



ROYAL FREE LONDON
PRIVATE PATIENTS
world-class care and expertise since 1828

The Royal Free London NHS Foundation Trust

Private Care



 THE ROYAL FREE

Contents

About us	4
List of services	6
Renal	8
Cancer	10
Neuroendocrine tumours	12
Rare diseases services	13
Lysosomal storage disorders	
Amyloid disease	
Relimb	14
Vascular	16
Complex reconstructive surgery	17
International second opinion	
MDT for complex patients	18

About the Royal Free London NHS Foundation Trust Private Care



Located in the heart of beautiful Hampstead, the Royal Free London Private Patients Unit (PPU) combines all the convenience, comfort and personalised attention of a private hospital with the very best state-of-the-art services, technology and professional excellence you would expect from a top London teaching hospital. We are proud to bring the very best skills and standards of the NHS to the benefit of our private patients and, in doing so, support the continued development of the NHS Royal Free London through our success.

The Royal Free London NHS Foundation is one of the largest care organisations in the United Kingdom, providing healthcare to more than 2 million patients each year through its main hospitals: The Royal Free Hospital, Barnet Hospital, Chase Farm Hospital, and Hadley Wood Hospital. In addition to a network of clinics available at Trust hospitals and other community locations.

We have been at the forefront of research and treatment since 1828 and continue to lead the way in improving healthcare in the 21st century, from targeted cancer and immunology therapies to new surgeries. In addition to providing an exceptional and expanded range of services to patients, we are a major campus of University College London Medical School (UCL is ranked as one of the top universities in the world). Our campus conducts important medical research of international relevance. We also specialise in training doctors, nurses, midwives, and many other healthcare professionals as a founding member of the Academic Health Sciences Network (University College London Partnership - UCL Partners).

The Royal Free London Hospital Trust has consistently delivered among the highest survival rates and currently the second lowest UK hospital mortality, in addition to continuing its record of excellence in infection control.



Greetings from London, we look forward to welcoming you.

“At the Royal Free London Private Patient Unit, we pride ourselves on our ability to deliver the highest tier of healthcare, backed by the quality and governance frameworks of a world-renowned NHS teaching hospital. Being one of the largest acute hospitals in both London and in the UK, our multidisciplinary team of specialists provide an unsurpassed standard of care. Internationally, we are recognised as one of the safest places to send patients with the most complex conditions and comorbidities. What sets us apart is delivery of individualised care with integrity and cost effectiveness. I know that once you attend the Royal Free London, you will wonder why you ever considered attending anywhere else.”

Dean S Booth
Managing director of private and international care

We support the National Health Service

The Private Patients Unit is based in the NHS system and wholly owned by the Royal Free London Hospital’s Founding Trust. This makes us unique as we reinvest all profits to securing the hospital’s vital medical staff, equipment and research. In turn we are proud to bring the highest skills and standards of the NHS to the benefit of private patients in our hospital.

Treatment and services

We provide a full range of clinical services across 26 clinical specialties in various areas of medicine, surgery, diagnostics, outpatient, and ambulant care, dialysis and cancer treatments. Our wide range of surgical treatments wherever possible focuses on robotic and minimally invasive procedures. We have advanced ‘state of art’ intensive care services on site to support our specialised care.

All our consultants are primarily based at the Royal Free Hospital thus constantly and readily available throughout the course of a patient’s treatment. The patient will also be cared for by highly skilled nursing teams who have undergone training for the most complex needs.

Highest standard of private and pastoral care

We are committed to the highest standard of clinical care for our private patients who can be treated and recover in an environment and culture of comfort and personal attention together with professional excellence. Our PPU is renowned for its cultural and friendly personal service delivered by dedicated nursing, hospital care, translator and administrative staff to ensure a safe and enjoyable stay.



Hello and welcome to the Royal Free London Hospital Private Patients Unit.

“The Private Patients Unit was established at the Royal Free Hospital in 1980. The unit has a rich history of excellence in providing high quality medical care to its patients. We are also proud to have world-class consultants who are leaders in their specialties, as well as the comprehensive clinical services we offer through our dedicated hospital facilities. The Royal Free London Hospital is one of the leading centres in the world with specialised facilities, a large multidisciplinary workforce, support back-up and is a leading teaching and research hospital.”

Prof George Hamilton
Professor of Vascular Surgery
Commercial medical director for private care



To our distinguished guests.

“I trust that our brochure will win your approval and provide you with the information you need to plan. Our care at the Royal Free Hospital PPU begins the moment you contact us. The specially trained, Arabic-speaking staff will answer all your enquiries and provide you with all the necessary documents even before you come to the hospital. The team works around the clock and is committed to taking care of you from your arrival at the hospital until the end of your recovery period and your return to the homeland, with God’s help and care. Our motto is excellent pastoral care together with pioneering and distinguished medical service, and integrated administrative supervision.”

Suzan Humsi
Head of international business



International patients and embassy liaison team

List of services

Nephrology

Royal Free private nephrology is one of the largest units with a dedicated renal dialysis unit for private patients. The consultants are supported by a large multidisciplinary team of dialysis nurses, transplant nurse specialists, dieticians, clinical psychologists, renal pharmacists, and administrative staff. We also have a distinguished team of renal surgeons integral to the delivery of optimal renal care.

Renal transplant

Our renal transplant service has world-class outcomes with a leading Related Live Donor programme delivered by an experienced team of transplant and renal access surgeons.

HPB surgery

Our specialist surgeons have a wealth of expertise in disorders of the liver, pancreas, gall bladder, bile ducts, and stomach. We offer major and complex surgery, including minimally invasive laparoscopic and robotic procedures.

