

☑ **Version 2.1**

Full information about Oxford ketamine service



This document contains a full copy of all of the information published on the Oxford Health ketamine treatment service website at www.oxfordhealth.nhs.uk/ips/ketamine-trd/

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Published 25/11/2022

Department Interventional Psychiatry Service
Version 2.1
Last Modified 19/02/2024

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Full information about Oxford ketamine service

Summary of the service

Ketamine is a licensed anaesthetic drug. It can also work as an antidepressant but has not been licensed for this use. A closely related version, nasal esketamine, does have a licence but has not been approved for routine NHS use, mainly because of cost.

We provide a self-pay, ketamine treatment service for people who have depression which has not responded to other treatments. It is based at the Warneford Hospital, Oxford, OX3 7JX.

Before offering you an assessment we assess your suitability for treatment by reviewing a referral letter from your GP or psychiatrist and other required documents.

If we can offer you an assessment, you will complete several questionnaires before the assessment meeting.

Assessment meetings are usually online, but we can meet face-to-face if you prefer.

Initial treatment consists of three to six ketamine infusions over three to six weeks. We recommend that you join two preparatory group sessions before treatment and an integration group after each treatment. These are optional.

About 50% respond well and want to continue treatment. The majority relapse at some point but then respond again with further treatment. As with conventional antidepressants, regular treatment over several years is often needed.

About 10% have an unpleasant experience with their first infusion. For the remainder it is pleasant or neutral.

For information about NHS treatment, see FAQ at end.

To see our feedback from a recent survey, see our FAQ: Why should I come to Oxford rather than elsewhere?

Overview

Summary of the service

We provide a self-pay service for people who have depression which has not responded to other treatments.

Before offering you an assessment we assess your suitability for treatment by reviewing a referral letter from your GP or psychiatrist and other required documents.

If we can offer you an assessment, you will complete on-line daily mood monitoring and questionnaires before the assessment meeting.

Assessment meetings are usually online, but we can meet face-to-face if you prefer.

Initial treatment consists of three to six ketamine infusions over three to six weeks.

About 50% respond well and want to continue treatment. A large majority relapse at some point but then respond to regular, longer-term, maintenance ketamine treatment, which can continue for several years.

About 10% have an unpleasant experience with their first infusion.

Where is the service provided?

Oxford Health NHS Foundation Trust's ketamine service is based at Warneford Hospital, Oxford, OX3 7JX.

Is it available on the NHS?

The service described here is a 'self-pay' or 'private' service which is provided by Oxford Health NHS Foundation Trust (OHFT). All potential patients must establish their own funding arrangements.

Patients who live in Oxfordshire or Buckinghamshire and who are formally referred to the service by a consultant psychiatrist who is employed by Oxford Health NHS Foundation Trust may be considered for treatment funded by OHFT, ie 'on the NHS'. The processes for this group are similar to those described in this website except that direct referral by a GP is not possible. The referral for OHFT-funded treatment must come from an OHFT consultant psychiatrist. If you then have ketamine treatment, you will remain under the joint care of the OHFT psychiatrist.

A very few patients from areas outside Oxfordshire and Buckinghamshire have been able to secure NHS funding for a trial of ketamine using an "Individual Funding Request". This is made by the patient's treating psychiatrist or GP to their local Integrated Care Board (ICB), which replaces the Clinical Commissioning Group. It is described here. Extracts from this website, including information in the FAQs about likely cost-effectiveness, can be used to support such applications, but we cannot get involved beyond this. Treatment cannot start until we have a

commitment in writing from the ICB to pay for the treatment and the details of the person who will process our invoice. It is important that patients realise that almost all such applications are unsuccessful because the patient's problems are not judged to meet the criterion of 'exceptionality'. Sadly, it is not exceptional for depression to be very resistant to treatment.

What is Ketamine?

Ketamine is used for depression which has not responded to other treatments.

Its brief rapid antidepressant effect has been confirmed in many several clinical trials over the last 20 years.

Is ketamine a licensed treatment?

Drugs receive a licence if the MHRA approves them as safe and effective for a particular condition. Ketamine is not a licensed treatment for depression. It is used in depression as an 'off-label' treatment. Ketamine is licensed as an anaesthetic and for analgesia. A version of ketamine, Spravato esketamine nasal spray, has a licence for use in Treatment Resistant Depression alongside an SSRI or SNRI. It has not been approved by NICE and is therefore not available on the NHS. It is expensive. We are happy to provide this for those who would prefer it. Some details about this are provided in the FAQs.

About us

We provide our self-pay services at the lowest cost possible. All of the income from the self-pay services described on this site is used to fund NHS care within Warneford Hospital and other NHS sites across Oxfordshire, Buckinghamshire, Wiltshire, Swindon, Bath and North East Somerset where Oxford Health NHS Foundation Trust operates.

Referrals

Your psychiatrist or GP should send the required documents, preferably by email to:
KetamineClinic@oxfordhealth.nhs.uk

or by post to:

Referrals
Ketamine Clinic
Warneford Hospital
Headington
Oxford
OX3 7JX

We provide this service at the lowest cost possible. All of the income from the self-pay service described on this site is used to fund NHS care within Warneford Hospital and other NHS sites across Oxfordshire, Buckinghamshire, Wiltshire, Swindon, Bath and North East Somerset where Oxford Health NHS Foundation Trust operates.

Assessment

We ask you to provide a lot of information before we decide whether to offer you an assessment meeting. This helps us to focus our service on those who are most likely to benefit and to keep our charges low. About 50-60% of patients who are referred go on to have an assessment.

If we do not get complete information at any stage this always causes delays.

Criteria for treatment

Patients must:

- ✔ currently be suffering from depression
- ✔ have tried at least two different types of antidepressants for at least six weeks each at an adequate treatment dose
- ✔ have tried at least one type of psychological treatment
- ✔ be referred to the service by a GP or psychiatrist
- ✔ be able to travel safely for treatment and assessment appointments
- ✔ be willing and able to send regular depression ratings by either email or SMS texting
- ✔ be willing and able to complete regular questionnaires online, or have someone who can help them do this if needed
- ✔ be able to understand the nature and purpose of the treatment, its benefits and possible side effects

Normally you should not take ketamine if you have:

- ❗ raised pressure within the skull (your doctor will know if this is the case)
- ❗ severe high blood pressure
- ❗ raised pressure inside the eye (glaucoma)
- ❗ recent history of epilepsy
- ❗ current or recent history of psychosis
- ❗ history of drug or medication induced manic episodes
- ❗ taken any illegal drugs in the last two years
- ❗ are undergoing IVF or may conceive
- ❗ cannot abstain from alcohol for at least three days

Pre-assessment

There are two stages before an assessment meeting can happen:

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- 1 Stage one:** Before we can offer an assessment we need to receive a referral letter and some background documents (see below)
- 2 Stage two:** If we offer you an assessment, we need you to complete on-line questionnaires before the meeting.

Stage one documents

- 1** A fully completed Patient [Essential Background](#) Information Form which can be found [here](#).
- 2** A **referral letter** from your GP or psychiatrist. You need to arrange for us to receive this.
- 3** A copy of your **NHS GP summary sheet**. If your GP is referring you, they should include this with the letter. If you are referred by a psychiatrist, we still need this summary from your GP. If you do not have a GP (for example, if you live outside the UK or have only used private specialists), the referring doctor must include all the following details which would be included on the GP summary sheet:
 - a. all your **current medication**
 - b. all previous psychiatric medication taken in the last 5 years**
 - c. all **admissions** to hospital (both physical and psychiatric) within last 5 years (or ever, if none in last 5 years)
 - d. all **physical illnesses** within last 5 years and any serious illnesses prior to that.

