

SYNOPSIS

Name of Sponsor/Company	Daiichi Sankyo Co., Ltd.
Name of Finished Product	Adsorbed cell culture-derived H5N1 influenza virus vaccine 30µg/mL intramuscular injection “Kitasato Daiichi Sankyo”
Name of Active Ingredient	Inactivated influenza vaccine
Title of Study	Clinical trial of KIB-PCI in healthy pediatric Japanese volunteers
Investigators	—
Study Centre(s)	10 sites
Publication (reference)	None
Studied Period	—
Phase of Development	Phase 2/3
Objectives	To examine the immunogenicity and safety of three different doses (3 µg, 7.5 µg, 15 µg) of KIB-PCI in healthy pediatric Japanese volunteers
Methodology	A single center, non-randomized, open-label study
Number of Patients (planned and analyzed)	Planned: 150 subjects (3 µg group: 50 subjects, 7.5 µg group: 50 subjects, 15 µg group: 50 subjects) Enrolled: 184 subjects (3 µg group: 63 subjects, 7.5 µg group: 63 subjects, 15 µg group: 58 subjects) Analyzed (Safety): 184 subjects (3 µg group: 63 subjects, 7.5 µg group: 63 subjects, 15 µg group: 58 subjects) Analyzed (Immunogenicity): 184 subjects (3 µg group: 63 subjects, 7.5 µg group: 63 subjects, 15 µg group: 58 subjects)
Diagnosis and Main Criteria for Inclusion	Diagnosis: Healthy Japanese pediatric volunteers Inclusion: 1) An age range from 6 months to 19 years old at the time of 1 st vaccination 2) A subject without any health problems to participate in the study, judged by investigators or sub investigators 3) Able to comply with all trial procedures, take examinations stipulated in the protocol, and report their symptoms (report from legal representatives is also acceptable)
Test Product, Dose and Mode of Administration, Batch Number	Test product (batch number): KIB-PCI 30 µg/mL formulation (PV-0011) Dosage and administration: For subjects aged 6 months to 12 years old, two-dose intramuscular administration of KIB-PCI (0.1 or 0.25 mL) at 3 or 7.5 µg (as HA content) For subjects aged 13 years to 19 years old, two-dose intramuscular administration of KIB-PCI (0.5 mL) at 15 µg (as HA content) Each vaccination (14 days to 28 days apart) was administered in the deltoid region on opposite sides of the body.
Duration of Treatment	6 weeks
Reference Therapy, Dose and	None

Mode of Administration, Batch Number	
Criteria for Evaluation	Primary endpoint: SRH antibody titer Secondary endpoint: Neutralizing antibody titer
Statistical Method	The following analyses were carried out in each dose group 1) Seroconversion rate For SRH antibody titer, the seroconversion rates with their 95% confidence intervals (95% CIs) were calculated at approximately 3 weeks after each vaccination. 2) Geometric Mean Titer Ratio (GMTR) For SRH antibody titer, GMTRs with their 95% CIs on the basis of geometric mean titer (GMT) before the 1st vaccination were calculated at approximately 3 weeks after each vaccination. 3) Seroprotection rate For SRH antibody titer, the seroprotection rates with their 95% CIs were calculated at approximately 3 weeks after each vaccination.
Summary - Conclusion	Immunogenicity summary: The seroconversion rate (95% CI) in SRH antibody titer approximately 3 weeks after the 2 nd vaccination was 73.02% (60.35 to 83.43) in the 3 µg group, 93.65% (84.53 to 98.24) in the 7.5 µg group, and 78.95% (66.11 to 88.62) in the 15 µg group. The GMTR of SRH antibody titer (95% CI) approximately 3 weeks after the 2 nd vaccination was 7.288 (5.838 to 9.098) in the 3 µg group, 11.699 (10.206 to 13.411) in the 7.5 µg group, and 9.375 (7.415 to 11.852) in the 15 µg group. The seroprotection rate (95% CI) in SRH antibody titer approximately 3 weeks after the 2 nd vaccination was 74.60% (62.06 to 84.73) in the 3 µg group, 92.06% (82.44 to 97.37) in the 7.5 µg group, and 77.19% (64.16 to 87.26) in the 15 µg group. Safety summary: The incidence of adverse events was 73.0% (46/63) in the 3 µg group, 82.5% (52/63) in the 7.5 µg group, and 84.5% (49/58) in the 15 µg group. The most frequently reported adverse events were injection site pain (36.5% [23/63] in the 3 µg group, 50.8% [32/63] in the 7.5 µg group, and 72.4% [42/58] in the 15 µg group), injection site erythema (19.0% [12/63], 22.2% [14/63], and 15.5% [9/58]), and malaise (7.9% [5/63], 4.8% [3/63], 20.7% [12/58]). During the study, no SAEs or AEs leading to study discontinuation were observed in any groups. Conclusion: From these results, it was suggested that two-dose intramuscular administration of KIB-PCI at 3 or 7.5 µg would have sufficient immunogenicity for 6-month- to 12-year-old subjects, and 15 µg would do for 13-year-old to 19 year-old subjects. There were no significant safety concerns.
Date of Report	October 13, 2016