

THE LANCET Microbe

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Santini J M, Edwards S J L. Host range of SARS-CoV-2 and implications for public health. *Lancet Microbe* 2020; published online June 18. [https://doi.org/10.1016/S2666-5247\(20\)30069-0](https://doi.org/10.1016/S2666-5247(20)30069-0).

Appendix 1 – Published experimental studies listed according to type and quality of methods and species identified

Article	Animals tested	Source and quality of data	Results
Deng et al. ⁷	This paper tested many animals including wild, companion and farm – too many to list – chicken, duck, mouse, rat and pig <i>etc.</i>	Experimental <i>in vivo</i> (direct infection) and antibody used for sole method of detection presumably missing asymptomatic cases. No metadata provided including information on the numbers of animals tested, ages <i>etc.</i>	All were negative
Kim et al. ²	Ferrets	Experimental. <i>in vivo</i> (direct infection) and RT-PCR used for detecting CoV-2	Showed infection and transmission of virus between infected and not infected animals (transmission not requiring direct contact)
Munster et al. ⁶	Macaques	Experimental <i>in vivo</i> (direct infection) and RT-PCR used for detecting CoV-2	Showed infection and possibility for transmission (no direct evidence of transmission)
Rockx et al. ³	Macaques	Experimental <i>in vivo</i> (direct infection) and RT-PCR used for detecting CoV-2	Showed infection and possibility for transmission (no direct evidence of transmission)

Shi et al. ⁴	Dogs, cats, ferrets, pigs, chickens	Experimental <i>in vivo</i> (direct infection) and RT-PCR and use of antibodies used for detecting CoV-2	Infection of cats and ferrets. Respiratory droplet transmission detected in cats. Ferrets show clinical signs of infection. Virus detected in faecal samples of some of the dogs but say they are not infectious but unclear how this was determined. CoV-2 not detected in pigs and chickens.
Sia et al. ⁵	Golden hamster	Experimental <i>in vivo</i> (direct infection)	Infection of golden hamsters
Zhou et al. ¹	Horseshoe bat, civet, pig and mouse	Experimental <i>in vitro</i> – protein-protein interaction of CoV-2 spike protein and ACE2	Yes to interaction between CoV-2 spike protein-ACE2 from horseshoe bat, civet and pig No interaction with mouse ACE2

Gu H., Chen Q., Yang G. et al. Rapid adaptation of SARS-CoV-2 in BALB/c mice: Novel mouse model for vaccine efficacy <https://doi.org/10.1101/2020.05.02.073411> downloaded 16th May 2020

Appendix 2 – Published modelling studies listed according to type and quality of methods and species identified

Article	Animals tested	Source and quality of data	Results
Luan et al. ⁸	Many animals including: apes, monkeys, cat, dog/wolf, hamster, squirrel, sheep, cows, horses, stoat, civet, wild boar, polecat, pangolin, rabbit, camel, racoon, bats, mouse, rat, platypus, racoon dog, elephant, hedgehog, meerkat, kangaroo rat, guinea pig	<i>in silico</i> modelling – based on just 5 amino acids involved in binding CoV-2 spike protein and ACE2 receptor. Unclear how cut-off was determined – see differences for horseshoe bats	Yes for possible binding apes, monkeys, cat, dog/wolf, hamster, squirrel, sheep, cattle, horses, stoat, civet, wild boar, polecat, pangolin, rabbit, camel, racoon Some bats and not others – yes to hairy-eared horseshoe bat no to greater horseshoe bat. Explanation not given. No – mouse, rat, platypus, racoon dog, elephant, hedgehog, meerkat, kangaroo rat, guinea pig
Wan et al. ⁹	Ape, bat, civet, mouse, rat, pig, ferret, monkey, cat	<i>in silico</i> modelling based on 5 amino acid residues at interface between CoV-2 spike protein and ACE2 receptor	Likely interaction - ape, bat, civet, pig, ferret, monkey, cat Less likely interaction – rat, mouse
Zhai et al. ¹⁰	Chicken, duck, guinea pig, Syrian hamster, pig, horseshoe bat, civet, mouse, dog, cat, tiger, lion, ferret, cow, sheep, camel	<i>In silico</i> modelling of receptor binding domain of spike to ACE2 protein of different animals	Detailed study of interacting residues in the interface and differences in the different animals but no predictions are made for the likelihood of infections