If the answer to any of 3a to 3d is 'None', then this must explicitly be mentioned in the referral letter. Please make sure that your referring doctor has this information and includes it. We cannot process the referral until we have a clear written statement about these items.
- 4** **Copies of the last 3 years' correspondence** about your mental health, such as letters from other psychiatrists or mental health teams. Summaries and assessment letters from before 3 years ago are also particularly helpful. If your referrer does not have these letters about your previous contact with mental health services, please request copies of such material from those services and forward them to the doctor who you wish to refer to us.

Once we have received and reviewed this information, we will send you an email to let you know whether or not we are able to offer you an assessment.

Stage two questionnaires

If we offer you an assessment meeting, you will need to complete on-line questionnaires before that meeting.

We will register you for the two systems we use:

- True Colours – for you to record your mood every day
- Patients Know Best (PKB) – for other questionnaires

It is essential that you start using True Colours at least 7 days before your appointment.

You must also complete all the forms within PKB at least 7 days before your appointment.

If we do not get complete information at any stage this always causes delays.

The assessment meeting

Assessments are usually done online by Teams. However, if you prefer, we can meet you at the Warneford Hospital. Because you have provided lots of information ahead of the meeting, these assessments usually take only 60-90 minutes. If you are happy for us to talk with someone who is supporting you we like to do this, but this is not essential.

The assessment will be with an experienced psychiatrist. This may be with Professor Rupert McShane who leads the team, another consultant psychiatrist, or an experienced clinical fellow.

Before this meeting, we will

- review the documents received from your referrer
- review the PKB forms
- review the True Colours monitoring data

At this meeting, we will

- talk to you in detail about your depression and your situation
- assess and help you to manage your expectations of treatment
- make sure you are fully aware of the risks and benefits of treatment
- ask whether you are happy to be contacted about future research

The doctor who you meet will tell you whether they judge that the treatment would be suitable in your case.

After the assessment meeting

We will arrange dates for the first series of infusions, or give you more time to consider the information you have heard before you make your decision.

Depending on waiting times, there may be a significant delay before your infusions can be scheduled. Typically, the initial treatment is a series of three to six intravenous infusions. This is usually enough to establish if you are a 'responder' and if you will be able to benefit from ketamine over a longer period.

We will also send you a link for a treatment consent form on PKB. This confirms that you have read the information leaflet, which exactly reflects the content of this website, that you understand the possible side effects, and that you recognise that ketamine is not licensed for the treatment of depression.

We will write to the doctor who referred you, copying in yourself and other doctors currently involved in your care unless you direct otherwise.

You will receive an email with a letter attached detailing the dates and times of your ketamine appointments.

Treatment

Preparing for treatment

Psychological preparation

We recommend that you try to create a 'peaceful mind' before we start your infusion. But it is normal to feel a little anxious or unsure before your treatment. Using a breathing app on your phone or mindfulness techniques to focus on your breath and feeling calm can be helpful to do this (See Headphones and Music, below).

The effects of the infusion will feel strange. Staff will encourage you to 'let go'. Allow yourself to feel strange. Be curious about it. Try not to 'fight' these effects. Turn towards any difficult experiences rather than trying to escape them. Focus on your experience rather than what's going on in the clinic around you.

Preparation groups

You may wish to take part in our optional, but recommended, Preparation groups.

Preparation Groups are designed for patients who are due to start ketamine treatment. Patients attend two sessions with up to three other people on two consecutive Tuesdays 2.30-4pm by Teams. The purpose is to come together and openly share information and expectations, and to consider:

- Information about ketamine and dosing
- Dissociation and psychedelic experiences
- The concept of "Set and Setting"
- Values and self-care
- Setting goals and intentions
- Cultivating curiosity and a capacity for change

Two staff from the clinic facilitate the groups, drawing on psychodynamic, attachment-based, cognitive-behavioural, and mindfulness-based psychotherapy.

Our clinic Preparation, Integration and Psychotherapy groups are described in detail here:

[Preparation group details](#)

Headphones and music

We strongly suggest that you bring noise cancelling headphones to block out the inevitable noise in the clinic. There are three bays in the clinic, separated by curtains. We do not have any private rooms. Other people will be having their treatment at the same time as you. We aim to create a quiet clinical environment; however, you may hear noises around you, such as the phone ringing and conversations with other patients.

It is a good idea to practice listening to a 'mindful' track at home before you come, using the same smartphone and headphones that you will use later.

Avoid music which you know well, has words, or is likely to evoke any emotions. Unstructured music works best. The idea is that this should be a neutral background. If you find it hard not to listen actively, then noises of nature (waves, wind, rain, woodland etc) may suit you better.

Here are some sources of tracks that others have found suitable:

- [Wavepaths](#)
- [Kriya Institute on Spotify](#)
- [Sana Healing Collective on Spotify](#)

Treatment

Before treatment

Look again at the section on Preparing for Treatment above.

Continue to complete True Colours mood monitoring daily throughout your treatment and follow up.

Preparation on the day of infusions

Treatment involves intravenous ketamine infusions and optional, but recommended, Integration groups.

Before every appointment, we will send you a link to a brief questionnaire. This asks for updates in your symptoms and medication and is also an opportunity for you to let us know about any changes in risk.

On the day of your treatment please keep your food intake within 4 hours of treatment to a minimum. Do not take benzodiazepines or alcohol the night before or on the day of your treatment as this may reduce the benefit. If you are unable to do this, please let us know.

You should arrange for someone to escort you to your appointment and advise them that you will need to stay in the clinic with them for 1 hour after treatment.

Where this is not possible, and you attend treatment unescorted, you should stay in the clinic for a minimum of 2 hours after treatment before getting public transport home.

Under no circumstances are you permitted to drive away from the clinic after receiving ketamine treatment. After you have had any ketamine treatment, you should not drive until after a restful night's sleep. We cannot continue to treat anyone who drives after a ketamine treatment.

What treatment involves

Ketamine infusions for the self-pay service happen on Mondays, Wednesdays, Thursdays. NHS ketamine (only for those from Oxon and Bucks) is on Tuesdays and Fridays.

You will arrive at the main reception of the Warneford Hospital. The reception staff will point you to the Interventional Psychiatry Service at the end of the main corridor.

You will be greeted by a member of the treatment team and shown through to a treatment bay. We will normally show the person accompanying you to the recovery area where they can wait and have a drink. During covid-19 restrictions, the person accompanying you may not be allowed into the department but is welcome to make use of our cafe and hospital grounds.

Before your first treatment, we will

- take your blood pressure
- weigh you
- take a urine test
- take a blood test. This is to establish whether any folate or B12 vitamin deficiencies may be contributing your depression, and to check your kidney, thyroid and liver function. If you are able to provide us with this information separately, we do not need to do the test.

During the appointment we will put a needle into a vein on the back of your hand and then arrange a pump to gradually infuse a low dose of ketamine over 40 minutes.

During the infusion you will be lying on a bed. A nurse will be present in the clinic at all times. Before, during and after the infusion we will check how you are feeling and ask you to describe and record any symptoms or side effects which you may be experiencing.

