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A clinical trial of the safety of the live, attenuated influenza vaccine nasal spray in children aged 12 - 23 months

Submission date
28/06/2025

Recruitment status
No longer recruiting

Registration date
27/08/2025

Overall study status
Ongoing

Last Edited
25/09/2026

Condition category
Infections and Infestations

[X] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Influenza (known as flu) causes substantial illness every winter, especially among older people, those with weakened immune systems, and young children. The NHS currently offers a nasal flu vaccine to children over 2 years, which also helps protect others by reducing transmission. Although children under 2 years are at the highest risk from flu, they haven't yet been offered the vaccine as sufficient safety data was not available for this age.

Who can participate?
12- to 23-month-old children

What does the study involve?
Participants are randomly allocated to receive the nasal flu vaccine or a placebo nasal spray at their first visit. The parents will not know which one the child receives. Over the next 4 weeks, the researchers will record/monitor the number of children in each group who return to their GP with a wheezing diagnosis. At the second visit, each child will receive whichever nasal spray they did not get at the first visit. Rates of wheezing will be compared after the second visit. Every child will receive both the vaccine and a placebo. If the rate of wheezing after the vaccine is the same (or lower) than after the placebo, the UK's vaccination advisory committee may decide to offer the nasal flu vaccine to all children from 12 months of age next winter.
This trial will be conducted with a company called uMed, a clinical research technology platform, who partners with UK Healthcare Providers to access NHS Electronic Health Record data and invite patients to participate in research. The uMed system was used in the HARMONIE study of nirsevimab (preventing RSV in infants) performed in general practice and hospitals in autumn 2022. uMed will be involved in aspects including digital screening and invitations, remote eConsent and electronic monitoring, ensuring it runs efficiently.

What are the possible benefits and risks of participating?
Allergic reactions from mild to severe may occur in response to any constituent of a medicine. Anaphylaxis or other allergic reactions are known to occur in between 1/1000 and 1/100 recipients of live-attenuated influenza vaccine (LAIV).

More than 1 in 10 people may experience a runny nose, reduced appetite or weakness, and up to 1 in 10 people may experience fever, muscle aches or headaches following vaccination with LAIV. The investigation of whether chest (lower respiratory tract) side effects occur or not is the primary reason for this trial.
Remote surveys reduce clinic visits; clear guidance will be provided for parents to seek usual NHS care, preserving normal healthcare-seeking behaviour if they are worried about their child (this is being measured in the trial in relation to specific chest (lower respiratory tract) reasons for doctor visits.

Where is the study run from?
University Hospital Southampton NHS Foundation Trust (UK)

When is the study starting and how long is it expected to run for?
June 2025 to January 2026

Who is funding the study?
National Institute for Health and Care Research (NIHR) (UK)

Who is the main contact?
1. Prof. Saul Faust, s.faust@soton.ac.uk
2. Dr Alasdair Munro, a.munro@soton.ac.uk

Contact information

Type(s)
Scientific

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Additional identifiers

Integrated Research Application System (IRAS)
1012411

Central Portfolio Management System (CPMS)
69981

National Institute for Health and Care Research (NIHR)
204677

Protocol serial number
RHM CHI 1293

Study information

Scientific Title
A Phase II randomised, single-blinded, placebo-controlled, cross-over trial of a single dose of live attenuated influenza vaccine in 12-23-month-old children (FluSNIFF-toddler)

Acronym
FluSNIFF-toddler

Study objectives
Primary objective:
To determine the safety of the live, attenuated influenza vaccine (Fluenz) in children aged 12 to 23 months, as determined by rates of medically attended wheezing compared to placebo.

Secondary objective:
To determine the safety of the live, attenuated influenza vaccine (Fluenz) in children aged 12 to 23 months, as determined by all-cause healthcare attendance compared to placebo.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 20/08/2025, London - Hampstead Research Ethics Committee (2 Redman Place, Stratford, London, E20 1JQ, United Kingdom; +44 (0)2071048171, +44 (0)207 104 8284; hampstead.rec@hra.nhs.uk), ref: 25/LO/0534

Primary study design
Interventional

Study design
Single-blind randomized placebo-controlled cross over trial

Study type(s)
Safety

Health condition(s) or problem(s) studied
Influenza

Interventions
Randomisation is via an online tool. Each group will receive both 0.2 ml of Fluenz (Live, attenuated influenza vaccine) via nasal spray and 0.2 ml of inert placebo via nasal spray, each as a single administration.

Participants are randomly allocated to receive the nasal flu vaccine or a placebo nasal spray at their first visit. The parents will not know which one the child receives. Over the next 4 weeks, the researchers will record/monitor the number of children in each group who return to their GP with a wheezing diagnosis. At the second visit, each child will receive whichever nasal spray they did not get at the first visit. Rates of wheezing will then again be compared after the second visit. Every child will receive both the vaccine and a placebo.

Follow-up activities include an electronic diary at days 7 and 14 post administration after visits one and two, and a final digital questionnaire given 4 weeks after visit two.

Intervention Type
Biological/Vaccine

Phase
Phase II

Drug/device/biological/vaccine name(s)
Fluenz [Influenza Vaccine (Live attenuated, nasal)]

Primary outcome(s)
Medically attended wheeze, measured via GP SNOMed codes for "viral induced wheeze", "asthma", "wheeze", or a prescription for "salbutamol" or "ipratropium bromide" collected from the GP record in the 4 weeks post receipt of vaccine or placebo. Any medically attended wheeze events reported via the electronic diary will also be included.

Key secondary outcome(s)
All cause medical attendances, measured by GP electronic records and electronic diaries in the 4 weeks post vaccine or placebo

Completion date
31/01/2027

Eligibility

Key inclusion criteria
1. Aged between 12 months up until 1 day before their second birthday
2. Parent/legal guardian is willing and able to give written informed consent for participation in the trial
3. In good health as determined by a trial clinician. Participants may have well-controlled or mild-moderate comorbidity, specifically including a personal history of eczema, bronchiolitis or viral-induced wheeze
4. In the Investigator’s opinion, is able and willing to comply with all trial requirements

5. Willing to allow their General Practitioner and consultant, if appropriate, to be notified of participation in the trial
6. Willing to allow investigators to discuss the volunteer's medical history with their General Practitioner and access all medical records when relevant to study procedures

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Child

Lower age limit
12 Months

Upper age limit
2 Years

Sex
All

Total final enrolment
0

Key exclusion criteria
1. Previous receipt of an IM seasonal influenza vaccine
2. Receipt of any investigational vaccine other than the study intervention within 30 days before and after each study vaccination
3. Living in close contact with someone with a severely weakened immune system
4. Administration of immunoglobulins and/or any blood products within the 3 months preceding the planned administration of the vaccines
5. Children eligible for annual influenza immunisation according to the national NHS programme, including those with any confirmed or suspected immunosuppressive or immunodeficient state; 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. History of allergic disease or reactions likely to be exacerbated by any component of study vaccines (e.g. hypersensitivity to gentamicin, gelatin, or other ingredients of Fluenz). Allergy to egg is only a contraindication if the participant has previously had anaphylaxis to egg.
7. Any history of anaphylaxis
8. Current diagnosis of or treatment for cancer
9. 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
10. Severe and/or uncontrolled cardiovascular disease, respiratory disease, gastrointestinal disease, liver disease, renal disease, endocrine disorder and neurological illness, defined broadly as currently requiring frequent hospital/specialist input or recently resulting in hospital admission, or as determined by the investigator (mild/moderate well controlled comorbidities are allowed)
11. History of active or previous auto-immune neurological disorders (e.g. Guillain-Barre

syndrome, transverse myelitis).
12. Scheduled elective surgery during the trial
13. Participants who have participated in another research trial involving an investigational product in the past 12 weeks.
14. Parent or guardian has an insufficient level of English language to undertake all study requirements in the opinion of the Investigators, except where translation has been able to be provided and is available. If at Visit 1 Screening & Vaccination, the volunteer has any of the following, they will not be enrolled that day.
15. Acute respiratory illness with or without wheeze (moderate or severe illness with or without fever)
16. Fever (oral temperature greater than 37.8°C)
17. Active wheezing at the time of dosing/randomisation (including use of bronchodilators within the past 72 hours).
They may be considered for enrolment later in the trial if they recover in sufficient time

Date of first enrolment
31/08/2025

Date of final enrolment
30/11/2025

Locations

Countries of recruitment
United Kingdom

Study participating centre
-
-
-
England
-

Sponsor information

Organisation
University Hospital Southampton NHS Foundation Trust

ROR
https://ror.org/0485axj58

Funder(s)

Funder type

Government

Funder Name
National Institute for Health and Care Research

Alternative Name(s)
National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be available upon request to the chief/lead investigators, Prof. Saul Faust (s.faust@soton.ac.uk) and Dr Alasdair Munro (a.munro@soton.ac.uk).

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file	version 2.0	14/08/2025	07/10/2025	No	No