**Supporting information**

**Supplemental Table 1.** GenBank® accession numbers and IUCN category of analyzed vertebrates.

**Supplemental Table 2.** GenBank® accession numbers of analyzed virus.

**Supplemental Table 3.** Matrix for physico-chemical-similarly value assignation.

**Supplemental Table 4.**  Total physico-chemical-similarly value per species.

**Supplemental Table 5.** Comparative rank of different species of different domestic and wild vertebrate species based on the value of the three models.