You will remain on the bed until you are ready to get up. Most people feel initially unsteady on their feet. We will show you to a recovery area where you will remain until the end of your recovery time.

In the recovery area there are facilities to make hot and cold drinks and biscuits. We recommend that you eat and drink something before leaving.

Filming, recording or photography of any kind is not permitted at any time.

Precautions after treatment

If you are going to be accompanied home by a responsible adult, you will stay on the unit for an hour after treatment.

If it is not possible for you to be accompanied, you will stay on the unit for at least two hours after the end of the infusion.

After ketamine treatment you must not:

- ❗ drive a vehicle

- ❗ ride a bicycle
- ❗ drink alcohol
- ❗ sign any legal documents
- ❗ be responsible for looking after dependents
- ✅ until the following morning.

Between infusion days

You may wish to take part in our optional, but recommended, Integration Groups.

Integration Groups are designed to help you maximise the benefit that you from your ketamine infusion by sharing their experiences with others. Studies have shown that the best window for growth and change is between 1-7 days after an infusion. This might include

- Being more able to do things which help improve your mood
- Developing the capacity to think flexibly which can be difficult to do in depression
- Improving how you relate to yourself and others
- Reviewing unexpected or new ideas that come up during dissociation

Patients attend with up to seven other people on Fridays 2.30-4pm by Teams. Two staff from the clinic facilitate the groups, drawing on psychodynamic, attachment-based, cognitive-behavioural, and mindfulness-based psychotherapy.

Details of the clinic Preparation, Integration and Psychotherapy groups are here:

[Integration group details](#)

What happens after the initial series of infusions?

There is usually a period of 3-4 weeks following the initial series of infusions when you will have no further treatment.

If you have responded to the ketamine, we expect you to relapse in this 3-4 week period because the average length of benefit of ketamine is 10 days.

The reasons we have this period are to help you and us work out:

- whether the ketamine is responsible for any benefit
- how big that benefit is
- how long the benefit lasts

If you have responded to the initial course of ketamine, you are very likely to respond when you are given it again after relapse.

Follow up

Initial follow up

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After the initial series of treatments, a telephone or Teams follow-up appointment will be arranged to discuss your response and to discuss the options. This appointment will be scheduled for about 4 weeks after your last infusion and will last up to 30 minutes.

Please continue to complete True Colours throughout this period.

The options at this point include:

- No further ketamine treatment for those who have not responded
- Further intermittent infusions every 4-8 weeks this is the most common initial pattern
- Further intermittent infusions every 4-8 weeks with oral ketamine taken once weekly in between infusions
- Further intermittent infusions as-and-when required

We do not offer treatment packages based only on oral ketamine.

The decision about these options will depend on a wide range of factors and will be discussed in the light of your response to ketamine. We cannot discuss these ahead of an initial assessment.

We will then write to the doctor who referred you, copying in yourself and your GP unless you direct otherwise. This will be a summary of your treatment and any suggestions for your ongoing care.

Further follow-up

All patients receiving ongoing ketamine treatment must be reviewed by a ketamine clinic psychiatrist after every sixth intravenous infusion or every sixth prescription of one month of oral medication. This may be by phone, by Teams or, if you prefer, in person.

Follow-up appointments last 10-30 minutes.

Oral ketamine

The average duration of initial benefit of IV ketamine infusions is 10 days.

Attendance at the clinic for infusions every 10 days is not practical for most people or for the clinic.

Oral ketamine, taken at home, can help maintain the benefit of IV infusions

Therefore, if the benefit is short-lived, we may offer you our maintenance regime:

Intermittent (usually monthly) IV ketamine PLUS oral ketamine, taken at home, once a week on the weeks between each infusion.

If you are going to start this, you will come to the clinic for a single session during which you will take one or two test doses of oral ketamine. This will help you to understand the very

different experience with oral ketamine. It also helps us to be confident that you are on the right dose.

Oral ketamine is supplied as a liquid so that the dose can be readily adjusted.

We do not supply this from the hospital. It is supplied through an external pharmacy (PCCA) who send it by courier to your home. You will need to sign to say you have received it.

You will need to pay PCCA directly for oral ketamine, not us.

We are not permitted to prescribe more than one month's supply at a time. This is typically 3 or 4 oral doses.

Each bottle can contain a maximum of 100ml of 10mg/ml oral ketamine. However, you will be charged the same amount for each bottle irrespective of how much there is in it. The cost of a bottle containing 20ml and one containing 100ml is the same.

By law, each new supply requires a fresh prescription.



Important We do not run a service where patients can take only oral ketamine. Oral ketamine is used to supplement and help maintain the effect of IV infusions..

Benefits of oral ketamine:

- ✔ Can help maintain the antidepressant benefit of IV ketamine
- ✔ Minimal dissociative effect

Problems with oral ketamine:

- ❗ Risk of tolerance and dose escalation. However, we are used to managing this and can help with the balance between IV and oral.
- ❗ Because the effect is so mild, you may feel like it is doing nothing, which some people worry about.
- ❗ It sometimes does stop working.
- ❗ Sometimes we need to add another drug (eg Pramipexole) for it to keep working.

Risks and benefits

Potential side effects

Ketamine is not a licensed treatment for depression and the effects of taking it long term are unknown. There may also be unusual side-effects which occur acutely which have not yet been reported.

About 10% of people who have a ketamine infusion have an experience that is very challenging. If you find any of the side effects too unpleasant then these will almost always resolve within 15 minutes of stopping the infusion. Occasionally people experience a worsening in their depressive symptoms and suicidality which persists for up to two weeks after taking ketamine. Sometimes this is sufficiently unpleasant that they do not want to take further ketamine. Those who do persist with further treatment often find that it starts to help after 1-2 more infusions.

Of the remaining 90%, about half have a very pleasant experience and in the remainder it is neither unpleasant nor pleasant.

Brief side effects

Ketamine commonly causes brief side effects. These are more common at higher doses, but the relationship between dose and side-effects is variable, even within the same patient.

Side-effects which occur during or shortly after treatment include:

Feeling dissociated (mind and body feel separate). Occasionally, this extends to the point of an 'out of body' experience. 'My feet didn't seem as if they belonged to me'. A floating sensation.

'Ego dissolution'. The feeling of 'oneness with everything', as if you are a drop of water being dropped into a river. A feeling of being very tiny, like an electron or atom. Often accompanied by a sense of awe – but can be experienced as frightening.

Dizziness.

Feeling a bit drunk or lightheaded.

Feeling tired for the rest of the day after treatment.

Altered perception. Things "look peculiar" or sound different.

Nausea or vomiting. This can be treated with anti-nausea agents. If you feel sick, we will give you ondansetron with your next and subsequent infusions. Do not have a big meal before treatment.

Anxiety. This can extend to the point of panic. It may be associated with a 'near death' experience. This can occur 'out of blue' even in people who have had many treatments. The

anxiety diminishes rapidly as the drug is broken down in the body, so the infusion can be turned off if necessary. In this case, the anxiety settles within 5-10 minutes.

Headache. Usually responds to paracetamol.

Tinnitus – a ringing in the ears. This can get louder in those who already experience it, or start in people who have never had it. It is probably more likely if you are also taking drugs with tinnitus listed as a known side-effect such as venlafaxine and duloxetine. The tinnitus usually resolves if the ketamine is stopped. If the ketamine is not stopped, it is possible that hearing may be affected so it is important you let us know if you develop tinnitus.

