### Supplementary Table S1 The finished H7N9 vaccine clinical trials registered in clinicalTrials.gov

| Name of clinical trial                                                                 | Stage | Registered number |
|----------------------------------------------------------------------------------------|-------|------------------|
| Randomized Study of H7 Influenza Prime-Boost Regimens in Healthy Adults                 | I     | NCT02206464      |
| Evaluating the Safety and Immunogenicity of a H7N9 Vaccine for the Prevention of Influenza H7N9 Disease in Adults 50 to 70 Years Old | I     | NCT02274545      |
| Preliminary Study on Safety and Immunogenicity of Influenza A (H7N9) Vaccine in the Population | I     | NCT03196661      |
| Safety and Immunogenicity of GSK Biologicals' Influenza Vaccine(s) GSK3206641A and GSK3206640A Administered in Adults 18 to 64 Years of Age | I     | NCT01999842      |
| Dose-Ranging Study of Adjuvanted and Non-Adjuvanted Cell Culture-Derived, Inactivated A/H7N9Monovalent Subunit Influenza Virus Vaccine (H7N9c) in Adults 18 to <65 Years | I     | NCT01928472      |
| Evaluation of the Safety and Immunogenicity of Live Influenza A Vaccine H7N9 (6-2) AA ca Recombinant (A/Anhui/1/2013 (H7N9) x A/Ann Arbor/6/60 ca). | I     | NCT01995695      |
| The Safety And Immunogenicity Of Priming With Live Attenuated A/H7N9 Influenza Virus Vaccine Followed By Inactivated A/H7N9 Influenza Virus Vaccine With AS03 Adjuvant | I     | NCT02957656      |
| Evaluation of the Optimal Interval Between Priming With a Live Influenza A Vaccine H7N9 (6-2) AA ca Recombinant (A/Anhui/1/2013 (H7N9) x A/Ann Arbor/6/60 ca). | I     | NCT02151344      |
Immunogenicity and Safety of Monovalent A/Anhui/1/2013 (H7N9) Virus-Like Particle (VLP) Avian Influenza Antigen (Recombinant) in Healthy Adults With and Without Adjuvant  

A Phase I Study in Healthy Adults to Assess Priming With Antigenically Mismatched Live Attenuated A/H7N3 Influenza Virus Vaccine Followed by Inactivated A/H7N9 Influenza Virus Vaccine  

A Phase I Study Priming With an Inactivated A/H7N9 Influenza Virus Vaccine With or Without MF59 Adjuvant Followed by Live Attenuated A/H7N9 Influenza Virus Vaccine  

A Study to Evaluate the Safety and Immunogenicity of H7N9 Influenza Vaccine (AT-501) in Healthy Adult Subjects  

Evaluate and Compare the Immunogenicity of Monovalent Inactivated Influenza A/H7N9 Virus Vaccine Administered With and Without AS03 Adjuvant and Monovalent Inactivated Influenza A/H3N2v Virus Vaccine Administered Without Adjuvant in Healthy Adults Through Standard and Systems Biology Analyses  

Safety, Reactogenicity, and Immunogenicity of an MF59-Adjuvanted, Monovalent Inactivated Influenza A/H7N9 Virus Vaccine Administered Intramuscularly at Different Intervals and Dosages  

Safety, Reactogenicity, and Immunogenicity of a Monovalent Influenza A/H7N9 Virus Vaccine Administered at Different Dosages Given With and Without AS03 and MF59 Adjuvants
| Study Description                                                                 | Phase | NCT Number          |
|----------------------------------------------------------------------------------|-------|---------------------|
| Safety, Reactogenicity, and Immunogenicity of a Single Intramuscular Dose of Inactivated Influenza A/H7N9 Vaccine After Priming With Inactivated Influenza A/H7N7 Vaccine | II    | NCT02586792         |
| Safety, Reactogenicity, and Immunogenicity of a Monovalent Influenza A/H7N9 Virus Vaccine Administered at Different Dosages Given With and Without MF59 Adjuvant | II    | NCT01938742         |
| A Phase II Study in Healthy Adults 19 Years and Older to Assess the Safety, Reactogenicity and Immunogenicity of a Sanofi Pasteur A/H7N9 Inactivated Influenza Vaccine Administered Intramuscularly With or Without AS03 Adjuvant | II    | NCT03312231         |
| A Phase II Study in Healthy Adults (19-64 Years of Age) to Assess the Safety, Reactogenicity and Immunogenicity of Sequential or Simultaneous Intramuscular Administration of an AS03-adjuvanted A/H7N9 Inactivated Influenza Vaccine With Seasonal Influenza Vaccine | II    | NCT03318315         |
| Name of clinical trial                                                                 | Stage | Registered number |
|----------------------------------------------------------------------------------------|-------|-------------------|
| Reactogenicity, Safety and Immunogenicity of a Live Monovalent A/17/Hong Kong/2017/75108 (H7N9) Influenza Vaccine | I     | NCT03739229       |
| A Phase II Study to Assess the Safety, Reactogenicity and Immunogenicity of a Single Dose of 2017 A/H7N9 Inactivated Influenza Vaccine (IIV) Administered Intramuscularly With or Without AS03 Adjuvant in 2013 A/H7N9 IIV Primed or A/H7 IIIV Naïve Subjects | II    | NCT03738241       |
| A Phase II Study in Healthy Adults 18-64 Years Old to Assess the Safety, Reactogenicity and Immunogenicity of a Seqirus A/H7N9 Inactivated Influenza Vaccine Administered Intramuscularly With or Without MF59 (R) Adjuvant | II    | NCT03682120       |
| Immunogenicity And Safety Of An Alum-Adjuvanted Inactivated H7N9 Influenza Vaccine     | I/II  | NCT03369808       |
| Immunogenicity and Safety of an Alum-adjuvanted Inactivated H7N9 Influenza Vaccine: a Randomized, Blind, Placebo-controlled, a Phase II Clinical Trial | II    | NCT03755427       |
| A Phase II Study to Assess the Safety, Reactogenicity and Immunogenicity of Different Prime-Boost Vaccination Schedules of 2013 and 2017 A/H7N9Inactivated Influenza Vaccines Administered Intramuscularly With or Without AS03 Adjuvant in Healthy Adults 19-50 Years of Age | II    | NCT03589807       |