Liver diseases

Our hepatology department delivers cutting edge diagnostic (e.g. non-invasive testing for liver scarring - Fibroscan) and treatment services with special expertise in viral hepatitis, alcohol misuse, cirrhotic disease, fatty liver, and liver cancers supported by our team of liver surgeons. The Royal Free London has a major liver transplant programme.

Gastroenterology

We offer a range of specialist outpatient gastroenterology services including diagnosis, treatment, and prevention of gastroenterology disease with major clinical trials and laboratory research into inflammatory bowel disease. Our team of specialist interventional endoscopists and surgeons provides cutting-edge care for inflammatory and malignant bowel disease.

Neuroendocrine tumours (NET)

Our neuroendocrine tumour unit at the Royal Free Hospital has an international reputation for the management of neuroendocrine tumour patients. Since 2010 it has European Centre of Excellence status and a designated national centre for NET treatment with expertise in the novel treatment area of theranostics.

Colorectal and emergency surgery

Our private colorectal department provides a comprehensive range of colorectal services. This includes novel diagnostic procedures such as capsule endoscopy, major colorectal surgery, implementing minimally invasive keyhole surgery, and robotic surgery.

Vascular and endovascular surgery

Our specialist teams provide leading-edge care for the spectrum of vascular problems, including peripheral arterial disease and diabetic foot, aortic aneurysmal disease, complex venous occlusive disease, all vascular malformations (excluding intra-cranial), extra-cranial cerebrovascular disease and varicose veins. Advanced treatments, both endovascular or minimally invasive, and open surgical procedures are offered.

Plastic & complex microscopic surgery

Ours is one of the UK's leading and largest plastic surgery units. In addition to general and aesthetic surgery, our specialist areas are facial re-animation, ear reconstruction, complex microsurgical flap reconstruction (such as DIEP) as well as novel minimally invasive fat cell restoration of facial appearance techniques (scleroderma).

Oncology (cancer treatment)

The Royal Free London Cancer Centre delivers wide ranging integrated and advanced treatments including immunotherapy, chemotherapy, radiotherapy, and theranostics, for cancers of breast, skin, thyroid, lung, colorectal, and kidney. It has the second highest volume of cancer treatments in London. The Cancer Centre is supported by a major Cancer Research strategy.

This is a selected but not exhaustive list of our services

Rare medical conditions

The Royal Free London has renowned expertise in rare and genetic conditions, specifically amyloid hosting the National Amyloid Centre, in addition to fabry and pompe diseases with 'state of art' diagnostic facilities.

Cardiology

Cardiology at our hospital provides a comprehensive service in the inpatient and outpatient facilities for the examination and treatment of heart diseases. It has a leading Heart Attack Centre, world-class diagnostics and comprehensive interventional cardiology.

Endocrinology & bariatric medicine

We provide endocrinology services in an outpatient setting supported by a large multidisciplinary team. Our leading Endocrine Screening Unit provides specialist investigation of the entire range of endocrine disorders supported by the latest endocrinology research to offer advanced treatments. Management of bariatric patients using the latest pharmacology supported by specialist surgery is a key specialty.

Dermatology

Our dermatology services provide family counselling, care and diagnostic examination using the most modern and advanced equipment. Tele-Dermatology is a major established service. Together with plastic surgery and specialist oncology we are a centre for treatment of skin cancer including melanoma.

General medicine

Internal medicine both emergency and routine is provided by some of London's most experienced specialists, delivering expertise and standards of the NHS in a leading teaching hospital.

Ophthalmology

Our ophthalmologists diagnose and treat all eye problems including red and painful eye, double vision and squint, cataract and vitreo-retinal disease, eyelid problems, neurological eye problems and trauma.

Rheumatology

The Royal Free Hospital is a world-renowned centre of excellence for systemic sclerosis spectrum diseases and undertakes major clinical trials and laboratory research in this disease. We also offer treatment for rheumatic diseases and musculoskeletal conditions that can affect children as well as adults such as scleroderma (systemic sclerosis), sarcoidosis, lupus, vasculitis and other systemic inflammatory conditions.

Trauma & orthopaedics

We offer specialist treatment in conditions that affect the musculoskeletal system including bones, joints, muscles, tendons, and nerves in addition to trauma. Our particular expertise is in the management of these conditions in high risk and frail patients.

Robotic assisted surgery

This is laparoscopic surgery using the da Vinci® robotic technology. Robotic surgery is delivered by specialist operating teams in dedicated theatres primarily in renal cancer, HPB, colorectal, and gynaecological procedures.

Please download our
consultant directory

www.royalfreeprivatepatients.ae/consultant-directory



Renal

Our renal department serves a local population of 1.6 million people providing a comprehensive service with inpatient and outpatient facilities for investigation and treatment of patients with kidney problems.

We provide general nephrology services across several hospital sites and run the dialysis and kidney transplantation services for the North Central sector of London.

24/7 Consultant-led service

A team of 18 consultant nephrologists and 5 transplant surgeons provide round-the-clock consultant cover for inpatient services.

The Private Patients Unit has a dedicated team of Resident Medical Officers who are based on the 12th floor, who liaise with all consultants to provide comprehensive medical support to patients.

The consultants are supported by a large multidisciplinary team of dialysis nurses, transplant nurse specialists, dieticians, clinical psychologists, renal pharmacists, and administrative staff. All the nurses in the private patients unit have been recruited with a clinical background or interest in ITU/HDU or renal medicine. The renal team liaises closely with consultants in other specialties.