Temporary bruising. The treatment involves a needle being put into the vein on the back of your hand and a low dose of ketamine infused over 40 minutes.

An increase in blood pressure or a fast heart rate. The extent of this comparable to changes that occur naturally in everyday activities. Therefore, we do not monitor this routinely after the first infusion. If you would like us to do so, please say.

Less-common side effects

Vivid dreams.

Hallucinations. Feeling, seeing or hearing something that is not actually there.

Mania. Unusually elevated mood which causes problems. Ketamine should be stopped immediately if you suspect this is happening. The ketamine team and your local team need to be informed promptly.

Rare physical side-effects

Liver damage. Rarely, people taking very regular ketamine experience liver damage. This is sufficiently rare that we do not routinely check this. However, if you feel unwell during ongoing ketamine treatment, please let us know and we will review whether you need a blood test.

Long term theoretical risks

Dependence

Sometimes people find that if they stop ketamine their depression relapses. This is not the same as addiction. This is reliance.

However, non-clinical ketamine is sometimes taken illegally in large, frequent doses and cause addiction. This has not happened in any of the patients treated with our protocol. For further discussion of addiction see our FAQs

Tolerance

It is not uncommon for patients taking ketamine for depression to find that their depression, which was initially relieved by the ketamine, is no longer controlled despite continuing to have treatment with ketamine. There can be several possible reasons, one of which is that they have developed tolerance to ketamine. This may mean that a treatment break is needed or that it is no longer an effective treatment and therefore will be stopped. Sometimes, the dose can be safely increased. Keeping the interval between doses as long as possible helps to maintain the effect. Adding a regular weekly dose of oral ketamine, taken at home, between monthly infusions, is another common way of managing this. We can also use other medicines successfully to augment the effect of the ketamine.

Rarely, people find that they think a lot about ketamine and crave it. It is important to notice that this is happening and to be open and honest with the clinical team about this.

For comparison, ketamine is much less addictive and dangerous than strong opiates (eg fentanyl, methadone) or nicotine, probably less addictive than benzodiazepines and probably about as addictive as whiskey.

Bladder damage

Bladder damage. This is common in people who take illegal ketamine recreationally, usually at nasal doses of over 1g ketamine daily. This dose is much higher than the maximum we use.

The main symptoms of ketamine-induced bladder damage are lower abdominal pain, pain passing urine, and needing to pass urine more often. If you start to experience these symptoms please contact your GP and the ketamine clinic.

Cognitive impairment

This has not been observed over 1 year treatment with esketamine, or in our patients, but has been seen in addicts taken high doses daily. It is associated with evidence of brain shrinking and other brain lesions.

Personality change

Apathy has been reported in addicts but not in patients receiving medical doses.

Benefits

Ketamine is a treatment for depression which has not responded to other treatments. A rapid antidepressant effect has been demonstrated in many clinical trials of single intravenous infusions over the last 20 years in patients with depression which has not responded to at least 2 or 3 antidepressants.

The response lasts at least a day for about 70% of patients and up to three days for 30% of patients. The majority of patients relapse within two weeks after treatment.

In our clinic 50% of people who try ketamine have enough of a benefit that they think it is worth continuing with it.

It is important to recognise that ketamine is not licensed as an antidepressant. It has not been evaluated in large, or long term, clinical trials. This means that the long-term success rates have not been fully documented.

Large trials of the closely related drug esketamine, which is a component of ketamine, have shown broadly similar effects. A safety study of over 800 patients who took intranasal esketamine and a newly initiated antidepressant showed a 43% remission rate after 12 months of treatment. Remission is when there are no longer any significant symptoms of depression. For comparison, a large randomised study of people with depression found that those whose depression had not responded adequately to two previous antidepressants had a 5% chance of being in remission 12 months later if they tried a third antidepressant.

Pricing

All of the income from this self-pay ketamine service is used to fund NHS care within Oxford Health NHS Foundation Trust. The service is part of OHFT's clinical innovation strategy.

Item	Fee
Initial assessment appointment with psychiatrist	£225
Each intravenous ketamine infusion	£225
Oral ketamine titration session in clinic	£225
Each 100ml bottle of oral ketamine (10mg/ml) irrespective of amount in the bottle	£60
Shipping costs of oral ketamine	£7.99
Each prescription of oral ketamine	£12
Scheduled review with psychiatrist, irrespective of duration (up to 30 minutes)	£100
Preparation and Integration therapy groups	£10 per session
Psychodynamic psychotherapy group	£20 per session
Spravato (nasal esketamine) 56mg dose – each administration	£551
Spravato (nasal esketamine) 84mg dose – each administration:	£714

Making payments

Oral ketamine

Payments for oral ketamine and shipping

You should make these directly to PCCA.

You will need to pay PCCA directly for the cost of the oral medication and the shipping.

PCCA must receive payment before they will ship the medication, in the same way as if you were paying for medicines at your local, or online, pharmacy.

All other payments

For all other payments, we will send you an email with a link to the .gov.uk system.

The link for each purchase is unique and applies only to that purchase.

You must pay, using the link, at least two working days before your appointment.

Cancellation policies

If you do not come to your appointment, and do not give us adequate notice, we cannot reallocate it to another patient. Please contact us as soon as you know you cannot attend.

Email is best as it avoids misunderstanding: ketamineclinic@oxfordhealth.nhs.uk or phone 01865 902 522.

Cancellation policy: Treatments and assessments

If you give us less than 2 working days' notice, we will charge you 50%.

If you miss an assessment or treatment appointment and you have not let us know that you will not be coming, we will charge you the full cost.

Further treatment or assessment will not be possible until we receive your payment. We have a policy of pursuing all outstanding amounts.

Cancellation policy: Preparation and Integration Therapy Groups

If you have booked a session, you will be charged regardless of whether you attend or not. It is possible to cancel sessions by getting in touch with the clinic up to 24 hours before the session.

Cancellation policy: Psychodynamic psychotherapy group

Once you have started therapy in this group, it is expected that you will attend each session. You will therefore be charged regardless of whether you attend or not. This does not apply for planned therapy breaks.

Important information for carers

We ask patients coming for ketamine treatment to arrange for someone to escort them to their appointment. This page provides information for those who are supporting patients.

Attending the appointment

When you bring a relative or friend for ketamine treatment you will be shown with them to a waiting room before treatment.

The team will then take the person you are accompanying through to the treatment room and you would normally be shown to an area where you can have a drink. During times of covid-19 restrictions, you will not be allowed into the department. You are welcome to make use of our cafe and hospital grounds instead.

You will not be able to sit with the person while they have their treatment.

After treatment

It will be about an hour before the person you are accompanying will finish having their treatment. They must remain in the department for a further hour before being assessed and allowed to go home.

Initially they may still feel a little strange; however, this will pass before they are allowed to leave the department.

After treatment people often feel tired. We encourage them to do very little for the rest of the day. They may have a headache and can take paracetamol as normal for this.

They may describe their experience to you. Sometimes treatments can be an emotional experience of release for some people and can initially feel overwhelming.

If you have concerns

If you are worried about your friend or relative, you should speak to the team in clinic about any concerns you have.

Frequently asked questions

Please find below frequently asked questions about our service.

