

## **Animal Tests: Effects of APS 45-10 Colostrum on Influenza (H1N1)**

### **Test animal**

BALB/c ♀ 12-week-old mouse

1. Colostrum group N=28
2. Control group N=30

### **Influenza**

Influenza A/PR/8/34 (H1N1) (PR8) virus

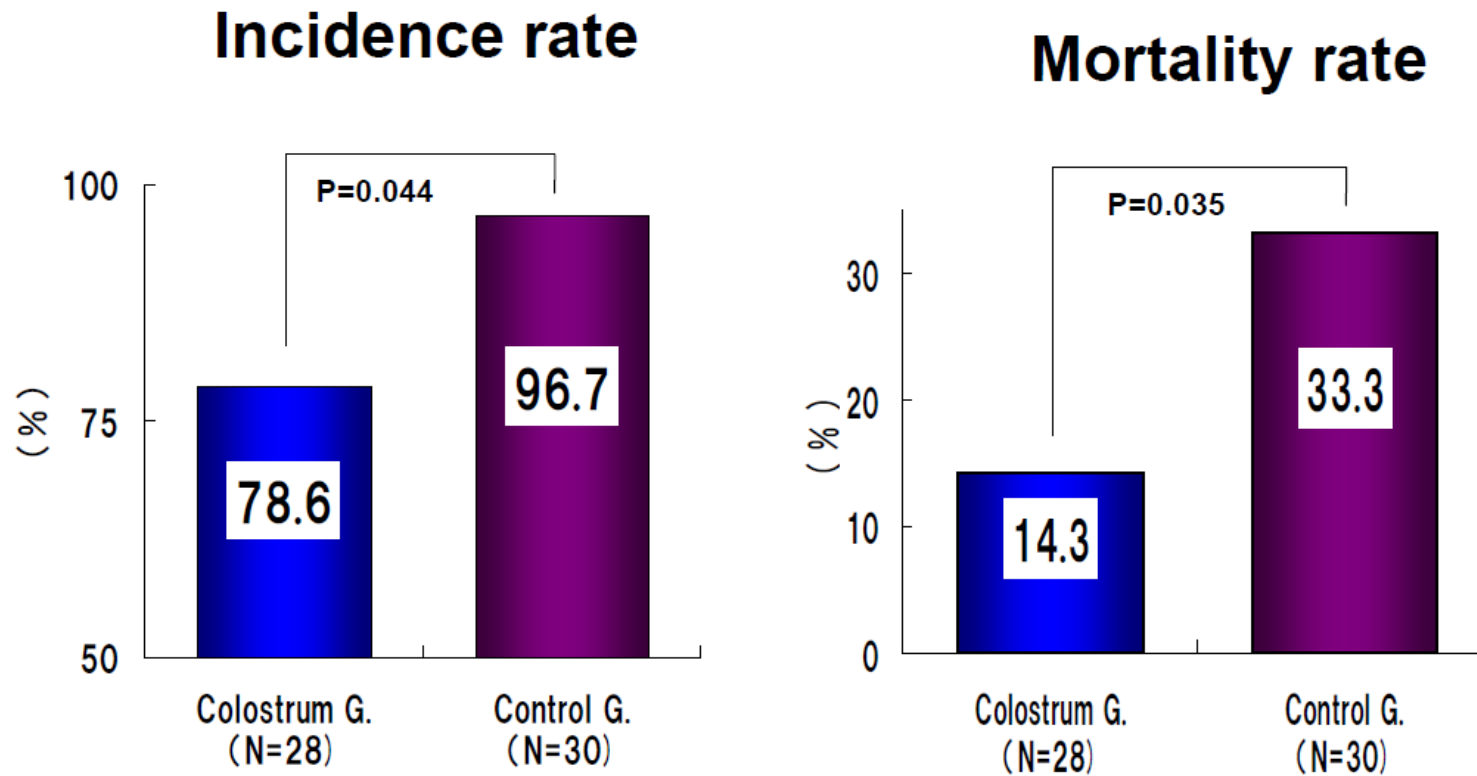
### **Administration**

Three weeks before infection, 6 times/week, oral administration. Administration halted on influenza infection.

1. Colostrum group; Colostrum (APS45-10) 2000 mg/kg/day
2. Control group; 0 mg/kg/day

## Animal Tests: Effects on Influenza (H1N1)

### Incidence / Mortality rates



Paper presented at The 14th Symposium of Adult Disease Countermeasure Society, 2009 and Annual Meeting of Japan Society for Bioscience, Biotechnology, and Agrochemistry 2010.

## Results

**Taking APS45-10 colostrum 2000 mg/kg/day, reduced the incidence rate of H1N1 influenza by 19%\* compared to control placebo group in 12-week old mice (N=58, P=0.044).**

$$*((96.7-78.6)/78.6) \times 100=19\%$$

**Taking APS45-10 colostrum 2000 mg/kg/day, reduced the mortality rate due to H1N1 influenza by 132.9%\* compared to control placebo group in 12-week old mice (N=58, P=0.035).**

$$*((33.3-14.3)/14.3) \times 100=132.9\%$$

## Conclusions

**APS45-10 colostrum administration reduced the H1N1 incidence or infection rate by 19%, but reduced the mortality by a much more significant effect of 132.9%.**

**This is a prevention study of H1N1 in animals. However, the “cytokine storm” is produced after infection, so better treatment data would be useful if the animals continued with the daily administration.**

