| Function         | n NCT Number               | Study Title  | Conditions   | Interventions  | Study Type   | Start Date | Study Status                          | Locations   |
|------------------|----------------------------|--|--|--|--|------------|---------------------------------------|---|
| B.               |                            | Safety and Efficacy of Doxonutricin Adsorbed to Magnetic Beads Vs. IV Doxonutricin in Treating Liver Cancer  |  | DRUG: MTC-DOX for Injection  DRUG: MTC-DOX for Injection PROCEDURE: Chemotherapy   | INTERVENTIONAL<br>INTERVENTIONAL                     | 2002-03    | TERMINATED<br>COMPLETED               | United States, Germany, and Hong Kong, et al.<br>United States, and Germany |
| Targe            | NCT00054951<br>NCT04894110 | Safety and Efficacy of Doxonubicin Adsorbed to Magnetic Beads  | Hepatocellular Carcinoma   | DRUG: MTC-DOX for Injection  | INTERVENTIONAL                                       | 2001-06    | UNKNOWN                               | China   |
| g                | NCT01270139                | Plasmonic Nanophotothermal Therapy of Atherosclerosis  | Stable Angina Heart Failure Atherosclerosis Multivessel Coronary A   | il BIOLOGICAL: EO2002 BIOLOGICAL: EO2002 low dose BIOLOGICAL: EO2002 r<br>il PROCEDURE: Transplantation of nanoparticles PROCEDURE: Transplantation o                | INTERVENTIONAL                                       | 2007-04-01 | ACTIVE_NOT_RECRUITING<br>COMPLETED    | United States<br>Netherlands, and Russian Federation                        |
| Magneti<br>c Mag | NCT01411904<br>NCT02025413 |  |  | DEVICE: MagProbe (TM)<br>a DEVICE: Mesenchymal-marker based ferrofluid (N-cadherin or O-cadherin based)  | INTERVENTIONAL<br>INTERVENTIONAL                     |            | WITHDRAWN<br>COMPLETED                | United States United States   |
|                  | P NCT05010759              | Study of Focal Ablation of the Prostate With NanoTherm® Therapy System for Intermediate-Risk Prostate Cancer   | Prostate Cancer<br>Prostate Cancer   | DEVICE: NanoTherm Abiation   | INTERVENTIONAL                                       |            | TERMINATED<br>COMPLETED               | United States United Kingdom  |
|                  | E NCT06271421              | NanoTherm In Adjuvant Therapy of Glioblastoma Multiforme   | Glioblastoma Multiforme  | DEVICE: NanoTherm therapy/PROCEDURE: Glioma Resection(RADIATION: radi  | INTERVENTIONAL                                       | 2024-01-01 | RECRUITING<br>COMPLETED               | Poland<br>United States   |
|                  | NCT00103038                | Ferumoxytol in Improving MR Imaging in Patients With High-Grade Brain Tumors or Cerebral Metastases  | Central Nervous System Lymphoma/Malignant Glioma/Metastatic M  | a PROCEDURE: 3 Tesla Magnetic Resonance Imaging PROCEDURE: Dynamic Co  | INTERVENTIONAL                                       | 2004-06-04 | COMPLETED                             | United States   |
|                  | NCT00107484<br>NCT00147238 |  | Breast Cancer<br>Bladder Cancer[Genitourinary Cancer Prostate Cancer   |  | INTERVENTIONAL                                       |            | COMPLETED<br>TERMINATED               | United States United States   |
|                  | NCT00185029                | MR-Lymphography and Lymph Node Staging in Prostate Cancer  | Prostatic Neoplasms Lymphatic Metastasis<br>Uterine Neoplasms Cervix Neoplasms Bladder Neoplasms Prostatic   | PROCEDURE: Ferumoxtran-10 enhanced MRI (MRL)   | phase 4, INTERVENTIONAL<br>phase 1/2, INTERVENTIONAL |            | UNKNOWN<br>COMPLETED                  | Netherlands<br>Canada   |
|                  | NCT00243594                | Dendritic Cell Vaccination in Melanoma Patients Scheduled for Regional Lymph Node Dissection   | Melanoma Stage III or IV   | BIOLOGICAL: Dendritic cells labeled with superparamagnetic nanoparticles (Endo   | INTERVENTIONAL                                       | 1999-09    | COMPLETED                             | Netherlands   |
|                  | NCT00368589                | Effects Of Atorvastatin On Macrophage Activity And Plaque Inflammation Using Magnetic Resonance Imaging  |  | DRUG: atorvastatin   | OBSERVATIONAL  | 2006-07    | COMPLETED<br>COMPLETED                | Italy United Kingdom  |
|                  |                            | Fludeoxyglucose (FDG) F 18 PET Scan, CT Scan, and Ferumoxtran-10 MRI Scan Before Chemotherapy and Radiation Therapy in Finding Lymp  | Cervical Adenocarcinoma Cervical Adenosquamous Cell Carcinoma  | (RADIATION: fludeoxyglucose F 18(PROCEDURE: positron emission tomography)  | phase 1/2, INTERVENTIONAL                            |            | UNKNOWN<br>COMPLETED                  | France United States, Canada, and Japan, et al.                             |
|                  | NCT00453817<br>NCT00585936 |  | Type 1 Diabetes Mellitus<br>Diabetes Mellitus, Type 1  | DRUG: ferucarbotran (iron-based MRI contrast agent) PROCEDURE: Islet transpl   | phase 1, INTERVENTIONAL<br>OBSERVATIONAL             |            | TERMINATED<br>COMPLETED               | Switzerland<br>United States  |
|                  |                            | USPIO-enhanced and Diffusion-weighted MRI for the Detection of Pelvic Lymph Node Metastases  | Prostate Cancer Bladder Cancer   | OTHER: Imaging: diffusion-weighted MRI/OTHER: Sinerem (USPIO) enhanced M   | phase 3, INTERVENTIONAL                              | 2007-09    | COMPLETED<br>TERMINATED               | Switzerland<br>United States  |
|                  | NCT00659334                | Imaging of Intravenous (IV) Combidex to Brain, Intra-cerebral Tumors and in Central Nervous System (CNS) Inflammation  | Brain Neoplasms  | DRUG: Ferumoxtran-10 (Combidex)(PROCEDURE: Neurosurgery  | phase 2, INTERVENTIONAL                              | 2000-08    | TERMINATED                            | United States   |
|                  | NCT00659776<br>NCT00660543 | MRI Study With Ferumoxytol in Assessing Early Response in Patients With Glioblastoma Multiforme Receiving Temozolomide and Radiation The   | Nervous System Diseases(Diagnostic Imaging<br>Adult Brain Glioblastoma                                       | DRUG: Ferumoxytol DRUG: Gadolinium DRUG: Ferumoxytol Non-Stoichiometric Magnetite OTHER: D   |  |            | TERMINATED<br>COMPLETED               | United States United States   |
|                  | NCT00707876<br>NCT00769093 |  | Peripheral Arterial Disease (PAD)<br>Brain Neoplasms   | DRUG: ferumoxytol DRUG: ferumoxytol DRUG: ferumoxytol  | phase 2, INTERVENTIONAL                              |            | UNKNOWN<br>TERMINATED                 | United States United States   |
|                  | NCT00781872                | Mesenchymal Stem Cells for the Treatment of MS   | Multiple Scierosis   | BIOLOGICAL: Injection of autologous bone marrow derived mesenchymal stem or  | INTERVENTIONAL                                       | 2006-10    | COMPLETED                             |   |
|                  | NCT00794092<br>NCT00886444 | Comparative Evaluation of Various Combinable Magnetic Resonance (CMR) Pulse-sequences for Macrophage Imaging Using Ferucarbotran   | Aortic Aneurysm<br>Acute Myocardial Infarction   | DRUG: Ferucarbotran (Resovist)   |  | 2009-03    | COMPLETED<br>COMPLETED                | United Kingdom<br>Germany   |
|                  | NCT00920023<br>NCT00972946 |  | Pancreatic Cancer<br>Healthy Volunteer   |  |  |            | COMPLETED<br>COMPLETED                | United States United Kingdom  |
|                  | NCT00978562<br>NCT01127113 | DSC-MRI With Ferumoxytol and DCE-MRI With Gadolinium in Imaging Vascular Properties in Younger Patients With Brain Tumors<br>Inflammatory Cell Trafficking After Myocardial Infarction   | Childhood Brain Neoplasm/Recurrent Childhood Brain Neoplasm<br>Myocardial Infarction/Inflammation            | PROCEDURE: Dynamic Contrast-Enhanced Magnetic Resonance Imaging   PROC<br>OTHER: Infusion of investigational product   OTHER: Cardiac magnetic resonance             | phase 1, INTERVENTIONAL                              |            | COMPLETED<br>WITHDRAWN                | United States United Kingdom  |
|                  | NCT01169935                | Tracking Inflammatory Cells Using Superparamagnetic Particles of Iron Oxide (SPIO) and Magnetic Resonance Imaging (MRI)  | Healthy  | DRUG: Administration of intra-dermal Endorem(BIOLOGICAL: Mantoux test(BIOL   | INTERVENTIONAL                                       | 2010-07    | COMPLETED                             | United Kingdom  |
|                  |                            | A Study of Two Methodologies for Measuring Blood Flow in the Brain in Response to Non-Drug Stimuti (P08085/MK-0000-180)  Ferumoxytol for Magnetic Resonance Imaging of Myccardial Infarction   | Functional Magnetic Resonance Imaging<br>Myocardial Infarction   |  |  |            | COMPLETED<br>COMPLETED                | United Kingdom  |
|                  | NCT01336803                | Differentiation of Bone Sarcomas and Osteomyelitis With Ferumoxytol-Enhanced MRI   |  | aDRUG: Feraheme PROCEDURE: Magnetic Resonance Imaging (MRI) scan<br>DRUG: ferumoxylol  |  |            | COMPLETED<br>UNKNOWN                  | United States United States   |
|                  |                            | Development of Radiation Free Whole Body Magnetic Resonance (MR) Imaging Technique for Staging Children With Cancer  | Canoer   | PROCEDURE: WB-DW-MR scan PROCEDURE: 18-F-FDG PET scan DRUG: Fe   | INTERVENTIONAL                                       | 2012-02    | RECRUITING                            | United States   |
|                  | NCT01665846                | Ferumoxytol-enhanced Brain MRI in HIV-associated Neurocognitive Disorders  | HIV Dementia   | DRUG: Ferumoxytol  | INTERVENTIONAL                                       | 2011-07    | WITHDRAWN<br>COMPLETED                | United States United States   |
|                  | NCT01710072                | Aspirin Attenuates Inflammation in Human Cerebral Aneurysms  | The Focus of the Study is to Monitor MRI Signal Changes and Inflar   |  | INTERVENTIONAL                                       | 2011-08    | COMPLETED<br>COMPLETED                | United Kingdom<br>United States   |
|                  | NCT01770353<br>NCT01815333 |  | Solid Tumors ER/PR Positive Breast Cancer Triple Negative Breast   | (DRUG: Ferumoxytol DRUG: MM-398  |  |            | COMPLETED<br>COMPLETED                | United States United States   |
|                  | NCT01895829                | Ferumoxytol - Iron Oxide Nanoparticle Magnetic Resonance Dynamic Contrast Enhanced MRI   | Head and Neck Cancer   | PROCEDURE: Magnetic Resonance Imaging (MRI) DRUG: Ferumoxytol  | INTERVENTIONAL                                       | 2013-09-12 | TERMINATED                            | United States   |
|                  | NCT01927887<br>NCT01973517 | High-Field MRI Iron-Based Contrast-Enhanced Characterization of Multiple Sciences and Demyelinating Diseases   | Papillary Carcinoma of Thyroid Gland Metastatic Medullary Thyroid<br>Multiple Scierosis                      | DRUG: Feraheme DRUG: Gadolinium-based contrast   | OBSERVATIONAL  | 2014-04    | COMPLETED<br>WITHDRAWN                | United States United States   |
|                  | NCT01983371<br>NCT01995799 |  | Colorectal Cancer<br>Myocardial Infarction Inflammation  |  |  |            | WITHDRAWN<br>COMPLETED                | United States United Kingdom  |
|                  |                            | Imaging Kidney Transplant Rejection Using Ferumoxytol-Enhanced Magnetic Resonance  | Renal Transplant Rejection   |  | INTERVENTIONAL                                       | 2012-11-27 | COMPLETED<br>WITHDRAWN                | United States United States   |
|                  | NCT02070705                | DCE MRI in Patients With Pancreatic Cancer   | Familial Pancreatic Cancer Pancreatic Adenocarcinoma Pancreatic  | I PROCEDURE: Dynamic Contrast-Enhanced Magnetic Resonance Imaging DRUG   | INTERVENTIONAL                                       | 2014-01-31 | RECRUITING                            | United States   |
|                  | NCT02080650<br>NCT02084303 | Imaging Neuroinflammation in Epileosy With Ferumoxytol MRI   | Epilepsy   | DEVICE: Mesenchymal-marker based ferrofluid (c-MET)(DEVICE: Epithelial cell a<br>OTHER: Ferumoxytol injection after focal epiteptic seizure followed by iron-sensiti | INTERVENTIONAL                                       | 2014-03    | COMPLETED<br>COMPLETED                | United States United States   |
|                  | NCT02141490<br>NCT02226523 |  | Prostate Cancer Bladder Cancer Kidney Cancer<br>Acute Coronary Syndrome                                      | DRUG: Ferumoxytol DIAGNOSTIC_TEST: Magnetic Resonance Imaging (MRI)  | INTERVENTIONAL<br>OBSERVATIONAL                      |            | COMPLETED<br>COMPLETED                | United States Taiwan  |
|                  | NCT02249208                | Sentinel Lymph Node Biopsy With Superparamagnetic Iron Oxide for Breast Cancer Patients After Neoadjuvant Treatment.   | Breast Cancer  | DEVICE: Tc+blue dye/DEVICE: Tc+SPIO/DEVICE: SPIO alone   | INTERVENTIONAL                                       | 2014-04    | UNKNOWN                               | Spain   |
|                  |                            |  | Esophageal Neoplasms<br>Cardiac Transplant Cardiac Sarcoid Myocarditis Healthy Volunteers                    |  |  |            | COMPLETED<br>COMPLETED                | Netherlands<br>United Kingdom   |
|                  |                            | Steady State Blood Volume Maps Using Ferumoxytol Non-stoichiometric Magnetite MRI in Imaging Patients With Glioblastoma  | Glioblastoma   | PROCEDURE: Dynamic Susceptibility Contrast-Enhanced Magnetic Resonance I<br>IDRUG: Ferumoxytol/OTHER: Tissue Analysis/PROCEDURE: Magnetic Resonance                  |  |            | COMPLETED<br>COMPLETED                | United States United States   |
|                  |                            |  | Glioblastoma Hypcoria  | DRUG: FerahemeÄ®   | INTERVENTIONAL                                       |            | COMPLETED<br>TERMINATED               | Canada<br>United States, and Russian Federation                             |
|                  | NCT02511028                | In Vivo Characterization of Inflammation With Ferumoxytol, an Ultrasmall Superparamagnetic Iron Oxide Nanoparticle, on 7 Tesla Magnetic Reso   | Multiple Scierosis   | DRUG: Ferumoxytol  | INTERVENTIONAL                                       | 2015-11-27 | COMPLETED                             | United States   |
|                  |                            | Sienna+Äll Injection Time Study 4 Arms   | Breast Neoplasms   | DRUG: Feraheme DRUG: Cliostazol OTHER: USPIO-MRI OTHER: BBI-MRI DEVICE: Sienna+ retro DEVICE: Sienna+ peri DEVICE: Sienna+ retro 4-6 DEVIC                           |  | 2016-02    | COMPLETED<br>UNKNOWN                  | Denmark<br>Switzerland  |
|                  | NCT02631733<br>NCT02678767 |  | Malignant Solid Neoplasm<br>AIDS Dementia Complex  | DRUG: Ferumoxytol/DRUG: Irinotecan Sucrosofate/OTHER: Laboratory Biomarks DRUG: Ferumoxytol  |  |            | ACTIVE_NOT_RECRUITING<br>COMPLETED    | United States United States   |
|                  | NCT02689401                | MRI Iron Oxide Imaging for Lymph Node Staging in Esophageal Canoer   |  | DRUG: Ferumoxytol/DEVICE: MRI 3T scanner   | INTERVENTIONAL                                       | 2016-05    | WITHDRAWN<br>COMPLETED                | United Kingdom  |
|                  |                            | Nano MRI on 7 Tesla in Rectal and Breast Cancer  | Rectal Neoplasms Breast Neoplasms  | DRUG: ferumoxtran-10/DEVICE: 7 Tesla MRI/DEVICE: 3 Tesla MRI   |  | 2015-06    | UNKNOWN                               | Netherlands   |
|                  | NCT02752191<br>NCT02791568 |  | Pediatric Congenital Heart Disease<br>Pregnancy/Obesity/Precclampsia   | DRUG: ferumoxytol DRUG: gadofosveset<br>PROCEDURE: Ultrasound Scan PROCEDURE: MRI Scan DRUG: Ferumoxytol   | INTERVENTIONAL<br>OBSERVATIONAL                      |            | COMPLETED<br>COMPLETED                | United States United States   |
|                  | NCT02857218<br>NCT02893293 | Ferumoxytol-Enhanced MRI in Imaging Lymph Nodes in Patients With Stage IIB-IIIC Esophageal Cancer<br>Imaging of Osteonecrosis With Ferumoxytol-Enhanced MRI  | Stage IIB Esophageal Cancer AJCC v7 Stage III Esophageal Cance<br>Ostennermois                               |  | INTERVENTIONAL                                       |            | WITHDRAWN<br>ENROLLING_BY_INVITATION  | United States   |
|                  | NCT02954510<br>NCT02977637 | Ferumoxytol-enhanced Magnetic Resonance Imaging  | Coronary Artery Disease  | DRUG: ferumoxytol  | INTERVENTIONAL                                       | 2017-02-01 | ACTIVE NOT RECRUITING<br>COMPLETED    | United States United States   |
| Ē                | NCT02997046                | Ferumoxytol Enhanced Magnetic Resonance Angiography in Chronic Kidney Disease  | Ferric Compounds Magnetic Resonance Angiography Vascular Graf  | ting Arteriovenous Fistula Kidney Transplantation  | OBSERVATIONAL  | 2016-12-12 | COMPLETED                             | United Kingdom  |
| geri a           | NCT03084523<br>NCT03173066 |  | Stroke Intracranial Atherosclerosis<br>Pulmonary Embolism  |  |  |            | RECRUITING<br>COMPLETED               | United States United States   |
| e e              |                            | In Vivo Characterization of Macrophages in Pediatric Patients With Malignant Brain Tumors Using Ferumoxytol-enhanced MRI   | Childhood Brain Neoplasm<br>Prostate Cancer/Lymph Node Metastases  | DIAGNOSTIC_TEST: Diagnostic (ferumoxytol-enhanced MRI)(PROCEDURE: Sur<br>DIAGNOSTIC_TEST: Ferumoxtran-10 enhanced MRI; MRI contrast agent DIAGN                      |  |            | WITHDRAWN<br>UNKNOWN                  | Netherlands   |
| R 88             | NCT03234309                | Ferumoxytol in Magnetic Resonance Imaging of Pediatric Patients With Brain Tumors  | Brain Neoplasm   | DRUG: Ferumoxytol/PROCEDURE: Magnetic Resonance Imaging  | INTERVENTIONAL                                       | 2017-10-20 | WITHDRAWN                             |   |
| §<br>5           | NCT03264300                | Development and Validation of Advanced MRI Methods for Clinical Applications   |  | OTHER: MRIJOTHER: MRI  | INTERVENTIONAL                                       | 2017-06-26 | COMPLETED<br>UNKNOWN                  | Switzerland<br>United States  |
| ä                |                            |  |  | DIAGNOSTIC_TEST: Quantitative Magnetic Resonance Imaging<br>i DRUG: Ferumoxytol/DRUG: Gadolinium/PROCEDURE: Magnetic Resonance Ima                                   |  |            | COMPLETED<br>RECRUITING               | United States United States   |
|                  |                            | Ferumoxytel-Enhanced MRI in Imaging Lymph Nodes in Patients With Locally Advanced Rectal Cancer  Pembrolizumab and Magnetic Resonance Imaging With Ferumoxytel in Treating Patients With Non-small Cell Lung Cancer and Brain Metastase      |  | / PROCEDURE: Contrast-enhanced Magnetic Resonance Imaging[DRUG: Ferumo   |  |            | TERMINATED<br>TERMINATED              | United States United States   |
|                  | NCT03342677                | Evaluation of Gd-EOB-DTPA MRI for Detection and Characterization of Liver Nodules in Cirrhotic Patients Undergoing Liver Transplantation and   | Hepatocellular Carcinoma   | DIAGNOSTIC_TEST: Primovist MRI   | INTERVENTIONAL                                       | 2017-11-07 | UNKNOWN                               | Canada  |
|                  | NCT03358563                | Pilot Trial of Chemohormonal Therapy Followed by Prostatectomy in High Risk Prostate Cancer  | Prostate Cancer  | DRUG: Ferumoxytol OTHER: Laboratory Biomarker Analysis PROCEDURE: Mag DRUG: Docetaxel DRUG: Degarelix DRUG: Bicalutamide RADIATION: Ferumoxy                         | INTERVENTIONAL                                       | 2018-01-17 | COMPLETED                             | United States United States   |
|                  | NCT03449615<br>NCT03602339 |  | Melanoma Stage Sentinel Lymph Node<br>Magnetic Resonance Imaging   | DRUG: Gadoterate (Dotarem/Clariscan)IDRUG: Gadobutrol (Gadavist/Gadovist. E  | OBSERVATIONAL<br>INTERVENTIONAL                      |            | UNKNOWN<br>COMPLETED                  | Spain<br>United States, France, and Germany, et al.                         |
|                  | NCT03648463                | Use of MRI Labeling Technique to Track Mesenchymal Stem Cell Survival in Orthopaedic Conditions  | Cartilage Degeneration Rotator Cuff Tear Osteoarthritis, Knee  | PROCEDURE: arthroscopy of the affected kneel Bone Marrow Concentrate Inject  | INTERVENTIONAL<br>INTERVENTIONAL                     |            | WITHDRAWN                             | Found   |
|                  | NCT03678012                | Evaluation of Anti-biofilm Effects of Ferumoxytol (Feraheme) Using an in Situ Biofilm Demineralization Model   | Dental Carles  | DRUG: Ferumoxytol/Hydrogen peroxide/DRUG: Hydrogen Peroxide/DRUG: Water  | INTERVENTIONAL                                       | 2018-06-07 | COMPLETED                             | Egypt<br>United States  |
|                  | NCT03817307                | Validation of USPIO-enhanced MRI for Detection of Lymph Node Metastases in Head and Neck Carcinoma   |  |  | INTERVENTIONAL                                       | 2019-05-20 | WITHDRAWN<br>UNKNOWN                  | United States<br>Netherlands  |
|                  |                            | The Use of MagtraceA®/SentimagA® in Sentinel Node Biopsy for Malignant Melanoma. The Magmen Study.   | Melanoma Sentinel Lymph Node   | DEVICE: SLN Biopsy with MagtraceÄ®/SentimagÄ®  | INTERVENTIONAL                                       | 2019-03-01 | COMPLETED<br>RECRUITING               | Sweden Belgium, Germany, and Netherlands, et al.                            |
|                  | NCT04277377                | Nanoparticle for DSA Removal   | Kidney Failure Presence of Donor Specific Antibodies   |  | OBSERVATIONAL  | 2021-10-05 | RECRUITING                            | Switzerland Switzerland   |
|                  | NCT04300673                | Radio Guided Lymph Node Dissection in Oligometastatic Prostate Cancer Patients   | Leukemia, Lymphocytic, Chronic, B-Cell Abnormalities Cell Epithelia<br>Prostate Cancer Lymph Node Metastases | PROCEDURE: Radio guided surgery (RGS) using Indium-labelled PSMA   | INTERVENTIONAL                                       | 2020-09-01 | COMPLETED<br>UNKNOWN                  | Netherlands   |
|                  | NCT04316091                | A Phase I Clinical Trial of Neoadjuvant Chemotherapy With/Without SPIONs/SMF for Patients With Osteosarcoma  | Pancreatic Cancer Periampullary Cancer<br>Osteosarcoma   | DIAGNOSTIC_TEST: USPIO-enhanced MRI DRUG: neoadjuvant chemotherapy+SPIONs/SMFIDRUG: neoadjuvant chemother  | INTERVENTIONAL<br>INTERVENTIONAL                     | 2020-09-01 | UNKNOWN                               | Netherlands   |
|                  | NCT04369560                | Virtual Histology of the Bladder Wall for Bladder Cancer Staging   | Urinary Bladder Neoplasms<br>Liver Neoplasms Hepatic Cirrhosis Hepatic Carcinoma Liver Cancer                | DIAGNOSTIC_TEST: Magnetic Resonance Imaging DRUG: Gadobutrol intravesio<br> DRUG: Ferumoxytol injection  | INTERVENTIONAL<br>OBSERVATIONAL                      |            | RECRUITING<br>ACTIVE_NOT_RECRUITING   | United States United States   |
|                  | NCT04721262                | Ferumoxytol Enhanced Hyperfine Low Field Strength MRI  | Anemia, Hemolytic  | DEVICE: Hyperfine Portable MRI   | OBSERVATIONAL  | 2020-11-09 | COMPLETED                             | United States   |
|                  | NCT04776980                | Multimodality MRI and Liquid Biopsy in GBM   | Glioblastoma Multiforme Brain Tumor, Adult: Glioblastoma Brain Tur   |  | INTERVENTIONAL                                       | 2022-06    |                                       | United States, Hong Kong, and Sweden<br>United States                       |
|                  |                            | Placental Lesions in Fetal Growth Restrictions   | Fetal Growth Retardation   |  |  |            |                                       | Netherlands<br>United States  |
|                  | NCT04867954                | Development of 4D Flow MRI for Risk Stratification of Variceal Bleeding in Cirrhosis   | Cirrhosis, Liver(Gastroesophageal Varioes  | OTHER: Ensure PlusABJOTHER: Pre-clinical validation contrast enhanced MRIJO<br>DRUG: Ferumoxytol injection(DRUG: Pharmacological ascorbate[RADIATION: Ex             | OBSERVATIONAL  | 2021-10-28 | RECRUITING                            | United States United States   |
|                  | NCT04925557                | Study to Assess the Efficacy of Mayzent on Microglia in Secondary Progressive Multiple Sciences  | Secondary-progressive Multiple Scierosis   | DRUG: Mayzent(DRUG: Ocrevus  | INTERVENTIONAL                                       | 2021-11-13 | COMPLETED                             | United States   |
|                  | NCT05045872                | the Accuracy and Safety of Coronary Artery Contrast-enhanced Magnetic Resonance Imaging With Polysaccharide Superparamagnetic Iron Oxid<br>Assessment of Renal Vasculature and Function With Ferumoxytol-enhanced Magnetic Resonance Imaging | Coronary Heart Disease<br>Chronic Kidney Diseases  | DRUG: domestic polysaccharide superparamagnetic iron oxide nanoparticle<br>DRUG: domestic polysaccharide superparamagnetic iron oxide nanoparticle                   | INTERVENTIONAL                                       | 2021-09-17 | COMPLETED<br>RECRUITING               | China China   |
|                  | NCT05052086<br>NCT05054062 | Magnetomotoric Ultrasound (MMUS) in Rectal Cancer  | Rectal Cancer  | DIAGNOSTIC_TEST: Magnetomotoric ultrasound   | INTERVENTIONAL                                       |            | RECRUITING<br>COMPLETED               | Sweden<br>Netherlands   |
|                  | NCT05077800                | FOLFIRINOX + 9-Ing-41 + Losartan In Pancreatic Cancer  | Pancreatic Adenocarcinoma Pancreatic Adenocarcinoma Metastatic   | DRUG: FOLFIRNINOX DRUG: Losartan DRUG: 9-ING-41  | INTERVENTIONAL                                       | 2022-03-21 | RECRUITING                            | United States   |
|                  | NCT05092750<br>NCT05145829 | Exploring an Alternative Pre-operative SLN Mapping Method Using a Magnetic Tracer and MRI for Melanoma Patients  | Melanoma   | DIAGNOSTIC_TEST: Diagnostic Test: Sentinel node mapping using MRI  | INTERVENTIONAL                                       | 2022-09-01 | WITHDRAWN<br>RECRUITING               | Netherlands   |
|                  | NCT05161507                | Magseed and Magtrace Localization for Breast Cancer  | Brain Cancer/Malignant Brain Tumor/Recurrent Brain Tumor/Progre  | PROCEDURE: Magseed/PROCEDURE: Magtrace/PROCEDURE: Avillary lymph<br>s DRUG: Magrolimab   | OBSERVATIONAL<br>INTERVENTIONAL                      |            | COMPLETED<br>SUSPENDED                | Czechia<br>United States  |
|                  | NCT05288686                | Use of Superparamagnetic Iron Oxide (SPIO) in Sentinel Lymph Node Detection for Breast Cancer  | Breast Cancer Sentinel Lymph Node  | PROCEDURE: sentinel lymph node biopsy procedure  | INTERVENTIONAL                                       | 2018-07-24 | ACTIVE_NOT_RECRUITING COMPLETED       | Hong Kong<br>United States  |
|                  | NCT05359783                | Sentinel Node Localization and Staging With Low Dose Superparamagnetic Iron Oxide  | Breast Cancer Sentinel Lymph Node  | DRUG: Ferumoxytol infusion DRUG: Gadoteridol DIAGNOSTIC_TEST: MRI Brain<br>DRUG: Superparamagnetic Iron Oxide  | INTERVENTIONAL                                       | 2021-11-01 | ACTIVE_NOT_RECRUITING                 | Sweden  |
|                  | NCT05515874                | Predicting Stroke Risk in ICAD With Novel MRI  | Intracranial Atherosclerosis   | DRUG: Feraheme   | INTERVENTIONAL                                       | 2021-08-16 | COMPLETED<br>RECRUITING               | Spain<br>United States  |
|                  | NCT05569707                | MR Lymphography and Magnetic Sentinel Lymph Node Biopsy in Melanoma Patients   | Melanoma (Skin)  | DEVICE: Magnetic sentinel lymph node biopsy by use of MagtraceAlB, in combina<br>DRUG: MagTrace only(COMBINATION_PRODUCT: MagTrace and Magseed                       |  |            | NOT_YET_RECRUITING<br>COMPLETED       | Netherlands<br>Sweden   |
|                  | NCT05656300                | Glioblastoma Imaging Using a Strong Iron-like Bloodpool Contrast Medium?   | Glioblastoma   | DIAGNOSTIC_TEST: MRI scan using USPIO particles  | OBSERVATIONAL  | 2023-04-01 | NOT_YET_RECRUITING                    |   |
|                  | NCT05666700                | CAR-T Cell Therapy in RelApsed/Refractory Myeloma With ExtrameduLlary Disease - an in Vivo Imaging and Molecular Monitoring Study  | Extramedulary Myeloma  | DIAGNOSTIC_TEST: Determination of tumormarkers (CA27.29, CEA, CA125) Di.<br>BIOLOGICAL: Combination Product: JNJ-68284528 (Cita-cet) & 64Cu SPION du                 | INTERVENTIONAL                                       | 2023-12-08 | RECRUITING<br>RECRUITING              | Germany<br>Australia  |
|                  | NCT05690542                | Nanoparticles in Blood: Understanding and Controlling Protein Corona for Optimized Nanomedicine  Phenotyping Interstitial Cystitis/Bladder Pain Syndrome (ICIBPS) by Intravesical Contrast Enhanced - Magnetic Resonance Imaging (ICE-MRI) B | Coagulation Tests  |  | OBSERVATIONAL  | 2023-02    | NOT_YET_RECRUITING<br>RECRUITING      | France<br>United States   |
|                  | NCT05928299                | Integrative Multi-Omics Testing for Immunotherapy Response in Non-Small Cell Lung Cancer   | Lung Cancer  |  | OBSERVATIONAL  | 2020-01-01 |                                       | China<br>United States  |
|                  | NCT05985551                | Delayed SLND for Patients With Breast Cancer Undergoing Primary Systemic Treatment   | Breast Cancer/Chemotherapy Effect(Sentinel Lymph Node  | OTHER: SLND or TAD by the magnetic technique (SPIO)  | OBSERVATIONAL  | 2020-01-01 | ACTIVE_NOT_RECRUITING                 | Sweden  |
|                  | NCT06051565                | Cardiovascular Contrast-enhanced Magnetic Resonance Imaging Using Polysaccharide Superparamagnetic Iron Oxide Injection in Diabetic Pati   | Diabetes Magnetic Resonance Imaging  | DRUG: Polysaccharide superparamagnetic iron oxide injection  | INTERVENTIONAL                                       | 2021-11-06 | COMPLETED<br>COMPLETED                | China<br>China  |
|                  | NCT06052969<br>NCT06104371 | Lymph Node Identification Using Magtrace and Magseed Before Chemotherapy   | Breast Cancer  |  |  |            | RECRUITING<br>NOT_YET_RECRUITING      | United States<br>Sweden   |
|                  | NCT06110494                | A New Clinical Use of Ferumoxytol Nanoparticles: An Antibiofilm Treatment  | Apical Periodontitis Pulp Disease, Dental  | DRUG: Iron oxide nanoparticles treatment Ferumoxytol/H2O2 DRUG: NaOCI DRU  | INTERVENTIONAL                                       | 2020-07-13 | COMPLETED<br>RECRUITING               | United States<br>China  |
|                  | NCT06146751                | A Novel Ferumoxytol-enhanced Cardiac Magnetic Resonance Imaging for the Detection of Intracardiac Thrombus   | Heart Aneurysm   |  | OBSERVATIONAL  | 2023-11-01 | RECRUITING                            | China   |
|                  | NCT06169072<br>NCT06261983 | Sentinel Lymph Node Localisation With an Ultra-low Dose of Magtrace in Breast Cancer Patients  | Breast Cancer Sentinel Lymph Node<br>Diagnostic Value of Sentinel Node Biopsy Guided by Magnetic Prob        |  |  |            | RECRUITING<br>RECRUITING              | Sweden<br>Spain   |
|                  |                            | Effectiveness of Topical Magnetite Zinc Oxide Composite Nanoparticles in the Management of Oral Potentially Malignant Lesions  |  | DRUG: Magnetite ZnO Composite Nanoparticles[DRUG: Topical Placebo Gel  | INTERVENTIONAL                                       | 2024-02-29 | RECRUITING<br>ENROLLING BY INVITATION | Egypt<br>Sweden   |
|                  | NCT06273501                |  |  |  |  |            |                                       |   |

| NCT06440408 | Calculating Wall Shear Stress in Infant Pulmonary Veins  | Pulmonary Vein Stenosis  | DRUG: Ferumoxytol   | INTERVENTIONAL   | 2024-09    | NOT_YET_RECRUITING    | United States                           |
|-------------|--|--|---|------------------|------------|-----------------------|---|
| NCT06463600 | Turnour Localisation With Magnetic Clip Before Neoadjuvant Chemotherapy.   | Breast Conserving Surgery  | DEVICE: Magseed/DEVICE: Metallic clip and guide wire                        | INTERVENTIONAL   | 2024-02-01 | RECRUITING            | Sweden                                  |
| NCT06483061 | Enhanced MRI Imaging in Healthy Participants and Participants With Epilepsy  | Epilepsy, Temporal Lobe  | DRUG: Ferumoxytol   | INTERVENTIONAL   | 2024-09    | NOT_YET_RECRUITING    | Canada                                  |
| NCT06540443 | Pilot Study of MPB-2043 Enhanced MRI for Nodal Staging in Head and Neck Squamous Cell Carcinomas   | Head and Neck Squamous Cell Carcinoma Lymph Node Metastasi         | s DRUG: MPB-2043 of 0.5 mg/kg/DRUG: MPB-2043 of 1.0 mg/kg/DRUG: MPB-20      | 4 INTERVENTIONAL | 2024-09    | NOT_YET_RECRUITING    | Talwan                                  |
| NCT06551805 | Clinical Research Protocol of Ferumoxytol for Magnetic Resonance Enhancement Imaging in Patients With Atherosclerosis.                         | Atheroscierosis  | DRUG: Safety assessment of Ferumoxytol   DRUG: Assessment of the diagnosti  | OBSERVATIONAL    | 2024-08-12 | RECRUITING            | China                                   |
| NCT06572475 | USPIO Enhanced MR Imaging in CNS Tumours (UMIC)  | Vestibular Schwannoma Glioma, Astrocytic                           | DIAGNOSTIC_TEST: USPIO enhanced MRI   | INTERVENTIONAL   | 2024-04-26 | RECRUITING            | United Kingdom                          |
| NCT00255424 | Ferumoxytol Versus Oral Iron in the Treatment of Anemia in Non-Dialysis Dependent Chronic Kidney Disease Patients                              | Anemia   | DRUG: ferumoxytol or oral iron  | INTERVENTIONAL   | 2004-05    | COMPLETED             | United States                           |
| NCT00255437 | Ferumoxytol Versus Oral Iron in the Treatment of Anemia in Non-Dialysis Dependent Chronic Kidney Disease Patients                              | Anemia   | DRUG: ferumoxytol or oral iron  | INTERVENTIONAL   | 2004-06    | COMPLETED             | United States                           |
| NCT00255450 | A Crossover Safety Study of Ferumoxytol Versus Placebo   | Anemia   | DRUG: ferumoxytol or placebo  | INTERVENTIONAL   | 2005-01    | COMPLETED             | United States                           |
| NCT00233597 | Ferumoxytol Versus Oral Iron in the Treatment of Anemia in Hemodialysis Patients   | Anemia   | DRUG: ferumoxytol or oral iron  | INTERVENTIONAL   | 2004-08    | COMPLETED             | United States                           |
| NCT00360425 | A Study of the Electrocardiogram Effects and Pharmacokinetics of Ferumoxytol in Healthy Men and Women  | Anemia   | DRUG: ferumoxytol/DRUG: moxifloxacin/DRUG: placebo                          | INTERVENTIONAL   | 2006-05    | COMPLETED             | United States                           |
| NCT01052779 | A Trial Comparing Ferumoxytol to Iron Sucrose for the Treatment of Iron Deficiency Anemia in Adult Subjects With Chronic Kidney Disease        | Iron Deficiency(Anemia)Kidney Disease                              | DRUG: Ferumoxytol DRUG: Iron Sucrose  | INTERVENTIONAL   | 2010-03-01 | COMPLETED             | United States, Canada, and Germany,     |
| NCT01114139 | A Trial Comparing Ferumoxytol With Placebo for the Treatment of Iron Deficiency Anemia   | Iron Deficiency Anemia   | DRUG: Ferumoxytol)OTHER: Placebo  | INTERVENTIONAL   | 2010-06-19 | COMPLETED             | United State, Canada, and India, et al. |
| NCT01114204 | A Trial Comparing Ferumoxytol With Iron Sucrose for the Treatment of Iron Deficiency Anemia  | Iron Deficiency Anemia   | DRUG: Ferumoxytol DRUG: Iron Sucrose  | INTERVENTIONAL   | 2010-08-10 | COMPLETED             | Australia, France, and Germany, et al.  |
| NCT01114217 | A Trial of Ferumoxytol for the Episodic Treatment of Iron Deficiency Anemia  | Iron Deficiency Anemia   | DRUG: Ferumoxytol   | INTERVENTIONAL   | 2010-07-27 | COMPLETED             | United States, Canada, and Hungary,     |
| NCT01148745 | Iron Indices and Intravenous Ferumoxytol: Time to Steady State   | Iron Deficiency Anemia   | DRUG: ferumoxytol   | INTERVENTIONAL   | 2010-03    | COMPLETED             | United States                           |
| NCT01155375 | A Trial of Ferumoxytol for the Treatment of Iron Desciency Anemia in Pediatric Participants With Chronic Kidney Disease                        | Iron Deficiency Anemia   | DRUG: Ferumoxytol DRUG: Oral Iron   | INTERVENTIONAL   | 2011-10-17 | TERMINATED            | United States                           |
| NCT01155388 | A Trial of Ferumoxytol for the Treatment of Iron Deficiency Anemia in Pediatric Participants With Nondialysis-Dependent Chronic Kidney Disea   | se Iron Deficiency Anemia/Nondialysis-dependent Chronic Kidney Dis | eaDRUG: Ferumoxytol DRUG: Oral Iron   | INTERVENTIONAL   | 2011-10-17 | TERMINATED            | United States                           |
| NCT01374919 | Total Dose Infusion of Ferumoxytol(1020mg) in 15 Minutes for Iron Deficiency Anemia  | Iron Deficiency Anemia   | DRUG: ferumoxytol   | INTERVENTIONAL   | 2011-06    | COMPLETED             | United States                           |
| NCT01227616 | Compare Efficacy/Safety of Repeat Doses of Ferumoxytol With Iron Sucrose in CKD Subjects With IDA and on Hemodialysis                          | Iron Deficiency Anemia Treatment(Chronic Kidney Disease(CKD)       | DRUG: Ferumoxytol DRUG: Iron Sucrose  | INTERVENTIONAL   | 2013-08    | COMPLETED             | United States, Canada, and United Kir   |
| NCT01942460 | Ferumoxytol for Iron-Deficiency Anemia in Chronic Kidney Disease and Peritoneal Dialysis Patients  | Iron-Deficiency Anemia(Inflammation(Oxidative Stress               | DRUG: Ferumoxytol   | INTERVENTIONAL   | 2013-09    | COMPLETED             | Canada                                  |
| NCT01264679 | A Trial of Ferumoxytol for the Episodic Treatment of Iron Deficiency Anemia in Pediatric Participants With Chronic Kidney Disease              | Iron Deficiency Anemia   | DRUG: Ferumoxytol   | INTERVENTIONAL   | 2011-12-27 | TERMINATED            | United States                           |
| NCT01984554 | Observational Study on the Use of IV (Intravenous) Iron Therapy Among Subjects With Iron Deficiency Anemia                                     | Iron Deficiency Anemia (IDA)                                       |   | OBSERVATIONAL    | 2013-09    | COMPLETED             | United States                           |
| NCT02189889 | Active Preoperative Anemia Management in Patients Undergoing Cardiac Surgery   | Anemia Cardiovascular Disease                                      | DRUG: EPO(DRUG: Feraheme  | INTERVENTIONAL   | 2013-04-09 | TERMINATED            | United States                           |
| NCT02694978 | A Phase III Safety Study of Ferumoxytol Compared to Ferric Carboxymaltose for the Treatment of Iron Deficiency Anemia (IDA)                    | Iron Deficiency Anemia   | DRUG: Ferumoxytol DRUG: FCM   | INTERVENTIONAL   | 2016-02-29 | COMPLETED             | United States, Canada, and Hungary,     |
| NCT02499354 | Pilot Study: Randomized, Placebo-controlled Comparator Trial of IV vs Oral Iron Treatment of RLS With IDA. (IVOR-IDA)                          | Restless Legs Syndromelfron Deficiency Anemia                      | DRUG: Ferumoxytol intravenous DRUG: Ferrous sulfate                         | INTERVENTIONAL   | 2014-08    | COMPLETED             | United States                           |
| NCT03619850 | A Study to Evaluate the Safety (Compared to Iron Sucrose), Efficacy and Pharmacokinetics of Ferumoxytol for the Treatment of Iron Deficiency   | A Chronic Kidney Disease; Iron Deficiency Anemia                   | DRUG: Ferumoxytol DRUG: Iron sucrose  | INTERVENTIONAL   | 2018-08-13 | RECRUITING            | United States, Hungary, and Lithuania   |
| NCT03657433 | Intravenous Infusions of Ferumoxytol Compared to Oral Ferrous Sulfate for the Treatment of Anemia in Pregnancy                                 | Iron Deficiency Anemia of Pregnancy                                | DIETARY_SUPPLEMENT: Ferrous sulfate 325mg DRUG: Ferumoxytol                 | INTERVENTIONAL   | 2018-12-17 | COMPLETED             | United States                           |
| NCT03777514 | Intravenous (IV) Versus Oral Iron Treatment of Iron Deficiency Anemia in the Post-operative Bariatric Surgical Patient                         | IDA in the Post-bariatric Surgical Patient                         | DRUG: Ferumoxytol/DRUG: Ferrous sulfate/OTHER: Oral vitamin C/OTHER: Int    | MINTERVENTIONAL  | 2019-08    | WITHDRAWN             |   |
| NCT03893045 | A Study to Evaluate Ferumoxytol for the Treatment of Iron Deficiency Anemia (IDA) in Pediatric Subjects  | Iron Deficiency Anemia   | DRUG: ferumoxytol/DRUG: Iron sucrose  | INTERVENTIONAL   | 2019-09-18 | RECRUITING            | United States, Lithuania, and Poland    |
| NCT04080908 | Study to Assess Feasibility and Safety of Iron Repletion With Feraheme in Iron Deficient Patients With Durable Ventricular Assist Device Suppr | rt Anemia  | DRUG: Ferumoxytol injection   | INTERVENTIONAL   | 2020-01-15 | TERMINATED            | United States                           |
| NCT04205266 | IV Iron vs Oral Iron for Treatment of Anemia in Women With Abnormal Uterine Bleeding   | Anemia, Iron Deficiency Heavy Menstrual Bleeding                   | DRUG: Ferumoxytol/DRUG: Ferrous Sulfate                                     | INTERVENTIONAL   | 2020-02-14 | RECRUITING            | United States                           |
| NCT04253626 | Comparison of Oral Ferrous Sulfate to Intravenous Ferumoxytol in Antepartum Iron Deficiency Anemia   | Pregnancy Related/Anemia, Iron Deficiency                          | DRUG: Ferumoxytol Injection [Feraheme] DRUG: Ferrous Sulfate                | INTERVENTIONAL   | 2021-01-21 | ACTIVE_NOT_RECRUITING | United States                           |
| NCT04268849 | Trial of IV vs Oral Iron Treatment of Iron Deficiency Anemia in the Post-Operative Bariatric Surgical Patient                                  | Iron Deficiency Anemia   | DRUG: Ferumoxytol/DRUG: Saline/DRUG: Ferrous sulfate tablets/DRUG: Vitam    | ININTERVENTIONAL | 2020-02-27 | RECRUITING            | United States                           |
| NCT04278651 | Early Antenatal Support for Iron Deficiency Anemia   | Pregnancy Related Anemia, Iron Deficiency Anemia of Pregnancy      | DRUG: Ferumoxytol/DRUG: Ferrous Sulfate                                     | INTERVENTIONAL   | 2021-09-29 | RECRUITING            | United States                           |
| NCT05340465 | Darbe Plus IV Iron to Decrease Transfusions While Maintaining Iron Sufficiency in Preterm Infants  | Promoturitulinos deficienculinos Deficiencus Aneminitos Molabecont | io DRUG: Darbecoetin AlfalDRUG: Low Molecular Weight Iron DextranIDRUG: Fer | INTERVENTIONAL   | 2022-11-27 | RECRUITING            | United States                           |

Source: clinicaltrials.gov