Renal transplantation

The Royal Free unit carries out 140 kidney transplants every year of which around 30% are from living donors. We offer laparoscopic ("keyhole") surgery for kidney donors as a routine. Our results compare favourably with the best transplant units both nationally and internationally. We are supported by a highly experienced tissue typing team based at the internationally renowned Anthony Nolan Centre and use the latest Luminex technology.

Robotic assisted surgery

This is a laparoscopic surgery using da Vinci® technology surgical assistance. Keyhole renal surgery including renal cancer (partial nephrectomy) and transplant harvesting is performed safely and minimally invasively with early patient recovery.

Kidney dialysis

The Royal Free manages dialysis services for the entire North Central sector of London serving a population of 1.6 million. We currently have 800 patients on haemodialysis. We have an active dialysis research programme and employ the latest techniques including an extensive haemodiafiltration programme.

The private dialysis facility on the 12th floor has 7 stations including an isolation facility. The unit is supervised by an experienced consultant nephrologist who also runs a Royal Free NHS dialysis unit.

Home dialysis therapies

We have 150 patients maintained on peritoneal dialysis and an expanding self-care and home haemodialysis service.



Surgeon sits at the console of the da Vinci® surgical system

Consultation service

The renal department provides an extensive inpatient consultation service with regular interaction with other specialist areas, including liver transplantation, intensive care, and rheumatology.

Vascular access for dialysis

The renal department at the Royal Free Hospital is a regional centre of excellence for vascular access surgery for haemodialysis. We run weekly, dedicated vascular access clinics for creation and surveillance of haemodialysis vascular access. Our team of experienced vascular access surgeons are supported by a specialist nurse, vascular ultrasound technicians and a highly experienced interventional radiology service.

Acute kidney injury

The Royal Free renal unit manages in excess of 200 episodes of acute kidney injury per annum. Nephrology outpatient clinics are held in a dedicated kidney and urology outpatient centre on the third floor adjacent to a renal ambulatory care area.

On the 12th floor private practice unit, acute kidney injury care is provided in a level 2 or HDU setting. An acute dialysis service for private inpatients is provided in the new private dialysis unit on the 12th floor run by senior dialysis nursing staff with round-the-clock consultant supervision.

General nephrology

We cover all areas of general nephrology plus specialist clinics for vasculitis, SLE, low clearance, renal transplantation, renal tubular disease, renovascular disease, difficult hypertension and stone clinics. Private clinics are held on the 12th floor in the Lyndhurst Private Consulting Rooms.

Summary renal service portfolio

The full range of services offered by the renal team at the Royal Free Private Patients Unit include:

Dialysis services

- Haemodialysis
- Haemodiafiltration
- Peritoneal dialysis (including laparoscopic PD catheter placement)
- Plasma exchange
- Acute Kidney Injury (AKI)
- Leading unit in the London AKI network
- HDU facilities for inpatient management of AKI
- Consultant-led private dialysis unit for provision of acute dialysis treatment

Specialist clinics

- SLE
- Vasculitis
- Renovascular disease
- Stone clinic
- Scleroderma
- Fabry's disease
- Genetic renal disease
- Renal tubular disease

Renal transplantation

- Laparoscopic ("keyhole") kidney donor surgery
- Transplantation of the medically complex recipient
- ABO incompatible transplantation
- HLA incompatible transplantation

General nephrology services

- Chronic kidney disease management
- Hypertension
- Low clearance (pre-dialysis) care

Vascular access

- AV fistulae
- AV grafts
- Complex upper and lower limb access formation
- Tunnelled central venous catheter placement
- Fistuloplasty
- SVC venoplasty

Robotic assisted surgery

- da Vinci® technology



da Vinci® technology surgical assistance

Cancer

The Royal Free London Hospital is a regional specialist Cancer Centre. We are proud to have a reputation as a leading specialist centre in the research and treatment of the following cancer types: hepatocellular (liver) cancer (HCC), cholangiocarcinoma, pancreatic cancer, neuroendocrine tumours (NET), melanoma and non-melanoma skin cancers, and renal (kidney) cancer.

The Royal Free London PPU sets itself apart from other private cancer centres because we are a large acute hospital with multidisciplinary expertise. This means patients with complex conditions and comorbidities are in the safest hands at the Royal Free Hospital because we treat our patients holistically by providing access to all our world-class subspecialties, not only cancer. Cancer treatment in frail and higher risk patients is one of our specialist areas of care.

Our hospitals are campuses of University College Medical School and conduct important medical research, much of it of international status. With over 40 years' experience pioneering research and treatments, we have been instrumental in continually improving clinical care and experience for patients across the globe. As a founding member of the Academic Health Science Network UCL Partners, we have trained world-renowned doctors, nurses, midwives and many other clinical and non-clinical professionals.

Treatments we offer

Neuroendocrine tumour unit

Royal Free Hospital PPU has an internationally recognised neuroendocrine tumour unit and European Centre of Excellence for the treatment of patients with these cancers. We work with a multidisciplinary team and aim to enhance the prospects for treatment by a combination of clinical and laboratory research.

Tertiary referral service

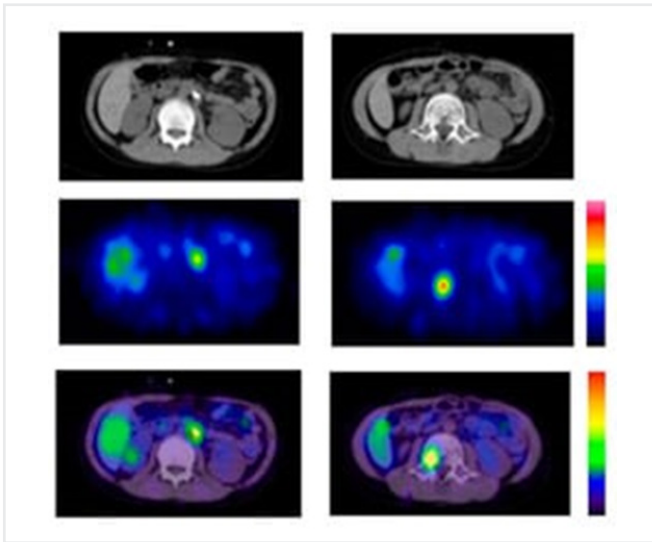
We are the leading centre in North London for tertiary referral service for liver, pancreas, renal and skin cancers including melanoma. With our surgical expertise, offering all modalities of treatment for these cancers leading to excellent outcomes.

We also provide a wide range of cutting-edge treatments for the following cancer types:

- Breast cancer (which can involve a simple visit to our one-stop breast clinic)
- Colorectal cancer
- Gastric (stomach) cancer
- Lung cancer
- Prostate cancer

Theranostics (therapy and diagnostics)

Theranostics is a combination of the terms 'therapeutics' and 'diagnostics'. Theranostics is based on the combination of using one radioactive drug to identify, diagnose and anatomically locate, and a second radioactive drug to deliver therapy to treat the main and any metastatic malignancies.

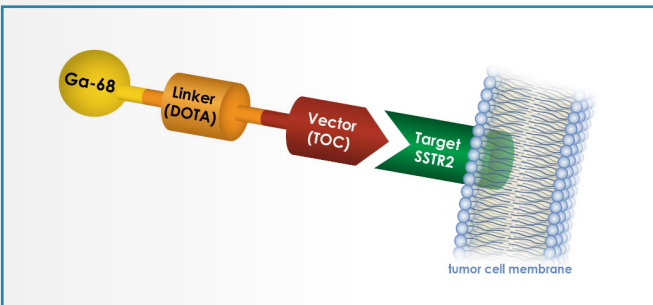


Cells around the tumours that do not have receptor proteins on their membrane are not affected. This methodology provides cancer specific cell death and is effectively 'internal' radiotherapy with limited damage to healthy surrounding tissues.

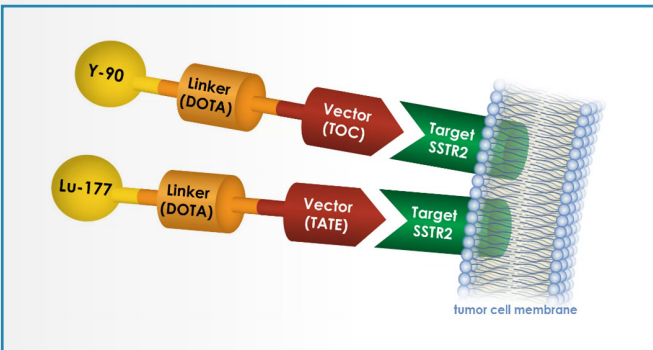
Patients treated with theranostics for rare conditions which are not responsive to other therapies report longer lifespans and significantly improved quality of life in comparison to other interventions.

Particularly exciting are the developments in prostate, breast, thyroid, neuroendocrine and renal cancers with a pipeline of new therapies to deliver selective internal radiotherapy.

The Royal Free Nuclear Medicine Service and Academy is the largest in the United Kingdom and thus at the forefront of development and delivery of theranostics with its specialists, state-of-the-art facilities and equipment.



In the instance of neuroendocrine tumours, a diagnostic radioactive molecule (Ga-68 DOTATOC) binds to the target receptor on the tumour membrane



For therapeutic treatment, Ga-68 DOTATOC is then replaced with a different, higher radiation radionuclide such as Lutetium-177 (Lu-177) DOTATATE or Yttrium-90 (Y-90) DOTATOC, thus targeting and killing tumour cells that also have the target receptor on their membranes

Our commitment to you

Each type of cancer requires a specific treatment plan, which takes into account individual circumstances and preferences. Our leading oncologists are on hand to deliver a wide range of cancer therapies. A combination of treatments is often used for the greatest effect, including:

- Chemotherapy
- Electrochemotherapy
- Immunotherapy
- Radiotherapy
- Stereotactic radiotherapy
- Surgical intervention
- Nuclear medicine treatments (the largest theranostics suite in the country)

Why the Royal Free London Private Patients Unit

Our expert clinical team

All our consultants also work for the Royal Free London NHS Foundation Trust, and many have been trained here over the many years of their career. Our private cancer services consist of a range of highly specialised consultant medical and clinical oncologists.

For expert care in cancer management, or for a second opinion, we are proud to offer access to innovative technologies and an experienced multidisciplinary team who are all dedicated to delivering the highest standards of care.

Clinical nursing team

We recognise that being diagnosed with cancer is a very difficult process to go through, and our private cancer services include a dedicated highly skilled clinical nursing team offering support from diagnosis to treatment.



Neuroendocrine tumours

Neuroendocrine tumour unit at the Royal Free Hospital

Founded in 1997, our neuroendocrine tumour (NET) unit is currently the largest globally, with approximately 2,500 patients under regular follow-ups. Our large clinical research program has international collaborations and we are the European Centre of Excellence for management of NET.

The aim is to provide optimal management for patients with neuroendocrine tumours, taking into account how the tumour affects each individual.

What do we offer?

We work within a multidisciplinary team and aim to enhance the prospects for treatment by a combination of clinical and laboratory research. The unit and oncology department conducts a number of clinical and basic science research trials relating to the treatment of and the pathogenesis of NET development.

