**三種A型流行性感冒分子檢測法於臺灣2.3.4.4 亞群H5N2 病毒之比較與應用**

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**摘要**

為評估A型流行性感冒病毒不同分子生物檢測法之適用性，本試驗利用RT-PCR、nested RT-PCR及real-time RT-PCR三種分子生物檢測法，針對去 (104)年爆發之高病原性2.3.4.4亞群禽流感H5N2病毒液以不同稀釋階並萃取核酸後進行檢測。三種檢測法中，以real-time RT-PCR的檢測極限最佳，至少可檢出100.5 EID50；RT-PCR檢測極限雖是最差，但範圍仍在103.5~2.5 EID50 之間。因此，依不同檢測法之優點、缺點及檢測極限，選擇適合的檢測以應用於不同的檢體及其不同的目的。

**Comparison and application of three molecular tests for the detection of influenza A with clade 2.3.4.4 highly pathogenic influenza A (H5N2) viruses**

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**Abstract**

In order to evaluate the applicability of different molecular tests for the diagnosis of influenza A viruses, RT-PCR, nested RT-PCR, and real-time RT-PCR were used to test the RNA extracted from different dilutions of H5N2 clade 2.3.4.4 HPAI viruses isolated from outbreak in 2015. Among the three methods, the detection limit of real-time RT-PCR was best, at 100.5 EID50. The RT-PCR detection limit was the worst, but still in the range between 103.5 and 102.5 EID50. Therefore, according to the advantages, disadvantages and the detection limits of different methods, suitable tests used in the diagnosis should be dependent upon the type of submitted samples and the purposes of the experiment.