ISRCTN15281137 https://doi.org/10.1186/ISRCTN15281137

A phase I/II study to determine efficacy, safety and immunogenicity of the candidate coronavirus disease (COVID-19) vaccine ChAdOx1 nCoV-19 in UK healthy adult volunteers

Submission date
27/03/2020

Recruitment status
No longer recruiting

Registration date
06/04/2020

Overall study status
Completed

Last Edited
24/04/2024

Condition category
Infections and Infestations

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
COVID-19 is a condition caused by the coronavirus (called SARS-CoV-2) that was first identified in late 2019. This virus can infect the respiratory (breathing) system. Some people do not have symptoms but can carry the virus and pass it on to others. People who have developed the condition may develop a fever and/or a continuous cough among other symptoms. This can develop into pneumonia. Pneumonia is a chest infection where the small air pockets of the lungs, called alveoli, fill with liquid and make it more difficult to breathe.

In 2020, the virus has spread to many countries around the world and neither a vaccine against the virus or specific treatment for COVID-19 has yet been developed. As of March 2020, it is advised that people minimize travel and social contact, and regularly wash their hands to reduce the spread of the virus.

Groups who are at a higher risk from infection with the virus, and therefore of developing COVID-19, include people aged over 70 years, people who have long-term health conditions (such as asthma or diabetes), people who have a weakened immune system and people who are pregnant. People in these groups, and people who might come into contact with them, can reduce this risk by following the up-to-date advice to reduce the spread of the virus.

The WHO declared the COVID-19 epidemic a Public Health Emergency of International Concern on 30th January 2020. There are no currently licensed vaccines or specific treatments for COVID-19. Vaccines are the most cost-effective way of controlling outbreaks and the international community have stepped-up their efforts towards developing one against COVID-19.

This study will enable us to assess if healthy people can be protected from COVID-19 with this new vaccine called ChAdOx1 nCoV-19. It will also give us valuable information on safety aspects

of the vaccine and its ability to generate good immune responses against the virus. We will do this by randomly allocating participants to receive the investigational vaccine or a MenACWY vaccine in addition to doing blood tests and collecting information about any symptoms that occur after vaccination.

The study would enrol up to 1,112 (updated 22/04/2020, previously: 510) healthy adults, aged 18 – 55 years of age living near to a study site in the UK. Dependent on the group, there will be between five and nine study visits over a 12 month period. Participants will be asked to complete a diary for 7 days after the vaccination and will be closely monitored by the study team.

Who can participate?
Healthy adults aged 18 - 55 years. Participation in this study is voluntary but the researchers are only accepting volunteers from the Oxford area.

What does the study involve?
Participants will be randomly allocated to receive the investigational vaccine or a MenACWY vaccine. We will then do blood tests and collect information about any symptoms that occur after vaccination. Dependent on the group, there will be between five and nine study visits over a 12 month period. Participants will be asked to complete a diary for 7 days after the vaccination and will be closely monitored by the study team.

What are the possible benefits and risks of participating?
Knowledge gained from this study will help us develop a vaccine against the newly emerging coronavirus disease COVID-19. There are no direct benefits of taking part, however, participants will receive a full medical examination as part of the study.
Although this is the first time this vaccine has been administered to humans, similar investigational vaccines have been widely administered for many pathologies without significant safety concerns.

The risks and side effects of the proposed study procedures are:
Blood samples: drawing blood may cause slight pain and occasionally bruising
Vaccinations: Common side effects are some mild redness and swelling at the injection site. Participants may feel like they have flu-like symptoms within 24 hours of the vaccinations. These usually resolve within 48 hours.

Where is the study run from?
Centre for Clinical Vaccinology and Tropical Medicine, Churchill Hospital (UK)

When is the study starting and how long is it expected to run for?
March 2020 to December 2024

Who is funding the study?
UK Research and Innovation

Who is the main contact?
Emma Plested
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Contact information

Type(s)

Scientific

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Additional identifiers

Clinical Trials Information System (CTIS)
2020-001072-15

Integrated Research Application System (IRAS)
281259

ClinicalTrials.gov (NCT)
NCT04324606

Protocol serial number
CPMS 45367, IRAS 281259

Study information

Scientific Title
A phase I/II study to determine efficacy, safety and immunogenicity of the candidate Coronavirus Disease (COVID-19) vaccine ChAdOx1 nCoV-19 in UK healthy adult volunteers

Acronym
COV001

Study objectives
Objectives:
1. To assess the efficacy of ChAdOx1 nCoV-19 against COVID-19
2. To assess the safety, tolerability, reactogenicity profile, and cellular and humoral immunogenicity of the candidate vaccine ChAdOx1 nCoV

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 26/03/2020, South Central Berkshire REC (Level 3, Block B, Whitefriars, Lewins Mead, Bristol, BS1 2NT, UK; +44 (0)2071048046; berkshire.rec@hra.nhs.uk), ref: 20/SC/0145

Study design
Interventional randomized controlled trial

Primary study design
Interventional

Study type(s)
Prevention

Health condition(s) or problem(s) studied
COVID-19 (SARS-CoV-2 infection)

Interventions
Current interventions as of 20/04/2021:

Volunteers will initially be required to complete an online screening. This is an initial confirmation of eligibility. Volunteers will initially be invited for a screening visit. Prior to attending they will have received written information about the study and had time to consider it. At the screening visit a doctor will explain about the study and answer any questions they may have. If the volunteer decides to take part, they will be asked to sign a consent form. The doctor will then check whether the volunteer is eligible to take part. This will involve taking a medical history, performing a physical examination, taking blood tests, urine tests, and measuring blood pressure and temperature.
The doctor will then write to the volunteers own GP to enquire about their medical health. If all the inclusion criteria are met and none of the exclusion criteria are present then the volunteer is invited to return for vaccination. Due to the need for rapid delivery of this study, there will be minimal flexibility around appointment dates.

Before vaccination, volunteers will be asked about their recent health to ensure that they are still medically fit. They will have blood tests taken and participants in groups 1, 2 and 4 will be

randomised (1:1) to receive either ChAdOx1 nCoV-19 or MenACWY. Group 3 participants will not be randomised and therefore not blinded

Participants from group 1 or 3 will be vaccinated first. The first volunteer to receive the IMP will be vaccinated ahead of any other participants. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. The next 3 volunteers will be vaccinated with the IMP at least 1 hour apart. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. If there are no safety concerns from the first 4 participants receiving IMP, further participants will be vaccinated with the IMP.