NET multidisciplinary team (MDT) consisting of:

- 3 dedicated gastroenterologists
- 2 oncologists
- 2 endocrinologists
- 2 Hepato-Biliary-Pancreatic (HPB) surgeons
- 2 colorectal surgeons
- 1 cardiologist
- 1 lung physician
- 3 nuclear medicine physicians
- 3 radiologists
- 2 histopathologists
- 3 dedicated NET specialist nurses

As well as:

- Collaborations with Cardio-Thoracic Surgical Departments have been established, through robust treatment pathways, for NET patients who need thoracic or cardiac surgery
- Weekly dedicated NET MDT meeting
- One dedicated carcinoid heart disease MDT per month, with participation of NET physicians, cardiologists and cardiac surgeons.
- World-class care, convenience, comfort and personalised attention



Neuroendocrine Tumour Unit

Diagnostics

All diagnostics for a full staging of NET patients are offered on-site: cross-sectional imaging, Ga-68 DOTATATE PET, FDG PET, conventional and advanced (such as double-balloon small bowel enteroscopy) endoscopy techniques and endoscopic ultrasound.

Treatment options

All interventional [HPB surgery, colorectal surgery, endoscopic submucosal dissection (ESD), Trans-catheter Arterial Embolization (TAE), Radio-Frequency-Ablation (RFA), Selective Intra-arterial Radio-Embolization Therapy (SIRT)] and non-interventional [medical systemic treatments, and Peptide Receptor Radionuclide Therapy (PRRT) with Lu-177 DOTATATE ("Lutathera")] are offered on-site.

In terms of PRRT, the Royal Free NET unit, has significant experience and treated more than 600 patients, which is the largest number in UK and one of the largest numbers, internationally.

- Five dedicated NET clinics per month, reviewing 50-60 patients per clinic
- "Shared follow-up and treatment protocols" with the referring physicians are offered for patients who do not live in London. Opportunity for the referring physician to participate online at the NET MDT meeting
- International experts in the field of neuroendocrine tumour (NET)
- Members of our NET MDT are considered as international experts in the field and have had senior positions at European NET Society

Rare diseases services

The Royal Free Hospital is a centre for rare medical conditions led and staffed by specialist medical and clinical teams who are active in medical research. Supported by leading edge diagnostic and therapeutic modalities successful management of a range of rare conditions is provided.

Amyloid disease

The National Amyloidosis Centre at the Royal Free Hospital has been at the cutting edge of treatment and research into all aspects of amyloidosis for more than 25 years. Its highly specialised service has been providing diagnoses and care to amyloidosis patients locally, throughout the UK and internationally since 1999.

Amyloidosis is a rare disease caused by the abnormal deposition and accumulation of protein in the tissues of the body.

Amyloid deposits are primarily made up of protein fibres known as amyloid fibrils. These amyloid fibrils are formed when normally soluble body proteins clump together, and then remain in the tissues instead of safely going away. About 30 different proteins are known to form amyloid deposits in humans.

Amyloid deposits cause disease by gradually accumulating within organs and thereby disrupting tissue structure and damaging their function. In some cases, previously healthy organs can be substantially replaced by extensive amyloid deposits.

Organs that may be affected by amyloidosis include:

- | | |
|--------------------|---|
| – kidneys | – bones and joints, especially the wrists |
| – heart | – blood vessels and clotting system |
| – liver and spleen | – skin |
| – nervous system | – eyes |
| – gut and tongue | |

There are many different types of amyloidosis. Each type has different causes, different symptoms and different treatments. The Centre and its laboratories are led by Prof Julian Gillmore, Prof Helen Lachman and Dr Carol Whelan.

Lysosomal storage disorders (LSDs)

These are a group of rare inherited metabolic diseases characterised by malfunctioning lysosomes, which are cellular structures responsible for breaking down various substances in the body. This leads to the build-up of undigested materials, causing cellular dysfunction, and has detrimental effects on the body's organs.

Our unit provides support for LSDs including **gaucher disease, pompe disease, fabry disease, mucopolysaccharidoses**, and others. We provide clinics for diagnoses, assessments, and evaluation for a full range of therapies.

Treatments include enzyme replacement therapy, oral pharmacological chaperone therapy, and substrate reduction therapy, as well as new therapies currently in development. The LSD team are deeply committed to ensuring the wellbeing and quality of life for people living with LSDs and their families.

Through clinical expertise, compassionate approaches and multidisciplinary collaboration, the team provide exceptional care and support to patients while advocating for increased awareness, early detection, and improved access to therapies.

The LSD team has made important contributions to the understanding of these rare genetic conditions. They have led clinical trials and translational research exploring the potential of enzyme replacement therapies, substrate reduction therapies, pharmacological chaperone therapies and gene therapies to alleviate the burden of these devastating conditions. The team is led by Prof Derralynn Hughes.

Expert in the field of lysosomal storage disorders

Prof Derralynn Hughes is professor of experimental haematology at the University College London, clinical director of research and innovation at the Royal Free London, and co-clinical director of the North Central London cancer alliance. She has clinical responsibilities in the area of haematology and lysosomal storage disorders and clinical director of Research and Development.

She directs the research programme in the LSD unit where interests include understanding the pathophysiology of phenotypic heterogeneity in fabry disease and bone-related pathology in gaucher disease and malignancy.

Relimb at the Royal Free Hospital

Relimb

Relimb™ was founded in 2018 by two plastic surgeons, Mr Norbert Kang and Mr Alex Woollard. They recognised the need for a one-stop, private, reconstructive service to manage a broad range of complex injuries, combining specialist plastic surgery procedures with techniques such as osseointegration and targeted muscle reinnervation. Mr Kang has been working in the field of osseointegration since 2005 and Mr Woollard has a PhD in nerve regeneration from Harvard and UCL. The service is based at the Royal Free Hospital, London and is part of the Private Patients Unit.

