NHS Devon

# NICE Update Bulletin: May 2023

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# Technology Appraisals (TAs)

## Mosunetuzumab for treating relapsed or refractory follicular lymphoma TA892

### Recommendations

Mosunetuzumab is **not recommended**, within its marketing authorisation, for treating relapsed or refractory follicular lymphoma in adults who have had 2 or more systemic therapies.

This recommendation is not intended to affect treatment with mosunetuzumab that was started in the NHS before this guidance was published. People having treatment outside this recommendation may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

### The Technology

Lymphomas are cancers of the lymphatic system, which is part of the immune system and are divided into Hodgkin and non-Hodgkin lymphomas. Non-Hodgkin lymphomas are a diverse group of conditions which can affect either of the 2 main types of lymphocytes, T lymphocytes or B lymphocytes. Non-Hodgkin lymphomas can be low grade, or indolent, meaning they are slow growing, or high-grade, meaning they grow faster and more aggressively.

Follicular lymphoma is a type of indolent, low-grade lymphoma which affects Blymphocytes. People with this condition typically present with painless lumps (enlarged lymph nodes) in the neck, armpit or groin although there may be additional symptoms such as night sweats and recurrent fevers in some people.

Follicular lymphomas are commonly staged from I (best prognosis) to IV (worse prognosis) and the staging depends on how many groups of lymph nodes are affected, where they are in the body, the size of the areas of lymphoma and whether other organs outside of the lymphatic system such as the bone marrow or liver are affected.

Mosunetuzumab is a bispecific fully humanised monoclonal antibody that has 2 distinct “Fab” regions, meaning that the antibody can bind 2 distinct targets. One of these regions is specific for CD20, which is expressed in the majority of B-cell malignancies, and the other is specific for CD3 which is a receptor on T-lymphocytes. By binding both cells the antibody mediates activation of the recruited T-lymphocytes against the CD20 expressing B-cells, resulting in B-cell death and an anti-tumour effect.

### Financial Factors

This technology is commissioned by NHS England.

The cost-effectiveness estimates for mosunetuzumab are highly uncertain and do not represent a cost-effective use of NHS resources. Therefore, mosunetuzumab is not recommended for routine use in the NHS.

Mosunetuzumab cannot be recommended with managed access. This is because mosunetuzumab is not likely to be cost effective. Also, more data collected in the Cancer Drugs Fund would not resolve the high level of uncertainty.

## Ibrutinib with venetoclax for untreated chronic lymphocytic leukaemia TA891

### Recommendations

Ibrutinib plus venetoclax is **recommended**, within its marketing authorisation, as an option for untreated chronic lymphocytic leukaemia (CLL) in adults. This is only if the companies provide both drugs according to the commercial arrangements.

### The Technology

Chronic lymphocytic leukaemia (CLL) is the most common type of chronic leukaemia and is a type of cancer that affects the white blood cells. It tends to progress slowly over many years. CLL mostly affects people 60 years of age and over and is rare in people 40 years of age and younger.

In CLL, the material found inside some bones (bone marrow) produces too many white blood cells called lymphocytes that aren't fully developed and don't work properly. Over time this can cause a range of problems, such as an increased risk of picking up infections, persistent tiredness, swollen glands in the neck, armpits or groin, and unusual bleeding or bruising. People with CLL may live with a considerable burden of symptoms impacting on their quality of life, whether or not they have received treatment.

Treatment options for untreated CLL depend on factors such as stage of disease, performance status and co-morbidities. Most people will not have symptoms when they first receive a diagnosis and will not need any treatment, if they don’t have any symptoms.

Ibrutinib is a small-molecule inhibitor of a protein called Bruton's tyrosine kinase (BTK), which stops B-cell (lymphocyte) proliferation and promotes cell death. It is administered orally. Venetoclax is a selective blocker of B-cell lymphoma-2 (BCL-2), which is a protein that allows cells to stay alive. Venetoclax is administered orally.

### Financial Factors

This technology is commissioned by NHS England.

Clinical evidence shows that CLL takes longer to get worse and people live longer, when they have ibrutinib plus venetoclax compared with obinutuzumab plus chlorambucil. An indirect comparison with acalabrutinib, FCR, ibrutinib alone, and venetoclax plus obinutuzumab suggests that CLL takes longer to get worse when treated with ibrutinib plus venetoclax.

The cost-effectiveness estimates are within what NICE normally considers an acceptable use of NHS resources, therefore ibrutinib plus venetoclax is recommended.

NICE estimate that 36 people in Devon will be eligible for treatment.

## Difelikefalin for treating pruritus in people having haemodialysis TA890

### Recommendations

Difelikefalin is **recommended**, within its marketing authorisation, for treating moderate to severe pruritus in adults with chronic kidney disease (CKD) having in-centre haemodialysis. Difelikefalin is only recommended if the company provides it according to the commercial arrangement.

### The Technology

Pruritus, or itch, commonly affects people with chronic kidney disease. It is a chronic, unpleasant symptom that can have a strong negative impact on people's quality of life, often leading to sleeplessness and mood disorders, including depression. The itching can be localised or generalised. When localised, it often occurs in the back, face, and arm. The urge to scratch can result in skin abrasions. It is also associated with a 17% increase in mortality in people having haemodialysis.

The prevalence of moderate to severe pruritus in people having haemodialysis in the UK has been estimated to be around 50%. Applying this estimate to data from the most recent UK Renal Registry report suggests that there are about 10,000 people having haemodialysis and with moderate to severe pruritus in the UK.

Difelikefalin is a kappa opioid receptor agonist that suppresses itch and inflammation. Activation of kappa opioid receptors on immune cells results in reduced release of nerve-sensitising pro-inflammatory molecules. Difelikefalin does not cross the blood/brain barrier and does not activate central opioid receptors, thereby avoiding risks such as hallucination or opioid addiction.

### Financial Factors

This technology is commissioned by NHS England.

Evidence from clinical trials shows that difelikefalin reduces itching compared with usual treatment, despite some uncertainty about how long it works for and whether it improves people's quality of life.