Group 1
88 participants will receive ChAdOx1 nCoV-19 5 x 10(10) virus particles (vp) or MenACWY at day 0, then followed up at days 2, 7, 14, 28, 56, 182 and 364.

Group 2
412 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0 then followed up at days 28, 182 and 364.
Up to 62 participants enrolled in group 2 will be invited to receive a booster vaccine. Participants will be randomised to receive either a standard booster dose (5 x 10(10)vp), or a lower booster dose (2.5 x 10(10)vp) at approximately 8 weeks post prime. Up to 10 volunteers from group 2 who received MenACWY will be receive a second dose of MenACWY at the same interval. The remaining participants in groups 2 (those who have not already been boosted) will be invited to receive a booster dose of either ChAdOx1 nCoV-19: 0.5mL (3.5-6.5 x 10(10)vp) or MenACWY. Once boosted, these remaining volunteers will instead be followed up on a schedule relative to the boost dose which will be POST BOOST+28 days , POST BOOST +90, POST BOOST +182 and POST BOOST +364 days.

Group 3
10 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp at day 0 and day 28, then followed up at days 2, 7, 14, 30, 35, 42, 56, 182 and 364. All participants from group 3 will be offered a third dose of ChAdOx1 nCoV-19 (0.5mL 3.5-6.5x10^10 viral particles) at 10 months from enrolment.

Group 4
Up to 580 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0, then followed up at days 28, 182 and 364.
Up to 112 participants in group 4 will be requested to take prophylactic paracetamol 1000 mg every 6 h for 24 h from the time of vaccination to reduce the chance of fever post immunisation. The remaining participants in group 4 (those who have not already been boosted) will be invited to receive a booster dose of either ChAdOx1 nCoV-19: 0.5 ml (3.5-6.5 x 10(10)vp) or MenACWY. Once boosted, these remaining volunteers will be followed up post boost at POST BOOST +28, POST BOOST +90, POST BOOST +182 and POST BOOST +364 days.

Group 5
Up to 120 participants from groups 2 and 4. Participants from groups 2 and 4 who received two doses of ChAdOx1 nCoV-19 5 x 10(10) vp, less than or equal to 16 weeks apart, earlier in the trial will be offered a third dose of ChAdOx1 nCoV-19 (0.5ml 3.5-6.5 x 10(10) vp) at 10 months from enrolment.

Participants from groups 2 and 4 who received two doses of MenACWY, less than or equal to 16 weeks apart, earlier in the trial will be offered a ChAdOx1 nCoV-19 (0.5 ml 3.5-6.5 x 10(10) vp)

prime vaccination at 10 months from enrolment followed by a second dose of ChAdOx1 nCoV-19 ((0.5 ml 3.5-6.5 x 10(10) vp) 12 weeks later.

A 2:1 ratio of previous ChAdOx1 nCoV-19 x 2 recipients to previous MenACWY x 2 recipients will be reallocated into group 5.

Participants will be observed for 60 min after vaccination (+/-30 min) and given an oral thermometer, tape measure and access to a diary with instructions for use. They will also receive an emergency 24-h telephone number to contact the on-call study physician if needed.

All study participants (that remain blinded) will be unblinded. Participants who received MenACWY will be invited to receive the MHRA approved 4-to-12 week ChAdOx1 nCoV-19 prime-boost schedule as part of provision of treatment to controls efforts. Contraindications to vaccination will be reviewed against the current UK Greenbook guidance on COVID-19 vaccination https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book. Due to the updated guidance relating to the emerging association of thrombosis with thrombocytopenia and ChAdOx1 nCoV-19, trial participants aged 29 and under will not be offered (prime) vaccinations with ChAdOx1 nCoV-19. These individuals will instead be advised to await vaccination under the national rollout program.

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Previous intervention as of 18/03/2021:

Volunteers will initially be required to complete an online screening. This is an initial confirmation of eligibility. Volunteers will initially be invited for a screening visit. Prior to attending they will have received written information about the study and had time to consider it. At the screening visit a doctor will explain about the study and answer any questions they may have. If the volunteer decides to take part, they will be asked to sign a consent form. The doctor will then check whether the volunteer is eligible to take part. This will involve taking a medical history, performing a physical examination, taking blood tests, urine tests, and measuring blood pressure and temperature.
The doctor will then write to the volunteers own GP to enquire about their medical health. If all the inclusion criteria are met and none of the exclusion criteria are present then the volunteer is invited to return for vaccination. Due to the need for rapid delivery of this study, there will be minimal flexibility around appointment dates.

Before vaccination, volunteers will be asked about their recent health to ensure that they are still medically fit. They will have blood tests taken and participants in groups 1, 2 and 4 will be randomised (1:1) to receive either ChAdOx1 nCoV-19 or MenACWY. Group 3 participants will not be randomised and therefore not blinded

Participants from group 1 or 3 will be vaccinated first. The first volunteer to receive the IMP will be vaccinated ahead of any other participants. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. The next 3 volunteers will be vaccinated with the IMP at least 1 hour apart. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. If there are no safety concerns from the first 4 participants receiving IMP, further participants will be vaccinated with the IMP.

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88 participants will receive ChAdOx1 nCoV-19 5 x 10(10) virus particles (vp) or MenACWY at day 0, then followed up at days 2, 7, 14, 28, 56, 182 and 364.

Group 2
412 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0 then followed up at days 28, 182 and 364.
Up to 62 participants enrolled in group 2 will be invited to receive a booster vaccine. Participants will be randomised to receive either a standard booster dose (5 x 10(10)vp), or a lower booster dose (2.5 x 10(10)vp) at approximately 8 weeks post prime. Up to 10 volunteers from group 2 who received MenACWY will be receive a second dose of MenACWY at the same interval. The remaining participants in groups 2 (those who have not already been boosted) will be invited to receive a booster dose of either ChAdOx1 nCoV-19: 0.5mL (3.5-6.5 x 10(10)vp) or MenACWY. Once boosted, these remaining volunteers will instead be followed up on a schedule relative to the boost dose which will be POST BOOST+28 days , POST BOOST +90, POST BOOST +182 and POST BOOST +364 days.

Group 3
10 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp at day 0 and day 28, then followed up at days 2, 7, 14, 30, 35, 42, 56, 182 and 364. All participants from group 3 will be offered a third dose of ChAdOx1 nCoV-19 (0.5mL 3.5-6.5x10^10 viral particles) at 10 months from enrolment.

Group 4
Up to 580 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0, then followed up at days 28, 182 and 364.
Up to 112 participants in group 4 will be requested to take prophylactic paracetamol 1000 mg every 6 h for 24 h from the time of vaccination to reduce the chance of fever post immunisation. The remaining participants in group 4 (those who have not already been boosted) will be invited to receive a booster dose of either ChAdOx1 nCoV-19: 0.5 ml (3.5-6.5 x 10(10)vp) or MenACWY. Once boosted, these remaining volunteers will be followed up post boost at POST BOOST +28, POST BOOST +90, POST BOOST +182 and POST BOOST +364 days.

Group 5
Up to 120 participants from groups 2 and 4. Participants from groups 2 and 4 who received two doses of ChAdOx1 nCoV-19 5 x 10(10) vp, less than or equal to 16 weeks apart, earlier in the trial will be offered a third dose of ChAdOx1 nCoV-19 (0.5ml 3.5-6.5 x 10(10) vp) at 10 months from enrolment.

Participants from groups 2 and 4 who received two doses of MenACWY, less than or equal to 16 weeks apart, earlier in the trial will be offered a ChAdOx1 nCoV-19 (0.5 ml 3.5-6.5 x 10(10) vp) prime vaccination at 10 months from enrolment followed by a second dose of ChAdOx1 nCoV-19 ((0.5 ml 3.5-6.5 x 10(10) vp) 12 weeks later.

A 2:1 ratio of previous ChAdOx1 nCoV-19 x 2 recipients to previous MenACWY x 2 recipients will be reallocated into group 5.

Participants will be observed for 60 min after vaccination (+/-30 min) and given an oral thermometer, tape measure and access to a diary with instructions for use. They will also receive an emergency 24-h telephone number to contact the on-call study physician if needed.

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Previous intervention as of 11/08/2020:

Volunteers will initially be required to complete an online screening. This is an initial confirmation of eligibility. Volunteers will initially be invited for a screening visit. Prior to attending they will have received written information about the study and had time to consider it. At the screening visit a doctor will explain about the study and answer any questions they may have. If the volunteer decides to take part, they will be asked to sign a consent form. The doctor will then check whether the volunteer is eligible to take part. This will involve taking a medical history, performing a physical examination, taking blood tests, urine tests, and measuring blood pressure and temperature.
The doctor will then write to the volunteers own GP to enquire about their medical health. If all the inclusion criteria are met and none of the exclusion criteria are present then the volunteer is invited to return for vaccination. Due to the need for rapid delivery of this study, there will be minimal flexibility around appointment dates.

Before vaccination, volunteers will be asked about their recent health to ensure that they are still medically fit. They will have blood tests taken and participants in groups 1, 2 and 4 will be randomised (1:1) to receive either ChAdOx1 nCoV-19 or MenACWY. Group 3 participants will not be randomised and therefore not blinded

Participants from group 1 or 3 will be vaccinated first. The first volunteer to receive the IMP will be vaccinated ahead of any other participants. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. The next 3 volunteers will be vaccinated with the IMP at least 1 hour apart. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. If there are no safety concerns from the first 4 participants receiving IMP, further participants will be vaccinated with the IMP.

Group 1
88 participants will receive ChAdOx1 nCoV-19 5 x 10(10) virus particles (vp) or MenACWY at day 0, then followed up at days 2, 7, 14, 28, 56, 182 and 364.

Group 2
412 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0 then followed up at days 28, 182 and 364.
Up to 62 participants enrolled in group 2 will be invited to receive a booster vaccine. Participants will be randomised to receive either a standard booster dose (5x10(10)vp), or a lower booster dose (2.5x10(10)vp) at approximately 8 weeks post prime. Up to 10 volunteers from group 2 who received MenACWY will be receive a second dose of MenACWY at the same interval. The remaining participants in groups 2 (those who have not already been boosted) will be invited to receive a booster dose of either ChAdOx1 nCoV-19: 0.5mL (3.5-6.5x10(10)vp) or MenACWY. Once boosted, these remaining volunteers will instead be followed up on a schedule relative to the boost dose which will be POST BOOST+28 days , POST BOOST +90, POST BOOST +182 and POST BOOST +364 days.

Group 3
10 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp at day 0 and day 28, then followed up at days 2, 7, 14, 30, 35, 42, 56, 182 and 364.

Group 4
Up to 580 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0, then

followed up at days 28, 182 and 364.
Up to 112 participants in group 4 will be requested to take prophylactic paracetamol 1000mg every 6 hours for 24 hours from the time of vaccination to reduce the chance of fever post immunisation. The remaining participants in group 4 (those who have not already been boosted) will be invited to receive a booster dose of either ChAdOx1 nCoV-19: 0.5mL (3.5-6.5x10(10)vp) or MenACWY. Once boosted, these remaining volunteers will be followed up post boost at POST BOOST +28, POST BOOST +90, POST BOOST +182 and POST BOOST +364 days.

Participants will be observed for 60 minutes after vaccination (+/-30 minutes) and given an oral thermometer, tape measure and access to a diary with instructions for use. They will also receive an emergency 24-hour telephone number to contact the on-call study physician if needed.

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Previous interventions as of 01/07/2020:

Volunteers will initially be required to complete an online screening. This is an initial confirmation of eligibility. Volunteers will initially be invited for a screening visit. Prior to attending they will have received written information about the study and had time to consider it. At the screening visit a doctor will explain about the study and answer any questions they may have. If the volunteer decides to take part, they will be asked to sign a consent form. The doctor will then check whether the volunteer is eligible to take part. This will involve taking a medical history, performing a physical examination, taking blood tests, urine tests, and measuring blood pressure and temperature.
The doctor will then write to the volunteers own GP to enquire about their medical health. If all the inclusion criteria are met and none of the exclusion criteria are present then the volunteer is invited to return for vaccination. Due to the need for rapid delivery of this study, there will be minimal flexibility around appointment dates.

Before vaccination, volunteers will be asked about their recent health to ensure that they are still medically fit. They will have blood tests taken and participants in groups 1, 2 and 4 will be randomised (1:1) to receive either ChAdOx1 nCoV-19 or MenACWY. Group 3 participants will not be randomised and therefore not blinded

Participants from group 1 or 3 will be vaccinated first. The first volunteer to receive the IMP will be vaccinated ahead of any other participants. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. The next 3 volunteers will be vaccinated with the IMP at least 1 hour apart. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. If there are no safety concerns from the first 4 participants receiving IMP, further participants will be vaccinated with the IMP.