Accessing the service

Is ketamine treatment available on the NHS?

The service described here is a 'self-pay' or 'private' service which is provided by Oxford Health NHS Foundation Trust (OHFT). All potential patients must establish their own funding arrangements.

Patients who live in Oxfordshire or Buckinghamshire and who are formally referred to the service by a consultant psychiatrist who is employed by Oxford Health NHS Foundation Trust may be considered for treatment funded by OHFT, ie 'on the NHS'. The processes for this group are similar to those described in this website except that direct referral by a GP is not possible. The referral for OHFT-funded treatment must come from an OHFT consultant psychiatrist. If you then have ketamine treatment, you will remain under the joint care of the OHFT psychiatrist.

Unfortunately, we are no longer able to accept any new patients from outside Oxfordshire and Buckinghamshire. As of 19 February 2024, we are no longer able to accept those whose treatment is funded through an 'Individual Funding Request' to the Integrated Care Board. This is because we are a small team and we are unable to manage the variable processes required to secure funding for ongoing treatment, and to recoup payment

Is ketamine a licensed treatment?

Drugs receive a licence if the MHRA approves them as safe and effective for a particular condition. Ketamine is not a licensed treatment for depression. It is used in depression as an 'off-label' treatment. However, ketamine is licensed as an anaesthetic and for analgesia because it is safe and effective for short term use for those conditions. A version of ketamine, Spravato esketamine nasal spray, has a licence for use in Treatment Resistant Depression alongside an SSRI or SNRI. It has not been approved by NICE (National Institute for Health and Care Excellence) and is therefore not available on the NHS. It is expensive. We are happy to provide this for those who would prefer it. Some details about this are provided in the FAQs.

How long is the waiting list?

Waiting times can vary throughout the year, on average once we have received a referral for you the appointment for an initial consultation will be booked for within 3 months.

Waiting times for treatment after an initial consultation can range from 1 – 8 weeks depending on the availability of appointments.

What if I can't get a referral?

We will not be able to see you without a referral from your GP or psychiatrist. Sometimes people have found it helpful to take the information leaflet about the service to their doctor.

Do you accept referrals from psychotherapists or psychologists?

No. If you are seeing a psychotherapist or psychologist it would be extremely helpful to receive a letter describing the sort of work that you have done together. However, because we need a full medical background, the referral letter must come from a medically qualified doctor who has been responsible for your clinical care.

What are the reasons you decide not to offer a patient an assessment following referral?

We cannot give an exhaustive list as we review each case on the basis of how likely it is that the patient will benefit. A global assessment is made of this.

Some of the reasons include:

- Urgent need for intervention to save life. Such patients should contact their local team immediately
- Currently taking psychedelics from other legal or underground clinics
- Alcohol Use Disorder
- Lack of persistent alteration in mood. Some people have abrupt severe fluctuations in mood but do not experience low mood most of the day nearly every day. An exception to this is the frequent occurrence of suicidal ideas and behaviour.
- Recent mania
- Unstable social circumstances that would interfere with ability to persist with treatment.
- Patient does not allow us to communicate with any professionals involved in their care

Do you do treatment on weekends, in the evenings and on Bank Holidays?

Not yet.

Why is ketamine not routinely available on the NHS?

Ketamine is not licensed in the UK by the Medicines and Healthcare products Regulatory Agency for the treatment of depression. This is because, so far, no company has made an application for such a licence. This is because the cost of generic ketamine is low, the cost of gathering the data required by the MHRA is very high, and there is no possibility of patent protection for the currently available formulations. It is possible that companies may apply for the licencing of new formulations in the future.

Because the MHRA has not approved ketamine for the treatment of depression, the safety of ketamine has not been confirmed using the high quality of evidence required. Therefore, as with other unlicensed treatments, NICE will not consider whether it should be routinely available in the NHS. Because NICE has not given an opinion on its cost-effectiveness, the health commissioning bodies (formerly CCG, now ICB) cannot routinely fund it.

Versions of depression

I have anorexia with depression. Can ketamine help?

Yes, we find that ketamine can help the depression and can make a big difference. It has helped some patients to be discharged from hospital. It is less helpful in combatting the disordered ideas about shape, weight and eating. We are grateful to a patient who was involved in [this earlier study](#) who called us to tell us how her life had been changed by it: this emboldened us to try ketamine in patients with anorexia. (If you are that patient, we managed to lose your contact details – do get in touch again!). The information about Treatment Resistant Depression all applies, and should be read carefully. Treatment needs to be long term.

I have bipolar disorder. Can ketamine help?

Patients with treatment resistant depression in bipolar disorder respond at about the same rate as those with unipolar depression. There is a risk of manic relapse, particularly perhaps in those where mania has previously been drug induced. Depending on the exact circumstances and history, we recommend taking a mood stabiliser before starting ketamine.

In the small number of patients we have treated (~5), we have not found ketamine to be useful in rapid-cycling bipolar disorder. Not only is it hard to time the doses, but it also does not appear to affect the cycling.

Does ketamine work for postpartum depression?

Yes. We and others have had very positive experience of its use for postpartum depression with rapid and permanent resolution after a short course of treatments. Research suggests that the level of ketamine and metabolites in breast milk is safe, though we still recommend caution and a 'pump and dump' strategy for three days after ketamine treatments.

There is also RCT evidence that IV ketamine, given at the time of caesarean, reduces the incidence of post-partum depression.

What the effects of ketamine on unborn foetus?

The effects of ketamine on the unborn foetus are unknown. Women of child-bearing potential should use effective contraception. It is essential that ketamine treatment is stopped during pregnancy and that a thorough review of risks and benefits is conducted before restarting. If you are trying to conceive it may be reasonable to restrict ketamine treatment to days when

you are menstruating as a way of reducing risk – but this is not a perfect marker that you are not pregnant.

I am peri- or post-menopausal. Should I take ketamine?

If you have not had a review from a specialist in this area, we recommend that you do so as HRT can sometimes be very effective in alleviating depression and prevent the need for ketamine treatment. Sometimes a combination of both can be effective. We suggest you review <https://www.balance-menopause.com/> in detail.

I am under 18. Can I have ketamine?

Possibly. We will need to work with you, your parents and your current doctors to work out if this is the right option for you. The adolescent brain may be more susceptible to being overactivated by ketamine and to developing brain lesions of uncertain significance (Olney lesions). However, adolescents with resistant depression can sometimes benefit.

I have emotionally unstable personality disorder / borderline personality disorder / PTSD / complex PTSD. Can I have ketamine?

The depression associated with these conditions does respond to ketamine. This can help with managing day to day life. However, entrenched patterns of thinking and relating can take a long time to change even when the depression is better. Ketamine may help with the avoidance that maintains these problems. Ketamine is particularly helpful for suicidal ideas in the context of depression.

Concurrent psychotherapy and engagement with another team are essential in these conditions, but often difficult to maintain.

Effects and side effects

Is ketamine safe?

Please look at the [Side Effects](#) section

Ketamine is not licensed by the MHRA as being safe for the treatment of depression. However, it has been licensed as safe for use as an anaesthetic and as an analgesic. This means that, although side effects are well known, it is considered safe for short term use as an anaesthetic or analgesic.

The important question of whether ketamine is safe if used regularly over a long period has not been formally answered and there are no published studies of its long-term use.

Our experience so far is that, at the frequency and doses we use, we have not observed important safety signals. This is consistent with the wide experience in the US.

