Pandemic Influenza Vaccine Clinical Trial Abstract Minimum information:

**Title of Trial:** A Phase II randomized study of the safety and immunogenicity of vaccination strategies using one or two clades and different schedules of H5N1 unadjuvanted, inactivated subvirion influenza vaccines in H5 naïve healthy adults

**Clinical Trial registration site if applicable (e.g. ClinicalTrials.gov):** ClinicalTrials.gov

**Authors/sponsors:** Dr. Linda Lambert/DHHS contract

**Study Design (including the phase of clinical trial):** Phase II. Eligible subjects will be randomized to varying schedules (two doses separated by 7, 14, 28 or 180 days), and clades (clade 1 followed by clade 1, clade 1 followed by clade 2, clade 2 followed by clade 2, or a combination of clades 1 & 2 followed by a combination of clades 1 & 2) of subvirion A/H5N1 vaccine.

**Vaccine subtype:** H5N1

**Virus:**
- Inactivated subvirion influenza rg A/Vietnam/1203/04 (clade 1) x PR8 A/H5N1 vaccine
- Inactivated subvirion influenza rg A/Indonesia/05/05 (clade 2) x PR8 A/H5N1 vaccine

**Manufacturer:** sanofi pasteur

**Type (whole virus/subvirion/subunit/live/recombinant/DNA/vector):** Inactivated subvirion

**Adjuvant:** none

**Delivery system/site:** IM

**Doses (antigen and adjuvant, number of doses, intervals between administrations):** 45 or 90 mcg; single priming dose to be followed by single homologous or heterologous boosting dose separated by 7, 14, 28 or 180 days

**Study population:**
- **Number of subjects involved:** 500
- **Age range:** 18-49
- **Health status:** healthy adults
- **Special inclusion/exclusion criteria:** no history of prior H5 influenza exposure or vaccination

**Clinical Endpoints Assessed:**

**Safety assessments:**
- Adverse event (AE) or serious adverse event (SAE) information (solicited in-clinic and via memory aids, concomitant medications, and periodic targeted physical assessments).

**Immunogenicity assessments:**
- Geometric Mean Titer (GMT), frequency of 4-fold or greater antibody titer increases, and proportion of subjects achieving a serum HAI antibody titer of 1:40 or greater against the two antigens being evaluated, A/Vietnam/1203/04 and A/Indonesia/05/05 H5N1 virus, 1 month post Dose 2 vaccination.
- Geometric mean titer (GMT), frequency of 4-fold or greater increases and proportion of subjects achieving a titer of 1:40 or greater in neutralizing antibody titers against the two antigens being evaluated, A/Vietnam/1203/04 and A/Indonesia/05/05 virus, 1 month post Dose 2 vaccination.
- Geometric Mean Titers (GMT) of antibody at 6 months post Dose 2.
- Development of serum HAI and neutralizing antibody responses against the A/Vietnam/1203/04 virus after two vaccinations of A/Indonesia/05/05 vaccine.
- Kinetics and magnitude of antibody development by HAI and neutralizing antibody after the ultra-short immunization schedules versus standard two-dose schedule.
• To explore the antibody responses by HAI and neutralizing antibody to other H5 hemagglutinin variants after vaccination with various schedules and combination of A/Vietnam/1203/04 and/or A/Indonesia/05/05.

Immunoassay type:
- HI (type of RBC used):
- NT (type of neutralization assay):
- SRH

Results:

Safety: Vaccine was well tolerated.

Reactogenicity:
- AEs:
- SAEs:

Immunogenicity: see slide set - 6th WHO Meeting on Evaluation of Pandemic Influenza Vaccines in Clinical Trials, 18-19 February 2010, Geneva - 19 FEBRUARY 2010
- A Phase II safety and immunogenicity study of different clades and schedules of H5N1 unadjuvanted, subvirion influenza vaccines - Mark Mulligan [pdf 1.69Mb]

HI or NT:
- GMTs:
- GMT Ratios (post:pre):
- Per cent responding (4 fold increase):
- Per cent responders at specified titer:
- SRH:
- Per cent with titre (in mm²)


Date envisaged for availability of results, if not yet available:

Planned time schedule for next phase of development: Booster dose of Anhui/H5 vaccine (A) with or without MF59 adjuvant is proposed under a future separate protocol. For Groups 8 and 9, all subjects providing consent to participate will be randomized to receive one of 5 possible doses, with approximately 20 subjects in each dose group: 3.75 mcg A MF59, 7.5 mcg A MF59, 15.0 mcg A MF59, 15.0 mcg A, 90 mcg A. At this time this protocol is open to enrollment.