Group 1
88 participants will receive ChAdOx1 nCoV-19 5 x 10(10) virus particles (vp) or MenACWY at day 0, then followed up at days 2, 7, 14, 28, 56, 182 and 364 (optional)
Group 3
10 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp at day 0 and day 28, then followed up at days 2, 7, 14, 30, 35, 42, 56, 182 and 364 (optional)
Group 4
Up to 580 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0, then followed up at days 28, 182 and 364 (optional).
Up to 112 participants in group 4 will be requested to take prophylactic paracetamol 1000mg

every 6 hours for 24 hours from the time of vaccination to reduce the chance of fever post immunisation.

A review will be conducted based on accumulated safety data of the first 54 participants receiving the IMP. At this point, immunopathology data from pre-clinical challenge studies in ferrets and non-human primates will be assessed by the CI and/or other designated relevant investigators and the DSMB. If safe to do so enrolment of up to 100 participants will proceed.

A second review will be conducted based on accumulated safety data on 100 participants receiving the IMP before enrolling the remainder of participants in the study. Enrolment of the remaining 160 participants receiving the IMP will only proceed if the CI, and/or other designated relevant investigators and the DSMB assess the data as indicating that it is safe to do so.

Group 2
412 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0 then followed up at days 28, 182 and 364 (optional).
Up to 62 participants enrolled in group 2 will be invited to receive a booster vaccine. Participants will be randomised to receive either a standard booster dose (5x10(10)vp), or a lower booster dose (2.5x10(10)vp) at approximately 8 weeks post prime. Up to 10 volunteers from group 2 who received MenACWY will be receive a second dose of MenACWY at the same interval.

Should other batches of IMP become available, the same staggered enrolment procedures will apply to these new batches.

Participants will be observed for 60 minutes after vaccination (+/-30 minutes) and given an oral thermometer, tape measure and access to a diary with instructions for use. They will also receive an emergency 24-hour telephone number to contact the on-call study physician if needed.

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Previous interventions as of 11/05/2020:

Volunteers will initially be required to complete an online screening. This is an initial confirmation of eligibility. Volunteers will initially be invited for a screening visit. Prior to attending they will have received written information about the study and had time to consider it. At the screening visit a doctor will explain about the study and answer any questions they may have. If the volunteer decides to take part, they will be asked to sign a consent form. The doctor will then check whether the volunteer is eligible to take part. This will involve taking a medical history, performing a physical examination, taking blood tests, urine tests, and measuring blood pressure and temperature.
The doctor will then write to the volunteers own GP to enquire about their medical health. If all the inclusion criteria are met and none of the exclusion criteria are present then the volunteer is invited to return for vaccination. Due to the need for rapid delivery of this study, there will be minimal flexibility around appointment dates.

Before vaccination, volunteers will be asked about their recent health to ensure that they are still medically fit. They will have blood tests taken and participants in groups 1, 2 and 4 will be randomised (1:1) to receive either ChAdOx1 nCoV-19 or MenACWY. Group 3 participants will not be randomised and therefore not blinded

Participants from group 1 or 3 will be vaccinated first. The first volunteer to receive the IMP will be vaccinated ahead of any other participants. The investigators and/or chair of DSMB will

assess there are no safety concerns within 48 hours (±24h) post vaccination. The next 3 volunteers will be vaccinated with the IMP at least 1 hour apart. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. If there are no safety concerns from the first 4 participants receiving IMP, further participants will be vaccinated with the IMP.

Group 1
88 participants will receive ChAdOx1 nCoV-19 5 x 10(10) virus particles (vp) or MenACWY at day 0, then followed up at days 2, 7, 14, 28, 56, 182 and 364 (optional)
Group 3
10 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp at day 0 and day 28, then followed up at days 2, 7, 14, 30, 35, 42, 56, 182 and 364 (optional)
Group 4
Up to 580 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0, then followed up at days 28, 182 and 364 (optional).
Up to 112 participants in group 4 will be requested to take prophylactic paracetamol 1000mg every 6 hours for 24 hours from the time of vaccination to reduce the chance of fever post immunisation.

A review will be conducted based on accumulated safety data of the first 54 participants receiving the IMP. At this point, immunopathology data from pre-clinical challenge studies in ferrets and non-human primates will be assessed by the CI and/or other designated relevant investigators and the DSMB. If safe to do so enrolment of up to 100 participants will proceed.

A second review will be conducted based on accumulated safety data on 100 participants receiving the IMP before enrolling the remainder of participants in the study. Enrolment of the remaining 160 participants receiving the IMP will only proceed if the CI, and/or other designated relevant investigators and the DSMB assess the data as indicating that it is safe to do so.

Group 2
412 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0 then followed up at days 28, 182 and 364 (optional).

Should other batches of IMP become available, the same staggered enrolment procedures will apply to these new batches.

Participants will be observed for 60 minutes after vaccination (+/-30 minutes) and given an oral thermometer, tape measure and access to a diary with instructions for use. They will also receive an emergency 24-hour telephone number to contact the on-call study physician if needed.

Previous interventions as of 22/04/2020:

Volunteers will initially be required to complete an online screening. This is an initial confirmation of eligibility. Volunteers will initially be invited for a screening visit. Prior to attending they will have received written information about the study and had time to consider it. At the screening visit a doctor will explain about the study and answer any questions they may have. If the volunteer decides to take part, they will be asked to sign a consent form. The doctor will then check whether the volunteer is eligible to take part. This will involve taking a medical history, performing a physical examination, taking blood tests, urine tests, and measuring blood pressure and temperature.

The doctor will then write to the volunteers own GP to enquire about their medical health. If all the inclusion criteria are met and none of the exclusion criteria are present then the volunteer is invited to return for vaccination. Due to the need for rapid delivery of this study, there will be minimal flexibility around appointment dates.

Before vaccination, volunteers will be asked about their recent health to ensure that they are still medically fit. They will have blood tests taken and participants in groups 1, 2 and 4 will be randomised (1:1) to receive either ChAdOx1 nCoV-19 or MenACWY. Group 3 participants will not be randomised and therefore not blinded

Participants from group 1 or 3 will be vaccinated first. The first volunteer to receive the IMP will be vaccinated ahead of any other participants. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. The next 3 volunteers will be vaccinated with the IMP at least 1 hour apart. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post vaccination. If there are no safety concerns from the first 4 participants receiving IMP, further participants will be vaccinated with the IMP.

