

**Title : Chip that identifies more than 10 flu strains goes commercial**

**By : Asha Papatlal, Channel NewsAsia**

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SINGAPORE: A diagnostic chip that can detect more than ten influenza strains, including the deadly avian flu, has been commercially launched in Singapore after successful trials at the National University Hospital (NUH).

Known as Vereflu, the chip is produced by local biomedical firm Veredus Laboratories and global semiconductor player ST Microelectronics.

It can detect various flu strains within two hours in a single test – a big improvement from comparable tests available in the market today which require multiple tests to be carried out.

**Dr Rosemary Tan**, CEO of Veredus Laboratories, said: "In this test, you can tell if it's H1N1, H3N2, H5N1 or other Flu A, and this is very important because any of these strains can be a pandemic strain. Only with that kind of knowledge can appropriate action be taken to prevent any outbreaks."

Moreover, this test can detect flu strains at the start of the infection, so the spread of the disease can be limited.

The move to commercialise came only after year-long trials at the NUH which conducted tests using both live flu viruses as well as synthetic H5N1 virus.

It said tests must be able to diagnose not just current viruses but also mutations.

Associate Professor Raymond Lin, Head of Microbiology, Dept of Lab Medicine, National University Hospital, said: "Even if my kit works for a field sample of H5N1 virus now, it doesn't mean it will work six months later because the virus is evolving from year to year, and month to month. What is important is that the kit must be able to take care of evolving changes in the virus and this kit has an advantage."

Vereflu has the ability to be updated once there are major mutations, and the advantage of such a mobile device – the size of a finger nail – is that it can go beyond hospital environment.

In fact, developers have already marketed it to other places such as checkpoints at airports and ports to stop the spread of virus at the point of entry. They are also looking at marketing it to other groups like the military.

Veredus Laboratories and ST Microelectronics said the cost of the chip would be comparable to existing tests, which are about S\$100 each. But the developers emphasised that their product has the advantage of testing for multiple strains at the same time.

The two companies, which have opened a new lab, are looking at developing their 'lab-on-chip' for other illnesses like cancer.

- CNA/so