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to drugs up to two years before they are licensed and appraised by NICE.

Sometimes out of licence or unlicensed drugs are prescribed where the patient is part of a clinical trial and the patient has specifically consented and agreed. HCA is currently developing a clinical trials unit in London in partnership with leading UK consultants and the Sarah Cannon Research Institute from the US. Initially, the unit will focus on cancer trials, where new treatments and potential cures are continually being developed.

Patients don't have to wait for the lengthy licensing and NICE processes to receive leading-edge treatments at HCA hospitals.

Overview of drug licensing in the UK

Medicine licensing

Before a medicine can be prescribed or sold in the UK it normally has to be licensed. Such licences, which last for five years, set out the terms and conditions of use including the specific diseases and conditions each drug can be used for. Licence applications are assessed by medical, pharmaceutical and scientific staff at the MHRA (the Medicines and Healthcare products Regulatory Agency) and the process can take up to nine months.

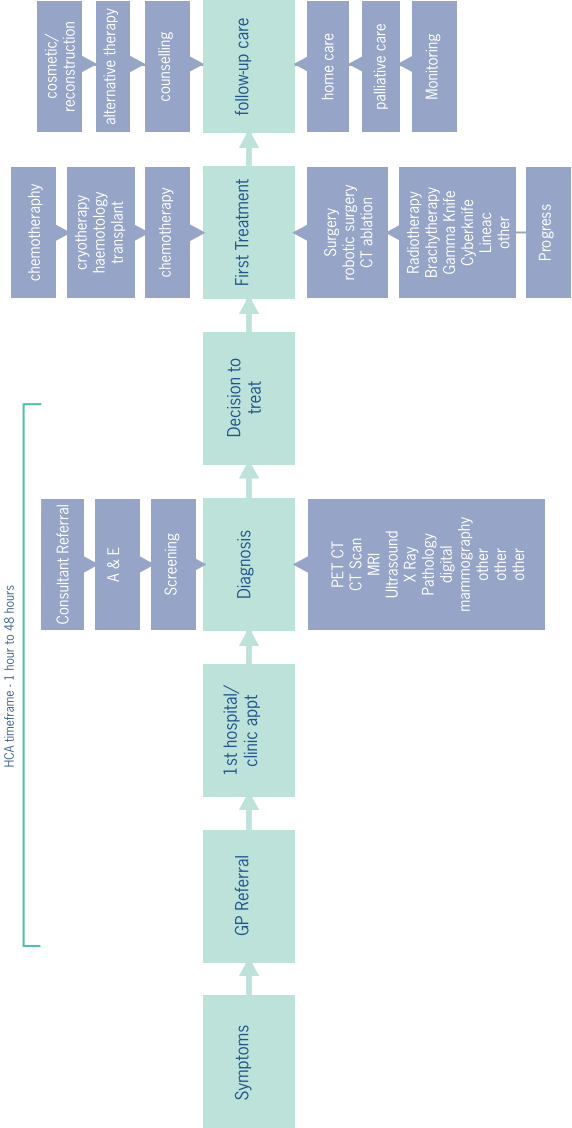
NICE approval

NICE (the National Institute for Health and Clinical Excellence) is an independent body that provides national guidance and publishes cost effectiveness appraisals on specific drugs and procedures after they have been licensed. A negative NICE appraisal is one of the reasons why certain treatments and drugs are not funded by the NHS even though they have been licensed.

Out of licence prescription

Consultant specialists may sometimes prescribe drugs to patients in their care which have either not been licensed at all, or which are licensed but not for the specific condition that the patient has. They do this where there is compelling published clinical evidence from drug trials which have been carried out either in the UK or overseas, for example in the US. Such out of licence prescriptions provide patients with access

Gold standard of cancer care



Disclaimer

Important information

The contents of these pages are to be used for information purposes only and are not intended for use by clinicians for prescription or other. Individual patient needs, such as the type and duration of treatment, are a clinical decision and will vary depending on the patient's response and tolerability to a treatment or procedure.

Changing circumstances may cause HCA to change the information and contents of the Directory at any time.

HCA has made every effort to ensure that the information and contents of the Directory of New Drugs and Procedures in Private Healthcare was correct at the time of print. It disclaims all responsibility for and accepts no liability for any consequences, as a result of persons relying on the information given.

New cancer drugs 2008

DRUG NAME	INDICATION	BRIEF DESCRIPTION	HOW IS IT GIVEN? (INP/ OUT)	LICENCED STATUS	NICE STATUS
Atriance (Nelarabine)	T-Cell lymphoblastic leukaemia & T-Cell lymphoblastic lymphoma	Antimetabolite	Intravenous infusion	Licensed	Not approved
Avastin (Bevacizumab)	Metastatic breast cancer	Monoclonal antibody	Intravenous infusion	Licensed	Not approved
Avastin (Bevacizumab)	Metastatic colorectal cancer	Monoclonal antibody	Intravenous infusion	Licensed	Not approved
DepoCyt (Liposomal Cytarabine)	Lymphomatous meningitis	Antimetabolite	Intravenous infusion	Licensed	Not yet reviewed
Eribitux (Cetuximab)	Metastatic colorectal cancer	Monoclonal antibody	Intravenous infusion	Licensed	Not approved
Eribitux (Cetuximab)	Head and neck cancer	Monoclonal antibody	Intravenous infusion	Licensed	Not approved
Glivec (Imatinib)	Chronic myeloid leukaemia	Tyrosine kinase Inhibitor	Oral	Licensed	Approved
Herceptin (Trastuzumab)	Early breast cancer	Monoclonal antibody	Intravenous infusion	Licensed	Approved
Mabthera (Rituximab)	Maintenance treatment lymphoma	Monoclonal antibody	Intravenous infusion	Licensed	Not approved
Nexavar (Sorafenib)	Hepatocellular carcinoma	Protein kinase inhibitor	Oral	Licensed	Not approved
Nexavar (Sorafenib)	Renal cell carcinoma	Protein kinase inhibitor	Oral	Licensed	Not approved
Revlimid (Lenalidomide)	Multiple myeloma	Immunomodulating agent	Oral	Licensed	Not approved
Sprycel (Dasatinib)	Chronic myeloid leukaemia	Protein kinase inhibitor	Oral	Licensed	Not approved
Sutent (Sunitinib)	Kidney cancer	Tyrosine kinase Inhibitor	Oral	Licensed	Not approved
Tarceva (Erlotinib)	Non-small cell lung cancer	Tyrosine kinase Inhibitor	Oral	Licensed	Not approved
Tarceva (Erlotinib)	Pancreatic cancer	Tyrosine kinase Inhibitor	Oral	Licensed	Not approved
Trisenox (Arsenic trioxide)	Acute promyelocytic leukaemia	Antineoplastic	Intravenous infusion	Licensed, in exceptional circumstances	Approved
Uftoral (tegafur-uracil)	Metastatic colorectal cancer	Antineoplastic	Oral	Licensed	Approved
Velcade (Bortezomib)	Multiple myeloma	Proteasome inhibitor	Intravenous injection	Licensed	Appraisal in progress
Vidaza (Azacitidine)	Myelodysplastic syndromes	Demethylation agent	Intravenous infusion	Unlicensed	Not yet reviewed

Average duration of treatment

Based on studies^{2,3} the median number of days for adults is 56 days and 64 days for children. It is assumed that, on average, patients will receive two cycles of Atriance

Licence status

Atriance received a licence in August 2007 for use in both adults and children, based on the outcome of clinical trials^{2,3}

NICE status

NICE has not yet decided whether Atriance will be included in its work programme

For more information

GlaxoSmithKline UK
Customer Contact Centre
0800 221 441
customercontactuk@gsk.com

References

1. Leukaemia Research Fund. Booklets, 2005; Childhood ALL, Adult ALL, NHL. Available at <http://www.lrf.org.uk>
2. DeAngelo DJ, Yu D, Johnson JL, et al. Nelarabine induces complete remission in adults with relapsed or refractory T-lineage acute lymphoblastic leukaemia or lymphoma: Cancer and leukaemia Group B Study 19801. *Blood* 2007;109:1810-1816
3. Berg SL, Blaney S, Devidas M, et al. Phase II Study of Nelarabine (compound 506U78) in children and young adults with refractory T-cell malignancies: A report from the Children's Oncology Group. *Journal of Clinical Oncology* 2005;23(15):3376-3382

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Atriance *(Nelarabine)*

In leukaemia and lymphoma

When would Atriance be prescribed?

Atriance is used for the treatment of child and adult patients with T-cell acute lymphoblastic leukaemia (T-ALL) and T-cell lymphoblastic lymphoma (T-LBL) whose disease has not previously responded to two prior chemotherapy treatments

Description of disease

T-ALL and T-LBL are both very rare types of cancer of the lymphocyte (white blood cells of the immune system), forming cells in the bone marrow called lymphoblasts

Incidence of disease

They are very rare. There are an estimated 230 and 27 cases of T-LBL and 40 and 68 cases of T-ALL in adults and children respectively diagnosed in the UK each year¹

Profile of people affected

T-LBL is predominantly seen in adults and T-ALL is more common in children¹

Description of medication

Atriance is a clear, colourless, sterile solution which belongs to the group of medicines called antineoplastics

How does it work?

Atriance primarily interferes with the growth of cancer cells, by interfering with DNA synthesis and inducing cell death. It may also have further toxic effects on the cells

How is it administered?

Atriance is given as an injection into a vein

How is it administered?

Avastin is administered through a small tube inserted into a vein. The first infusion should be delivered over 90 minutes. If this infusion is well tolerated, the second infusion may be administered over 60 minutes. If the 60-minute infusion is well tolerated, all subsequent infusions may be administered over 30 minutes. Infusions are given once every two or three weeks depending on the dose

Average duration of treatment

It is recommended that treatment is continued until it no longer has any effect on stopping the disease from progressing

Licence status

Avastin was licensed in March 2007 in conjunction with paclitaxel for first-line treatment of patients with MBC. It is also licensed for use in metastatic colorectal cancer, non-small cell lung cancer and metastatic renal cell cancer

NICE status

Avastin is not currently appraised by NICE for use in MBC. It is available for use at HCA hospitals

For more information

Medical Information Department
0800 328 1629
medinfo.uk@roche.com

References

1. Cancer Research UK. <http://www.cancerhelp.org.uk/help/default.asp?page=3270>. Accessed February 2008

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Avastin *(Bevacizumab)*

In breast cancer

When would Avastin be prescribed?

Avastin is used in conjunction with paclitaxel chemotherapy for first-line treatment of patients with metastatic breast cancer (MBC)

Description of disease

MBC is the most advanced stage of breast cancer. The cancer cells have spread past the breast and underarm lymph nodes to other areas of the body where they continue to grow and multiply¹

Incidence of disease

Breast cancer is now the most common cancer in the UK, with one in nine women likely to develop it at some point in their lives¹. Each year more than 44,500 women and 300 men are diagnosed with the disease in the UK¹

Profile of people affected

Breast cancer predominantly affects women although it can also affect men. The risk increases most significantly with age amongst other factors, such as personal and family history

Description of medication

Avastin is a colourless to pale brown liquid. It is from a class of drugs called monoclonal antibodies

How does it work?

Avastin works to stop cancers from developing new blood vessels. This reduces the cancer's supply of oxygen and nutrients, which causes the tumour to shrink, or stop growing

Average duration of treatment

It is recommended that treatment is continued until it no longer has any effect on stopping the disease from progressing.

Licence status

Avastin is licensed to be used in conjunction with fluoropyrimidine-based chemotherapy for mCRC. It is also licensed for use in metastatic breast cancer and non-small cell lung cancer

NICE status

Avastin is not approved by NICE for use in mCRC. It is however available for use at HCA hospitals

For more information

Medical Information Department
0800 328 1629
medinfo.uk@roche.com

References

1. Cancer Research UK. <http://info.cancerresearchuk.org/cancerstats/types/bowel/>. Accessed February 2008

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Avastin *(Bevacizumab)*

In colorectal cancer

When would Avastin be prescribed?

Avastin is used in conjunction with fluoropyrimidine-based chemotherapy for the treatment of patients with metastatic colorectal cancer (mCRC)

Description of disease

Colorectal cancer occurs when abnormal cells grow in the colon or rectum. These cells grow together and form tumours. This cancer is also called colon cancer or rectal cancer

Incidence of disease

Every year in the UK around 36,100 people are diagnosed with bowel cancer, and it causes almost 16,100 deaths¹

Profile of people affected

83% of patients in the UK are 60 years of age or older¹

Description of medication

Avastin is a colourless to pale brown liquid. It is from a class of drugs called monoclonal antibodies

How does it work?

Avastin works to stop cancers from developing new blood vessels. This reduces the cancer's supply of oxygen and nutrients, which causes the tumour to shrink, or at least to stop growing

How is it administered?

Avastin is given through a small tube inserted into a vein

How is it administered?

DepoCyte is generally administered by slow injection over a period of one to five minutes in one of two ways: directly into the space surrounding the spinal cord, or into the cerebrospinal fluid (fluid surrounding the brain) via a reservoir which may be inserted by doctors in a simple head operation. Further injections can then be made directly into this reservoir when treatment is needed

Average duration of treatment

30 weeks⁴

Licence status

DepoCyte is licensed for the treatment of LM, based on the outcome of clinical trials^{5, 6}

NICE status

DepoCyte has never been reviewed by NICE and therefore is not available on the NHS. It is however available at HCA hospitals

For more information

Napp Pharmaceuticals Ltd.
Medical Information Department
medicalinformationuk@napp.co.uk

References

1. Cancer Research UK. Non-Hodgkin Lymphoma. <http://www.cancerhelp.org.uk/help/default.asp?page=142>
2. Lister, A et al. Central nervous system lymphoma. *Hematology* 2002;283-96
3. Gleissner B, Chamberlain MC. Neoplastic meningitis. *Lancet neurol* 2006;5(5):443-52
4. <http://www.accessdata.fda.gov/scripts/cder/onctools/administer.cfm?GN=cytarabine%20liposomal>
5. Glantz M, LaFollette S, Jaekle KA et al. Randomised trial of a slow-release versus a standard formulation of cytarabine for the intrathecal treatment of lymphomatous meningitis. *J Clin Oncol* 1999;17:3110-6
6. Howell SB. Liposomal cytarabine for the treatment of lymphomatous meningitis. *Biological Therapy of Lymphoma* 2003;6:10-14.

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DepoCyte *(Liposomal Cytarabine)*

In meningitis

When would DepoCyte be prescribed?

DepoCyte is used to treat lymphomatous meningitis (LM)

Description of disease

LM is a rare and generally incurable condition that occurs when a patient's primary cancer spreads to the fluid or membranes that surround the central nervous system (spinal cord and brain)

Incidence of disease

There are approximately 9,000 new cases of non-Hodgkin's lymphoma in the UK every year¹. An estimated 4-5% of these patients will go on to develop LM^{2,3}

Profile of people affected

Lymphomas of the central nervous system primarily affect older people aged 60 and above²

Description of medication

DepoCyte is designed to recognise and bind to certain proteins (epidermal growth factor receptors or EGFRs), that are found on the surface of particular cancer cells. This prevents the cancer cell growing, dividing and spreading

How does it work?

DepoCyte works by gradually releasing cytarabine into the cerebral spinal fluid which is taken up by any dividing cancer cells. It then acts to stop DNA synthesis in these cells

How is it administered?

Erbix is given via a drip through a small tube inserted into a vein. Erbitux is mainly given in conjunction with irinotecan chemotherapy, although it may be given on its own, with other chemotherapy or with radiotherapy as part of a research trial

Average duration of treatment

The first dose is administered gradually over two hours. Subsequent doses take one hour, and are administered weekly for an average duration of 18 weeks or until it no longer has any effect on stopping the disease from progressing

Licence status

Erbix is licensed for treating metastatic colorectal cancer patients with EGFR expression, in conjunction with irinotecan chemotherapy, and only after irinotecan chemotherapy alone has proved unsuccessful. It is also licensed for use in the treatment of locally advanced head and neck cancer, in conjunction with radiotherapy

NICE status

Erbix is not yet approved by NICE in colorectal cancer. Erbitux is available at HCA hospitals

For more information

Merck Serono
Medical Information Department
020 8818 7261

References

1. National Institute for Health and Clinical Excellence. http://www.nice.org.uk/nicemedia/pdf/colcancer_lapsurgery_review_final_scope.pdf. Accessed January 2008
2. Cancer Research UK <http://www.cancerhelp.org.uk/help/default.asp?page=3748#age>. Accessed January 2008
3. Cunningham D et al., N Eng J Med 2004; 351: 337-345

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Erbix (*Cetuximab*)

In colorectal cancer

When would Erbitux be prescribed?

Erbitux is currently used to treat cancer of the large bowel (colon and rectum), sometimes known as colorectal cancer, that has come back after initial treatment with chemotherapy and has spread to other parts of the body

Description of disease

Colorectal cancer is cancerous growths in the colon, rectum and appendix. The diagnosis of localized colon cancer is most commonly made through colonoscopy

Incidence of disease

Colorectal cancer is the third most common cause of cancer-related deaths in the UK, with an annual incidence of 60.2 cases per 100,000 annually¹

Profile of people affected

More than 83% of bowel cancers are diagnosed in the over 60s and the risk of getting this disease increases with age²

Description of medication

Erbitux comes in the form of a fluid. It is a monoclonal antibody which is used to try and destroy some types of cancer cells, whilst causing little harm to normal cells

How does it work?

Erbitux is designed to target certain proteins (epidermal growth factor receptors or EGFRs) on the cancer cell surface that, when activated, send a signal to the cancer cell to grow, proliferate and spread. Erbitux blocks the cancer cells' receptors so they can't receive the signal to grow. This prevents the cancer cells from spreading and causes them to die. Erbitux reduces the risk of irinotecan-refractory colorectal cancer progressing by 46%³

How is it administered?

Erbitux is given through a small tube inserted into a vein, in conjunction with radiotherapy. It can be administered in an outpatient clinic. Premedication with antihistamines may also be given to the patient in advance of receiving Erbitux, to minimise the risk of side effects

Average duration of treatment

For the duration of the radiotherapy treatment: this is usually eight weeks

Licence status

Erbitux is licensed for the treatment of locally advanced squamous cell cancer of the head and neck, in conjunction with radiotherapy, based on the outcome of a clinical trial². It is also licensed for use in treating second-line metastatic colorectal cancer

NICE status

NICE has given a provisional positive guidance for Erbitux: at the time of going to print, the final decision was expected in June 2008. Erbitux is available at HCA hospitals

For more information

Merck Serono
Medical Information Department
020 8818 7261

References

1. Cancer Research UK. <http://info.cancerresearchuk.org>. Accessed October 2007
2. Bonner J et al., N Eng J Med 2006;354:567-78

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Erbix (*Cetuximab*)

In head and neck cancer

When would Erbitux be prescribed?

Erbitux is used in the treatment of locally advanced head and neck cancer (H&NC), as a first treatment option, in conjunction with radiotherapy

Description of disease

H&NC includes cancers of the mouth, nose, sinuses, salivary glands, throat and lymph nodes in the neck. Most begin in the moist tissues that line the mouth, nose and throat

Incidence of disease

In the UK, H&NC is one of the top ten most commonly diagnosed cancers, accounting for more than 7,800 new cases annually¹

Profile of people affected

H&NC is most common amongst men and people over the age 50

Description of medication

Erbitux is a monoclonal antibody in the form of a fluid. It is used to try and destroy some types of cancer cells, whilst causing little harm to normal cells

How does it work?

Erbitux is designed to recognise and bind to certain proteins (epidermal growth factor receptors or EGFRs), that are found on the surface of particular cancer cells. This prevents the cancer cells growing, dividing, spreading and repairing themselves. It also makes the cancer cells more susceptible to radiotherapy

How is it administered?

Glivec is available as a tablet

Average duration of treatment

Glivec is normally given once daily and is usually taken for as long as patients are benefiting from it

Licence status

Glivec is licensed for use in the treatment of chronic myeloid leukaemia. It is also licensed for KIT-positive GIST (gastrointestinal stromal tumours) and relapsed/refractory ALL (acute lymphoblastic leukaemia)

NICE status

Glivec is approved for use in the NHS. NICE recommends that Glivec is stopped if a response to treatment is not seen on a CT scan within 12 weeks. It can however take up to nine months to see a radiological response to the drug on a CT scan

For more information

Novartis Pharmaceuticals UK
Medical Information Department
medinfo.uk@novartis.com
01276 698 370

References

1. Cancer Research UK. <http://info.cancerresearchuk.org/cancerstats/types/leukaemia/>. Accessed February 2008

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Glivec *(Imatinib)*

In leukaemia

When would Glivec be prescribed?

Glivec is the main type of anti-cancer drug treatment for chronic myeloid leukaemia (CML)

Description of disease

Chronic myeloid leukaemia is a cancer of blood cells, characterised by replacement of the bone marrow with malignant, leukaemic cells. Many of these leukaemic cells can be found circulating in the blood and can cause enlargement of the spleen, liver and other organs¹

Incidence of disease

Around 7,000 people are diagnosed with leukaemia and it causes more than 4,300 deaths each year in the UK¹. One to two cases of CML per 100,000 people are diagnosed per year in the UK

Profile of people affected

Overall leukaemia is slightly more common in men than women. Grouped together leukaemias are the ninth most common cancer in men and tenth in women

Description of medication

It is a type of drug known as a tyrosine kinase inhibitor

How does it work?

Glivec works by blocking signals within cancer cells and preventing a series of chemical reactions that cause the cell to grow and divide

How is it administered?

Herceptin is a liquid administered through a small tube inserted into a vein. For MBC the first infusion usually takes about 90 minutes, and patients must be observed for six hours. Any infusions following this should last about 30 minutes. For EBC, doses are recommended to be given over 90 minutes

Average duration of treatment

In EBC Herceptin is licensed for treatment to continue for approximately one year, based on the patient receiving one dose every three weeks for 18 doses. This was based on the outcome of clinical trials. In MBC, Herceptin is licensed to continue until it no longer has any effect on stopping the disease from progressing

Licence status

Herceptin has been licensed for MBC since 2000 and since 2006 for EBC. Herceptin is licensed for the treatment of patients whose tumours over-express the HER2 protein; in MBC in conjunction with chemotherapy or by itself after receiving at least two chemotherapy regimens; and in EBC following surgery, chemotherapy and radiotherapy (if appropriate)⁴

NICE status

Herceptin has been approved by NICE for use in both MBC and EBC⁵

For more information

Medical Information Department
0800 328 1629
medinfo.uk@roche.com

References

1. Cancer Research UK. <http://www.cancerhelp.org.uk/help/default.asp?page=3270>. Accessed March 2008
2. Piccart-Gebhart et al N Eng J Med 2005 2005; 353:1659-1672
3. Smith et al Lancet 2007;369:29-36
4. Herceptin summary of product characteristics
5. Nice UK. <http://www.nice.org.uk/guidance/index.jsp?action=article&o=32318>. Accessed February 2008

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Herceptin (*Trastuzumab*)

In breast cancer

When would Herceptin be prescribed?

In the UK, Herceptin is used in the treatment of HER2 positive early and metastatic breast cancer (EBC and MBC respectively). It may be used in the early stages to increase the chances of a cure or in advanced stages to help control the disease if the breast cancer has returned

Description of disease

EBC occurs when there are cancerous cells found contained in the breast, which may or may not have spread to the lymph nodes in the breast or armpit area. MBC occurs in the advanced stages when the cancer has spread from the original site in the breast to other organs or tissues in the body

Incidence of disease

Breast cancer is now the most common cancer in the UK, with one in nine women likely to develop it at some point in their lives¹. Each year more than 44,500 women and 300 men are diagnosed with the disease in the UK¹

Profile of people affected

Breast cancer predominantly affects women although it can also affect men. The risk increases most significantly with age amongst other factors, such as personal and family history

Description of medication

Herceptin is a type of targeted cancer therapy known as a monoclonal antibody

How does it work?

Herceptin works by interfering with the HER2 protein to stop the breast cancer cells from growing in a number of ways, and by stimulating the immune system to kill tumour cells

conjunction with chemotherapy, it will be given on the same day as the other medicines, which are usually given eight times at three-week intervals. Courses may be repeated. If the cancer responds to the initial treatment, maintenance treatment may be given once every three months for up to two years

Licence status

MabThera is licensed as a first treatment option in conjunction with chemotherapy to treat diffuse large B-cell lymphoma and advanced stage follicular lymphoma (stage 3 or 4) and advanced stage follicular lymphoma (stage 3 or 4) patients where chemotherapy has previously failed. MabThera is also licensed for adult rheumatoid arthritis in conjunction with the drug methotextrate after a previous treatment has failed

NICE status

At the time of going to print, MabThera had received a positive opinion by NICE as per its licensed indications for relapsed refractory stage 3 or 4 follicular NHL³:

- i. In conjunction with chemotherapy for the induction of remission
- ii. As maintenance treatment in those patients that have responded to induction with or without MabThera
- iii. As monotherapy in second or subsequent relapse when all alternative treatment options have been exhausted

For more information

Please see a copy of the MabThera Summary of Product Characteristics:
<http://emc.medicines.org.uk>

References

1. Cancer Research UK. <http://info.cancerresearchuk.org/cancerstats/types/nhl/> Accessed January 2008.
2. Olszewski AJ, Grossbard ML. Empowering Sci STKE 2004; 2004: pe30
3. Nice UK. <http://www.nice.org.uk/guidance/index.jsp?action=byID&r=true&o=11448>. Accessed February 2008.

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MabThera *(Rituximab)*

In non-Hodgkin's lymphoma

When would MabThera be prescribed?

MabThera is used to treat several types of non-Hodgkin's lymphoma (NHL), either on its own or in conjunction with chemotherapy

Description of disease

NHL is a type of cancer of the white blood cells in the lymphatic system, which affects the immune system

Incidence of disease

Every year in the UK around 10,000 cases of NHL are diagnosed and around 4,450 deaths result from NHL¹

Profile of people affected

The incidence of NHL increases with age - around two thirds of all cases are diagnosed in people over 60¹

Description of medication

MabThera comes in the form of a fluid and is a targeted treatment known as a chimeric antibody, targeted against the B-cell-specific CD20 antigen

How does it work?

CD20 is a surface antigen which is present on all abnormal and normal B-cells. MabThera selectively binds to the CD20 antigen to effectively eradicate these cells in lymphoma patients². B-cells gradually recover to normal levels in approximately 6-12 months

How is it administered?

MabThera is given through a small tube inserted into a vein

Average duration of treatment

If used on its own, it will usually be given once a week for four weeks. If used in

Average duration of treatment

The median duration is 23 weeks for patients with HCC. Patients may however stay on Nexavar as long as their doctor thinks it is benefiting them or until the level of toxicity becomes unacceptable

Licence status

Nexavar is licensed to treat patients with HCC, based on the outcome of clinical trials^{3,4} It is also indicated for the treatment of patients with advanced renal cell carcinoma (kidney cancer) where interferon-alpha- or interleukin-2- based therapy has not previously worked or is considered unsuitable for the patient

NICE status

Nexavar is not yet appraised for use in the NHS. It is available for use in HCA hospitals

For more information

Bayer Schering Pharma
Medical Information Department
01635 563 116
medical.science@bayer.co.uk

References

1. Wilson et al *Annals int Med* 2005; 142(12): 1029-1032
2. Cancer Research UK, <http://info.cancerresearchuk.org/cancerstats/types/liver/?a=5441>. Accessed January 2008
3. <http://emc.medicines.org.uk/> Nexavar Patient Information Leaflet and Summary of Product Characteristics
4. Llovet J et al, *Journal of Clinical Oncology*, 2007; 25(18S): 962S, abstr. LBA1

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Nexavar *(Sorafenib)*

In liver cancer

When would Nexavar be prescribed?

Nexavar is an anti-cancer medicine that is used to treat adults with hepatocellular carcinoma (HCC), the most common form of primary liver cancer

Description of disease

HCC constitutes 80-90% of all primary liver cancers¹

Incidence of disease

Around 2,800 people are diagnosed with primary liver cancer each year in the UK and the disease is causing around the same number of deaths each year²

Profile of people affected

Liver cancer is within the top twenty most common cancers for UK males (18th), with over 1,700 new cases diagnosed in 2004. This compares to almost 1,200 cases in females

Description of medication

Nexavar comes in a tablet form. It is a type of drug called a multi-kinase inhibitor, one of a new class of therapies often called targeted therapy

How does it work?

In pre-clinical models it has been shown to slow down the rate of growth of cancer cells by cutting off the blood supply that keeps cancer cells growing³

How is it administered?

Nexavar is an oral pill that should be swallowed whole. The recommended dose of Nexavar for adults is 400mg (two tablets of 200mg) twice daily³

Average duration of treatment

The median duration is 23 weeks for patients with RCC. Patients may however stay on Nexavar as long as their doctor thinks it is benefiting them or until the level of toxicity becomes unacceptable

Licence status

Nexavar is licensed to treat patients with advanced RCC where interferon-alpha- or interleukin-2- based therapy has not previously worked or is considered unsuitable for the patient, based on the outcome of clinical trials^{4, 5}. Nexavar was also licensed to treat hepatocellular carcinoma in October 2007

NICE status

Nexavar is not yet appraised for use in the NHS. It is available for use in HCA hospitals

For more information

Bayer Schering Pharma
Medical Information Department
01635 563 116
medical.science@bayer.co.uk

References

1. Cancer Research UK. <http://info.cancerresearchuk.org/cancerstats/types/kidney/?a=5441>. Accessed January 2008
2. Cohen HT et al, The New England Journal of Medicine 2005; 2477-2489
3. <http://emc.medicines.org.uk/Nexavar> Patient Information Leaflet
4. Escudier et al., N Eng J Med, 2007;356:125-34 SOR0010
5. Ratain MJ et al, Journal of Clinical Oncology, 2006;24(16):2505-2512 SOR0043

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Nexavar *(Sorafenib)*

In kidney cancer

When would Nexavar be prescribed?

Nexavar is an anti-cancer medicine that is used to treat adults with advanced renal cell carcinoma (RCC) (kidney cancer), where interferon-alpha- or interleukin-2- based therapy has not previously worked or is considered unsuitable for the patient

Description of disease

RCC is the most common form of kidney cancer. The cancerous cells are found in the lining of very small tubes (tubules) in the kidney

Incidence of disease

More than 7,000 people are diagnosed with kidney cancer and around 3,600 people die each year in the UK¹. RCC constitutes 85% of all kidney cancers²

Profile of people affected

Kidney cancer accounts for 3% of all cancers in men and just less than 2% of all cancers in women in the UK¹

Description of medication

Nexavar comes in tablet form. It is a type of drug called a multi-kinase inhibitor, one of a new class of therapies often called targeted therapy

How does it work?

In pre-clinical models it has been shown to slow down the rate of growth of cancer cells by cutting off the blood supply that keeps cancer cells growing³

How is it administered?

Nexavar is an oral pill that should be swallowed whole. The recommended dose of Nexavar for adults is 400 mg (two tablets of 200 mg) twice daily³

How is it administered?

Revlimid is an oral medicine that is taken in capsule form

Average duration of treatment

Revlimid is given in a 28-day cycle – taken once daily on days 1–21. A typical patient would receive about nine cycles of treatment during the first year. Four capsule strengths (5, 10, 15 and 25mg) are available. The starting dose is 25mg per day, but this may vary depending on the patient characteristics³

Licence status

Revlimid was licensed for use in conjunction with dexamethasone in June 2007, based on the outcome of clinical trials⁴

NICE status

Revlimid is not yet appraised by NICE but is available at HCA hospitals

For more information

Celgene Medical Information
0844 801 0045
medinfo.uk.ire@celgene.com

References

1. Cancer Research UK. <http://info.cancerresearchuk.org/cancerstats/types/multiplemyeloma/> Accessed January 2008
2. <http://www.multiplemyeloma.org/treatments/3.08.02.php>
3. <http://www.myelomaonline.org.uk/NetCommunity/Document.Doc?&id=97>
4. Weber D, Wang M, Chen C et al. Lenalidomide plus Dexamethasone for Relapsed Multiple Myeloma in North America. *N Engl J Med* 2007; 357:21

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Revlimid *(Lenalidomide)*

In multiple myeloma

When would Revlimid be prescribed?

Revlimid is used to treat people with multiple myeloma (MM) (bone marrow cancer) when at least one previous therapy has failed

Description of disease

MM is a type of cancer that develops from plasma cells in the bone marrow. It is from the bone marrow that our different blood cells are produced. It can develop wherever there are plasma cells; this includes the bone marrow, pelvis, spine and ribcage

Incidence of disease

Every year almost 3,800 cases of MM are diagnosed in the UK, and it causes more than 2,400 deaths in the UK annually¹

Profile of people affected

The risk of MM increases with age. It is very rare under the age of 40 and is about twice as common in black populations as it is in white populations

Description of medication

Revlimid belongs to a group of drugs called immunomodulatory agents, which affect the immune system in several ways

How does it work?

Revlimid appears to have direct and indirect effects on myeloma cells, including directly killing or stopping their growth, blocking the growth of new blood vessels which supply them with oxygen and nutrients, boosting the immune response against them and preventing the myeloma cells from sticking to the bone marrow²

Average duration of treatment

The average length of treatment is 125 days in NSCLC³

Licence status

Tarceva is licensed for use as monotherapy in NSCLC, based on the outcome of a clinical trial⁴. It received its licence on 19 September 2005. It is also licensed in conjunction with gemcitabine (chemotherapy) in the treatment of metastatic pancreatic cancer. This indication was added to the licence in January 2007⁵

NICE status

At the time of going to print, Tarceva was undergoing NICE reappraisal for NSCLC. It is available at HCA hospitals

For more information

Roche Medical Information
medinfo.uk@roche.com

References

1. Cancer Research UK. <http://info.cancerresearchuk.org/cancerstats/types/lung/> Accessed January 2008
2. Tarceva Summary of Product Characteristics.
3. Roche data on file-BR21 study report
4. Shepherd FA et al. Erlotinib in previously treated non-small-cell lung cancer. *New England Journal of Medicine* 2005;353(2):123-132.
5. Moore MJ et al. *Journal of Clinical Oncology* 2007; 25 (15): 1960-1966

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Tarceva *(Erlotinib)*

In lung cancer

When would Tarceva be prescribed?

Tarceva is used to treat people with non-small cell lung cancer (NSCLC), whose cancer has come back after, or not responded to, at least one course of chemotherapy

Description of disease

NSCLC is a disease in which cancer cells form in the tissues of the lung

Incidence of disease

Every year in the UK around 38,300 cases of lung cancer are diagnosed, (of which 80% are NSCLC)¹. Annually it causes around 33,500 deaths¹

Profile of people affected

Lung cancer is fairly rare in individuals under the age of 40. The average age of patients diagnosed with lung cancer is about 60. Smoking is the single most important risk factor for the development of this type of cancer

Description of medication

Tarceva is a targeted cancer treatment, designed to block tumour cell growth²

How does it work?

Tarceva targets proteins called epidermal growth factor receptors (EGFRs) whose activation normally causes the cells to grow rapidly. Inhibition by Tarceva prevents the cancer cells from spreading and can encourage cell death

How is it administered?

Tarceva treatment is taken as a single tablet once daily

Average duration of treatment

The median length of treatment in pancreatic cancer is 15.7 weeks²

Licence status

Tarceva is licensed for use in conjunction with gemcitabine (chemotherapy) in the treatment of metastatic pancreatic cancer. This indication was added to the license in January 2007³. It was also licensed on 19 September 2005 for its use as monotherapy in non-small cell lung cancer, based on the outcome of a clinical trial⁴

NICE status

At the time of going to print, Tarceva had not been reviewed by NICE for use in pancreatic cancer. It is available at HCA hospitals

For more information

Roche Medical Information
medinfo.uk@roche.com

References

1. Cancer Research UK. <http://info.cancerresearchuk.org/cancerstats/types/pancreas> Accessed January 2008
2. Roche data on file-PA3 study report
3. Moore MJ et al. Journal of Clinical Oncology 2007; 25 (15): 1960-1966
4. Shepherd FA et al. Erlotinib in previously treated non-small-cell lung cancer. New England Journal of Medicine 2205; 353(2):123-132.

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Tarceva *(Erlotinib)*

In pancreatic cancer

When would Tarceva be prescribed?

Tarceva is used to treat people with metastatic pancreatic cancer

Description of disease

Pancreatic cancer is a malignant tumour within the pancreas (a gland organ in the digestive and endocrine system) characterised by pain in the upper abdomen, significant weight loss, jaundice and loss of appetite

Incidence of disease

Pancreatic cancer is the tenth most common cancer in the UK, with an average of just over 20 cases diagnosed every day and annually causes almost 7,250 deaths¹

Profile of people affected

Pancreatic cancer is principally a disease affecting middle-aged and older women and men, and the risk increases with age

Description of medication

Tarceva is a targeted cancer treatment, designed to block tumour cell growth

How does it work?

Tarceva targets proteins called epidermal growth factor receptors (EGFRs) whose activation normally causes the cells to grow rapidly. Inhibition by Tarceva prevents the cancer cells from spreading and can encourage cell death

How is it administered?

Tarceva treatment is taken as a single 100mg tablet once daily

How is it administered?

Trisenox is administered by a drip through a small tube inserted into a vein and usually takes around one to two hours

Average duration of treatment

Treatment is given in two phases; once daily for up to a maximum of 50 doses, followed by a three- to four-week break from treatment before the second phase of about 25 doses over a period of up to five weeks²

Licence status

Due to the rarity of APL, it has been hard to get enough data with which to obtain a licence. However, based on the outcomes of clinical trials, Trisenox was licensed for use under exceptional circumstances on 5 March 2002 by the European Medicines Agency. Trisenox has been approved by the FDA for the treatment of patients who require subsequent APL treatment²

NICE status

Trisenox is available for use in NHS hospitals. Patients can get access to it at HCA hospitals

For more information

Cephalon Medical Information Department
0800 783 4869
ukmedinfo@cephalon.com

References

1. Cancer Research UK. <http://info.cancerresearchuk.org/cancerstats/types/leukaemia/?a=5441>. Accessed January 2008
2. Food and Drug Administration <http://www.accessdata.fda.gov/scripts/cder/onctools/administer.cfm?GN=arsenic%20trioxide>. Accessed January 2008

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Trisenox *(Arsenic trioxide)*

In leukaemia

When would Trisenox be prescribed?

Trisenox is used to treat acute promyelocytic leukaemia (APL) in adults whose disease has returned or has not responded to initial treatments

Description of disease

APL (a type of myeloid leukaemia) is a rare cancer of the blood and bone marrow and leads to an abnormal accumulation of certain white blood cells. This affects the production of normal red blood cells, platelets and further white blood cell types causing abnormal bleeding and bruising

Incidence of disease

Around 7,000 people are diagnosed with leukaemia each year in the UK, and it causes more than 4,300 deaths each year in the UK¹

Profile of people affected

Acute leukaemia is more common in children. The incidence of APL is 8-30% in children with acute myeloid leukaemia. Leukaemia generally is slightly more common in men than in women

Description of medication

Trisenox is a clear solution. It belongs to the general group of medicines called antineoplastics which inhibit or prevent the growth or development of malignant cells

How does it work?

The full mechanism of the action of Trisenox is not completely understood. It is known, however, that it primarily interferes with the growth of cancer cells

How is it administered?

Uftoral is given orally three times a day together with calcium folinate tablets. The tablets are taken daily for four weeks, then the patient has a one-week break. These five weeks constitutes one cycle treatment

Average duration of treatment

The average duration of treatment is between three and five cycles each lasting five weeks

Licence status

Uftoral is licensed for treating metastatic colorectal cancer patients in conjunction with calcium folinate

NICE status

Uftoral is NICE-approved (TA 61 May 2003).
Uftoral is available at HCA hospitals

For more information

Merck Serono
Medical Information Department
020 8818 7261

References

1. National Institute for Health and Clinical Excellence. http://www.nice.org.uk/nicemedia/pdf/colcancer_lapsurgery_review_final_scope.pdf. Accessed January 2008
2. Cancer Research UK <http://www.cancerhelp.org.uk/help/default.asp?page=3748#age>. Accessed January 2008
3. Uftoral SPC. Merck Serono.

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Uftoral *(Tegafur-uracil)*

In colorectal cancer

When would Uftoral be prescribed?

Uftoral is currently used to treat cancer of the large bowel (colon and rectum), sometimes known as colorectal cancer, that has spread to other parts of the body (metastatic colorectal cancer)

Description of disease

Colorectal cancer is cancerous growths in the colon, rectum and appendix. The diagnosis of localized colon cancer is most commonly made through colonoscopy

Incidence of disease

Colorectal cancer is the third most common cause of cancer-related death in the UK, with an annual incidence of 60.2 cases per 100,000¹

Profile of people affected

More than 83% of bowel cancers are diagnosed in the over 60s and the risk of getting this disease increases with age²

Description of medication

Uftoral comes in the form of white capsules. It is an oral form of 5-fluorouracil (5FU) chemotherapy which is used to destroy cancer cells

How does it work?

Uftoral is composed of Tegafur and Uracil. Tegafur is a prodrug which is metabolised in the liver to 5-fluorouracil (5FU), which is a chemotherapy agent. The co-administration of Uracil enhances the activity of tegafur alone and inhibits the degradation of 5FU to metabolites which are thought to cause hand-foot syndrome. The incidence of hand-foot syndrome with Uftoral is less than 0.01%³

How is it administered?

Vidaza is given as an injection under the skin. This injection is received in a clinic or hospital setting

Average duration of treatment

Medication is usually given for seven days in a row every four weeks for about nine treatment cycles on average, although treatment schedules may differ². The minimum treatment time is four cycles

Licence status

Vidaza has been approved by the FDA (approval was given on May 19, 2004) for the treatment of patients with MDS3, but is currently unlicensed. It is currently only available on an individual named patient supply basis in the UK, and is available at HCA hospitals

NICE status

At the time of going to print, Vidaza had not yet been submitted to NICE for review

For more information

Pharmion Ltd.
Medical Information Department
01753 240 600
uk_medinfo@pharmion.com

References

1. Leukaemia Research <http://www.lrf.org.uk/en/1/dismdshome.html>. accessed 14 august 2007
2. <http://www.vidaza.com/1110-how-vidaza-works.aspx>
3. http://www.bioportfolio.com/november_06/22_11_2006/Pharmion_and_Nippon_Shinyaku.html

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Vidaza *(Azacitidine)*

In myelodysplastic syndromes

When would Vidaza be prescribed?

Vidaza is used to treat certain types of bone marrow cancers and blood cell disorders called myelodysplastic syndromes (MDS)

Description of disease

The MDS are a group of blood cancers in which the production of blood cells by the bone marrow is disrupted resulting in under-production of healthy blood cells

Incidence of disease

The current incidence of MDS in the UK is 3,250 cases per year.¹

Profile of people affected

MDS is more common in women than men and the average age at diagnosis is between 65 and 75 years

Description of medication

Vidaza is a cancer medication that interferes with the growth of cancer cells and slows their growth and spread in the body

How does it work?

Vidaza works by both helping to correct the abnormal processes in DNA that cause cancer and directly killing abnormal blood cells. This effect is strongest in cells that are growing and dividing very quickly, such as cancer cells, while cells in other parts of the body that divide much more slowly are relatively unaffected. It may also help the patient's bone marrow to make healthy red blood cells, white blood cells and platelets again²

Average duration of treatment

Treatments can be delivered in single or multiple sessions (typically two to five), at the patient's convenience. Each session generally ranges from 30 to 90 minutes depending on the dosage and the complexity of the tumour

Supporting evidence

An estimated 40,000 + patients have been treated with the CyberKnife system worldwide

What it's replacing/is it additional?

It can be used for patients that wouldn't have previously been considered for radiotherapy. For brain tumours, the Cyberknife system is an alternative option to the Gamma Knife

Benefits

The Cyberknife is a non-invasive and is a pain-free alternative to surgery with minimal side effects. Treatment can be given as an outpatient procedure with little or no recovery time and the patient can immediately return to normal activities. The Cyberknife is able to target multiple tumours at different locations during a single treatment. It is able to non-invasively detect and correct for tumour and patient movement throughout the treatment. This results in minimal damage to surrounding tissue and eliminates the need for tracking implants or invasive head or body frames to stabilize patients as typically used with conventional radiosurgery systems

FDA status and CE mark

Accuray received FDA clearance to introduce enhancements to the CyberKnife System for the treatment of tumours anywhere in the body in 2001, and in 2002 in Europe

For more information

Barry Bonner, Accuray
07919 593141, +33 (0)155 232037
www accuray.com

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Cyberknife

Delivers radiosurgery to any part of the body

When would patients need to be treated by a Cyberknife?

The Cyberknife system offers new hope to patients who have inoperable or surgically complex tumours, or who may be looking for an alternative to surgery for treating many small tumours and a few other select medical disorders. Unlike other radiosurgery systems, which are primarily used for head cancers, the Cyberknife can deliver radiosurgery to any part of the body.

Indications

Cancer tumours of the brain, spine, lung, liver, pancreas, kidney and prostate

Description

It is a compact linear accelerator (used to direct high doses of radiation to a target) mounted onto a robotic arm, designed to treat tumours anywhere in the body

What does radiotherapy with a Cyberknife involve?

The Cyberknife system delivers multiple beams of high-dose radiation to tumours with sub-millimetre accuracy, minimizing damage to surrounding healthy tissue. It is able to continuously track, detect and correct for tumour and patient movement throughout the treatment

Safety

Because of its extreme precision, the radiation doses used for treatment are calculated to be safe and effective

How is it administered?

The patient lies on a moveable treatment table and the robotic arm moves around them

Average duration of treatment

Two to three hours, dependent on surgery type

Supporting evidence

There are many clinical studies which support the effectiveness of the da Vinci Surgical System

What it's replacing/is it additional?

It's an alternative tool to both traditional open surgery and conventional laparoscopy (minimally invasive surgery)

Benefits

Less damage to the surrounding tissue, nerves and vessels of the area being operated on, resulting in less pain, discomfort, blood loss and scarring, a shorter hospital stay and a quicker return to normal activities

FDA approval

The da Vinci Surgical System is FDA-approved for both laparoscopic and general surgery procedures

NICE status

The da Vinci Surgical System has been approved by NICE for use as an alternative to laparoscopic surgery

For more information

www.davincisurgery.com

References

1. Robotic Surgical Training in an Academic Institution. W. Randolph Chitwood, et al., Ann Surg. 2001 October; 234(4): 475-486.

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da Vinci Surgical System

For minimally invasive general surgery

When would patients need to be treated with the da Vinci Surgical System?

For minimally invasive general surgery procedures. It's beneficial for use in tricky and delicate areas where there are a lot of nerves and vessels to be avoided such as the prostate

Indications

All general surgery. It can be used to treat conditions as diverse as obesity and heart disease. It is most commonly used to remove parts of the prostate to treat prostate cancer

Description

A computer-enhanced minimally invasive surgical system consisting of three components: vision system, surgical cart and surgeon console. It enables the surgeon to perform minimally invasive work with minimal movement whilst having a close-up and clearer 3-D view of the nerves, blood vessels and muscles

How does it work?

The surgeon is seated at a control console across the room from the patient, viewing magnified 3-D images from a tiny video camera and manipulating the robot with joystick-like hand and foot controls. The surgery tools mimic the surgeon's hand and wrist movements at the console, enabling the surgeon to make minute and precise movements for complex surgery in tiny entry incisions as small as 1-2cm

Safety

Robotic surgery can be performed safely with excellent results¹

How is it administered?

The actual MRI system is a tube surrounded by a giant circular magnet. The patient sits in an ergonomically designed moveable chair and places the relevant limb into the magnet

Average duration of treatment

45 minute average patient study time

Supporting evidence

The Extremity MRI Scanner provides the same diagnostic images as the traditional full body MRI scanners. MRI scanners have been used commercially as medical devices for around 15-20 years

What it's replacing/is it additional?

Additional to traditional full body MRI scanners

Benefits

- Only the limbs are inserted into the magnet therefore it is non-claustrophobic
- Comfortable patient chair, not table or cart. When lower extremities are being scanned, patients can lie or sit and read or work
- Fast, high-quality diagnostics, eliminating risk of repeat scans
- Avoids x-ray radiation exposure
- There are no known side effects of an MRI scan

FDA status

It has received FDA approval

For more information

Patricia Clark, Imaging Manager
The London Bridge Hospital Diagnostic
and Treatment Centre
patricia.clark2@hcahealthcare.co.uk
020 7496 3531

www.vertec.co.uk

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Extremity MRI Scanner for Extremity Imaging

**Reveals damage to soft tissue
of the extremities**

When would you need to have this?

MRI scanners reveal any damage to soft tissue, such as stress fractures, ligament, cartilage or muscle damage which wouldn't show up on an x-ray. The Extremity MRI Scanner is used for soft tissues of the extremities, including knees, ankles, heels, toes, wrists, hands, fingers and elbows

Description

An Extremity MRI scan (or magnetic resonance imaging) uses a strong magnetic field and radio waves to create very high quality imagery pictures on a computer of tissues, organs and structures inside the body. This scanner is a smaller, dedicated extremity design and therefore only the patient's limbs need to be inserted into the magnet, reducing any claustrophobia

What does an MRI scan involve?

The magnet creates a strong magnetic field, to align the protons of hydrogen atoms. These are then exposed to a beam of radio waves which spins the various protons of the body, causing them to produce a signal. This signal is detected by the receiver portion of the MRI scanner, which is then processed by a computer, to produce an image on screen

Safety

MRI scans are painless and safe. Unlike x-rays and some other imaging tests, an MRI scan does not use any radiation. Following an MRI scan, the patient can continue with their daily activities as normal