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Group 3
10 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp at day 0 and day 28, then followed up at days 2, 7, 14, 30, 35, 42, 56, 182 and 364 (optional)
Group 4 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0, then followed up at days 28, 182 and 364 (optional)

A review will be conducted based on accumulated safety data of the first 54 participants receiving the IMP. At this point, immunopathology data from pre-clinical challenge studies in ferrets and non-human primates will be assessed by the CI and/or other designated relevant investigators and the DSMB. If safe to do so enrolment of up to 100 participants will proceed.

A second review will be conducted based on accumulated safety data on 100 participants receiving the IMP before enrolling the remainder of participants in the study. Enrolment of the remaining 160 participants receiving the IMP will only proceed if the CI, and/or other designated relevant investigators and the DSMB assess the data as indicating that it is safe to do so.

Group 2
412 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0 then followed up at days 28, 182 and 364 (optional).

Should other batches of IMP become available, the same staggered enrolment procedures will apply to these new batches.

Participants will be observed for 60 minutes after vaccination (+/-30 minutes) and given an oral thermometer, tape measure and access to a diary with instructions for use. They will also receive an emergency 24-hour telephone number to contact the on-call study physician if needed.

Previous interventions as of 17/04/2020:

Volunteers will initially be required to complete an online screening. This is an initial confirmation of eligibility. Volunteers will initially be invited for a screening visit. Prior to attending they will have received written information about the study and had time to consider it. At the screening visit a doctor will explain about the study and answer any questions they may have. If the volunteer decides to take part, they will be asked to sign a consent form. The doctor will then check whether the volunteer is eligible to take part. This will involve taking a medical history, performing a physical examination, taking blood tests, urine tests, and measuring blood pressure and temperature.
The doctor will then write to the volunteers own GP to enquire about their medical health. If all the inclusion criteria are met and none of the exclusion criteria are present then the volunteer is invited to return for vaccination. Due to the need for rapid delivery of this study, there will be minimal flexibility around appointment dates.

Before vaccination, volunteers will be asked about their recent health to ensure that they are still medically fit. They will have blood tests taken and participants in groups 1 and 2 will be randomised (1:1) to receive either ChAdOx1 nCoV-19 or MenACWY. Group 3 participants will not be randomised and therefore not blinded.

Participants from group 1 or 3 will be vaccinated first. The first volunteer to receive the IMP will be vaccinated ahead of any other participants. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post-vaccination. The next 3 volunteers will be vaccinated with the IMP at least 1 hour apart. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24h) post-vaccination. If there are no safety concerns from the first 4 participants receiving IMP, further participants will be vaccinated with the IMP.

Group 1
88 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0, then followed up at days 2, 7, 14, 28, 56, 182 and 364 (optional)
Group 3
10 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp at day 0 and day 28, then followed up at days 2, 7, 14, 30, 35, 42, 56, 182 and 364 (optional)

A review will be conducted based on accumulated safety data of the first 54 participants receiving the IMP. At this point, immunopathology data from pre-clinical challenge studies in ferrets and non-human primates will be assessed by the CI and/or other designated relevant investigators and the DSMB. If safe to do so enrolment of up to 100 participants will proceed.

A second review will be conducted based on accumulated safety data on 100 participants receiving the IMP before enrolling the remainder of participants in the study. Enrolment of the remaining 160 participants receiving the IMP will only proceed if the CI, and/or other designated relevant investigators and the DSMB assess the data as indicating that it is safe to do so.

Group 2
412 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or MenACWY at day 0 then followed up at days 28, 182 and 364 (optional).

Should other batches of IMP become available, the same staggered enrolment procedures will apply to these new batches.

Participants will be observed for 60 minutes after vaccination (+/-30 minutes) and given an oral thermometer, tape measure and access to a diary with instructions for use. They will also receive an emergency 24-hour telephone number to contact the on-call study physician if needed.

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Previous interventions:

Volunteers will initially be required to complete an online screening. This is an initial confirmation of eligibility. Volunteers will initially be invited for a screening visit. Prior to attending they will have received written information about the study and had time to consider it. At the screening visit a doctor will explain about the study and answer any questions they may have. If the volunteer decides to take part, they will be asked to sign a consent form. The doctor will then check whether the volunteer is eligible to take part. This will involve taking a medical history, performing a physical examination, taking blood tests, urine tests, and measuring blood pressure and temperature.
The doctor will then write to the volunteers own GP to enquire about their medical health. If all the inclusion criteria are met and none of the exclusion criteria are present then the volunteer is invited to return for vaccination. Due to the need for rapid delivery of this study, there will be minimal flexibility around appointment dates.

Before vaccination, volunteers will be asked about their recent health to ensure that they are still medically fit. They will have blood tests taken and participants in groups 1 and 2 will be randomised (1:1) to receive either ChAdOx1 nCoV-19 or saline placebo. Group 3 participants will not be randomised and therefore not blinded.

Participants from group 1 or 3 will be vaccinated first. The first volunteer to receive the IMP will be vaccinated ahead of any other participants. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24 h) post-vaccination. The next 3 volunteers will be vaccinated with the IMP at least 1 hour apart. The investigators and/or chair of DSMB will assess there are no safety concerns within 48 hours (±24 h) post-vaccination. If there are no safety concerns from the first 4 participants receiving IMP, further participants will be vaccinated with the IMP.

Group 1
88 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or saline placebo at day 0, then followed up at days 2, 7, 14, 28, 56, 182 and 364 (optional)

Group 3
10 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp at day 0 and day 28, then followed up at days 2, 7, 14, 30, 35, 42, 56, 182 and 364 (optional)

A review will be conducted based on accumulated safety data of the first 54 participants receiving the IMP. At this point, immunopathology data from pre-clinical challenge studies in ferrets and non-human primates will be assessed by the CI and/or other designated relevant investigators and the DSMB. If safe to do so enrolment of up to 100 participants will proceed.

A second review will be conducted based on accumulated safety data on 100 participants receiving the IMP before enrolling the remainder of participants in the study. Enrolment of the remaining 160 participants receiving the IMP will only proceed if the CI, and/or other designated relevant investigators and the DSMB assess the data as indicating that it is safe to do so.

Group 2
412 participants will receive ChAdOx1 nCoV-19 5 x 10(10) vp or saline placebo at day 0 then followed up at days 28, 182 and 364 (optional).

Should other batches of IMP become available, the same staggered enrolment procedures will apply to these new batches.

Participants will be observed for 60 minutes after vaccination (+/-30 minutes) and given an oral thermometer, tape measure and access to a diary with instructions for use. They will also receive an emergency 24-hour telephone number to contact the on-call study physician if needed.