The cost-effectiveness estimates for difelikefalin are within the range that NICE usually considers an acceptable use of NHS resources, therefore, it is recommended.

The company has a commercial arrangement. This makes difelikefalin available to the NHS with a discount.

## Ciltacabtagene autoleucel for treating relapsed or refractory multiple myeloma *(terminated appraisal)* TA889

NICE is **unable to make a recommendation** on ciltacabtagene autoleucel for treating relapsed or refractory multiple myeloma in adults. This is because the company withdrew its evidence submission for the appraisal. NICE will review this decision if the company decides to make a submission.

## Risankizumab for previously treated moderately to severely active Crohn's disease TA888

### Recommendations

Risankizumab is **recommended** as an option for treating moderately to severely active Crohn's disease in people 16 years and over, only if:

- the disease has not responded well enough or lost response to a previous biological treatment, or
- a previous biological treatment was not tolerated, or
- tumour necrosis factor (TNF)-alpha inhibitors are not suitable.

Risankizumab is only recommended if the company provides it according to the commercial arrangement.

If people with the condition and their clinicians consider risankizumab to be 1 of a range of suitable treatments, after discussing the advantages and disadvantages of all the options, use the least expensive. Take account of administration costs, dosage, price per dose and commercial arrangements.

These recommendations are not intended to affect treatment with risankizumab that was started in the NHS before this guidance was published. People having treatment outside these recommendations may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop. For young people, this decision should be made jointly by the clinician, the young person, and their parents or carers.

### The Technology

Crohn’s disease is a chronic inflammatory condition of the gastrointestinal tract (gut) that may affect any part of the gut from the mouth to the anus. People with Crohn’s disease have recurrent relapses, with acute exacerbations in between periods of remission or less active disease. These flares may affect any part of the gut and are defined by location, or by the pattern of the disease.

The clinical features of Crohn's disease are variable and are determined partly by the site of the disease. Common symptoms include diarrhoea, abdominal pain, extreme tiredness, fatigue, anaemia, unintended weight loss and blood and mucus in stools. Other symptoms may include fever, nausea, vomiting, arthritis, inflammation and irritation of the eyes, mouth ulcers and areas of painful, red and swollen skin.

Crohn's disease can be complicated by the development of strictures, obstructions, fistulae and perianal disease. Other complications include acute dilation, perforation and massive haemorrhage, and carcinoma of the small bowel or colon.

The condition has a debilitating impact on the daily lives and quality of life of those affected, including mental health and wellbeing, education, employment and relationships.

Crohn's disease is not medically or surgically curable. Treatment aims to reduce symptoms, promote mucosal healing and maintain or improve quality of life while minimising drug-related toxicity. Clinical management depends on disease activity, site, behaviour of disease, response to previous treatments, frequency, delivery and side-effect profiles of treatments, long term safety, as well as impact on other comorbidities and extra-intestinal manifestations, such as uveitis, skin manifestations and arthritis.

NICE recommend several options for treating Crohn's disease, including, infliximab and adalimumab (TA187), vedolizumab (TA352), ustekinumab (TA456).

NG129 recommends monotherapy with a glucocorticosteroid to induce remission in people with a first presentation or a single inflammatory exacerbation of Crohn's disease in a 12-month period. Budesonide or 5-aminosalicylates are considered for some people who decline, cannot tolerate or in whom a conventional corticosteroid is contraindicated. When 2 or more inflammatory exacerbations are experienced in a 12-month period, azathioprine, mercaptopurine and methotrexate may be considered as add-on treatments to conventional glucocorticosteroids or budesonide to induce remission of Crohn's disease.

Risankizumab is a humanised IgG1 monoclonal antibody that selectively binds with high affinity to the p19 subunit of interleukin-23, which prevents activation of the immune system which subsequently reduces inflammation. It is administered in induction by intravenous infusion followed by subcutaneous maintenance injection.

### Financial Factors

This technology is commissioned by ICBs.

NICE do not expect a significant resource impact of implementing the recommendations in this guidance. This is because the technology is a further treatment option and the overall cost of treatment will be similar.

The first 3 doses of risankizumab are administered by IV in a secondary care setting, thereafter it is administered by subcutaneous injection by people themselves in their home. Where risankizumab displaces the use of intravenous (IV) vedolizumab there will be *capacity savings* in the maintenance phase.

Where risankizumab displaces the use of ustekinumab there will be *capacity increase* in the induction period. Ustekinumab is administered for 1 dose by IV in a secondary care setting and thereafter by subcutaneous injection by people themselves in their home.

## Olaparib for previously treated BRCA mutation-positive hormone-relapsed metastatic prostate cancer TA887

**This guidance updates and replaces TA831 (published October 2022)**

### Recommendations

Olaparib is **recommended**, within its marketing authorisation, as an option for treating hormone-relapsed metastatic prostate cancer with BRCA1 or BRCA2 mutations that has progressed after a newer hormonal treatment (such as abiraterone or enzalutamide) in adults. Olaparib is only recommended if the company provides it according to the commercial arrangement.

### The Technology

Prostate cancer is a condition in which tumours develop in the prostate, a gland in the male reproductive system. The exact cause is unknown but environmental and genetic factors are associated with an increased risk of developing prostate cancer. The incidence of prostate cancer increases with age and is higher in people of black African-Caribbean family origin and people with a family history of the condition.

Genetic mutations of the BRCA2 and BRCA1 genes are associated with a greater risk of developing prostate cancer. These genes are part of a group of homologous recombination repair genes producing proteins involved in repairing damaged DNA.

NG131 recommends androgen deprivation therapy for people whose prostate cancer is sensitive to such hormonal therapy.

Hormone-relapsed prostate cancer (also known as hormone-resistant, hormonerefractory and castrate-resistant) refers to prostate cancer which has progressed on androgen deprivation therapy. Abiraterone and enzalutamide are referred to as new hormonal therapies.

Olaparib is a poly-ADP-ribose polymerase (PARP) inhibitor which inhibits PARP proteins involved in DNA repair. It is administered orally.

### Financial Factors

This technology is commissioned by NHS England.

Olaparib likely meets NICE's criteria for a life-extending treatment at the end of life. When taking this into account, the most likely cost-effectiveness estimates are within what NICE considers an acceptable use of NHS resources.

The company has a commercial arrangement. This makes olaparib available to the NHS with a discount.

## Olaparib for adjuvant treatment of BRCA mutation-positive HER2-negative high-risk early breast cancer after chemotherapy TA886

### Recommendations

Olaparib (alone or with endocrine therapy) is **recommended**, within its marketing authorisation, as an option for the adjuvant treatment of HER2-negative high-risk early breast cancer that has been treated with neoadjuvant or adjuvant chemotherapy in adults with germline BRCA1 or 2 mutations. It is only recommended if the company provides it according to the commercial arrangement.

### The Technology

Breast cancer arises from the tissues of the ducts or lobules of the breast. Breast cancer is described as ‘early’ if it is restricted to the breast, or the breast and nearby lymph nodes, and has not spread to other parts of the body. Locally advanced cancer means that the cancer has spread into nearby tissue and lymph nodes around the breast, including lymph nodes around the collar bone and breastbone, but hasn’t spread to other organs. Some people have mutations in the BRCA1 and BRCA2 genes that may increase the risk of breast cancer. Cancers are described as HER2-negative when the cancer cells test negative for human epidermal growth factor receptor 2. Additionally, when cancer cells also test negative for oestrogen and progesterone receptors (hormone receptor-negative cancer) cancers are described as triple negative breast cancer.

Treatment may depend on whether the cancer cells have particular receptors (hormone receptor status or HER2 status), the extent of the disease, and previous treatments.

Adjuvant therapy is used to reduce the risk of the cancer coming back after surgery. The decision about whether to have adjuvant therapy is based on the assessment of the risk of the cancer coming back and the potential benefits and side effects of the treatment.

Olaparib is a poly-ADP-ribose polymerase (PARP) inhibitor which inhibits PARP proteins involved in DNA repair. It is administered orally.

### Financial Factors

This technology is commissioned by NHS England.

Clinical trial evidence shows that, compared with placebo, olaparib after neoadjuvant or adjuvant chemotherapy decreases the chance of the cancer returning or getting worse, and increases the length of time people live.

The cost-effectiveness estimates for olaparib are within what NICE considers to be an acceptable use of NHS resources.

The company has a commercial arrangement. This makes olaparib available to the NHS with a discount.

## Pembrolizumab plus chemotherapy with or without bevacizumab for persistent, recurrent or metastatic cervical cancer TA885

### Recommendations

Pembrolizumab plus chemotherapy with or without bevacizumab is **recommended** for use within the **Cancer Drugs Fund** as an option for treating persistent, recurrent or metastatic cervical cancer in adults whose tumours express PD-L1 with a combined positive score (CPS) of at least 1. It is recommended only if:

- pembrolizumab is stopped at 2 years of uninterrupted treatment, or earlier if disease progresses, and
- the conditions in the managed access agreement for pembrolizumab are followed.

This recommendation is not intended to affect treatment with pembrolizumab plus chemotherapy with or without bevacizumab that was started in the NHS before this guidance was published. People having treatment outside this recommendation may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

### The Technology

Cervical cancer develops when abnormal cells in the lining of the cervix grow in an uncontrolled way and eventually form a tumour. It can start from different types of cells in different parts of the cervix, which gives rise to two subtypes of cancer. The most common subtype, called squamous cell carcinoma, develops from skin-like cells present on the outer surface of the cervix. The other subtype is called adenocarcinoma and it develops from glandular cells that produce mucus inside the cervix.

Infection with human papillomavirus (HPV) is associated with the development of cervical cancer. It has been detected in 99.7% of cases. HPV types 16 and 18 are considered high risk for cervical cancer and cause about 75% of cases.

Cervical cancer is defined as recurrent when it has returned following treatment, and as persistent when it does not respond to treatment. Cervical cancer is defined as metastatic when it has spread beyond the cervix to other places in the body such as the abdomen, liver, gut, or lungs.

For people with recurrent, persistent or metastatic cervical cancer the aim of treatment is to relieve symptoms and improve quality of life. Treatment options may include chemotherapy with paclitaxel plus either cisplatin or carboplatin. NICE recommends topotecan in combination with cisplatin as an option for treating recurrent or stage 4B cervical cancer in people who have not previously received cisplatin (TA183).

Pembrolizumab is a humanised monoclonal antibody which binds to the programmed cell death-1 (PD-1) receptor and blocks its interaction with ligands PD-L1 and PD-L2, to promote an anti-tumour immune response. It is administered intravenously.

### Financial Factors

The resource impact of pembrolizumab plus chemotherapy with or without bevacizumab will be covered by the Cancer Drugs Fund budget.

More evidence on pembrolizumab plus chemotherapy with or without bevacizumab is being collected until the final results of the KEYNOTE-826 trial are available. After this, NICE will decide whether or not to recommend it for use on the NHS and update the guidance. It will be available through the Cancer Drugs Fund until then.

## Capmatinib for treating advanced non-small-cell lung cancer with MET exon 14 skipping *(terminated appraisal)* TA884

NICE is **unable to make a recommendation** on capmatinib for treating advanced non-small-cell lung cancer with MET exon 14 skipping in adults. This is because the company did not provide an evidence submission. NICE will review this decision if the company decides to make a submission.

## Tafasitamab with lenalidomide for treating relapsed or refractory diffuse large B-cell lymphoma TA883

### Recommendations

Tafasitamab with lenalidomide is **not recommended**, within its marketing authorisation, for treating relapsed or refractory diffuse large B-cell lymphoma in adults who cannot have an autologous stem cell transplant.

This recommendation is not intended to affect treatment with tafasitamab with lenalidomide that was started in the NHS before this guidance was published. People having treatment outside this recommendation may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

## The Technology

Lymphomas are cancers of the lymphatic system, which is a part of the immune system. Lymphomas are divided into Hodgkin lymphoma and non-Hodgkin lymphoma.

Non-Hodgkin lymphomas (NHL) are a diverse group of conditions which are categorised according to the cell type affected (B-cell or T-cell), as well as the clinical features and rate of progression of the disease. The most common B-cell lymphomas are follicular lymphoma which is a slow growing, low grade form of NHL and diffuse large B-cell lymphomas (DLBCL), a fast growing, high grade form of NHL.

Some follicular lymphomas transform into high grade DLBCL. The symptoms differ depending on which organ or tissues are affected by the lymphoma.

NHL often presents as painless lumps (enlarged lymph nodes) in the neck, armpit or groin but sometimes may start in other parts of the body such as the stomach or bowel. People may also have loss of appetite, tiredness or night sweats.

The most widely used first-line treatment for DLBCL is R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine and prednisolone). Sometimes etoposide is added to this regimen. NICE guideline NG52 recommends salvage therapy, a multi-agent chemotherapy with or without rituximab, for relapsed or refractory disease in patients who are fit and eligible for subsequent stem cell transplant. Chemotherapy regimens commonly used in clinical practice include DHAP (dexamethasone, cytarabine, cisplatin), GDP (gemcitabine, dexamethasone, cisplatin), ICE (ifosfamide, carboplatin, etoposide) and IVE (ifosfamide, etoposide, epirubicin).

Tafasitamab is an investigational humanised Fc-engineered monoclonal antibody directed against CD19 antigen, a protein which is found on the surface of B-cells. It is administered by intravenous infusion. Lenalidomide is an immunomodulator and a structural analogue of thalidomide. It has anti-neoplastic, anti-angiogenic and proerythropoeitic properties. It is administered orally.

## Financial Factors

This technology is commissioned by NHS England.

Tafasitamab plus lenalidomide meets NICE's criteria to be considered a life-extending treatment at the end of life. This is because people on standard treatment (polatuzumab vedotin plus rituximab and bendamustine) for relapsed or refractory diffuse large B-cell lymphoma are likely to live on average less than 2 years. All of the cost-effectiveness estimates for tafasitamab plus

lenalidomide are above the range that NICE normally considers to be an acceptable use of NHS resources for end-of-life treatments. Therefore, it cannot be recommended for routine use in the NHS.

Because the cost-effectiveness estimates are high and uncertain, and further evidence is unlikely to resolve this uncertainty, it also cannot be recommended for use in the Cancer Drugs Fund.

The company has a commercial arrangement for tafasitamab, which would have applied if the technology had been recommended.

## Voclosporin with mycophenolate mofetil for treating lupus nephritis TA882

### Recommendations

Voclosporin with mycophenolate mofetil is **recommended**, within its marketing authorisation, as an option for treating active class 3 to 5 (including mixed class 3 and 5, and 4 and 5) lupus nephritis in adults. It is only recommended if the company provides voclosporin according to the commercial arrangement.

### The Technology

Systemic lupus erythematosus (SLE) is a chronic autoimmune condition that causes inflammation in the body's tissues. The manifestations of SLE vary greatly between people and can affect the whole body including the skin, joints, internal organs and serous membranes.

In some people with SLE, the body’s immune system targets kidney cells, particularly the filtering units called glomeruli, resulting in inflammation. This complication is called lupus nephritis. Lupus nephritis is divided into classes (I to VI), based on glomerular pathology, following a kidney biopsy.

Common signs and symptoms of lupus nephritis include blood or foam in urine, swelling in extremities and high blood pressure. Untreated lupus nephritis can permanently damage kidney structures.

People with lupus nephritis are at increased risk of developing end-stage renal disease, which will need dialysis or kidney transplantation. Lupus nephritis has an increased mortality risk compared with SLE without lupus nephritis.

There is no cure for lupus nephritis. The aim of current treatments for lupus nephritis is to preserve renal function, prevent disease flares, improve quality of life, and improve survival.

Voclosporin is a calcineurin-inhibitor immunosuppressant that suppresses lymphocyte proliferation, T-cell cytokine production, and expression of T-cell activation surface antigens. In addition, voclosporin is associated with the stabilisation of the renal podocyte actin cytoskeleton. Voclosporin is administered orally.

### Financial Factors

This technology is commissioned by NHS England.

Clinical trial evidence suggests voclosporin with mycophenolate mofetil is more effective at stopping lupus nephritis from getting worse than mycophenolate mofetil alone. Indirect comparisons suggest voclosporin with mycophenolate mofetil is more effective than other immunosuppressant options.

The most likely cost-effectiveness estimates are within what NICE considers an acceptable use of NHS resources, therefore, voclosporin with mycophenolate mofetil is recommended.

NICE estimate that 283 people in Devon will be eligible for treatment.

The company has a commercial arrangement. This makes voclosporin available to the NHS with a discount.

## Ripretinib for treating advanced gastrointestinal stromal tumour after 3 or more treatments TA881

### Recommendations

Ripretinib is **not recommended**, within its marketing authorisation, for treating advanced gastrointestinal stromal tumour (GIST) in adults after 3 or more kinase inhibitors, including imatinib.

This recommendation is not intended to affect treatment with ripretinib that was started in the NHS before this guidance was published. People having treatment outside this recommendation may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

### The Technology

Gastrointestinal stromal tumours (GIST) are a rare type of soft tissue sarcoma which develops in the digestive tract (most frequently in the stomach and small intestine but can arise anywhere along the gastrointestinal tract).

GIST are aggressive tumours and in advanced GIST the tumours will have begun to spread to other parts of the body (such as the liver or peritoneum). In over 85% of cases, the cancer cells associated with GIST are found with an activating mutation in either the tyrosine-protein kinase KIT, CD117 (KIT) or platelet derived growth factor receptor alpha (PDGFRA) gene. Although GIST can occur at any age, the median age at diagnosis is around 60 to 65 years.

The first treatment method used for GIST is surgery to remove the tumour. However, drugs known as growth (kinase) inhibitors can be used to treat tumours that are too large to be removed safely, or those that have already spread to other parts of the body. There are several pharmacological options for advanced GIST.

There are currently no lines of pharmacological therapy recommended specifically for the treatment of patients with GIST whose disease has progressed after treatment with third-line therapy.

Ripretinib is a switch-control tyrosine kinase inhibitor (TKI). It works by blocking the KIT and PDGFRA enzymes, slowing down the growth of the cancer cells and tumours. It is administered orally.

### Financial Factors

This technology is commissioned by NHS England.

Ripretinib meets NICE's criteria to be considered a life-extending treatment at the end of life. But the economic model does not reflect clinical practice about when to change treatment when advanced GIST gets worse. This means it is not in line with how ripretinib would be used in the NHS. It is not possible to determine if ripretinib is cost effective with the available analyses, therefore it is not recommended.

The company has a commercial arrangement, which would have applied if ripretinib had been recommended.

## Highly Specialised Technology Guidance (HSTs)

None published this month.

## NICE Guidelines (NGs)

### Head injury: assessment and early management NG232

This guideline covers assessment and early management of head injury in babies, children, young people and adults. It aims to ensure that people have the right care for the severity of their head injury, including direct referral to specialist care if needed.

**Acne vulgaris: management NG198 (UPDATE)**

This guideline covers management of acne vulgaris in primary and specialist care. It includes advice on topical and oral treatments (including antibiotics and retinoids), treatment using physical modalities, and the impact of acne vulgaris on mental health and wellbeing.

**May 2023: NICE clarified the recommendations on oral isotretinoin treatment in line with the 2020 MHRA reminder of important risks and precautions and the 2023 MHRA advice on new safety measures to be introduced in the coming months following the April 2023 report of the Commission on Human Medicines Isotretinoin Expert Working Group.**

**Diabetes (type 1 and type 2) in children and young people: diagnosis and management (UPDATE) NG18**

This guideline covers the diagnosis and management of type 1 and type 2 diabetes in children and young people aged under 18. The guideline recommends how to support children and young people and their families and carers to maintain tight control of blood glucose to reduce the long-term risks associated with diabetes.

**May 2023: NICE reviewed the evidence and made new recommendations on blood glucose monitoring and management for children and young people with type 2 diabetes.**

**Cardiovascular disease: risk assessment and reduction, including lipid modification CG181 (UPDATE)**

This guideline covers the assessment and care of adults who are at risk of or who have cardiovascular disease (CVD), such as heart disease and stroke. It aims to help healthcare professionals identify people who are at risk of cardiovascular problems including people with type 1 or type 2 diabetes, or chronic kidney disease. It describes the lifestyle changes people can make and how statins can be used to reduce their risk.

**May 2023: NICE reviewed the evidence and made new/updated recommendations on risk assessment tools for primary prevention of CVD, cardioprotective diets, and statin treatment for primary and secondary prevention of CVD.**

## NICE Rapid COVID-19 Guidelines

None published this month.

## Public Health Guidelines

None published this month.

## Antimicrobial Prescribing Guidelines

None published this month.

## Social Care Guidelines

None published this month.

## Interventional Procedures Guidance (IPGs)

**Intramuscular diaphragm stimulation for ventilator-dependent chronic respiratory failure from high spinal cord injuries IPG762**

**This guidance updates and replaces IPG594.**

### Recommendations

Intramuscular diaphragm stimulation for ventilator-dependent chronic respiratory failure from high spinal cord injuries should only be used with **special arrangements** for clinical governance, consent, and audit or research.

Clinicians wanting to do intramuscular diaphragm stimulation for ventilator-dependent chronic respiratory failure from high spinal cord injuries should:

- Inform the clinical governance leads in their healthcare organisation.
- Ensure that people (and their families and carers as appropriate) understand the procedure's safety and efficacy, and any uncertainties about these.
- Take account of NICE's advice on shared decision making and NICE's information for the public.
- Audit and review clinical outcomes of everyone having the procedure. The main efficacy and safety outcomes identified in this guidance can be entered into NICE's interventional procedure outcomes audit tool (for use at local discretion).
- Discuss the outcomes of the procedure during their annual appraisal to reflect, learn and improve.

Healthcare organisations should:

- Ensure systems are in place that support clinicians to collect and report data on outcomes and safety for everyone having this procedure.
- Regularly review data on outcomes and safety for this procedure.

Patient selection should be done by a multidisciplinary team with experience in managing high spinal cord injury and in managing home ventilation.

The procedure should only be done by surgeons with experience and training in this procedure.

Report any problems with a medical device using the Medicines and Healthcare products Regulatory Agency's Yellow Card Scheme.

Further research should be randomised controlled trials or observational data from registries or other sources of real-world evidence.

### The Condition

High spinal cord injuries can damage the nerves that control breathing and cause chronic respiratory failure.

Standard care for managing chronic respiratory failure in people with high spinal cord injuries includes non-invasive forms of ventilation support (such as bi-level positive airway pressure). In advanced stages of respiratory failure, mechanical ventilation is done through a permanent tracheostomy. Phrenic nerve pacing is an alternative treatment for people who have intact phrenic nerves (the nerves that contract the diaphragm). The diaphragm is stimulated to contract by electrodes placed on the phrenic nerve in the neck or thorax.

### The Procedure

The aim of intramuscular diaphragm stimulation is to make the diaphragm contract, enabling a full or partial weaning from mechanical ventilation. This procedure needs intact phrenic nerve function. It avoids the need to access the phrenic nerve through the neck or thorax, as well as reducing the risk of phrenic nerve damage.

The procedure is done laparoscopically with general anaesthesia. Areas of the diaphragm where minimal electrical stimulation causes maximal diaphragm contraction are mapped. Two intramuscular electrodes are implanted on the abdominal surface of each hemi-diaphragm at the motor points. The electrode leads are tunnelled subcutaneously to an exit site in the chest where they are connected to an external battery-powered pulse generator. A reference electrode is also implanted and the leads tunnelled with the other electrodes. Intraoperative stimulation and voltage calibration tests are done to confirm there is adequate contraction of the diaphragm. After implantation the person follows a diaphragm conditioning programme, which involves progressive use of the system for increasing periods of time with gradual weaning from the ventilator.

## Medical Technologies Guidance (MTGs)

None published this month.

# Diagnostics Guidance (DGs)

## MRI fusion biopsy systems for diagnosing prostate cancer DG53

### Recommendations

There is **not enough evidence to recommend** routine adoption of MRI fusion biopsy systems for diagnosing prostate cancer. Centres already using MRI fusion biopsy systems to diagnose prostate cancer may continue to do so but are encouraged to collect data or do further research.

Further data collection and research is recommended to:

- assess the performance of MRI fusion biopsy systems compared with cognitive fusion biopsies to detect different grades of prostate cancer
- assess the impact of using the technology on the rate at which biopsies can be done, and on service capacity to do biopsies.

### The Tests

NG131 recommends that a multiparametric MRI test should be offered to people with suspected clinically localised prostate cancer. People with a significant lesion should be offered a multiparametric MRI-influenced prostate biopsy. Based on prostate-specific antigen test results, Gleason score determined by histological analysis of the biopsy and clinical stage based on the multiparametric MRI scan, people are assigned to risk categories. This informs treatment options (such as active surveillance, radical prostatectomy and radiotherapy).

Biopsies for suspected prostate cancer are done using previously taken MRI images and live ultrasound imaging to help the operator guide the biopsy needle (cognitive fusion). In MRI fusion biopsy systems, software overlays the MRI image onto the live ultrasound image (MRI fusion). This could mean fewer cases of prostate cancer are missed and could reduce the number of repeat biopsies.

### Financial Factors

ICBs commission services for prostate cancer.

The cost-effectiveness estimates depend on how well MRI fusion biopsy systems detect higher-grade cancers compared with cognitive fusion. The estimates suggest that MRI fusion biopsy systems could be cost effective compared with cognitive fusion, but because the clinical evidence is uncertain, the cost-effectiveness estimates are very uncertain.

MRI fusion biopsy systems show promise for better detection of prostate cancer and could help to standardise biopsy quality across the NHS, but more evidence is needed.

## Automated ankle brachial pressure index measurement devices to detect peripheral arterial disease in people with leg ulcers DG52

### Recommendations

There is not enough evidence to recommend routine adoption of automated ankle brachial pressure index (ABPI) measurement devices to detect peripheral arterial disease in people with leg ulcers. They should only be used in the **context of research** for these people.

Centres already using automated ABPI measurement devices to detect peripheral arterial disease in people with leg ulcers can continue to use them, only if:

- they collect data or do research to assess their value and how well they identify people with peripheral arterial disease (see the section on further research)
- people using the devices have experience assessing peripheral arterial disease
- people using the devices are aware of their limitations, particularly diagnostic accuracy and the risk of missing peripheral arterial disease, and that there are differences between devices
- further assessment using other methods, including manual doppler, is available.

Further research is recommended on automated ABPI measurement to:

- assess their ability to detect peripheral arterial disease in people with leg ulcers
- assess how they affect time to treatment for venous leg ulcers
- assess clinical outcomes for treatments started after ABPI assessment
- explore the most appropriate user (specialist and non-specialist in assessing peripheral arterial disease) and the most appropriate healthcare setting for their use
- explore whether different ABPI thresholds can improve their sensitivity for detecting peripheral arterial disease.

### The Tests

Leg ulcers are slow-healing wounds that usually develop on the inside of the leg, just above the ankle. Treatment involves using compression such as bandages or stockings. Strong compression therapy can disturb the arterial blood supply in the leg, so it should not be offered to people with peripheral arterial disease.

People with peripheral arterial disease may not have any symptoms, but it can lead to serious complications such as chronic limb-threatening ischaemia. In this condition, loss of blood supply to the leg causes tissue to die and there is a significant risk of losing a limb and premature death.

The National Wound Care Strategy Programme (NWCSP) recommendations for lower limb ulcers advise using the ankle brachial pressure index (ABPI) to screen for peripheral arterial disease in people with leg ulcers alongside a full clinical assessment.

People with leg ulcers may present in primary care. NWCSP guidance recommends that immediate care for ulcers should include cleaning, application of emollient and a simple low-adherent dressing. In the absence of any 'red flag symptoms' (such as infection, symptoms of sepsis, ischaemia, suspected deep vein thrombosis or skin cancer), mild graduated compression should be applied until full clinical assessment and ABPI measurement can take place.

Currently, ABPI is measured and calculated manually. The assessment takes up to 1 hour and can be uncomfortable for people with leg ulcers. Automated ABPI measurement devices may potentially be easier and faster to use than manual doppler measurement, and more comfortable for people with leg ulcers.

Automated ABPI devices include doppler-based, oscillometry-based and plethysmography-based devices. Doppler-based devices use a doppler probe and provide doppler waveform signals as an output. Oscillometry-based devices assess oscillations in the vessel wall and plethysmography-based devices assess blood volume changes. These devices either estimate blood pressure directly or use a pressure cuff to help with the measurement. Diabetes, rheumatoid arthritis, systemic vasculitis, atherosclerotic disease and advanced chronic renal failure can cause calcium build-up and hardening of the arteries, which can make ABPI measurements appear misleadingly normal.

### Financial Factors

Tissue viability and peripheral arterial disease services are commissioned by ICBs.

Economic modelling shows that automated ABPI devices are unlikely to be cost effective compared with manual doppler measurement unless they reduce the length of time before treatment starts, which is uncertain. The results of the economic model are also uncertain because there is no evidence on how results from automated ABPI measurement devices affect clinical decision making or clinical outcomes. So, automated ABPI measurement devices are only recommended in the context of research. Centres already using the devices can continue to use them if they do research and ensure safety.

# Health Technology Evaluations (HTE)

## Digitally enabled therapies for adults with anxiety disorders: early value assessment HTE9

### Recommendations

Six digitally enabled therapies **can be used** as treatment options for adults with anxiety disorders while further evidence is generated on their clinical and cost effectiveness, once they have appropriate approval.

The following technologies can only be used once they have Digital Technology Assessment Criteria (DTAC) approval and an NHS Talking Therapies for anxiety and depression digitally enabled therapies assessment from NHS England:

Beating the Blues for generalised anxiety symptoms or unspecified anxiety disorder

- iCT-PTSD for post-traumatic stress disorder (PTSD)
- iCT-SAD for social anxiety disorder
- Space from Anxiety for generalised anxiety symptoms or unspecified anxiety disorder.

The following technologies **can only be used** once they have CE or UK Conformity Assessed (UKCA) mark approval, DTAC approval and an NHS Talking Therapies for anxiety and depression digitally enabled therapies assessment:

- Perspectives for body dysmorphic disorder (BDD)
- Spring for PTSD.

Low intensity interventions should be supported by a psychological wellbeing practitioner and high intensity interventions by a high intensity therapist in NHS Talking Therapies for anxiety and depression services.

Further evidence should be generated on:

- rates of recovery
- rates of reliable recovery
- rates of reliable improvement
- rates of reliable deterioration
- rates and reasons for stopping treatment
- rates of relapse
- adverse effects and stepping up of care
- patient experience

- health-related quality of life
- resource use during and after treatment, including the average number of treatment sessions and level of guidance provided (defined by healthcare professional grade and time)
- baseline data including the demographics and symptom severity of the people using the technology and their risk classification.

The following technologies should only be used as **part of a research study** that has been approved by an ethics committee, once they have appropriate regulatory approval:

- Cerina, Iona Mind Minddistrict, Resony and Wysa for generalised anxiety disorder (GAD) or generalised anxiety symptoms
- Cerina, Minddistrict and Space from OCD for obsessive compulsive disorder (OCD)
- Minddistrict and SilverCloud programmes for health anxiety, panic disorder with or without agoraphobia, social anxiety disorder and phobias.

### The Technology

Anxiety disorders are a major contributor to mental health problems in the UK. Improving and widening services for mental health is a commitment of the NHS, given the high prevalence of these conditions and the importance of early intervention.

NHS Talking Therapies for anxiety and depression services provide evidence-based psychological therapies for anxiety and depression using a stepped care approach. This means offering the least intrusive, most effective intervention first, in line with patient needs and preferences. NHS Talking Therapies for anxiety and depression services deliver low intensity psychological interventions at step 2 of the care pathway and high intensity psychological interventions at step 3.

Digitally enabled therapies are most commonly offered as a step 2 low intensity intervention with the support of a psychological wellbeing practitioner who facilitates treatment and reviews progress. Digitally enabled therapies may also be offered as high intensity psychological interventions if they include the same therapeutic content as recommended in the following NICE guidelines; CG123, CG113, CG31, NG116, CG159.

### Financial Factors

These technologies are commissioned by ICBs.

Digitally enabled therapies are an alternative mental health treatment that can provide better access to care. Some mental health support teams will already be aware of, and using these technologies, however practice is likely to vary across different settings.

Where this approach to helping adults manage their condition is adopted, it may require additional resources to implement, which may be significant at a local level. Benefits derived from using the technologies may help mitigate additional costs.

NICE estimate that in Devon, 8,207 people will be eligible for treatment with the technologies.

**Digitally enabled therapies for adults with depression: early value assessment HTE8**

### Recommendations

Three digitally enabled therapies **can be used** as treatment options for adults with depression while further evidence is generated on their clinical and cost effectiveness. The therapies should be used with support from a trained practitioner or therapist in NHS Talking Therapies for anxiety and depression services. These technologies can be used once they have Digital Technology Assessment Criteria (DTAC) approval and an NHS Talking Therapies for anxiety and depression digitally enabled therapies assessment from NHS England. The technologies are:

- Beating the Blues
- Deprexis
- Space from Depression

Further evidence should be generated on:

- rates of recovery
- rates of reliable recovery
- rates of reliable improvement
- rates of reliable deterioration
- rates and reasons for stopping treatment
- rates of relapse
- adverse effects and stepping up of care
- patient experience
- health-related quality of life
- resource use during and after treatment, including the average number of treatment sessions and level of guidance provided (defined by healthcare professional grade and time)
- baseline data, including the demographics and symptom severity of the people using the technology, and their risk classification.

The following technologies should only be used as **part of a research study** that has been approved by an ethics committee, once they have appropriate regulatory approval:

- Iona Mind
- Minddistrict
- Wysa

## The Technology

Depressive disorders are very common and are among the leading causes of disability worldwide. In people aged 18 to 44 years, depression is the leading cause of disability and premature death.

Digitally enabled therapies are a treatment option for adults with depression. They are technologies, used online or through apps, that deliver a substantial portion of therapy through their content. They are delivered with support from a trained practitioner or therapist in NHS Talking Therapies for anxiety and depression services (formerly Improving Access to Psychological Therapies, or IAPT). The practitioner or therapist facilitates the intervention, encourages completion, recommends complementary material, and reviews progress and outcomes.

NHS Talking Therapies for anxiety and depression services provide NICE-recommended psychological therapies for depression using a stepped care approach. For adults with depression, treatment options should be discussed and the choice of treatment matched to their clinical needs and preferences. NG222 recommends several treatment options that can be used as first-line treatments for less severe and more severe depression. Guided self-help (including digitally enabled therapies) is an option for treating less severe and more severe episodes of depression. It should be considered first for most people with less severe depression because it is the least intrusive and least resource intensive treatment option. Although guided self-help is also recommended for adults with more severe depression, other treatment choices with more therapist contact should be considered first. Monitoring for treatment concordance, side effects and suicidal ideation should be done by a healthcare professional. Routine outcome monitoring and follow up should be considered.

## Financial Factors

These technologies are commissioned by ICBs.

The economic modelling on Beating the Blues, Deprexis and Space from Depression showed that they could be cost-effective options for people with less severe depression. For more severe depression, only Deprexis could be included in the model. The results showed that Deprexis and generic computerised cognitive behavioural therapy with support could be cost-effective options for people with more severe depression. But the technologies are less likely to be the most cost-effective treatment option when compared with other standard care treatment options.

NICE estimate that in Devon 10,009 people are referred to NHS talking therapies for depression and therefore eligible for treatment. NICE anticipate that there will be an equal market share between the three technologies with 333 people using each.

## Point-of-care tests for urinary tract infections to improve antimicrobial prescribing: early value assessment HTE7

### Recommendations

The following point-of-care tests are **not recommended** for early routine use for suspected urinary tract infections (UTIs) in primary or community care settings in the NHS while further evidence is generated:

- Astrego PA-100 analyser with the PA AST panel U-0501
- Uriscreen

They show promise in guiding antimicrobial prescribing and further research and completion of ongoing studies would allow the risks and benefits of early routine use in the NHS to be understood.

Further research is recommended on how:

- accurate the tests are in detecting and identifying bacteria and testing for antibiotic susceptibility (depending on the test's functions)
- the tests affect antibiotic prescribing.

The following *culture-based* point-of-care tests are **not recommended** for early routine use in NHS primary or community care settings for suspected UTIs:

- Diaslide, DipStreak and ChromoStreak
- Flexicult Human
- Uricult, Uricult trio and Uricult plus

They are not expected to give results quickly enough to improve antimicrobial prescribing in these settings.

### The Technology

Urinary tract infections (UTIs) are commonly diagnosed in primary care. They contribute to a large proportion of antibiotic use. UTIs are currently diagnosed using a combination of clinical symptoms, dipstick tests and laboratory-based culture testing.

Dipstick tests are rapid and can be done in a GP surgery. But they may not accurately diagnose UTIs, are not recommended for all and cannot identify the type of bacteria causing the infection. Laboratory-based culture tests can identify bacteria and test for antibiotic susceptibility. But they

do not detect all types of bacteria and the results can take 24 to 72 hours. Laboratory test results may sometimes take longer (up to a week) if there are delays in getting samples to the laboratory or a delay in processing.

People are often diagnosed with a UTI based on clinical symptoms alone and may be prescribed antibiotics empirically. When testing is done, people could also be prescribed antibiotics while waiting for test results. NICE's guideline on antimicrobial prescribing for lower UTIs (NG109) recommends reviewing the choice of antibiotic when microbiological results are available and changing the antibiotic according to the susceptibility results if bacteria are resistant and symptoms are not already improving. It recommends using a narrow-spectrum antibiotic if possible.

Rapid tests:

Astrego PA-100 analyser with PA AST panel U-0501 detects the presence of bacteria in a urine sample in 10 to 15 minutes. If the urine sample is positive, it assesses the susceptibility of the bacteria to 5 antibiotics (amoxicillin-clavulanic acid, ciprofloxacin, fosfomycin, nitrofurantoin, trimethoprim). Full results take 30 to 45 minutes.

Uriscreen is an enzyme-based test that detects the presence of bacterial catalase in a urine sample. Results take approximately 2 minutes.

Culture-based tests:

Diaslide, DipStreak and ChromoStreak are 3 culture-based tests that detect and identify the presence of gram-negative bacteria in a urine sample. ChromoStreak also detects the growth of common UTI-causing bacteria (E. coli, Proteus, and enterococci). Results take about 16 to 24 hours.

Flexicult Human is a culture-based test that detects and quantifies the bacteria in a urine sample, and evaluates the susceptibility to 5 antibiotics (mecillinam, nitrofurantoin, ampicillin, sulfamethizol and trimethoprim). It must be incubated overnight and takes 16 to 24 hours for results.

Uricult, Uricult trio and Uricult plus are 3 culture-based tests that detect and identify the presence of gram-negative bacteria in a urine sample. Uricult plus also detects enterococci and Uricult trio also detects gram-negative, beta-glucuronidase-producing bacteria, such as E. coli. Results take approximately 16 to 24 hours.

### Financial Factors

This technology is commissioned by ICBs.

The tests are in the early stages of development and research is still being done. Uncertainties in the current evidence mean it is difficult to assess the risks and benefits of early routine use in the NHS while further evidence is generated.

The tests vary in how quickly they give results. There is not much evidence for the more rapid point-of-care tests, including if these tests give results quickly enough to improve antibiotic prescribing. Delays to appropriate antibiotic prescribing because a GP is waiting for test results or because a test has given inaccurate results could harm patients, so it is uncertain if the tests will improve care.

Evidence suggests that culture-based point-of-care tests that take around 16 to 24 hours to give results do not give results quickly enough to improve antibiotic prescribing in primary or community care. Clinical experts agree that these tests may be less useful in these settings.

Costs were only available for some of the tests, therefore the cost to the NHS is also uncertain.

## NICE Quality Standards

### Cardiovascular risk assessment and lipid modification QS100 (UPDATE)

This quality standard covers identifying and assessing cardiovascular risk in adults (aged 18 and over) and treatment to prevent cardiovascular disease. It describes high-quality care in priority areas for improvement.

**May 2023: NICE have made changes to align this quality standard with the updated NICE guideline on cardiovascular disease: risk assessment and reduction, including lipid modification (CG181).**

### Head injury QS74 (UPDATE)

This quality standard covers assessment, early management and rehabilitation following head injury in adults, young people and children. It describes high-quality care in priority areas for improvement.

**May 2023: Changes were made to align this quality standard with the updated NICE guideline on head injury (NG232). Statement 2 on CT head scans for people taking anticoagulants has been removed because the recommendations in this area have changed.**

## Current NICE Consultations

| Title/link | End date of consultation |
|---|---|
| Intrapartum care for healthy women and babies (update) | 06/06/2023 |
| Clopidogrel genotype testing after ischaemic stroke or transient ischaemic attack | 09/06/2023 |
| Cirrhosis in over 16s: assessment and management | 12/06/2023 |
| Venous thromboembolic diseases: diagnosis, management and thrombophilia testing | 13/06/2023 |
| Vaginal natural orifice transluminal endoscopic surgery for hysterectomy and adnexal surgery | 22/06/2023 |