Is ketamine addictive?

When people use ketamine illegally – either recreationally or for self-treatment – it is not uncommon for the dose and frequency of use to escalate. Drug abusers can become addicted to it.

Sometimes people find that if they stop ketamine their depression relapses. This is not the same as addiction. This is reliance. The same phenomenon has been noticed with other psychedelics such as psilocybin.

There are a handful of reports of patients who have been prescribed ketamine for the treatment of depression and who has become addicted. In all cases, the doses used are very much higher and more frequent than we use.

People who try to treat their depression with ketamine without medical support use higher doses, more frequently and are more likely to want to reduce the dose they are using than those who use it recreationally. We strongly advise against treatment outside a conventional medical setting.

For comparison, in our opinion, when used in a medical setting, ketamine is much less addictive and dangerous than strong opiates (eg fentanyl, methadone) or nicotine, is probably less addictive than benzodiazepines, and is probably about as addictive as whiskey.

Could I become tolerant to ketamine?

Yes. Sometimes patients taking it for depression find that their depression is no longer controlled despite continuing to have treatment with ketamine. There can be several possible reasons, one of which is that they have developed tolerance to ketamine. In our clinic, we use a variety of strategies to minimise this.

We are currently formally evaluating the frequency of this but estimate that this becomes a problem for about 15% of people who take ketamine long term.

A treatment break or increase in the interval between treatments may be needed.

We sometimes add another off-label medication that has an antidepressant effect (eg pramipexole).

How well and how quickly does ketamine work?

For some people, ketamine can work within a few hours. For other people it may take a few treatments before their depression improves. It is not possible to tell who will respond, or how quickly to ketamine.

If you do not respond to 6 treatments of ketamine then you are unlikely to see a benefit from any further treatment.

What dose of ketamine is usually prescribed?

The dose of ketamine you are prescribed is decided by the ketamine clinic treatment team. Intravenous doses are calculated on your weight at 0.5mg/kg and will be reviewed before

each treatment. For some people this dose will not change; however, doses may be increased or decreased during your treatment period.

Is there any way of knowing who will benefit?

Patients over 65 years old are less likely to respond or to respond more slowly. Therefore, a longer trial (eg up to 10 infusions) may be needed before it is clear that there will be no response.

People who have been extremely unwell with depression for a very long time (ie to the point of immobility and prolonged hospitalisation) may be less likely to respond.

Patients whose depression has not responded to ECT or to many antidepressants at high doses may be slightly likely to respond than those with less severe illness. However, they do sometimes respond dramatically.

These predictors have not been confirmed and patients who have been chronically or severely depressed, or who have had poor response to conventional antidepressants, have also benefitted.

There is a possibility that a genetic mutation predicts whether patients develop an initial response. However, we do not assess whether you have this mutation. There are no known predictors of a longer duration of response.

How does ketamine compare to ECT?

A single, large, well conducted randomised controlled trial has shown that ECT is slightly more effective than ketamine (Ekstrand 2022). Overall, ECT caused more cognitive side effects than ketamine, but ketamine caused more acute dissociative effects. Ketamine was slightly more effective in younger patients and ECT was slightly more effective in older patients. When the treatments were stopped, patients relapsed at the same rate. In practice, however, maintenance ECT is less commonly used than maintenance ketamine.

How does ketamine compare to psilocybin?

Psilocybin is not a licensed treatment for any condition and experience with its use in conventional medical settings is limited. There has been no research which compares the effectiveness of ketamine and psilocybin. It is possible that the effect of psilocybin last longer, though some patients report needing to take it repeatedly to maintain benefit. In current research, psilocybin is given 2 or 3 times to induce remission, compared to up to 6 with ketamine. Psilocybin treatment typically involves more preparation and integration sessions than we offer. Each treatment session lasts a day. There is preliminary evidence that long ketamine infusions lasting 4 days may result in longer duration of benefit than the 40-minute infusions we use. Psilocybin may be less likely to induce tolerance than ketamine and it is not associated with addiction.

Practical arrangements

I live a long way away. Can I stay overnight in Oxford?

Yes. Patients often do this. There are a variety of B&Bs, AirBNB, hotels etc available.

Can I drive or ride a bicycle if I am having ketamine?

Yes, but not until the morning after you have had ketamine treatment.

However, when you first start taking ketamine or when your dose is increased you may feel drowsy the next day. You should use common sense and not drive if you feel drowsy. It is your responsibility to decide whether you are fit to drive on each occasion.

Can the person bringing me for treatment sit with me?

No. The person accompanying you will normally be shown to a room where they can have a drink and wait with others. During times of covid-19 restrictions, the person accompanying you will not be allowed into the department but is welcome to make use of our cafe and hospital grounds.

There are two main reasons for this. Clinic bays are small, and staff need room to access the infusion pump during treatment. Also, there will be other patients having their treatments at the same time and we try to create a quiet and calm environment.

Additionally, staff are trained and experienced to be able to look after you during your treatment and through any of the side effects associated with ketamine. Friends or family members may find observing this distressing and alarming.

Taking other medicines with ketamine

Can I take other medicines if I am having ketamine?

Benzodiazepines such as Diazepam, Lorazepam and Clonazepam probably reduce the effect of ketamine, so we advise that these are not taken the night before or the day you have ketamine. If you are on long term benzodiazepines we will discuss how far and how fast you should reduce these before having ketamine. The Ashton method of reduction is a slow careful method which we recommend: <https://www.benzoinfo.com/>.

If you take venlafaxine or duloxetine, this may increase the risk of tinnitus following ketamine, but you should not stop it before starting ketamine.

Other than those listed above, ketamine should not affect your other medicines. Other painkillers including opioids (e.g. codeine), non-steroidal anti-inflammatory drugs such as ibuprofen, or paracetamol can be taken at the same time as ketamine.

When you start ketamine, you will be asked to complete paperwork asking about your current medications.

Before you take or buy any new medicines always tell your doctor or pharmacist that you are having ketamine.

Can I have oral ketamine straight after my infusions?

No. There will be a period of 3-4 weeks after your 3-6 ketamine infusions before you might start any oral ketamine. This is to see how long any benefit lasts.

Not everyone is suitable for oral ketamine treatment, this will be assessed during your telephone follow-up appointment.

We do not provide an 'oral ketamine only' service

Can I drink alcohol if I am having ketamine?

You should not drink alcohol on the night before and day you take ketamine and for 24 hours afterwards.

If possible, you should avoid drinking alcohol completely while you are taking ketamine. This is because alcohol may reduce the benefit and increase some of the side-effects of ketamine.

What other treatments do you prescribe?

Do you provide nasal esketamine?

Yes. Nasal spray esketamine (Spravato), in conjunction with an oral antidepressant, is licensed as safe and effective for the treatment of Treatment Resistant Depression. Ketamine does not have such a license and we use it 'off-label'. The data supporting the use of esketamine nasal spray are of a much higher quality and of a longer duration than those supporting the use of ketamine.

Esketamine nasal spray was developed because the effect of ketamine was recognised to be novel and an important advance. There are randomised trials suggesting that ketamine is not inferior to esketamine.

We are happy to make esketamine nasal spray available and are registered with the Janssen for pharmacy and the Risk Mitigation Scheme.