Intervention Type
Biological/Vaccine

Phase
Phase I/II

Drug/device/biological/vaccine name(s)
ChAdOx1 nCoV-19 (AZD1222)

Primary outcome(s)
Current primary outcome measures as of 18/03/2021:
1. Efficacy of candidate vaccine ChAdOx1 nCoV-19 against COVID-19 measured by virologically confirmed (PCR* positive) symptomatic cases of COVID-19 throughout the study
2. Safety of candidate vaccine ChAdOx1 nCoV-19 measured by the occurrence of serious adverse events (SAEs) throughout the study until a cutoff date of 01/07/2021 or 6 months post late vaccination visit, whichever is latest
* Or other nucleic acid amplification test (NAAT)

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Previous primary outcome measures as of 17/11/2020:
1. Efficacy of candidate vaccine ChAdOx1 nCoV-19 against COVID-19 measured by virologically confirmed (PCR* positive) symptomatic cases of COVID-19.
2. Safety of candidate vaccine ChAdOx1 nCoV-19 measured by the occurrence of serious adverse events (SAEs) throughout the study duration.
* Or other nucleic acid amplification test (NAAT)

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Previous primary outcome measures:
1. Efficacy of candidate vaccine measured by virologically confirmed (PCR positive) symptomatic cases of COVID-19 over the course of 6 months
2. Safety of candidate vaccine measured by the occurrence of serious adverse events (SAEs) over the course of 6 months

Key secondary outcome(s))
1. Safety, tolerability and reactogenicity profile of the candidate vaccine ChAdOx1 nCoV:
1.1. Occurrence of solicited local reactogenicity signs and symptoms for 7 days following vaccination
1.2. Occurrence of solicited systemic reactogenicity signs and symptoms for 7 days following

vaccination
1.3. Occurrence of unsolicited adverse events (AEs) for 28 days following vaccination
1.4. Change from baseline for safety laboratory measures over the course of 6 months
1.5. Occurrence of disease enhancement episodes over the course of 6 months
2. Efficacy of the candidate ChAdOx1 nCoV-19 against severe and non-severe COVID-19 over the course of 6 months:
2.1. Hospital admissions associated with COVID-19
2.2. Intensive care unit (ICU) admissions associated with COVID-19
2.3. Deaths associated with COVID-19
2.4. Severe COVID-19 disease (defined according to clinical severity scales) (added 28/09/2020)
2.5. Seroconversion on non-Spike SARS-CoV-2 antigens
3. Cellular and humoral immunogenicity of ChAdOx1 nCoV-19 over the course of 6 months:
3.1. Interferon-gamma (IFN-γ) enzyme-linked immunospot (ELISpot) responses to SARS-CoV-2 spike protein
3.2. Enzyme-linked immunosorbent assay (ELISA) to quantify antibodies against SARS-CoV-2 spike protein (seroconversion rates)

Completion date
31/12/2024

Eligibility

Key inclusion criteria
Current inclusion criteria as of 22/04/2020:

1. Healthy adults aged 18-55 years
2. Able and willing (in the Investigator's opinion) to comply with all study requirements (participants must not rely on public transport or taxis)
3. Willing to allow the investigators to discuss the volunteer's medical history with their General Practitioner and access all medical records when relevant to study procedures
4. For females only, willingness to practice continuous effective contraception (see below) during the study and a negative pregnancy test on the day(s) of screening and vaccination
5. Agreement to refrain from blood donation during the course of the study
6. Provide written informed consent

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Previous inclusion criteria:

1. Healthy adults aged 18 - 55 years
2. Able and willing (in the Investigator's opinion) to comply with all study requirements
3. Willing to allow the investigators to discuss the volunteer's medical history with their General Practitioner and access all medical records when relevant to study procedures
4. For females only, willingness to practice continuous effective contraception (see below) during the study and a negative pregnancy test on the day(s) of screening and vaccination
5. Agreement to refrain from blood donation during the course of the study
6. Provide written informed consent

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Upper age limit
55 years

Sex
All

Total final enrolment
1077

Key exclusion criteria
Current exclusion criteria as of 30/10/2020:

1. Prior receipt of any vaccines (licensed or investigational) ≤30 days before enrolment
2. Planned receipt of any vaccine other than the study intervention within 30 days before and after each study vaccination with the exception of the licensed seasonal influenza vaccination and the licensed pneumococcal vaccine. Participants will be encouraged to receive these vaccinations at least 7 days before or after their study vaccine.
3. Prior receipt of an investigational or licensed vaccine likely to impact on interpretation of the trial data (e.g. Adenovirus vectored vaccines, any coronavirus vaccines)
4. Administration of immunoglobulins and/or any blood products within the three months preceding the planned administration of the vaccine candidate
5. Any confirmed or suspected immunosuppressive or immunodeficient state, including HIV infection; asplenia; recurrent severe infections and use of immunosuppressant medication within the past 6 months, except topical steroids or short-term oral steroids (course lasting <14 days)
6. Any autoimmune conditions, except mild psoriasis, well-controlled autoimmune thyroid disease, vitiligo or stable coeliac disease not requiring immunosuppressive or immunomodulatory therapy
7. History of allergic disease or reactions likely to be exacerbated by any component of the ChAdOx1 nCoV-19 or MenACWY vaccines.
8. Any history of angioedema
9. Any history of anaphylaxis
10. Pregnancy, lactation or willingness/intention to become pregnant during the study
11. History of cancer (except basal cell carcinoma of the skin and cervical carcinoma in situ)
12. History of serious psychiatric condition likely to affect participation in the study (e.g. ongoing severe depression, history of admission to an in-patient psychiatric facility, recent suicidal ideation, history of suicide attempt, bipolar disorder, personality disorder, alcohol and drug dependency, severe eating disorder, psychosis, use of mood stabilisers or antipsychotic medication)
13. Bleeding disorder (e.g. factor deficiency, coagulopathy or platelet disorder), or prior history of significant bleeding or bruising following IM injections or venepuncture
14. Any other serious chronic illness requiring hospital specialist supervision