What we offer? Multidisciplinary team (MDT) – a holistic approach

Relimb is the first surgical service in the UK to provide Osseointegration surgery routinely, after major limb amputation. From its inception, Relimb has recognised the critical importance of a holistic approach to the treatment of amputees using osseointegration and this was endorsed by ISPO in 2023. Therefore, Relimb is proud to work with case managers, solicitors, prosthetists, orthotists, physiotherapists, rehabilitation physicians, psychologists, orthopaedic surgeons, engineers and scientists in the UK and overseas, who all contribute equally to our shared aims.



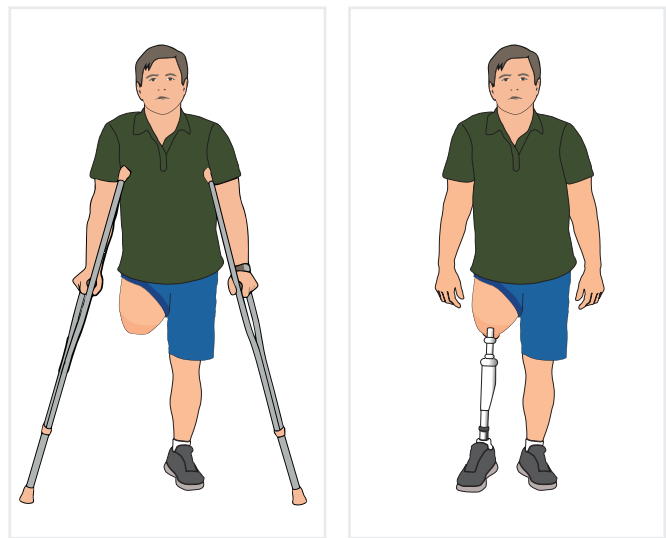
Main services

The most common request received by the Relimb service is to help an amputee regain as much of their previous quality of life as possible. However, Relimb also performs a wide range of reconstructive procedures to help restore the function and appearance of any anatomical site, providing our patients with a complete reconstructive service without having to consult multiple specialists. For amputees, Relimb commonly uses osseointegration and nerve surgery to address two key problems: **Limited mobility** and **Nerve-related pain**.

Limited mobility

Osseointegration involves inserting a titanium metal implant into the bone, allowing a prosthetic limb to be connected directly to the residual skeleton. Using an osseointegrated bone-anchor removes the need for a socket and eliminates many of the problems associated with using sockets including; chafing, pain, skin ulcers and infections, instability and sweating. Because the prosthetic limb is now attached directly to the bone, patients feel that the prosthesis is a part of their body. In many cases, their walking gait returns to nearly normal, and patients are able to return to many (but not all) of the activities that they used to enjoy before the amputation, especially walking.

The Relimb service also uses osseointegrated implants to secure prosthetics after loss of an eye, nose or ear (including bone-anchored hearing aids).



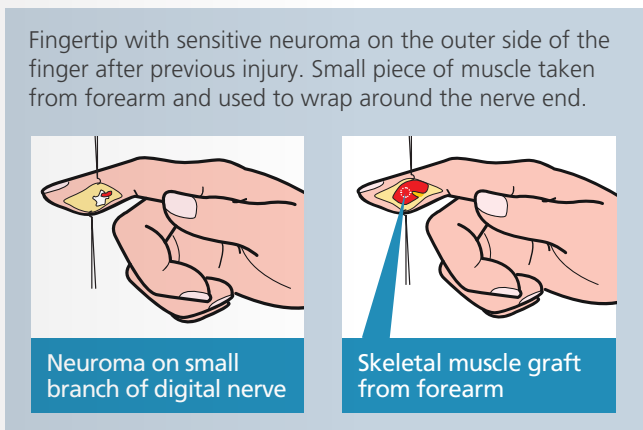
Nerve-related pain

Targeted Muscle Reinnervation (TMR)

TMR is a surgical treatment for neuroma pain (NP) and phantom limb pain (PLP). TMR offers patients who suffer from NP and PLP the possibility of predictable, reproducible and durable improvements in their overall levels of pain. Surgery involves excision of any neuromas followed by reattachment of the nerve stumps to the motor nerves of any redundant muscles in the stump. The new nerve connection made with the target muscles tricks the central nervous system into thinking that the absent limb is now present. This helps to reduce the sensitivity of the nerve endings. Patients often report immediate relief from their NP after their TMR surgery, but it can take several months before relief from PLP becomes evident.

Regenerative Peripheral Nerve Interface (RPNI)

RPNI is like a mini-TMR, but uses pieces of skeletal muscle as a free graft. The neuroma is excised, and the muscle grafts are wrapped around the free end of the nerve. The nerve ends grow into, and make connections with, the muscle preventing the neuroma from re-forming.



List of services

- Amputee reconstruction – including stump refashioning and scar revision
- Osseointegration (upper and lower limb)
- Osseointegration (after craniofacial injury or loss) for fixation of a prosthetic eye/nose/ear
- Surgical treatment of neuroma and phantom limb pain
- Targeted Muscle Reinnervation (TMR)
- Regenerative Peripheral Nerve Interface (RPNI)
- Complex surgical reconstruction (bone, soft tissue and nerve) of the upper and lower limbs
- Soft tissue reconstruction (any – including external genitalia, breast, abdominal wall, perineum)
- Management of complex hand problems (e.g. after combined injury to bone, tendon, nerve, soft tissue)
- Surgical treatment after brachial plexus injury
- Surgical treatment after facial nerve injury
- Scar management – all types
- Clinical psychology support included

Our commitment to you

We accept referrals from any professional including, case managers, solicitors, physiotherapists, orthotists, surgeons, rehabilitation specialists, general practitioners and many others. After receipt of a referral, you will be invited to attend one of our Relimb™ multidisciplinary (MDT) clinics. In the clinic, you will be able to meet the Relimb™ team, including our rehabilitation partners (Dorset Orthopaedic), our psychologist and our anaesthetist. In the clinic, we also obtain special investigations (X-rays, CT-scans, DEXA scans) to gain additional information about your condition.

We encourage you to bring the person who referred you so they can share their unique perspectives on your particular needs. After due consideration of your case, combined with the results of the special investigations, we will provide you with a recommendation for any surgical treatment.



Vascular

Our specialists and their teams are trained to provide a high standard of care for a variety of vascular problems, including:

Diabetic leg and foot

We have a multidisciplinary diabetic limb service with vascular surgery and interventional radiology, podiatry, infectious disease and diabetology. This is a highly successful service delivering urgent care with impressive success rates in treating sepsis, wound healing and limb preservation – our major and minor amputation rates are in the lowest quintiles.

Vascular malformations

The Royal Free Hospital has the largest vascular malformation clinic in the UK and one of the most experienced international centres. Multidisciplinary management with vascular surgeons, interventional radiologists, plastic surgeons, orthopaedic surgeons, geneticists and haematologists is key to our successful outcomes.

Peripheral arterial disease (PAD)

Advanced revascularisation techniques primarily minimally invasive or endovascular are routinely used with high limb salvage rates.

Abdominal and thoracic aortic aneurysm (AAA & TAA)

The majority of aneurysms are treated by minimally invasive endovascular techniques – EVAR, FEVAR and TEVAR.

Varicose veins

Varicose veins are treated by a range of methods including endothermal ablation, sclerotherapy and surgery.

Cerebrovascular disease

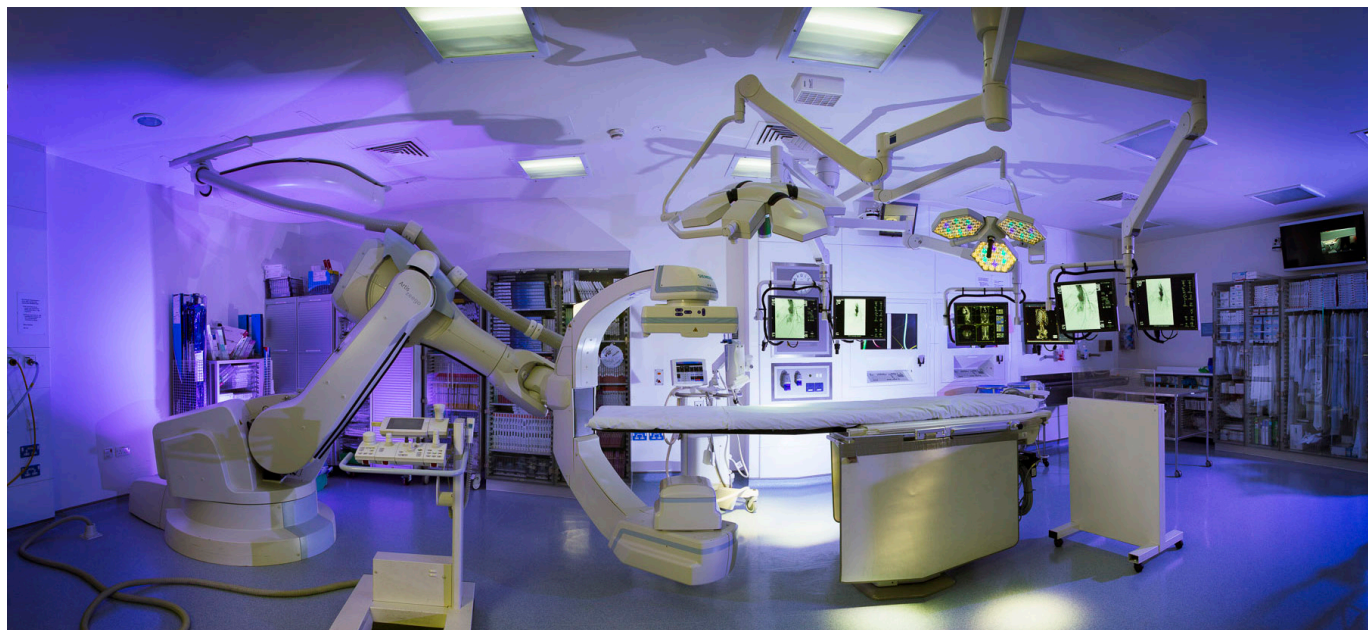
Carotid endarterectomy and stenting are the interventions used in addition to the best medical therapy and in conjunction with multidisciplinary neurovascular care in stroke prevention.

Complex venous disease

The full range of complex venous disease (venous insufficiency, IVC, Iliac, femoral venous occlusion, post-thrombotic syndrome, nutcracker syndromes) are treated by highly experienced vascular specialists.

Deep vein thrombosis (DVT)

DVT and pulmonary embolism are treated in conjunction with a renowned coagulation disorder clinic (Royal Free Hospital Haemophilia Department) using anti-coagulation, thrombolysis and clot dispersal techniques.



Complex reconstructive surgery

The Royal Free London is a major plastic surgical centre with a large group of surgeons experienced in reconstructive, cancer and aesthetic surgery. Each has special areas of expertise, for example in ear reconstruction. As an example of our range of plastic surgical expertise one specialist group and surgeon is highlighted in this section.

London Microsurgery Group at the Royal Free Hospital

London Microsurgery Group was founded in 2021 at the Royal Free Hospital, United Kingdom by internationally renowned Microvascular surgeon Dariush Nikkhah to meet the needs of patients requiring complex reconstructions including:

- Extremity (hand and lower limb)
- Facial reconstruction
- Microsurgical nasal reconstruction after trauma and cancer
- Toe-to-hand transfer
- Microsurgical breast reconstruction (DIEP flap, TUG flap)
- Paediatric congenital hand surgery
- Chest wall reconstruction

What do we offer?

London Microsurgery Group offers complex microsurgical reconstruction after trauma, cancer and congenital birth differences.

The Royal Free Hospital Plastic Surgery department has a long history of free tissue transplantation. In 2022 alone, Mr Nikkhah performed 46 free tissue transplants.

We provide multidisciplinary care to all our patients:

- Consultant plastic surgeons specialising in microvascular surgery (fellowship trained)
- Consultant anaesthetists that specialise in regional anaesthesia and tissue transplantation
- Specialist nurses for 1-to-1 care in microsurgical cases
- Hand therapists
- Psychologists
- Rehabilitation team
- Dedicated secretarial team

Why London Microsurgery Group

- 0% Transplant Failure rate in 2022
- Super-microsurgical experience with vessels smaller than 0.8 mm
- Experts in failed breast, hand, lower limb and facial reconstruction
- State-of-the-art flap monitoring with Venous Flow Couplers
- State-of-the-art imaging systems for flap assessment using Indocyanine Green

Expert in the field of reconstructive surgery

Mr Dariush Nikkhah is a consultant plastic and reconstructive surgeon who trained on the Pan-Thames rotation in London with a specialist interest in cosmetic surgery, hand surgery and reconstructive microsurgery. He is one of the few plastic surgeons to hold dual fellowships in reconstructive microsurgery and hand surgery.

He completed a prestigious hand fellowship at Queen Victoria Hospital in both adult and paediatric hand surgery and an international fellowship in reconstructive microsurgery at the Royal Perth Hospital in Western Australia.

Mr Nikkhah is currently a substantive consultant plastic surgeon at the Royal Free London NHS Trust, focusing on reconstructive microsurgery, breast surgery, chest wall reconstruction and hand surgery. He leads the chest wall service at Harefield Heart Hospital and has an honorary contract at Queens Square Hospital for neurosurgery and neurology. He has NHS outpatient clinics at the Royal Free Hospital. Mr Nikkhah is also an Honorary Associate Professor at UCL and mentors both BSc and MSc students.

Mr Nikkhah has contributed a great deal to the plastic surgery literature with over 130 peer reviewed publications and 2 books in plastic and reconstructive surgery. He is also a reviewer for the Journal of Hand Surgery and the Journal of Plastic, Reconstructive & Aesthetic Surgery and on the editorial board of the prestigious Microsurgery Journal.

He also authored the book Core Techniques in Flap Reconstructive Microsurgery.

Microsurgical breast reconstruction

Mr Nikkhah is a leading surgeon in microsurgical breast reconstruction. His team use up-to-date techniques to minimise complications and reduce operative time with dual-consultant led operations.

International second opinion MDT for complex patients

The Royal Free is internationally famous for its specialist services and has a long-established reputation as a national and international referral centre. Sometimes patients or their doctors would simply like some advice or have a very specific question that needs the knowledge of an international specialist in that condition. That is why we have created a new service, our international second opinion MDT (multidisciplinary team) for complex patients. We are initially starting this for patients with complex kidney diseases, but we will extend this to other specialist areas in which we have expertise.

How can we help patients and families with complex kidney disease?

We have wide-ranging experience of many complex kidney conditions, such as complex renal transplantation, peritoneal dialysis and management of rare diseases. Because of our unique position as a national and international leader in this area, we are able to link into clinical expertise and multidisciplinary team meetings, which can sometimes be outside the Royal Free, on your behalf. This means that we can create a clinical plan for almost any complex kidney patient.

For example, there are many families with unexplained kidney disease, and we may be able to help obtain a diagnosis. In that case we can not only treat the patient, but sometimes also find a diagnosis that could help their whole family. This can help identify new cases, and prevent worsening kidney function. We can advise where patients may be suitable for international research studies if appropriate. Rare kidney diseases are actually quite common, with 1 in 17 people having some sort of rare disease, and it usually takes at least four years and often much longer to achieve an accurate diagnosis.

How will the international remote service work?

1. First, we will obtain referral and clinical information via secure email
2. We will accept or reject the case depending on clinical suitability for a remote approach (if we can't accept, we will explain why)
3. We will take the time needed to review submitted casenotes and images
4. We will present and discuss the case at the Royal Free Hospital or an external clinical multidisciplinary team meeting
5. We will prepare a bespoke report
6. Finally, we can arrange a 1-to-1 discussion of the final report with the referring clinician via video link

How will we ensure quality and safety of the international remote service?

- Not all patients will be suitable for virtual review and discussion. If this is the case we will explain why and suggest suitable options.
- We will follow the NHS principles of honesty and probity at all times.
- We use our national and international networks and expertise to provide your patients with world-class clinical advice.





**For more information, please contact our
International patients and embassy liaison office**

T: +44 (0)7930 801 032

E: rf-tr.ppuinternationalreferrals@nhs.net

W: royalfreeprivatepatients.ae

A: Royal Free London, Private Patients Unit,
Pond Street, London NW3 2QG
United Kingdom

Positively **welcoming**

Actively **respectful**

Clearly **communicating**

Visibly **reassuring**