Nasal spray esketamine (Spravato) is not available on the NHS because it has not been approved for routine use by NICE. The cost of the drug for self-pay patients is £326 or £489 per dose. Patients must come to the clinic for every dose and stay for an hour after administration. It cannot be administered at home. On top of this drug cost, we must therefore charge the same clinic fee (£225) to cover our staffing and clinic overheads as for ketamine (which costs about £1 per dose). The frequency of maintenance esketamine nasal spray dosing is initially twice weekly for four weeks, then weekly or every 2 weeks thereafter.

Do you offer psilocybin, MDMA, LSD, 5Me-OT or other psychedelic treatments?

No. Unlike ketamine, none of these drugs are licensed for medical use. Long term data on their safety and effectiveness is not available. It is not known how often they need to be given. We do not know if they will be more effective than ketamine. Given the very low cost of ketamine, and the high cost of developing new drugs to the point of licensure, it is rather unlikely that licensed forms of these other drugs will be more cost-effective than ketamine.

Will you prescribe other medications?

Should you experience acute sickness during your infusion we will prescribe an anti-sickness medication to be given in clinic.

Your referring doctor will remain responsible for your overall care and the prescribing of all other medications including any other antidepressants.

Medical care

Will you take over as my psychiatrist?

No. The service is set up only to provide and manage ketamine treatment. Any other psychiatric care will remain with your current team. We are unable to take on the overall care of patients and will correspond with your referring team about your ketamine treatment.

I am under the care of an NHS team. What are the arrangements with them?

We do not have the option of admitting you to hospital and cannot follow you up as closely during crises as your local team can. The management of all your other psychiatric medication apart from ketamine will remain the responsibility of your current team. However, we recognise that, for a period, you may see more of us than them. Therefore, we keep in touch with your GP and current team and may advise about adjusting other medication (typically, reducing it).

This is why we need the names and contact details of your GP, psychiatrist and care coordinator. Many patients find that their contact with their local team reduces considerably once they start treatment with us. However, we ask that you remain 'on the books' of the local team so that, if there are acute crises, they are able to help you without requiring a re-referral from your GP. Your team is very welcome to contact us on 01865 902522 or at ketamineclinic@oxfordhealth.nhs.uk.

Therapy

I am seeing a psychotherapist privately. Will that influence my care?

We very much support the combination of ketamine and psychotherapy. This may help you to make the most of being well, using your newly well mind to explore issues that you were unable to address when depressed.

We provide psychotherapy groups (see elsewhere).

We are unable to recommend particular therapists but recommend that if you are considering starting therapy you chose either someone who is experienced in Acceptance Commitment Therapy (ACT), which is a NICE approved therapy for pain, or in psychedelic assisted psychotherapy:

<https://contextualscience.org/civcrm/profile?gid=17&reset=1&force=1> <https://instituteofpsychedelictherapy.org/psychedelic-integration-database/>.

We are always happy to speak with therapists who can contact us on ketamineclinic@oxfordhealth.nhs.uk or 01865 902522.

Can I join therapy groups if I am already in therapy myself?

Yes. Anyone who is receiving ketamine treatment at the clinic can join the [Preparation and Integration Groups](#) irrespective of whether they are already in personal therapy or not. If you are already in group therapy, we will need to discuss whether it is appropriate to join the integration groups.

Patients who are in the maintenance phase of treatment and are not already in regular psychotherapy, but feel the need to be in therapy, have the option of joining a weekly psychodynamic psychotherapy group. Patients in this psychodynamic group do not join the integration group sessions.

What are the time commitments for the therapy groups?

The preparation and integration sessions are optional but recommended. They are designed to help you get the most out of the experiences you have with ketamine treatment.

You will be offered 2 preparation group sessions between your assessment and starting ketamine treatment. As the material covered in session 1 and session 2 is slightly different, it is important to attend both sessions. There will be a maximum of 4 patients in these groups, and the group members will remain the same across both sessions. Sessions run on 2 consecutive Tuesdays between 14:30 and 16:00.

You are encouraged to attend an integration group session each week that you have an IV ketamine infusion. The potential frequency of attendance will vary depending on which stage you are in treatment, and how often you receive IV ketamine treatment. These sessions run every Friday between 14:30 and 16:00.

Patients who are in the ketamine psychodynamic group should attend online sessions each week between 18:00 and 19:30 except for planned therapy breaks. The minimum amount of time for a patient to be a member of this group is 1 year, and the longest is 2 years. Patients who are considering joining this group should plan to join for approximately 18 months.

Clinical results and research

What research are you doing?

Our clinic is focussed on delivering treatment, is run under the auspices of the NHS and is not primarily a research clinic.

As with other NHS services, we routinely ask patients to provide information which helps us with making clinical decisions and in order to evaluate our service.

We are also now running a project evaluating the effect of long-term ketamine on changes in different frequencies of brain waves. You may be invited to participate in this or future research projects. Participation in research is always optional.

How do your results compare with those of other clinics?

We have not compared our results with others. There are many factors that may cause different clinics to have different results. For example, different clinics probably see slightly different sorts of patients. We aim to be transparent about our results and to keep expectations realistic. We would be surprised if, like-for-like, our results are better or worse than elsewhere.

Why should I come to Oxford rather than elsewhere?

We have more experience of long-term ketamine use than any other UK provider.

Our user satisfaction is high.

We are transparent about our results.

Our costs are competitive. We run within the NHS and are priced to cover costs, not to make a profit.



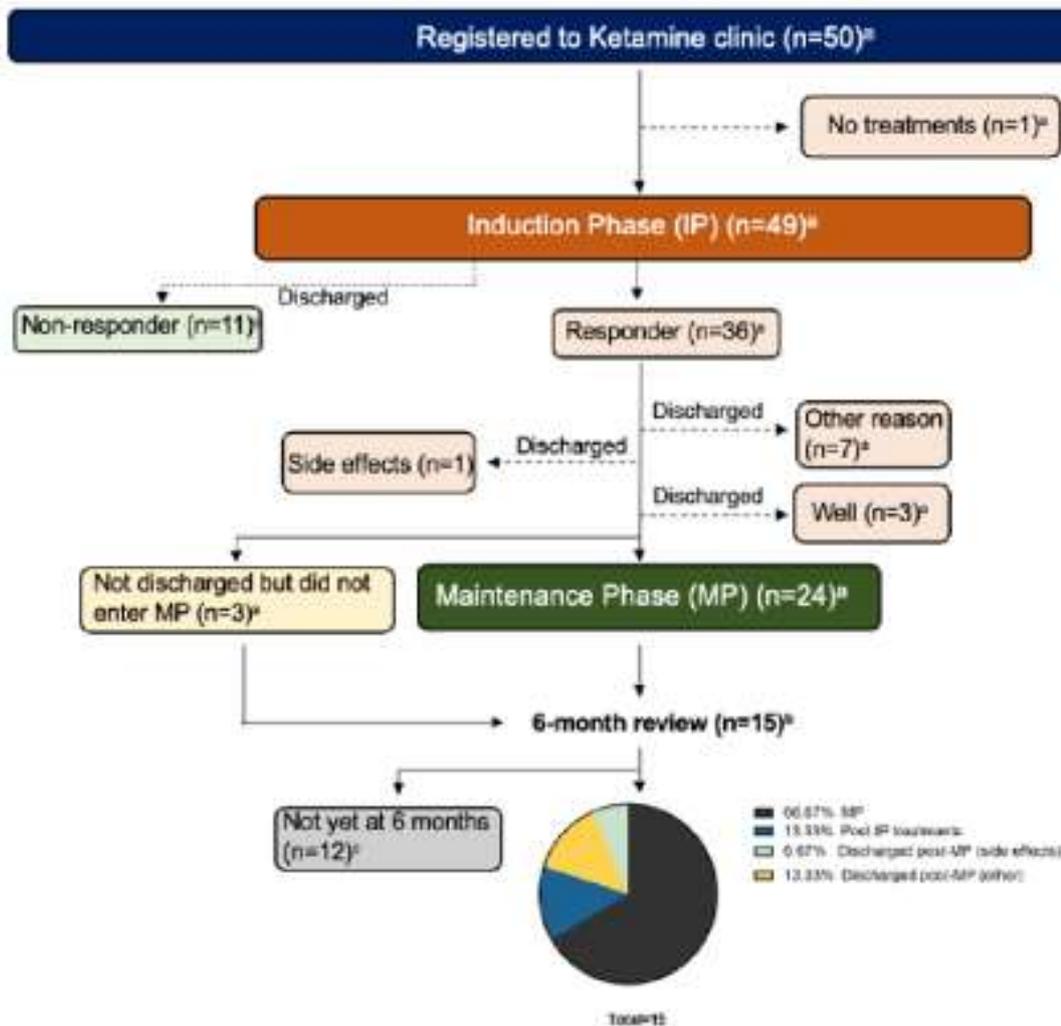
Question asked	Average rating
The effectiveness of ketamine	3.7
The overall side effects of ketamine (high score = good)	3.9
The assessment interview you had before starting ketamine	4.5
The follow-up reviews with a doctor which you had	4.2
The support from nurses on, and between, treatment days	4.5
The clinic's administrative processes	4.4
The forms you were asked to fill in	3.7