15. Chronic respiratory diseases, including mild asthma (resolved childhood asthma is allowed)
16. Chronic cardiovascular disease (including hypertension), gastrointestinal disease, liver disease (except Gilberts Syndrome), renal disease, endocrine disorder (including diabetes) and neurological illness (excluding migraine)
17. Seriously overweight (BMI≥40 kg/m²) or underweight (BMI≤18 kg/m²)
18. Suspected or known current alcohol abuse as defined by an alcohol intake of greater than 42 units every week.
19. Suspected or known injecting drug abuse in the 5 years preceding enrolment.
20. Any clinically significant abnormal finding on screening biochemistry, haematology blood tests or urinalysis.
21. Any other significant disease, disorder or finding which may significantly increase the risk to the volunteer because of participation in the study, affect the ability of the volunteer to participate in the study or impair interpretation of the study data.
22. History of laboratory confirmed COVID-19.
23. New onset of fever or a cough or shortness of breath or anosmia/ageusia since February 2020. Should a reliable test become available, this exclusion criteria will be replaced with seropositivity for SARS-CoV-2 before enrolment.
24. Those who have been at high risk of exposure before enrolment, including but not limited to: close contacts of confirmed COVID-19 cases, anyone who had to self-isolate as a result of a symptomatic household member, frontline healthcare professionals working in A&E, ICU and other higher risk areas. Should a reliable test become available, this exclusion criteria will be replaced with seropositivity for SARS-CoV-2 before enrolment.
25. Living in the same household as any vulnerable groups at risk of severe COVID-19 disease (as per PHE guidance)
26. History of allergic disease or reactions likely to be exacerbated by Paracetamol

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Previous exclusion criteria as of 11/05/2020:

1. Prior receipt of any vaccines (licensed or investigational) ≤30 days before enrolment
2. Planned receipt of any vaccine other than the study intervention within 30 days before and after each study vaccination
3. Prior receipt of an investigational or licensed vaccine likely to impact on interpretation of the trial data (e.g. Adenovirus vectored vaccines, any coronavirus vaccines)
4. Administration of immunoglobulins and/or any blood products within the three months preceding the planned administration of the vaccine candidate
5. Any confirmed or suspected immunosuppressive or immunodeficient state, including HIV infection; asplenia; recurrent severe infections and use of immunosuppressant medication within the past 6 months, except topical steroids or short-term oral steroids (course lasting <14 days)
6. Any autoimmune conditions, except mild psoriasis, well-controlled autoimmune thyroid disease, vitiligo or stable coeliac disease not requiring immunosuppressive or immunomodulatory therapy
7. History of allergic disease or reactions likely to be exacerbated by any component of the ChAdOx1 nCoV-19 or MenACWY vaccines.
8. Any history of angioedema
9. Any history of anaphylaxis
10. Pregnancy, lactation or willingness/intention to become pregnant during the study
11. History of cancer (except basal cell carcinoma of the skin and cervical carcinoma in situ)
12. History of serious psychiatric condition likely to affect participation in the study (e.g. ongoing severe depression, history of admission to an in-patient psychiatric facility, recent suicidal

ideation, history of suicide attempt, bipolar disorder, personality disorder, alcohol and drug dependency, severe eating disorder, psychosis, use of mood stabilisers or antipsychotic medication)
13. Bleeding disorder (e.g. factor deficiency, coagulopathy or platelet disorder), or prior history of significant bleeding or bruising following IM injections or venepuncture
14. Any other serious chronic illness requiring hospital specialist supervision
15. Chronic respiratory diseases, including mild asthma (resolved childhood asthma is allowed)
16. Chronic cardiovascular disease (including hypertension), gastrointestinal disease, liver disease (except Gilberts Syndrome), renal disease, endocrine disorder (including diabetes) and neurological illness (excluding migraine)
17. Seriously overweight (BMI≥40 kg/m²) or underweight (BMI≤18 kg/m²)
18. Suspected or known current alcohol abuse as defined by an alcohol intake of greater than 42 units every week.
19. Suspected or known injecting drug abuse in the 5 years preceding enrolment.
20. Any clinically significant abnormal finding on screening biochemistry, haematology blood tests or urinalysis.
21. Any other significant disease, disorder or finding which may significantly increase the risk to the volunteer because of participation in the study, affect the ability of the volunteer to participate in the study or impair interpretation of the study data.
22. History of laboratory confirmed COVID-19.
23. New onset of fever or a cough or shortness of breath or anosmia/ageusia since February 2020. Should a reliable test become available, this exclusion criteria will be replaced with seropositivity for SARS-CoV-2 before enrolment.
24. Those who have been at high risk of exposure before enrolment, including but not limited to: close contacts of confirmed COVID-19 cases, anyone who had to self-isolate as a result of a symptomatic household member, frontline healthcare professionals working in A&E, ICU and other higher risk areas. Should a reliable test become available, this exclusion criteria will be replaced with seropositivity for SARS-CoV-2 before enrolment.
25. Living in the same household as any vulnerable groups at risk of severe COVID-19 disease (as per PHE guidance)
26. History of allergic disease or reactions likely to be exacerbated by Paracetamol

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Previous inclusion criteria as of 22/04/2020:

1. Prior receipt of any vaccines (licensed or investigational) ≤30 days before enrolment
2. Planned receipt of any vaccine other than the study intervention within 30 days before and after each study vaccination
3. Prior receipt of an investigational or licensed vaccine likely to impact on interpretation of the trial data (e.g. Adenovirus vectored vaccines, any coronavirus vaccines)
4. Administration of immunoglobulins and/or any blood products within the three months preceding the planned administration of the vaccine candidate
5. Any confirmed or suspected immunosuppressive or immunodeficient state, including HIV infection; asplenia; recurrent severe infections and use of immunosuppressant medication within the past 6 months, except topical steroids or short-term oral steroids (course lasting <14 days)
6. Any autoimmune conditions, except mild psoriasis, well-controlled autoimmune thyroid disease, vitiligo or stable coeliac disease not requiring immunosuppressive or immunomodulatory therapy
7. History of allergic disease or reactions likely to be exacerbated by any component of the ChAdOx1 nCoV-19 or MenACWY vaccines.

