clade). As a second order clade continues to evolve it may reach a similar level of genetic diversity at which point it may be split into third order clades and so on. designation criteria apply to first, second, and any higher order clade