Outcome QIDS scores — long term

	Baseline	3 months	6 months	9 months	12 months	15 months	18 months
mean	17.5	11.8	10.1	12.0	10.7	11.2	9.2
SD	4.7	6.0	6.3	6.8	6.4	5.4	5.2
N*	33	33	25	19	13	12	8
p-val		<.00001	<.00001	0.0008	0.0198	0.0058	0.0251

Summary: patients who received the 'Oxford Protocol' continued to benefit for 18 months.

*falling N is because some patients in this analysis have not yet had eg >12 months treatment.



Summary: In a population with TRD:

- 49% of those who start ketamine think it is sufficiently worthwhile that they continue with regular treatment
- 6% are discharged off treatment, well

When should I go to another provider rather than Oxford?

If:

- Your local NHS service provides ketamine.
- You have a closer clinic. Ketamine treatment is not a one-off so the practicalities of getting to and from Oxford are important. It takes 60-90 minutes to get from London to Oxford by car or train.
- You want a friend/relative in the room with you.
- You want a private room for treatment. (We do not yet provide single rooms or allow friends/relatives into the treatment space with the patient).

- You are looking for help with addiction
- You are unable to use the electronic systems we use and do not have anyone who can help you do this.
- You want a less 'medical' experience. We are based in an NHS hospital rather than a private clinic.

What are your plans to improve the clinic?

We are constantly open to suggestions, but our facilities mean that there are limitations in what is practical. We are planning to open new space at the Warneford towards the end of 2022 but we do not have a budget to refurbish this space at present.

If you have suggestions for improvements, please let us know.

Cost effectiveness and financing

What is the evidence that the ketamine you provide is cost-effective?

The cost of each IV treatment is £225 and of oral ketamine is £60 per month.

There have been no long-term cost effectiveness studies of ketamine.

Ketamine is not a licensed treatment for depression. It has meta-analysis level evidence for a 7- day benefit. [Guidelines](#) for its use have been published in American Journal of Psychiatry. Nasal esketamine is licensed is not NICE approved, and costs approximately 400 times as much, per dose, as ketamine.

Short term racemic ketamine may be superior to and is at least non-inferior to esketamine. NICE has reviewed esketamine nasal spray [several times](#). [The last consultation document](#) where a cost per QALY was given says (p34) that : 'Using the committee's preferred assumptions, the ERG's ICER [for Spravato esketamine nasal spray] was in the range of £64,554 to £72,158 per QALY gained'. The current NHS list price for esketamine 84mg (which is the dose that would likely be administered weekly for the most severe cases) is £489 per dose. The current NHS list price for a vial of IV ketamine, from which it is usual to treat about 7 patients, is £7. Each oral, weekly, ketamine dose costs about £15. [Drug](#) costs for four week's treatment with esketamine (ie not including service costs) are £1,956 (assuming no NHS discount). The total costs of drug, administration and follow-up with ketamine, are £225+60 = £285. It is highly likely that this cost differential means that the cost per QALY of ketamine is well under the conventional NICE threshold of £30k per QALY.

Summary:

Cost per QALY nasal esketamine (NICE): £64,554 to £72,158

Drug cost per weekly dose nasal esketamine: £489

Total cost per week nasal esketamine including administration: £714

Full information about Oxford ketamine service

Drug cost per week ketamine (assuming monthly IV and weekly oral): £15

Total cost per week ketamine including administration (assuming monthly IV and weekly oral):
£71

Inferred cost per QALY generic ketamine: £6,455-7,216

I will have trouble paying. Should I proceed?

You should carefully consider your budget and the following factors:

1. Ketamine treatment is not a one-off. If you respond, you are very likely to need continued treatment. This usually continues for several years before people feel strong enough to stop. Some patients have been coming for up to 10 years.
2. The costs of having ketamine at our clinic are not just those of the treatment. Travel and accommodation costs can be considerable. If someone is bringing you, will they continue to be available? Can you actually manage public transport? Taking time off work can be difficult.
3. If you are working, will your employer be sympathetic to the amount of time you need to take off?

Can you reduce your costs if I help you with your work?

We are grateful for the many offers we receive, but cannot alter our processes or costs.

Education

What education and training work do you do?

We run an international journal club for clinicians and researchers, twice a month, 5.30pm on 2nd and 4th Tuesdays. See www.ketamineconference.org.

We host the world's only hybrid international academic conference for clinicians, academics and policy makers devoted to ketamine and related compounds for psychiatric disorders. The next one is September 11th-13th 2023 in Oxford. See www.ketamineconference.org.

We host regular peer-support / anonymous case review sessions for other clinicians working with ketamine in the UK: 3rd Wednesdays at 2-3pm

We host visiting clinicians from the UK and abroad who want to understand more about how to run a ketamine service. Such visits are usually for a day.

We train clinical fellows who spend a year with us full time learning about a broad range of Interventional Psychiatry treatments.

MSc and medical students have run service evaluations as dissertations for their courses.

Trainee psychiatrists can elect to be involved in the therapy groups, special interest sessions and as part of training in other Interventional Psychiatry Service modalities.

We introduce medical and nursing students to IPS.

If you would like to be involved in any of this, please send an email to ketamineclinic@oxfordhealth.nhs.uk

I would like to train in psychedelic psychotherapy. Can you help?

We are developing the psychotherapy side of our work but do not run any psychedelic psychotherapy training programmes. These are available through other providers in the UK and US.

Science of ketamine treatment

How does ketamine work as an antidepressant?

Watch YouTube video here: <https://www.youtube.com/watch?v=NvYn-FU1Auw>