

1 **Supplementary Table S3 Biological properties of HPAI H5 viruses.**

Virus Name	H5 Clade	Biological characteristics					Transmission		
		EID ₅₀	TCID ₅₀	Ck LD ₅₀	Dk LD ₅₀	IVPI	MLD ₅₀	Chicken	Duck
En/W149(H5N1)	2.2	8.3	8.6	2.3	2.5	3.0	3.2	6/6	6/6
Mdk/W401(H5N1)	2.3.2.1	8.3	6.3	3	5.3	2.7	2.6	6/6	6/6
MDk/W452(H5N8)	2.3.4.6	8.9	6.9	2.5	≥ 6.0	3	5.8	6/6	6/6
BDk/Gochang1(H5N8)	2.3.4.6	N/A	N/A	N/A	N/A	3*	N/A	N/A	N/A
BTI/Donglim3(H5N8)	2.3.4.6	N/A	N/A	N/A	N/A	3*	N/A	N/A	N/A

2 All values are expressed as log₁₀: EID₅₀, 50% egg infectious dose; TCID₅₀, 50% tissue culture infectious dose; Ck LD₅₀, 50%

3 lethal dose in chicken; Dk LD₅₀, 50% lethal dose in duck; IVPI, intravenous pathogenic index determined in chickens;

4 MLD₅₀, 50% lethal dose in mice. N/A, not applicable.

5 *As reported by Lee et al (2014).

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