8. Any history of angioedema
9. Any history of anaphylaxis
10. Pregnancy, lactation or willingness/intention to become pregnant during the study
11. History of cancer (except basal cell carcinoma of the skin and cervical carcinoma in situ)
12. History of serious psychiatric condition likely to affect participation in the study (e.g. ongoing severe depression, history of admission to an in-patient psychiatric facility, recent suicidal ideation, history of suicide attempt, bipolar disorder, personality disorder, alcohol and drug dependency, severe eating disorder, psychosis, use of mood stabilisers or antipsychotic medication)
13. Bleeding disorder (e.g. factor deficiency, coagulopathy or platelet disorder), or prior history of significant bleeding or bruising following IM injections or venepuncture
14. Any other serious chronic illness requiring hospital specialist supervision
15. Chronic respiratory diseases, including mild asthma (resolved childhood asthma is allowed)
16. Chronic cardiovascular disease (including hypertension), gastrointestinal disease, liver disease (except Gilberts Syndrome), renal disease, endocrine disorder (including diabetes) and neurological illness (excluding migraine)
17. Seriously overweight (BMI≥40 kg/m²) or underweight (BMI≤18 kg/m²)
18. Suspected or known current alcohol abuse as defined by an alcohol intake of greater than 42 units every week.
19. Suspected or known injecting drug abuse in the 5 years preceding enrolment.
20. Any clinically significant abnormal finding on screening biochemistry, haematology blood tests or urinalysis.
21. Any other significant disease, disorder or finding which may significantly increase the risk to the volunteer because of participation in the study, affect the ability of the volunteer to participate in the study or impair interpretation of the study data.
22. History of laboratory confirmed COVID-19.
23. New onset of fever or a cough or shortness of breath or anosmia/ageusia since February 2020. Should a reliable test become available, this exclusion criteria will be replaced with seropositivity for SARS-CoV-2 before enrolment.
24. Those who have been at high risk of exposure before enrolment, including but not limited to: close contacts of confirmed COVID-19 cases, anyone who had to self-isolate as a result of a symptomatic household member, frontline healthcare professionals working in A&E, ICU and other higher risk areas. Should a reliable test become available, this exclusion criteria will be replaced with seropositivity for SARS-CoV-2 before enrolment.
25. Living in the same household as any vulnerable groups at risk of severe COVID-19 disease (as per PHE guidance)

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Previous exclusion criteria:

1. Prior receipt of any vaccines (licensed or investigational) < = 30 days before enrolment
2. Planned receipt of any vaccine other than the study intervention within 30 days before and after each study vaccination
3. Prior receipt of an investigational or licensed vaccine likely to impact on interpretation of the trial data
4. Administration of immunoglobulins and/or any blood products within the three months preceding the planned administration of the vaccine candidate
5. Any confirmed or suspected immunosuppressive or immunodeficient state, including HIV infection; asplenia; recurrent severe infections and chronic use of (more than 14 days) immunosuppressant medication within the past 6 months (inhaled and topical steroids are allowed)

6. History of allergic disease or reactions likely to be exacerbated by any component of the vaccine
7. Any history of hereditary angioedema or idiopathic angioedema
8. Any history of anaphylaxis in relation to vaccination
9. Pregnancy, lactation or willingness/intention to become pregnant during the study
10. History of cancer (except basal cell carcinoma of the skin and cervical carcinoma in situ)
11. History of serious psychiatric condition likely to affect participation in the study
12. Bleeding disorder (e.g. factor deficiency, coagulopathy or platelet disorder), or prior history of significant bleeding or bruising following IM injections or venepuncture
13. Any other serious chronic illness requiring hospital specialist supervision
14. Suspected or known current alcohol abuse as defined by an alcohol intake of greater than 42 units every week
15. Suspected or known injecting drug abuse in the 5 years preceding enrolment
16. Any clinically significant abnormal finding on screening biochemistry, haematology blood tests or urinalysis
17. Any other significant disease, disorder or finding which may significantly increase the risk to the volunteer because of participation in the study, affect the ability of the volunteer to participate in the study or impair interpretation of the study data
18. History of laboratory confirmed COVID-19
19. New onset of fever and a cough or shortness of breath in the 30 days preceding screening and/or enrolment

Date of first enrolment
26/03/2020

Date of final enrolment
24/04/2020

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Churchill Hospital
Centre for Clinical Vaccinology and Tropical Medicine
Oxford University Hospitals NHS Foundation Trust
Old Road
Headington
Oxford
United Kingdom
OX3 7LE

Study participating centre

Southampton University Hospital
NIHR WTCRF
Southampton NHS Foundation Trust
Southampton
United Kingdom
SO16 6YD

Study participating centre
Hammersmith Hospital
NIHR Imperial Clinical Research Facility Imperial College
Imperial College NHS Trust
150 Du Cane Road
London
United Kingdom
W12 0HS

Study participating centre
St George's University Hospital
St George's University Hospital NHS Foundation Trust
Blackshaw Road
Tooting
London
United Kingdom
SW17 0QT

Study participating centre
University Hospitals Bristol and Weston NHS Foundation Trust
Marlborough Street
Bristol
United Kingdom
BS1 3NU

Study participating centre
St George's University of London
Paediatric Infectious Diseases Research Group
Jenner Wing
Level 2
Room 2.216F
Mail Point J2C
London
United Kingdom
SW17 0RE

Sponsor information

Organisation
University of Oxford

ROR
https://ror.org/052gg0110

Funder(s)

Funder type
Research council

Funder Name
UK Research and Innovation

Alternative Name(s)
UKRI

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The current data sharing plans for this study are unknown and will be available at a later date.

IPD sharing plan summary
Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	preliminary results	15/08/2020	20/07/2020	Yes	No
Results article	results	06/03/2021	23/02/2021	Yes	No

HRA research summary			28/06/2023	No	No
Interim results article	interim results	09/01/2021	09/12/2020	Yes	No
Interim results article	Reactogenicity and immunogenicity after a late second dose or a third dose of ChAdOx1 nCoV-19 in the UK	01/09/2021	06/09/2021	Yes	No
Participant information sheet	version v4.0	16/04/2020	22/04/2020	No	Yes
Participant information sheet	version v5.0	21/04/2020	22/04/2020	No	Yes
Participant information sheet	version v6.0	22/06/2020	01/07/2020	No	Yes
Participant information sheet	version v7.0	30/07/2020	11/08/2020	No	Yes
Participant information sheet	version V8.0	11/09/2020	15/09/2020	No	Yes
Participant information sheet	version v8.1	14/09/2020	18/09/2020	No	Yes
Participant information sheet	version v9.0	16/09/2020	28/09/2020	No	Yes
Participant information sheet	version v10.0	21/10/2020	30/10/2020	No	Yes
Participant information sheet	version v11.1	10/12/2020	15/12/2020	No	Yes
Participant information sheet	version v13.0	09/03/2021	18/03/2021	No	Yes
Participant information sheet	version v13.0	09/03/2021	18/03/2021	No	Yes
Participant information sheet	version 15.0	12/04/2021	20/04/2021	No	Yes
Participant information sheet	version 15.1	14/05/2021	24/05/2021	No	Yes
Participant information sheet	version 16	26/07/2021	02/09/2021	No	Yes
Protocol file	version 19.2	26/06/2023	01/08/2023	No	No
Protocol file	version 19.3	27/03/2024	24/04/2024	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes