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Antiviral treatment with tecovirimat for patients managed at home with mpox

Submission date
20/09/2022

Recruitment status
No longer recruiting

Registration date
27/09/2022

Overall study status
Completed

Last Edited
21/03/2025

Condition category
Infections and Infestations

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

Plain English summary of protocol

Background and study aims
Mpox (monkeypox) is a viral disease that usually causes a pustular rash, and can occasionally cause severe complications. It does not usually circulate in the UK, but in May 2022 a large outbreak was detected with ongoing spread from person to person. At the moment, most patients with mpox are treated only for their symptoms, such as pain and itching. However, an antiviral drug called tecovirimat has been developed that can stop the virus from replicating and may speed recovery. This has been shown to be effective in treating mpox in animals, and no significant side effects have been identified when giving tecovirimat to healthy volunteers, but there has never been a clinical trial in people with mpox . This trial aims to find out whether a 2-week course of tecovirimat pills can increase the speed of recovery of people with mpox who are well enough to be at home.

Who can participate?
People with laboratory-confirmed mpox who are well enough to be at home.

What does the study involve?
Half of the patients will receive tecovirimat and half will receive an identical-looking placebo so we can compare how quickly each group recovers. All patients will receive the standard care from the NHS, and patients are free to stop taking the tablets or participating in the study if they wish.
Patients who join the trial will be followed for 4 weeks and will be asked to answer a few questions every day about their rash using an online form. We will also call participants weekly to review their progress, and will ask them to take weekly swabs of their throat and skin, which will be collected by a courier. The study is coordinated by staff at the University of Oxford, and all information about participants will be kept securely and confidentially on University computers. We aim to recruit 500 participants in total, which should allow us to identify or rule out any meaningful benefit of tecovirimat.

What are the possible benefits and risks of participating?
We do not yet know if tecovirimat has any benefit in treating mpox in people. The study treatment may or may not help participants recover more quickly from mpox , but the study results should help people with mpox in the future.

Tecovirimat was well tolerated when tested in healthy volunteers, with the commonest reported side effect being mild headache, and other less common side effects including dizziness, nausea or diarrhoea. As tecovirimat has not been widely used, it is possible that it has side effects that are not yet recognised, so we will ask people to report any new symptoms. As with any drug, there is also the unlikely possibility of a more severe reaction, although none are yet known with tecovirimat. Because some people have reported mild dizziness when taking it, we will advise participants to be careful driving or operating machinery until they know how it affects them.
No harmful effects on the foetus have been identified in animal studies, but tecovirimat has not been used in pregnant or breastfeeding women before, so risks to mother and baby are unknown. We ask women who could become pregnant to use effective contraception during the study to prevent any unintended risks to a foetus.

Where is the study run from?
University of Oxford (UK)

When is the study starting and how long is it expected to run for?
August 2022 to December 2023

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

Who is the main contact?
Prof. Sir Peter Horby, platinumtrial@ndph.ox.ac.uk

Contact information

Type(s)
Scientific

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

Integrated Research Application System (IRAS)
1006115

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
CTSU_PLATINUM, IRAS 1006115, CPMS 53964

Study information

Scientific Title
Placebo-controlled randomised trial of tecovirimat in non-hospitalised mpox patients (PLATINUM)

Acronym
PLATINUM

Study objectives
Current study hypothesis as of 21/11/2023:
1. To determine whether tecovirimat improves the speed of recovery from mpox in people who do not require hospital treatment
2. To determine whether tecovirimat improves the speed that patients with mpox who do not require hospital treatment to clear the virus

Previous study hypothesis:
1. To determine whether tecovirimat improves the speed of recovery from monkeypox in people who do not require hospital treatment
2. To determine whether tecovirimat improves the speed that patients with monkeypox who do not require hospital treatment to clear the virus

Ethics approval required
Ethics approval required

Ethics approval(s)
approved 18/08/2022, South Central - Berkshire Research Ethics Committee (Temple Quay House, 2 The Square, Bristol Research Ethics Committee Centre, Bristol, BS1 6PN, United Kingdom; +44 207 104 8121; berkshire.rec@hra.nhs.uk), ref: 22/SC/0336

Study design
Interventional double-blind randomized parallel group placebo-controlled trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Mpox (monkeypox)

Interventions
Eligible individuals who have provided and consent will be randomly allocated to tecovirimat or placebo. This will be done via a web-based randomisation program with allocation concealment, using a minimisation algorithm to maximise balance between important prognostic variables (age, sex at birth, previous orthopox vaccination, severity, and time since lesion onset). Randomised participants will be issued with a supply of tecovirimat capsules (200 mg) or placebo capsules to be taken orally with food as follows:
1. Adults aged 18 years or older: three capsules twice a day for 14 days (total daily tecovirimat dose: 1200 mg)
2. Children and adolescents aged <18 years:
2.1. Estimated body weight ≥13 to <25 kg: one capsule twice a day for 14 days (total daily tecovirimat dose: 400 mg)
2.2. Estimated body weight ≥25 to <40 kg: two capsules twice a day for 14 days (total daily tecovirimat dose: 800 mg)
2.3. Estimated body weight ≥40 kg: three capsules twice a day for 14 days (total daily tecovirimat dose: 1200 mg)

Follow-up procedures consist of:
1. Daily symptom diary on days 1-28
2. Weekly follow-up calls on days 7, 14, 21 and 28, collecting further information on symptoms, adverse events, and treatment adherence
3. Self-collected throat and lesion swabs on days 7, 14, 21 and 28, which are picked up by courier and delivered to a central testing laboratory at the University of Liverpool
4. Linkage to national health records for 1 year, which will include vital status & coded hospital admissions

Intervention Type
Drug

Phase
Phase III

Drug/device/biological/vaccine name(s)
Tecovirimat

Primary outcome(s)
Time to active lesion resolution, defined as the first day on which all skin lesions are scabbed or desquamated (and mucosal lesions healed) up to 28 days after randomisation

Key secondary outcome(s))
1. Time to complete lesion resolution, defined as the first day on which all lesions are completely resolved (all scabs dropped off and intact skin remains underneath, mucosal lesions healed) up to 28 days after randomisation
2. Time to negative throat swab viral culture, defined as time to consistently negative culture for monkeypox virus on throat swab at Days 7, 14, 21, and 28
3. Time to negative skin or mucosa swab viral culture, defined as time to consistently negative culture for monkeypox virus on swab of most recent active skin or mucosa lesion at Days 7, 14, 21, and 28

Completion date
31/12/2023

Eligibility

Key inclusion criteria
The participant inclusion criteria as of 21/11/2023:
1. Laboratory confirmed mpox infection
2. The presence of active skin or mucosal lesion(s) (defined as a skin lesion that is not scabbed or desquamated or a mucosal lesion that has not healed)
3. Patient is appropriate to be managed without hospitalisation
4. Women with reproductive potential must be willing to use effective contraception from the time of enrolment through study day 28

Previous participant inclusion criteria:
1. Laboratory confirmed monkeypox viral infection
2. The presence of active skin or mucosal lesion(s) (defined as a skin lesion that is not scabbed or desquamated or a mucosal lesion that has not healed)

3. Patient is appropriate to be managed without hospitalisation
4. Women with reproductive potential must be willing to use effective contraception from the time of enrolment through study day 28

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
All

Sex
All

Total final enrolment
35

Key exclusion criteria
1. Weight <13 kg (children weighing more than this are eligible)
2. Use of contraindicated treatment (bupropion, repaglinide, voriconazole, rilpivirine, maraviroc, midazolam, atorvastatin, tacrolimus, methadone, flurbiprofen, phosphodiesterase type 5 inhibitors [sildenafil, tadalafil, vardenafil], darunavir, or proton pump inhibitors [lansoprazole, omeprazole, rabeprazole])
3. Current or past use of tecovirimat
4. Lack of capacity to provide informed consent
5. The referring doctor considers there to be a definite indication for tecovirimat
6. Hypersensitivity to tecovirimat or any excipients in the study treatment
7. Current pregnancy or breastfeeding
8. Clinically determined severe renal impairment i.e., under the care of a nephrologist
9. Clinically determined severe hepatic impairment i.e. under the care of a hepatologist
10. Diagnosis of epilepsy

Date of first enrolment
19/08/2022

Date of final enrolment
30/06/2023

Locations

Countries of recruitment
United Kingdom

England

Study participating centre

PLATINUM Central Coordinating Office
Richard Doll Building
Old Road Campus
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Sponsor information

Organisation
University of Oxford

ROR
https://ror.org/052gg0110

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 University of Oxford's PLATINUM Central Coordinating Office will be responsible for drafting the main reports from the study and for review of any other reports. In general, papers

initiated by the Central Coordinating Office (including the primary manuscript) will be written in the name of the PLATINUM Collaborative Group, with individual contributors named personally at the end of the report (or, to comply with journal requirements, in web-based material posted with the report).

The Central Coordinating Office will also establish a process by which proposals for additional publications (including from independent external researchers) are considered by the Trial Steering Committee. The Central Coordinating Office will facilitate the use of the study data for health research in the public interest and approval will not be unreasonably withheld. However, the Central Coordinating Office will need to be satisfied that any proposed publication is of high quality, honours the commitments made to the study participants in the consent documentation and ethical approvals, and is compliant with relevant legal and regulatory requirements (e.g. relating to data protection and privacy). The Trial Steering Committee will have the right to review and comment on any draft manuscripts prior to publication.

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?
Basic results		21/03/2025	21/03/2025	No	No
HRA research summary			28/06/2023	No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Protocol file	version 2.0	17/08/2022	27/09/2022	No	No
Protocol file	version 2.1	15/09/2023	21/03/2025	No	No
Statistical Analysis Plan	version 1.0	21/11/2022	21/03/2025	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes