<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Summary</th>
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<tbody>
<tr>
<td>April 30, 2018</td>
<td><strong>Intraoperative Resection Guidance with Photoacoustic and Fluorescence Molecular Imaging Using an Anti-B7-H3 Antibody-Indocyanine Green Dual Contrast Agent</strong></td>
<td>Breast cancer often requires surgical treatment including breast-conserving surgical resection.</td>
</tr>
<tr>
<td>November 01, 2017</td>
<td><strong>Exploration of melanoma metastases in mice brains using endogenous contrast photoacoustic imaging</strong></td>
<td>Photoacoustic imaging (PAI) provides real time non-invasive and contrast agent free monitoring of some endogenous compounds concentrations that provid</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Spectroscopic photoacoustic molecular imaging of breast cancer using a B7-H3-targeted ICG contrast agent</strong></td>
<td>Purpose: Breast cancer imaging methods lack diagnostic accuracy, in particular for patients with dense breast tissue, and improved techniques are crit</td>
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<tr>
<td>November 01, 2012</td>
<td><strong>Functional polycystin-1 dosage governs autosomal dominant polycystic kidney disease severity</strong></td>
<td>Autosomal dominant polycystic kidney disease (ADPKD) is caused by mutations to PKD1 or PKD2, triggering progressive cystogenesis and typically leading</td>
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<tr>
<td>March 01, 2019</td>
<td><strong>Data processing of 3D and 4D in-vivo electron paramagnetic resonance imaging co-registered with ultrasound. 3D printing as a registration tool</strong></td>
<td>We present the concept of image registration using ultrasound (US) and electron paramagnetic resonance (EPR) imaging and discuss the benefits of this</td>
</tr>
<tr>
<td>March 01, 2019</td>
<td><strong>Multifunctional nanoplatform for photoacoustic imaging-guided combined therapy enhanced by CO induced ferroptosis</strong></td>
<td>A multifunctional CO/thermo/chemotherapy nanoplatform is here reported, which is composed of mesoporous carbon nanoparticles (MCN) as near infrared (N</td>
</tr>
<tr>
<td>March 01, 2019</td>
<td><strong>Mild hyperthermia as a localized radiosensitizer for deep seated tumors: investigation in an orthotopic prostate cancer model in mice</strong></td>
<td>OBJECTIVE:: Non-ablative or mild hyperthermia (HT) has been shown in preclinical (and clinical) studies as a localized radiosensitizer that enhances t</td>
</tr>
<tr>
<td>February 28, 2019</td>
<td><strong>Use of Antimetastatic SOD3-Mimetic Albumin as a Primer in Triple Negative Breast Cancer</strong></td>
<td>Of the deaths attributed to cancer, 90% are due to metastasis. Treatments that prevent or cure metastasis remain elusive.</td>
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<tr>
<td>February 01, 2019</td>
<td>Down-regulation of MYCN protein by CX-5461 leads to neuroblastoma tumor growth suppression</td>
<td>Purpose: MYCN oncogene amplification is an independent predictor of poor prognosis in neuroblastoma.</td>
</tr>
<tr>
<td>February 01, 2019</td>
<td>Erythrocyte-cancer hybrid membrane-camouflaged melanin nanoparticles for enhancing photothermal therapy efficacy in tumors</td>
<td>Cell membrane coating has emerged as an intriguing biomimetic strategy to endow nanomaterials with functions and properties inherent to source cells.</td>
</tr>
<tr>
<td>February 01, 2019</td>
<td>Specific delivery of delta-5-desaturase siRNA via RNA nanoparticles supplemented with dihomo-γ-linolenic acid for colon cancer suppression</td>
<td>We have previously demonstrated that DGLA treatment along with Delta-5-Desaturase (D5D) siRNA in various types of cancer cells enhances the formation of tumor-suppressive siRNA nanoparticles.</td>
</tr>
<tr>
<td>January 01, 2019</td>
<td>Cytosolic 5′-nucleotidase 1A is overexpressed in pancreatic cancer and mediates gemcitabine resistance by reducing intracellular gemcitabine metabolites</td>
<td>Background: Cytosolic 5′-nucleotidase 1A (NT5C1A) dephosphorylates non-cyclic nucleoside monophosphates to produce nucleosides and inorganic phosphate.</td>
</tr>
<tr>
<td>January 01, 2019</td>
<td>Radioembolization of Hepatocellular Carcinoma with Built-In Dosimetry: First in vivo Results with Uniformly-Sized, Biodegradable Microspheres Labeled with 188 Re</td>
<td>A common form of treatment for patients with hepatocellular carcinoma (HCC) is transarterial radioembolization (TARE) with non-degradable glass or resins.</td>
</tr>
<tr>
<td>January 01, 2019</td>
<td>Effect of increasing liver blood flow on nanodrug clearance by the liver for enhanced antitumor therapy</td>
<td>The clinical applications of particulate drug delivery systems have demonstrated limited treatment outcomes, which is largely attributable to the elimination of drug nanoparticles.</td>
</tr>
<tr>
<td>January 01, 2019</td>
<td>pH/NIR-responsive semiconducting polymer nanoparticles for highly effective photoacoustic image guided chemo-photothermal synergistic therapy</td>
<td>ABSTRAC T Multifunctional drug delivery nanoplatform (PDPP3T@PSNiAA NPs) based on NIR absorbing semiconducting polymer nanoparticles for pH/NIR light-induced therapy.</td>
</tr>
<tr>
<td>January 01, 2019</td>
<td>Inhibiting Glutamine-Dependent mTORC1 Activation Ameliorates Liver Cancers Driven by β-Catenin Mutations</td>
<td>Based on their lobule location, hepatocytes display differential gene expression, including pericentral hepatocytes that surround the central vein, which is associated with enhanced tumor growth and poor prognosis.</td>
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<tr>
<td>January 01, 2019</td>
<td><strong>Efficient prostate cancer therapy with tissue-specific homing peptides identified by advanced phage display technology</strong></td>
<td>Selective targeting of drugs to tumor cells is a key goal in oncology.</td>
</tr>
<tr>
<td>January 01, 2019</td>
<td><strong>Imaging of the Mouse Lymphatic Sinus during Early Stage Lymph Node Metastasis Using Intranodal Lymphangiography with X-ray Micro-computed Tomography</strong></td>
<td>Purpose: Lymph node (LN) metastasis is detected prior to distant metastasis in many types of cancer.</td>
</tr>
<tr>
<td>January 01, 2019</td>
<td><strong>Oxygenated theranostic nanoplatforms with intracellular agglomeration behavior for improving the treatment efficacy of hypoxic tumors</strong></td>
<td>Hypoxia plays vital roles in the development of tumor resistance against typical anticancer therapies and local reoxygenation has proved effective to</td>
</tr>
<tr>
<td>January 01, 2019</td>
<td><strong>Chlorella-gold nanorods hydrogels generating photosynthesis-derived oxygen and mild heat for the treatment of hypoxic breast cancer</strong></td>
<td>Hypoxic tumors are rarely cured because their low oxygen environment restricts the cytotoxicity of many chemotherapeutics by blocking the production o</td>
</tr>
<tr>
<td>January 01, 2019</td>
<td><strong>SDF-1-loaded PLGA nanoparticles for the targeted photoacoustic imaging and photothermal therapy of metastatic lymph nodes in tongue squamous cell carcinoma</strong></td>
<td>The combination of photothermal therapy and targeted chemotherapy can produce much greater cytotoxicity than chemotherapy.</td>
</tr>
<tr>
<td>December 26, 2018</td>
<td><strong>Integration of Polymerization and Biomineralization as a Strategy to Facilely Synthesize Nanotheranostic Agents</strong></td>
<td>Integration of biological macromolecules with inorganic materials via biomineralization has demon- strated great potential for development of nanother</td>
</tr>
<tr>
<td>December 22, 2018</td>
<td><strong>IL-6-mediated cross-talk between human preadipocytes and ductal carcinoma in situ in breast cancer progression</strong></td>
<td>Background: The function of preadipocytes in the progression of early stage breast cancer has not been fully elucidated at the molecular level.</td>
</tr>
<tr>
<td>December 19, 2018</td>
<td><strong>Contrast-enhanced ultrasound for ovary assessment in a murine model: preliminary findings on the protective role of a gonadotropin-releasing hormone analogue from chemotherapy-induced ovarian damage</strong></td>
<td>The prolonged, gonadotoxic effect of chemotherapy can finally lead to infertility in female cancer survivors.</td>
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<tr>
<td>December 15, 2018</td>
<td><strong>A Multimodal Molecular Imaging Study Evaluates Pharmacological Alteration of the Tumor Microenvironment to Improve Radiation Response</strong></td>
<td>Hypoxic zones in solid tumors contribute to radioresistance, and pharmacological agents that increase tumor oxygenation prior to radiation, including</td>
</tr>
<tr>
<td>December 14, 2018</td>
<td><strong>Intrinsically absorbing photoacoustic and ultrasound contrast agents for cancer therapy and imaging</strong></td>
<td>Nanoparticles are submicrometer in size and are used in a variety of ways in the biomedical field.</td>
</tr>
<tr>
<td>December 12, 2018</td>
<td><strong>Multimodality cellular and molecular imaging of concomitant tumour enhancement in a syngeneic mouse model of breast cancer metastasis</strong></td>
<td></td>
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<tr>
<td>December 12, 2018</td>
<td><strong>Chemodrug-Gated Biodegradable Hollow Mesoporous Organosilica Nanotheranostics for Multimodal Imaging-Guided Low-Temperature Photothermal Therapy/Chemotherapy of Cancer</strong></td>
<td>Noninvasive physical treatment with relatively low intensity stimulation and the development of highly efficient anticancer medical strategy are still</td>
</tr>
<tr>
<td>December 12, 2018</td>
<td><strong>Stemness marker ALDH1A1 promotes tumor angiogenesis via retinoic acid/HIF-1α/VEGF signalling in MCF-7 breast cancer cells</strong></td>
<td>BACKGROUND: Aldehyde dehydrogenase 1A1 (ALDH1A1), a member of aldehyde dehydrogenase family, is a marker of stemness in breast cancer.</td>
</tr>
<tr>
<td>December 10, 2018</td>
<td><strong>Species-dependent extracranial manifestations of a brain seeking breast cancer cell line</strong></td>
<td>Purpose Metastatic brain tumors pose a severe problem in the treatment of patients with breast carcino- noma.</td>
</tr>
<tr>
<td>December 08, 2018</td>
<td><strong>Evaluation of pancreatic tumor development in KPC mice using multi-parametric MRI</strong></td>
<td>Pancreatic ductal adenocarcinoma (PDA) is a fatal disease with very poor prognosis.</td>
</tr>
<tr>
<td>December 04, 2018</td>
<td><strong>Up-regulation of FGF15/19 signaling promotes hepatocellular carcinoma in the background of fatty liver</strong></td>
<td>Background: Upregulated fibroblast growth factor 19 (FGF19) expression in human hepatocellular carcinoma (HCC) specimens is associated with tumor progresion.</td>
</tr>
<tr>
<td>December 04, 2018</td>
<td><strong>RET, a Targetable Driver of Pancreatic Adenocarcinoma</strong></td>
<td>Pancreatic ductal adenocarcinoma (PDA) remains a deadly disease, affecting about 40,000 individuals in the United States annually.</td>
</tr>
<tr>
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<tr>
<td>November 25, 2018</td>
<td>C3HeB/FeJ Mice mimic many aspects of gene expression and pathobiological features of human hepatocellular carcinoma</td>
<td>Hepatocellular carcinoma (HCC) remains a deadly cancer, underscoring the need for relevant preclinical models.</td>
</tr>
<tr>
<td>November 22, 2018</td>
<td>Conditional knockout of SHP2 in ErbB2 transgenic mice or inhibition in HER2-amplified breast cancer cell lines blocks oncogene expression and tumorigenesis</td>
<td>Overexpression of the human epidermal growth factor receptor 2 (HER2) is the cause of HER2-positive breast cancer (BC).</td>
</tr>
<tr>
<td>November 19, 2018</td>
<td>Noninvasive quantification of oxygen saturation in the portal and hepatic veins in healthy mice and those with colorectal liver metastases using QSM MRI</td>
<td>Purpose: This preclinical study investigated the use of QSM MRI to noninvasively measure venous oxygen saturation (SvO2) in the hepatic and portal veins.</td>
</tr>
<tr>
<td>November 12, 2018</td>
<td>Lestaurtinib is a potent inhibitor of anaplastic thyroid cancer cell line models</td>
<td>Anaplastic thyroid cancer (ATC) is a rare and lethal human malignancy with no known effective therapies in the majority of cases.</td>
</tr>
<tr>
<td>November 09, 2018</td>
<td>Tumor cell invasion from the marginal sinus into extranodal veins during early-stage lymph node metastasis can be a starting point for hematogenous metastasis</td>
<td>The primary control on the N–S zonation of the Southern Ocean is the wind-induced transport of the Antarctic Circumpolar Current (ACC).</td>
</tr>
<tr>
<td>November 01, 2018</td>
<td>Nonlinear ultrasound parameter to monitor cell death in cancer cell samples</td>
<td>A scaling subtraction method was proposed to analyze the radio frequency data from cancer cell samples exposed to an anti-cancer drug and to estimate</td>
</tr>
<tr>
<td>November 01, 2018</td>
<td>Enhancing Checkpoint Inhibitor Therapy with Ultrasound Stimulated Microbubbles</td>
<td>Checkpoint inhibitor (CI) immunotherapy is playing an increasingly prominent role in the treatment of cancer but is effective and durable in only a su</td>
</tr>
<tr>
<td>November 01, 2018</td>
<td>Remodeling Tumor-Associated Macrophages and Neovascularization Overcomes EGFR T790M-Associated Drug Resistance by PD-L1 Nanobody-Mediated Codelivery</td>
<td>Precision medicine has made a significant breakthrough in the past decade.</td>
</tr>
<tr>
<td>October 18, 2018</td>
<td>In Vivo Molecular Ultrasound Assessment of Glioblastoma Neovascularure with Endoglin-Targeted Microbubbles</td>
<td>Objectives. Glioblastoma, as one of the most malignant cancer in the world, usually shows substantially increased angiogenesis.</td>
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<tr>
<td>October 12, 2018</td>
<td>Sonodynamic Therapy on Intracranial Glioblastoma Xenografts Using Sinoporphyrin Sodium Delivered by Ultrasound with Microbubbles</td>
<td>Sonodynamic therapy (SDT) is a promising non-invasive method for cancer treatment.</td>
</tr>
<tr>
<td>October 10, 2018</td>
<td>Self-Supplied Tumor Oxygenation through Separated Liposomal Delivery of H₂O₂ and Catalase for Enhanced Radio-Immunotherapy of Cancer</td>
<td>The recent years have witnessed the blooming of cancer immunotherapy, as well as their combinational use together with other existing cancer treatment.</td>
</tr>
<tr>
<td>October 04, 2018</td>
<td>Combination Therapy with DETA/NO and Clopidogrel Inhibits Metastasis in Murine Mammary Gland Cancer Models via Improved Vasoprotection</td>
<td>Vascular endothelial dysfunction and platelet activation play a key role in tumor metastasis, and therefore both of these processes are considered imp.</td>
</tr>
<tr>
<td>October 01, 2018</td>
<td>Growth and in vivo stresses traced through tumor mechanics enriched with predator-prey cells dynamics</td>
<td>Mechanical stress accumulating during growth in solid tumors plays a crucial role in the tumor mechanobiology.</td>
</tr>
<tr>
<td>September 01, 2018</td>
<td>Tumor inhibitory effects of intravesical Ganoderma lucidum instillation in the syngeneic orthotopic MB49/C57 bladder cancer mice model</td>
<td>Ethnopharmacological relevance: Ganoderma lucidum (GL) has been traditionally used in oriental medicine as superior health tonic, and there are numero.</td>
</tr>
<tr>
<td>September 01, 2018</td>
<td>Biomimetic O₂-Evolving metal-organic framework nanoplatform for highly efficient photodynamic therapy against hypoxic tumor</td>
<td>Improving the supply of O₂ and the circulation lifetime of photosensitizers for photodynamic therapy (PDT) in vivo would be a promising approach to el.</td>
</tr>
<tr>
<td>September 01, 2018</td>
<td>Combined application of Indocyanine green (ICG) and laser lead to targeted tumor cell destruction</td>
<td>Purpose: Precise excision of neuroblastoma is challenging, especially when tumors adhere to vital structures.</td>
</tr>
<tr>
<td>August 24, 2018</td>
<td>Alterations in Sod2-induced oxidative stress affect endocrine cancer progression</td>
<td>Although significant advances have been made in understanding the genetics of endocrine tumors, cellular physiology is relatively understudied as a de.</td>
</tr>
<tr>
<td>July 24, 2018</td>
<td>Four-class tumor staging for early diagnosis and monitoring of murine pancreatic cancer using magnetic resonance and ultrasound</td>
<td>Background.</td>
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<tr>
<td>June 19, 2018</td>
<td>The oncolytic Adenovirus XVir-N-31 as a novel therapy in muscle-invasive bladder cancer</td>
<td>Muscle-invasive bladder cancer represents approximately 25% of patients diagnosed with bladder cancer and carries a significant risk of death.</td>
</tr>
<tr>
<td>June 08, 2018</td>
<td>Deletion of Rap1b, but not Rap1a or Epac1, reduces PKA-mediated thyroid cancer</td>
<td>Background: Thyroid cancer is an emerging health problem in the United States and Worldwide.</td>
</tr>
<tr>
<td>May 28, 2018</td>
<td>A Tumor Vascular-Targeted Interlocking Trimodal Nanosystem That Induces and Exploits Hypoxia</td>
<td>Vascular-targeted photodynamic therapy (VTP) is a recently approved strategy for treating solid tumors.</td>
</tr>
<tr>
<td>May 19, 2018</td>
<td>Treatment of SEC62 over-expressing tumors by Thapsigargin and Trifluoperazine</td>
<td>Treatment with analogues of the SERCA-inhibitor Thapsigargin is a promising new approach for a wide variety of cancer entities.</td>
</tr>
<tr>
<td>May 11, 2018</td>
<td>Impact of Age on Disease Progression and Microenvironment in Oral Cancer</td>
<td>Despite the recognized link between aging and cancer, most preclinical studies in experimental tumor models are conducted with 6- to 8-wk-old rodents.</td>
</tr>
<tr>
<td>May 01, 2018</td>
<td>A TRAMP-derived orthotopic prostate syngeneic (TOPS) cancer model for investigating anti-tumor treatments</td>
<td>Background: Patients with advanced prostate cancer have limited curative options, therefore new treatments are needed.</td>
</tr>
<tr>
<td>May 01, 2018</td>
<td>Histidine-rich glycoprotein-induced vascular normalization improves EPR-mediated drug targeting to and into tumors</td>
<td>Tumors are characterized by leaky blood vessels, and by an abnormal and heterogeneous vascular network.</td>
</tr>
<tr>
<td>April 23, 2018</td>
<td>Monitoring circulating prostate cancer cells by in vivo flow cytometry assesses androgen deprivation therapy on metastasis</td>
<td>It remains controversial whether surgical castration prolongs survival rate and improves therapy prospects in patients suffering from prostate cancer.</td>
</tr>
<tr>
<td>April 20, 2018</td>
<td>Magnetic resonance and photoacoustic imaging of brain tumor mediated by mesenchymal stem cell labeled with multifunctional nanoparticle introduced via carotid artery injection</td>
<td>OBJECTIVE: To evaluate the feasibility of visualizing bone marrow-derived human mesenchymal stem cells (MSCs) labeled with a gold-coated magnetic reso</td>
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<tr>
<td>April 19, 2018</td>
<td><strong>Quantifying solid stress and elastic energy from excised or in situ tumors</strong></td>
<td>Solid stress, distinct from both tissue stiffness and fluid pressure, is a mechanical stress that is often elevated in both murine and human tumors.</td>
</tr>
<tr>
<td>April 07, 2018</td>
<td><strong>Utilizing High Resolution Ultrasound to Monitor Tumor Onset and Growth in Genetically Engineered Pancreatic Cancer Models</strong></td>
<td>The LSL-KrasG12D/+; LSL-Trp53R172H/+; Pdx-1-Cre (KPC) mouse model represents an established and frequently used transgenic model to evaluate novel the</td>
</tr>
<tr>
<td>April 06, 2018</td>
<td><strong>Radiotherapy-Sensitized Tumor Photothermal Ablation Using γ-Polyglutamic Acid Nanogels Loaded with Polypyrrole</strong></td>
<td>Development of versatile nanoscale platforms for cancer diagnosis and therapy is of great importance for applications in translational medicine.</td>
</tr>
<tr>
<td>April 01, 2018</td>
<td><strong>A Yolk-Shell Nanoplatform for Gene-Silencing-Enhanced Photolytic Ablation of Cancer</strong></td>
<td>Noninvasive near-infrared (NIR) light responsive therapy is a promising cancer treatment modality; however, some inherent drawbacks of conventional ph</td>
</tr>
<tr>
<td>April 01, 2018</td>
<td><strong>The combined therapeutic effects of iodine 131-labeled multifunctional copper sulfide-loaded microspheres in treating breast cancer</strong></td>
<td>Compared to conventional cancer treatment, combination therapy based on well-designed nanoscale platforms may offer an opportunity to eliminate tumors.</td>
</tr>
<tr>
<td>March 01, 2018</td>
<td><strong>Deep Tumor Penetrating Bioparticulates Inspired Burst Intracellular Drug Release for Precision Chemo-Phototherapy</strong></td>
<td>The relevance of personalized medicine has inspired research for individually concerted diagnosis and therapy.</td>
</tr>
<tr>
<td>March 01, 2018</td>
<td><strong>Thyroid-Specific PPARγ Deletion Is Benign in the Mouse</strong></td>
<td>Peroxisome proliferator–activated receptor γ (PPARγ) is widely expressed at low levels and regulates many physiological processes.</td>
</tr>
<tr>
<td>February 13, 2018</td>
<td><strong>Multi-modality photoacoustic tomography, ultrasound, and light sheet microscopy for volumetric tumor margin detection</strong></td>
<td>Current methods for breast tumor margin detection are invasive, time consuming, and typically result in a reoperative rate of over 25%.</td>
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<tr>
<td>February 01, 2018</td>
<td>Biomimetic Copper Sulfide for Chemo-Radiotherapy: Enhanced Uptake and Reduced Efflux of Nanoparticles for Tumor Cells under Ionizing Radiation</td>
<td>Combined chemo-radiotherapy is one of most widely applied treatments for clinical cancer therapy.</td>
</tr>
<tr>
<td>January 31, 2018</td>
<td>Design of Phase-Changeable and Injectable Alginate Hydrogel for Imaging-Guided Tumor Hyperthermia and Chemotherapy</td>
<td>The objective of the present study was to construct an alginate (AG)-based phase-changeable and injectable hydrogel for imaging-guided tumor hyperthermia.</td>
</tr>
<tr>
<td>January 18, 2018</td>
<td>The novel TRAIL-receptor agonist APG350 exerts superior therapeutic activity in pancreatic cancer cells</td>
<td>Tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) has raised attention as a novel anticancer therapeutic as it induces apoptosis preferentially.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Photoacoustic imaging of tumour vascular permeability with indocyanine green in a mouse model</td>
<td>Background: We analysed the haemodynamics of indocyanine green (ICG) in mouse organs and tumours and evaluated responses to anti-angiogenic agents in vitro and in vivo.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>MiR-301a-3p Suppresses Estrogen Signaling by Directly Inhibiting ESR1 in ERα Positive Breast Cancer.</td>
<td>BACKGROUND/AIMS MiRNA-301a-3p is an oncogenic miRNA whose expression is associated with tumor development, metastases and overall poor prognosis.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Development and evaluation of a CEACAM6-targeting theranostic nanomedicine for photoacoustic-based diagnosis and chemotherapy of metastatic cancer</td>
<td>Metastasis is the leading cause of cancer-related deaths.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Visualizing the effects of metformin on tumor growth, vascularity, and metabolism in head and neck cancer</td>
<td>© 2018 John Wiley &amp; Sons A/S.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Iodinated Echogenic Glycol Chitosan Nanoparticles for X-ray CT/US Dual Imaging of Tumor</td>
<td>Development of biopolymer-based imaging agents which can access rapidly and provide detailed information about the diseases has received much attention.</td>
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<tr>
<td>January 01, 2018</td>
<td>A laser-activated multifunctional targeted nanoagent for imaging and gene therapy in a mouse xenograft model with retinoblastoma Y79 cells</td>
<td>Retinoblastoma (RB) is the most common intraocular malignancy of childhood that urgently needs early detection and effective therapy methods.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>[ASAP] Gadolinium Metallofullerene-Polypyrrole Nanoparticles for Activatable Dual-Modal Imaging-Guided Photothermal Therapy</td>
<td>Accurate diagnosis of tumor is promising to guide photothermal therapy (PTT) for efficacious tumor ablation with minimal damage to healthy tissues.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Biomimetic nanoparticles delivered hedgehog pathway inhibitor to modify tumour microenvironment and improved chemotherapy for pancreatic carcinoma</td>
<td>© 2018 Informa UK Limited, trading as Taylor &amp; Francis Group The unique tumour microenvironment (TM) of pancreatic ductal adenocarcinoma (PDA) includi</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Generation and testing of clinical-grade exosomes for pancreatic cancer</td>
<td>Exosomes are extracellular vesicles produced by all cells with a remarkable ability to efficiently transfer genetic material, including exogenously lo</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Photoacoustic imaging of integrin-overexpressing tumors using a novel ICG-based contrast agent in mice</td>
<td>PhotoAcoustic Imaging (PAI) is a biomedical imaging modality currently under evaluation in preclinical and clinical settings.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Role of Acid Sphingomyelinase and Ceramide in Mechano-Acoustic Enhancement of Tumor Radiation Responses</td>
<td>Background: High-dose radiotherapy (&gt;8-10 Gy) causes rapid endothelial cell death via acid sphingomyelinase (ASMase)-induced ceramide production, resu</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Nuclear factor 90 promotes angiogenesis by regulating HIF-1α/VEGF-A expression through the PI3K/Akt signaling pathway in human cervical cancer article</td>
<td>© 2018 The Author(s).</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Multi-modal characterization of vasculature and nanoparticle accumulation in five tumor xenograft models</td>
<td>Preclinical research has demonstrated that nanoparticles and macromolecules can accumulate in solid tumors due to the enhanced permeability and retent</td>
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<tr>
<td>Date</td>
<td>Title</td>
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<tr>
<td>January 01, 2018</td>
<td><strong>Semi-Automated Segmentation of the Tumor Vasculature in Contrast-Enhanced Ultrasound Data</strong></td>
<td>The vascular architecture in tumors contains relevant information for tumor classification and evaluation of therapy responses.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Tumour vascular shutdown and cell death following ultrasound-microbubble enhanced radiation therapy</strong></td>
<td>High-dose radiotherapy effects are regulated by acute tumour endothelial cell death followed by rapid tumour cell death instead of canonical DNA break.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Preparation and Imaging Investigation of Dual-targeted C3F8-filled PLGA Nanobubbles as a Novel Ultrasound Contrast Agent for Breast Cancer</strong></td>
<td>Molecularly-targeted contrast enhanced ultrasound (US) imaging is a promising imaging strategy with large potential for improving diagnostic accuracy.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Breast cancer cell-derived exosomes and macrophage polarization are associated with lymph node metastasis</strong></td>
<td>Crosstalk between breast cancer and macrophages has potential implications for tumor metastasis.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Targeting the NRG1/HER3 pathway in tumor cells and cancer-associated fibroblasts with an anti-neuregulin 1 antibody inhibits tumor growth in pre-clinical models of pancreatic cancer</strong></td>
<td>Neuregulin 1 (NRG1), a ligand for HER3 and HER4 receptors, is secreted by both pancreatic tumor cells (PC) and cancer-associated fibroblasts (CAFs), t</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>A novel mouse model of human prostate cancer to study intraprostatic tumor growth and the development of lymph node metastases</strong></td>
<td>BACKGROUND: In this study, we aimed to establish a versatile in vivo model of prostate cancer, which adequately mimics intraprostatic tumor growth, an</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Preoperative measurement of cutaneous melanoma and nevi thickness with photoacoustic imaging</strong></td>
<td>Photoacoustic imaging (PAI) is an emerging biomedical imaging technology, which can potentially be used in the clinic to preoperatively measure melano</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Ultrasound Doppler as an Imaging Modality for Selection of Murine 4T1 Breast Tumors for Combination Radiofrequency Hyperthermia and Chemotherapy</strong></td>
<td>Noninvasive radiofrequency-induced (RF) hyperthermia has been shown to increase the perfusion of chemotherapeutics and nanomaterials through cancer ti</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Phosphatidylserine targeted single-walled carbon nanotubes for photothermal ablation of bladder cancer</strong></td>
<td>© 2017 IOP Publishing Ltd.</td>
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<tr>
<td>Date</td>
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<tr>
<td>January 01, 2018</td>
<td>Therapy-educated mesenchymal stem cells enrich for tumor initiating cells</td>
<td>Stromal cells residing in the tumor microenvironment contribute to the development of therapy resistance.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Photoacoustic Imaging as an Early Biomarker of Radio Therapeutic Efficacy in Head and Neck Cancer</td>
<td>The negative impact of tumor hypoxia on radiotherapeutic efficacy is well recognized.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Thyroid Cancer Detection by Ultrasound Molecular Imaging with SHP2-Targeted Perfluorocarbon Nanoparticles</td>
<td>Background.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Thy1-Targeted Microbubbles for Ultrasound Molecular Imaging of Pancreatic Ductal Adenocarcinoma</td>
<td>Purpose: To engineer a dual human and murine Thy1-binding single-chain-antibody ligand (Thy1-scFv) for contrast microbubble–enhanced ultrasound mole</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>MYC-family protein overexpression and prominent nucleolar formation represent prognostic indicators and potential therapeutic targets for aggressive high-MKI neuroblastomas: A report from the children's oncology group</td>
<td>© Niemas-Teshiba et al.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Au-PLGA Hybrid Nanoparticles with Catalase-Mimicking and near-Infrared Photothermal Activities for Photoacoustic Imaging-Guided Cancer Therapy</td>
<td>© 2018 American Chemical Society. Imaging-guided diagnosis and therapy has been highlighted in the area of nanomedicines.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>A catalase-loaded hierarchical zeolite as an implantable nanocapsule for ultrasound-guided oxygen self-sufficient photodynamic therapy against pancreatic cancer</td>
<td>Photodynamic therapy (PDT) is an alternative strategy for treating pancreatic cancer (PC) in clinics.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Degradable rhenium trioxide nanocubes with high localized surface plasmon resonance absorbance like gold for photothermal theranostics</td>
<td>The applications of inorganic theranostic agents in clinical trials are generally limited to their innate non-biodegradability and potential long-term</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Hypoxia-specific therapeutic agents delivery nanotheranostics: A sequential strategy for ultrasound mediated on-demand tritherapies and imaging of cancer</td>
<td>The hypoxic microenvironment induced by sonodynamic therapy (SDT) via sonochemical oxygen consumption usually triggered tumor resistance to SDT, imped</td>
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<tr>
<td>January 01, 2018</td>
<td>Synthesis of Hollow Biomineralized CaCO3-Polydopamine Nanoparticles for Multimodal Imaging-Guided Cancer Photodynamic Therapy with Reduced Skin Photosensitivity</td>
<td>The development of activatable nanoplatforms to simultaneously improve diagnostic and therapeutic performances while reducing side effects is highly a</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Selective cancer treatment via photodynamic sensitization of hypoxia-responsive drug delivery</td>
<td>The precise and selective delivery of chemodrugs into tumors represents a critical requirement for anti-cancer therapy.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Sensitization of Hypoxic Tumors to Radiation Therapy Using Ultrasound-Sensitive Oxygen Microbubbles</td>
<td>Purpose: Much of the volume of solid tumors typically exists in a chronically hypoxic microenvironment that has been shown to result in both chemother</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Early assessment of tumor response to radiation therapy using high-resolution quantitative microvascular ultrasound imaging</td>
<td>Measuring changes in tumor volume using anatomical imaging weeks to months post radiation therapy (RT) is currently the clinical standard for indicati</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>In vitro and in vivo evaluation of etoposide - silk wafers for neuroblastoma treatment</td>
<td>High-risk neuroblastoma requires surgical resection and multi-drug chemotherapy.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Bacteria-like mesoporous silica-coated gold nanorods for positron emission tomography and photoacoustic imaging-guided chemo-photothermal combined therapy</td>
<td>Mesoporous silica nanoshell (MSN) coating has been demonstrated as a versatile surface modification strategy for various kinds of inorganic functional</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Biodegradable Hollow Mesoporous Organosilica Nanotheranostics for Mild Hyperthermia-Induced Bubble-Enhanced Oxygen-Sensitized Radiotherapy</td>
<td>Alleviation of tumor hypoxia has been the premise for improving the effectiveness of radiotherapy, which hinges upon the advanced delivery and rapid r</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>One-pot synthesis of pH-responsive charge-switchable PEGylated nanoscale coordination polymers for improved cancer therapy</td>
<td>Nanoscale coordination polymers (NCPs) are promising nanomedicine platforms featured with biodegradability and versatile functionalities.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Endoglin-targeted contrast-enhanced ultrasound imaging in hepatoblastoma xenografts</td>
<td>Angiogenesis is required for the growth of hepato-blastoma (HB).</td>
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<tr>
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<tr>
<td>January 01, 2018</td>
<td><strong>Size-dependent Tumor Response to Photodynamic Therapy and Irinotecan Monotherapies Revealed by Longitudinal Ultrasound Monitoring in an Orthotopic Pancreatic Cancer Model</strong></td>
<td>Longitudinal monitoring of tumor size in vivo can provide important biological information about disease progression and treatment efficacy that is no</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Molecular imaging of tumor photoimmunotherapy: Evidence of photosensitized tumor necrosis and hemodynamic changes</strong></td>
<td>Near-infrared photoimmunotherapy (NIR PIT) employs the photoabsorbing dye IR700 conjugated to antibodies specific for cell surface epidermal growth fa</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Perfluorooctyl bromide &amp; indocyanine green co-loaded nanoliposomes for enhanced multimodal imaging-guided phototherapy</strong></td>
<td>As a highly biocompatible NIR dye, indocyanine green (ICG) has been widely explored for cancer treatment due to its various energy level transition pa</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Generation of multiparametric MRI maps by using Gd-labelled- RBCs reveals phenotypes and stages of murine prostate cancer</strong></td>
<td>Prostate Cancer (PCa) is the second most common and fifth cause of cancer-related mortality in males in Western Countries.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Acidic pH-responsive polymer nanoparticles as a TLR7/8 agonist delivery platform for cancer immunotherapy</strong></td>
<td>Synthetic imidazoquinoline-based toll-like receptor (TLR) 7/8 bi-specific agonists are promising vaccine adjuvants that can induce maturation of dendr</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Tumor Evolution and Drug Response in Patient-Derived Organoid Models of Bladder Cancer</strong></td>
<td>Bladder cancer is the fifth most prevalent cancer in the U.S., yet is understudied, and few laboratory models exist that reflect the biology of the hu</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Anti-angiogenic drug scheduling optimisation with application to colorectal cancer</strong></td>
<td>Bevacizumab (bvz) is a first choice anti-angiogenic drug in oncology and is primarily administered in combination with chemotherapy.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td><strong>Chemotherapy and Radiofrequency-Induced Mild Hyperthermia Combined Treatment of Orthotopic Pancreatic Ductal Adenocarcinoma Xenografts</strong></td>
<td>Patients with pancreatic ductal adenocarcinomas (PDAC) have one of the poorest survival rates of all cancers.</td>
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<tr>
<td>Date</td>
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<tr>
<td>January 01, 2018</td>
<td>2D Ultrathin MXene-Based Drug-Delivery Nanoplateform for Synergistic Photothermal Ablation and Chemotherapy of Cancer</td>
<td>Two-dimensional (2D) MXenes, as a new 2D functional material nanosystem, have been extensively explored for broad applications.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>An Easy-to-Fabricate Clearable CuS-Superstructure-Based Multifunctional Theranostic Platform for Efficient Imaging Guided Chemo-Photothermal Therapy</td>
<td>Despite drug delivery systems (DDSs) have been receiving ever-increasing attention, development of a simple, effective, sensitive and clearable drug d</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Unfavorable effect of calcitriol and its low-calcemic analogs on metastasis of 4T1 mouse mammary gland cancer</td>
<td>Low vitamin D status is considered as a risk factor for breast cancer and has prognostic significance.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Radiation treatment monitoring with DCE-US in CWR22 prostate tumor xenografts.</td>
<td>Background Longitudinal monitoring of potential radiotherapy treatment effects can be determined by dynamic contrast-enhanced ultrasound (DCE-US).</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Facile fabrication of highly photothermal-effective albumin-assisted gold nanoclusters for treating breast cancer</td>
<td>Gold nanoclusters (AuNCs) have been considered to be a promising candidate for hyperthermia-based anticancer therapy.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Superselective Drug Delivery Using Doxorubicin-Encapsulated Liposomes and Ultrasound in a Mouse Model of Lung Metastasis Activation</td>
<td>Conventional treatment of lymph node metastasis involves dissection of the tumor and regional lymph nodes, but this may cause activation of latent met</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Natural antibody against neuroblastoma of TH-MYCN transgenic mice does not correlate with spontaneous regression</td>
<td>The mechanism underlying the spontaneous regression of neuroblastoma is unclear.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Serological biomarkers associate ultrasound characteristics of steatohepatitis in mice with liver cancer</td>
<td>Banana is the common name for herbaceous plants of the genus Musa and for the fruit they produce. It is one of the oldest cultivated plants.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Complement 5a stimulates macrophage polarization and contributes to tumor metastases of colon cancer</td>
<td>Inflammatory cells such as macrophages can play a pro-tumorigenic role in the tumor stroma.</td>
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<tr>
<td>January 01, 2018</td>
<td>Ultrasound beam steering of oxygen nanobubbles for enhanced bladder cancer therapy</td>
<td>New intravesical treatment approaches for bladder cancer are needed as currently approved treatments show several side effects and high tumor recurrence.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Motion model ultrasound localization microscopy for preclinical and clinical multiparametric tumor characterization</td>
<td>Super-resolution imaging methods promote tissue characterization beyond the spatial resolution limits of the devices and bridge the gap between histop.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Perfusion Computer Tomography Assessment of the Effect of Angiotensin II On Blood Flow Distribution in Rabbits with Intrarenal VX2 Tumors</td>
<td>Background/Aims: Unlike other organs, which only have one set of capillary network, the renal microvasculature consists of two sets of capillary netwo.</td>
</tr>
<tr>
<td>January 01, 2018</td>
<td>Disseminated injection of vincristine-loaded silk gel improves the suppression of neuroblastoma tumor growth</td>
<td>Background: Advanced-stage neuroblastoma patients require multiagent chemotherapy.</td>
</tr>
<tr>
<td>December 27, 2017</td>
<td>In Vitro and In Vivo Comparison of Gemcitabine and the Gemcitabine Analog 1-(2’-deoxy-2’-fluoroarabinofuranosyl) Cytosine (FAC) in Human Orthotopic and Genetically Modified Mouse Pancreatic Cancer Models</td>
<td>Purpose: Although gemcitabine is a mainstay of pancreatic cancer therapy, it is only moderately effective, and it would be desirable to measure drug u.</td>
</tr>
<tr>
<td>December 17, 2017</td>
<td>Validation of Bevacizumab Therapy Effect on Colon Cancer Subtypes by Using Whole Body Imaging in Mice</td>
<td>Purpose: Preclinical imaging offers a useful tool for monitoring cance.</td>
</tr>
<tr>
<td>December 04, 2017</td>
<td>Altering calcium influx for selective destruction of breast tumor</td>
<td>BACKGROUND: Human triple-negative breast cancer has limited therapeutic choices. Breast tumor cells have depolarized plasma membrane potential.</td>
</tr>
<tr>
<td>December 01, 2017</td>
<td>Contrast enhanced ultrasound imaging can predict vascular-targeted photodynamic therapy induced tumor necrosis in small animals</td>
<td>Aims To evaluate the accuracy of contrast-enhanced ultrasound (CEUS) for monitoring tumor necrosis following WST-11 vascular targeted photodynamic the.</td>
</tr>
<tr>
<td>November 02, 2017</td>
<td>NOTCH3 regulates stem-to–mural cell differentiation in infantile hemangioma</td>
<td>Infantile hemangioma (IH) is a vascular tumor that begins with rapid vascular proliferation shortly after birth, followed by vascular involution in ea.</td>
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<tr>
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<tr>
<td>November 01, 2017</td>
<td><strong>mTORC1 Couples Nucleotide Synthesis to Nucleotide Demand Resulting in a Targetable Metabolic Vulnerability</strong></td>
<td>The mechanistic target of rapamycin complex 1 (mTORC1) supports proliferation through parallel induction of key anabolic processes, including protein,</td>
</tr>
<tr>
<td>October 05, 2017</td>
<td><strong>A cerebellar window for intravital imaging of normal and disease states in mice</strong></td>
<td>The cerebellum is a prominent part of the vertebrate hindbrain that is critically involved in the regulation of important body functions such as movement.</td>
</tr>
<tr>
<td>October 05, 2017</td>
<td><strong>Fibroblast activation protein augments progression and metastasis of pancreatic ductal adenocarcinoma</strong></td>
<td>Pancreatic ductal adenocarcinomas (PDAs) are desmoplastic and can undergo epithelial-to-mesenchymal transition to confer metastasis and chemoresistance.</td>
</tr>
<tr>
<td>September 26, 2017</td>
<td><strong>Targeting CXCR4-dependent immunosuppressive Ly6C low monocytes improves antiangiogenic therapy in colorectal cancer</strong></td>
<td>Antiangiogenic therapy with antibodies against VEGF (bevacizumab) or VEGFR2 (ramucirumab) has been proven efficacious in colorectal cancer (CRC) patients.</td>
</tr>
<tr>
<td>August 01, 2017</td>
<td><strong>Measuring Absolute Blood Perfusion in Mice Using Dynamic Contrast-Enhanced Ultrasound</strong></td>
<td>We investigated the feasibility of estimating absolute tissue blood perfusion using dynamic contrast-enhanced ultrasound (CEUS) imaging in mice.</td>
</tr>
<tr>
<td>July 01, 2017</td>
<td><strong>Abstract 2833: Epithelial cell adhesion molecule (EpCAM) is associated with prostate cancer progression and chemo-/radio- resistance in vitro and in vivo</strong></td>
<td>Aims: Prostate cancer (CaP) is the most common cancer in males in Australia which caused more than 3000 deaths in 2015.</td>
</tr>
<tr>
<td>July 01, 2017</td>
<td><strong>Cabozantinib Eradicates Advanced Murine Prostate Cancer by Activating Antitumor Innate Immunity</strong></td>
<td>Several kinase inhibitors that target aberrant signaling pathways in tumor cells have been deployed in cancer therapy.</td>
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<tr>
<td>July 01, 2017</td>
<td>Drug “Pent-Up” in Hollow Magnetic Prussian Blue Nanoparticles for NIR-Induced Chemo-Photothermal Tumor Therapy with Trimodal Imaging</td>
<td>The study reports a biocompatible smart drug delivery system based on a doxorubicin (DOX) blending phase-change material of 1-pentadecanol loaded holl</td>
</tr>
<tr>
<td>July 01, 2017</td>
<td>Dielectric properties of the normal and malignant breast tissues in xenograft mice at low frequencies (100 Hz–1 MHz)</td>
<td>Previous studies have shown that dielectric properties of biological tissues can be imaged at high frequencies (50 MHz–20 GHz) to detect abnormalities</td>
</tr>
<tr>
<td>June 01, 2017</td>
<td>Lanthanide-integrated supramolecular polymeric nanoassembly with multiple regulation characteristics for multidrug-resistant cancer therapy</td>
<td>Cancer treatment can in principle be enhanced by the synergistic effects of chemo- and nucleic acid-based combination therapies but the lack of effici</td>
</tr>
<tr>
<td>May 31, 2017</td>
<td>Marriage of Albumin–Gadolinium Complexes and MoS 2 Nanoflakes as Cancer Theranostics for Dual-Modality Magnetic Resonance/Photoacoustic Imaging and Photothermal Therapy</td>
<td>The construction of safe and stable theranostics is beneficial to realize simultaneous cancer diagnosis and treatment.</td>
</tr>
<tr>
<td>May 15, 2017</td>
<td>A Model-Based Personalized Cancer Screening Strategy for Detecting Early-Stage Tumors Using Blood-Borne Biomarkers</td>
<td>An effective cancer blood biomarker screening strategy must distinguish aggressive from nonaggressive tumors at an early, intervenable time.</td>
</tr>
<tr>
<td>May 04, 2017</td>
<td>Development of prostate specific membrane antigen targeted ultrasound microbubbles using bioorthogonal chemistry</td>
<td>Prostate specific membrane antigen (PSMA) targeted microbubbles (MBs) were developed using bioorthogonal chemistry.</td>
</tr>
<tr>
<td>May 01, 2017</td>
<td>Orthogonal near-infrared upconversion co-regulated site-specific O2 delivery and photodynamic therapy for hypoxia tumor by using red blood cell microcarriers</td>
<td>Pre-existing hypoxia in tumors can result in an inadequate oxygen supply during photodynamic therapy (PDT), which in turn hampers photodynamic efficac</td>
</tr>
<tr>
<td>May 01, 2017</td>
<td>Near-infrared photothermal therapy using EGFR-targeted gold nanoparticles increases autophagic cell death in breast cancer</td>
<td>Although triple negative breast cancer (TNBC) is a small percentage of all breast cancers, to date, TNBC is one of the most challenging types of breas</td>
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<tr>
<td>May 01, 2017</td>
<td>A Smart Responsive Dual Aptamers-Targeted Bubble-Generating Nanosystem for Cancer Triplex Therapy and Ultrasound Imaging</td>
<td>The absence of targeted, single treatment methods produces low therapeutic value for treating cancers.</td>
</tr>
<tr>
<td>April 20, 2017</td>
<td>Aptamer-mediated impairment of EGFR-integrin αvβ3 complex inhibits vasculogenic mimicry and growth of triple-negative breast cancers</td>
<td>Current treatment options for triple-negative breast cancers (TNBCs) is limited by the absence of well-defined biomarkers, excluding a targeted therapy.</td>
</tr>
<tr>
<td>April 03, 2017</td>
<td>A novel treatment for metastatic lymph nodes using lymphatic delivery and photothermal therapy</td>
<td>Systemic delivery of an anti-cancer agent often leads to only a small fraction of the administered dose accumulating in target sites.</td>
</tr>
<tr>
<td>April 01, 2017</td>
<td>In vivo photoacoustics and high frequency ultrasound imaging of mechanical high intensity focused ultrasound (HIFU) ablation</td>
<td>The thermal effect of high intensity focused ultrasound (HIFU) has been clinically exploited over a decade, while the mechanical HIFU is still largely</td>
</tr>
<tr>
<td>March 23, 2017</td>
<td>Optimizing ultrasound molecular imaging of secreted frizzled related protein 2 expression in angiosarcoma</td>
<td>Secreted frizzled related protein 2 (SFRP2) is a tumor endothelial marker expressed in angiosarcoma.</td>
</tr>
<tr>
<td>March 16, 2017</td>
<td>Ganetespib synergizes with cyclophosphamide to improve survival of mice with autochthonous tumors in a mutant p53-dependent manner</td>
<td>The DNA-alkylating cytotoxic agent cyclophosphamide (CTX) is commonly used in the clinic to treat hematological malignancies like lymphomas and leukem</td>
</tr>
<tr>
<td>March 13, 2017</td>
<td>Optimizing non-invasive radiofrequency hyperthermia treatment for improving drug delivery in 4T1 mouse breast cancer model</td>
<td>Interactions of high-frequency radio waves (RF) with biological tissues are currently being investigated as a therapeutic platform for non-invasive ca</td>
</tr>
<tr>
<td>March 01, 2017</td>
<td>NH4HCO3 gas-generating liposomal nanoparticle for photoacoustic imaging in breast cancer</td>
<td>In this study, we have developed a biodegradable nanomaterial for photoacoustic imaging (PAI).</td>
</tr>
<tr>
<td>March 01, 2017</td>
<td>Photoacoustic signal characterization of cancer treatment response: Correlation with changes in tumor oxygenation</td>
<td>Frequency analysis of the photoacoustic radiofrequency signals and oxygen saturation estimates were used to monitor the in-vivo response of a novel, t</td>
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<tr>
<td>Date</td>
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<td>Summary</td>
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<tr>
<td>March 01, 2017</td>
<td><strong>Tumor angiogenesis of SCLC inhibited by decreased expression of FMOD via downregulating angiogenic factors of endothelial cells</strong></td>
<td>Fibromodulin (FMOD), an ECM small leucine-rich proteoglycan (SLRP), was reported to promote angiogenesis not only during wound healing, but also in op</td>
</tr>
<tr>
<td>February 28, 2017</td>
<td><strong>Magnetic Nanoliposomes as in Situ Microbubble Bombers for Multimodality Image-Guided Cancer Theranostics</strong></td>
<td>Nanosized drug delivery systems have offered promising approaches for cancer theranostics.</td>
</tr>
<tr>
<td>February 01, 2017</td>
<td><strong>Enhancing the anti-multiple myeloma efficiency in a cancer stem cell xenograft model by conjugating the ABCG2 antibody with microbubbles for a targeted delivery of ultrasound mediated epirubicin</strong></td>
<td>Background: Although multiple myeloma (MM) treatment has improved in the last decade, it remains largely incurable.</td>
</tr>
<tr>
<td>January 24, 2017</td>
<td><strong>Theranostic Liposomes with Hypoxia-Activated Prodrug to Effectively Destruct Hypoxic Tumors Post-Photodynamic Therapy</strong></td>
<td>Photodynamic therapy (PDT), a noninvasive cancer therapeutic method triggered by light, would lead to severe tumor hypoxia after treatment.</td>
</tr>
<tr>
<td>January 17, 2017</td>
<td><strong>Matrix stiffening promotes a tumor vasculature phenotype</strong></td>
<td>Tumor microvasculature tends to be malformed, more permeable, and more tortuous than vessels in healthy tissue, effects that have been largely attribu</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Self-assembly of semiconducting-plasmonic gold nanoparticles with enhanced optical property for photoacoustic imaging and photothermal therapy</strong></td>
<td>Although various noble metal and semiconducting molecules have been developed as photoacoustic (PA) agents, the use of semiconducting polymer-metal na</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>CD8αα intraepithelial lymphocytes arise from two main thymic precursors</strong></td>
<td>TCRαβ+CD4–CD8α+CD8β– intestinal intraepithelial lymphocytes (CD8αα IELs) are an abundant population of thymus-derived T cells that protect the gut bar</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Red blood cell membrane-camouflaged melanin nanoparticles for enhanced photothermal therapy</strong></td>
<td>Photothermal therapy (PTT) has represented a promising noninvasive approach for cancer treatment in recent years.</td>
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<tr>
<td>Date</td>
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<tr>
<td>January 01, 2016</td>
<td><strong>Ultra-small Iron-Galic Acid Coordination Polymer Nanoparticles for Chelator-free Labeling of 64Cu and Multimodal Imaging-guided Photothermal Therapy</strong></td>
<td>Cancer nanotechnology has become the hot topic nowadays.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Modeling the Iatrogenic Pancreatic Cancer Risk After Islet Autotransplantation in Mouse</strong></td>
<td>Iatrogenic pancreatic cancer metastasis after islet infusion is a potential risk of islet autotransplantation performed after pancreatectomy.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Ly6Cmonocytes drive immunosuppression and confer resistance to anti-VEGFR2 cancer therapy</strong></td>
<td>Current anti-VEGF therapies for colorectal cancer (CRC) provide limited survival benefit, as tumors rapidly develop resistance to these agents.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>A Theranostic Nanoplatform: Triple-Model Imaging Guided Synergistic Cancer Therapy Based on Liposomes Conjugated Mesoporous Silica Nanoparticles</strong></td>
<td>Mesoporous silica nanoparticles (MSNs) have long since been investigated to provide a versatile drug-delivery platform due to their multitudinous meri.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>The chemokine scavenging receptor D6 / ACKR2 is a target of miR-146a in thyroid cancer</strong></td>
<td>We have previously shown that miR-146a, a NF-kB-regulated microRNA, is strongly expressed in human specimens and cell lines derived from anaplastic th</td>
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<tr>
<td>January 01, 2016</td>
<td><strong>Optical clearing and fluorescence deep-tissue imaging for 3D quantitative analysis of the brain tumor microenvironment</strong></td>
<td>© 2017 The Author(s) Background: Three-dimensional visualization of the brain vasculature and its interactions with surrounding cells may shed light o</td>
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<tr>
<td>January 01, 2016</td>
<td><strong>A Systems Biology Approach Identifies FUT8 as a Driver of Melanoma Metastasis</strong></td>
<td>Association of aberrant glycosylation with melanoma progression is based mainly on analyses of cell lines.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Detection and characterization of murine colitis and carcinogenesis by molecularly targeted contrast-enhanced ultrasound</strong></td>
<td>AIM To study mucosal addressin cellular adhesion molecule-1 (MAdCAM-1) and vascular endothelial growth factor (VEGF)-targeted contrast enhanced ultras</td>
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<tr>
<td>January 01, 2016</td>
<td><strong>Nanoscale covalent organic polymers as a biodegradable nanomedicine for chemotherapy-enhanced photodynamic therapy of cancer</strong></td>
<td>Recently, covalent-organic polymers (COPs), which covalently cross-link different types of organic molecules to form organic network structures, have</td>
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<tr>
<td>January 01, 2016</td>
<td><strong>Enhanced photothermal therapy of biomimetic polypyrrole nanoparticles through improving blood flow perfusion</strong></td>
<td>In this study, we reported a strategy to improve delivery efficiency of a long-circulation biomimetic photothermal nanoagent for enhanced photothermal</td>
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<tr>
<td>January 01, 2016</td>
<td><strong>inhibition of bone marrow-derived mesenchymal stem cells homing towards triple-negative breast cancer microenvironment using an anti-PDGFRβ aptamer</strong></td>
<td>Bone marrow-derived mesenchymal stem cells (BM-MSCs) are shown to participate in tumor progression by establishing a favorable tumor microenvironment</td>
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<tr>
<td>January 01, 2016</td>
<td><strong>Two-Dimensional Tantalum Carbide (MXenes) Composite Nanosheets for Multiple Imaging-Guided Photothermal Tumor Ablation</strong></td>
<td>MXenes, an emerging family of graphene-analogues two-dimensional (2D) materials, have attracted continuous and tremendous attention in many applicati</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Monitoring of Blood Vessel Density Using Contrast-Enhanced High Frequency Ultrasound May Facilitate Early Diagnosis of Lymph Node Metastasis</strong></td>
<td>Time-dependent alterations in the ultrasonography characteristics of lymph nodes during early-stage metastasis have not been compared with those of tu</td>
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<tr>
<td>January 01, 2016</td>
<td><strong>Biological Evaluation of a Fluorescent-Imaging Agent for Medullary Thyroid Cancer in an Orthotopic Model</strong></td>
<td>Context: The primary and definitive treatment of medullary thyroid cancer (MTC) is surgical re-section.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>The brain microenvironment mediates resistance in luminal breast cancer to PI3K inhibition through HER3 activation</strong></td>
<td>Although targeted therapies are often effective systemically, they fail to adequately control brain metastases.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Exosome as a Vehicle for Delivery of Membrane Protein Therapeutics, PH20, for Enhanced Tumor Penetration and Antitumor Efficacy</strong></td>
<td>As biochemical and functional studies of membrane protein remain a challenge, there is growing interest in the application of nanotechnology to solve</td>
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<tr>
<td>January 01, 2016</td>
<td><strong>Albumin-Templated Manganese Dioxide Nanoparticles for Enhanced Radioisotope Therapy</strong></td>
<td>Although nanoparticle-based drug delivery systems have been widely explored for tumor-targeted delivery of radioisotope therapy (RIT), the hypoxia zone.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Carbon ion radiotherapy: Impact of tumor differentiation on local control in experimental prostate carcinomas</strong></td>
<td>To summarize the research activities of the “clinical research group heavy ion therapy”, funded by the German Research Foundation (DFG, KFO 214), on targeted therapy.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Tumor vasculature normalization by orally fed erlotinib to modulate the tumor microenvironment for enhanced cancer nanomedicine and immunotherapy</strong></td>
<td>The abnormal tumor vasculature is one of key reasons that lead to the limited tumor perfusion as well as hypoxic and immunosuppressive tumor microenvironment.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Manipulation of variables in local controlled release vincristine treatment in neuroblastoma</strong></td>
<td>Introduction Local drug delivery minimizes systemic toxicity while delivering high-dose chemotherapy for neuroblastoma patients.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Highly versatile SPION encapsulated PLGA nanoparticles as photothermal ablaters of cancer cells and as multimodal imaging agents</strong></td>
<td>We have designed versatile polymeric nanoparticles with cancer cell specific targeting capabilities via aptamer conjugation after the successful encapsulation.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Photoacoustic-Guided Surgery with Indocyanine Green-Coated Superparamagnetic Iron Oxide Nanoparticle Clusters</strong></td>
<td>A common cause of local tumor recurrence in brain tumor surgery results from incomplete surgical resection.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>PBCA-based polymeric microbubbles for molecular imaging and drug delivery</strong></td>
<td>Microbubbles (MB) are routinely used as contrast agents for ultrasound (US) imaging.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Black hollow silicon oxide nanoparticles as highly efficient photothermal agents in the second near-infrared window for in vivo cancer therapy</strong></td>
<td>Semiconductor nanoparticles with localized surface plasmon resonance (LSPR) have gained increasing interest due to their potential for use in nanomedicine.</td>
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<td>January 01, 2016</td>
<td><strong>Protein disulfide isomerase a4 acts as a novel regulator of cancer growth through the procaspase pathway</strong></td>
<td>Protein disulfide isomerase a4 (PDIA4) is implicated in the growth and death of tumor cells; however, its molecular mechanism and therapeutic potential.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>MicroRNA-378 enhances radiation response in ectopic and orthotopic implantation models of glioblastoma</strong></td>
<td>Glioblastoma multiforme (GBM) is the most common and highly malignant primary brain tumor, which is virtually incurable due to its therapeutic resistance.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>β-elemene regulates endoplasmic reticulum stress to induce the apoptosis of NSCLC cells through PERK/IRE1α/ATF6 pathway</strong></td>
<td>Endoplasmic reticulum stress (ERs) has been regarded as an important cause for the pathogenesis of non-small-cell lung cancer (NSCLC).</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Intrathymic injection of hematopoietic progenitor cells establishes functional T cell development in a mouse model of severe combined immunodeficiency</strong></td>
<td>BACKGROUND Even though hematopoietic stem cell transplantation can be curative in patients with severe combined immunodeficiency, there is a need for...</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Tissue-directed Implantation Using Ultrasound Visualization for Development of Biologically Relevant Metastatic Tumor Xenografts</strong></td>
<td>Background: Advances in cancer therapeutics depend on reliable in vivo model systems.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>A Combination of Radiation and the Hypoxia-Activated Prodrug Evofosfamide (TH-302) is Efficacious against a Human Orthotopic Pancreatic Tumor Model</strong></td>
<td>This study was designed to investigate the effect of single-dose radiation therapy (RT) in combination with evofosfamide (TH-302), a hypoxia-activated...</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Reactive Oxygen Species (ROS)-Responsive Nanomedicine for RNAi Cancer Therapy</strong></td>
<td>Although much effort has been dedicated to the development of efficient siRNA delivery for cancer therapy, delivery nanomaterials that can particular...</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Establishment of highly metastatic KRAS mutant lung cancer cell sublines in long-term three-dimensional low attachment cultures</strong></td>
<td>Decreased cell-substratum adhesion is crucially involved in metastasis.</td>
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<td>January 01, 2016</td>
<td><strong>Experimental imaging in orthotopic renal cell carcinoma xenograft models: comparative evaluation of high-resolution 3D ultrasonography, in-vivo micro-CT and 9.4T MRI</strong></td>
<td>In this study, we aimed to comparatively evaluate high-resolution 3D ultrasonography (hrUS), in-vivo micro-CT (µCT) and 9.4T MRI for the monitoring of...</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Engineered Zn(II)-dipicolylamine-gold nanorod provides effective prostate cancer treatment by combining siRNA delivery and photothermal therapy</strong></td>
<td>Combination cancer treatment has emerged as a critical approach to achieve remarkable anticancer effect.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>PSMA-targeted theranostic nanocarrier for prostate cancer</strong></td>
<td>Herein, we report the use of a theranostic nanocarrier (Folate-HBPE(CT20p)) to deliver a therapeutic peptide to prostate cancer tumors that express PS.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Magnetically-actuated drug delivery device (MADDD) for minimally invasive treatment of prostate cancer: An in vivo animal pilot study</strong></td>
<td>Background: The vast majority of prostate cancer presents clinically localized to the prostate without evidence of metastasis.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Proteoglycan-targeting applied to hypoxia-activated prodrug therapy in chondrosarcoma: first proof-of-concept</strong></td>
<td>Due to its abundant chondrogenic matrix and hypoxic tissue, chondrosarcoma is chemo- and radio-resistant.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Bottom-up synthesis of WS 2 nanosheets with synchronous surface modification for imaging guided tumor regression</strong></td>
<td>Two-dimensional transition metal dichalcogenides (TMDs) have been receiving great attention as NIR photothermal transducing agent in tumor phototherma.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Non-invasive monitoring of the therapeutic response in sorafenib-treated hepatocellular carcinoma based on photoacoustic imaging</strong></td>
<td>PURPOSE: We investigated the changes of tissue oxygen saturation (sO2) in sorafenib-treated HCC (hepatocellular carcinoma) mouse models using photoacou...</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Anti-RhoJ antibody functionalized Au@I nanoparticles as CT-guided tumor vessel-targeting radiosensitizers in patient-derived tumor xenograft model</strong></td>
<td>The clinical success of radiotherapy is greatly hampered due to its intolerable off-target cytotoxicity induced by the high dose of radiation.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Transposon mutagenesis identifies chromatin modifiers cooperating with Ras in thyroid tumorigenesis and detects ATXN7 as a cancer gene</strong></td>
<td>Oncogenic RAS mutations are present in 15-30% of thyroid carcinomas.</td>
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<td>January 01, 2016</td>
<td><strong>Inhibition of ROCK1 kinase modulates both tumor cells and stromal fibroblasts in pancreatic cancer</strong></td>
<td>ROCK, or Rho-associated coiled coil-containing protein kinase, is a member of the AGC kinase family and has been shown to play a role in cell migration.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Limiting the protein corona: A successful strategy for in vivo active targeting of anti-HER2 nanobody-functionalized nanostars</strong></td>
<td>Gold nanoparticles hold great promise as anti-cancer theranostic agents against cancer by actively targeting the tumor cells.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Ultrasound-mediated delivery and distribution of polymeric nanoparticles in the normal brain parenchyma and melanoma metastases</strong></td>
<td>The blood-brain barrier (BBB) prevents the passage of nearly all drugs into the brain, hindering brain cancer treatment.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Targeting the tumour microenvironment with an enzyme-responsive drug delivery system for the efficient therapy of breast and pancreatic cancers</strong></td>
<td>The development of novel therapeutic strategies allowing the destruction of tumour cells while sparing healthy tissues is one of the main challenges.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Apple polyphenol decelerates bladder cancer growth involving apoptosis and cell cycle arrest in N-butyl-N-(4-hydroxybutyl) nitrosamine-induced experimental animal model</strong></td>
<td>Apple polyphenol (AP) was found to possess the potential to prevent cancers.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Polyaniline-loaded γ-polyglutamic acid nanogels as a platform for photoacoustic imaging-guided tumor photothermal therapy</strong></td>
<td>We report the facile synthesis of polyaniline (PANI)-loaded γ-polyglutamic acid (γ-PGA) nanogels (NGs) for photoacoustic (PA) imaging-guided photother.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Spatiotemporal Optoacoustic Mapping of Tumor Hemodynamics in a Clinically Relevant Orthotopic Rabbit Model of Head and Neck Cancer</strong></td>
<td>The purpose of this study was to investigate the usefulness of photoacoustic imaging (PAI) for spatiotemporal mapping of tumor hemodynamics in a rabbit.</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td><strong>Rational Design of Branched Nanoporous Gold Nanoshells with Enhanced Physico-Optical Properties for Optical Imaging and Cancer Therapy</strong></td>
<td>Reported procedures on the synthesis of gold nanoshells with smooth surfaces have merely demonstrated efficient control of shell thickness and particl.</td>
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<tr>
<td>January 01, 2016</td>
<td>BSA-Bioinspired Gadolinium Hybrid-Functionalized Hollow Gold Nanoshells for NIRF/PA/CT/MR Quadmodal Diagnostic Imaging-Guided Photothermal/Photodynamic Cancer Therapy</td>
<td>Multimodal imaging guided synergistic therapy promises more accurate diagnosis and higher therapeutic efficiency than single imaging modality or their</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td>A triple-synergistic strategy for combinational photo/radiotherapy and multi-modality imaging based on hyaluronic acid-hybridized polyaniline-coated WS 2 nanodots</td>
<td>In this study, we report a strategy for integrating hyaluronic acid (HA), polyaniline (PANI), WS2 nanodots (WS2), and chlorin e6 (Ce6) into a single n</td>
</tr>
<tr>
<td>January 01, 2016</td>
<td>Rational Design of Tumor Microenvironment-Activated Micelles for Programed Targeting of Breast Cancer Metastasis</td>
<td>The poor drug delivery to primary and metastatic tumors of breast cancer remains a great challenge for effective antimetastasis therapy.</td>
</tr>
<tr>
<td>December 19, 2016</td>
<td>Synthesis and functionalization of protease-activated nanoparticles with tissue plasminogen activator peptides as targeting moiety and diagnostic tool for pancreatic cancer</td>
<td>Background: Functionalized nanoparticles (NPs) are one promising tool for detecting specific molecular targets and combine molecular biology and nanot</td>
</tr>
<tr>
<td>December 08, 2016</td>
<td>PD-L1 blockade enhances response of pancreatic ductal adenocarcinoma to radiotherapy</td>
<td>Pancreatic ductal adenocarcinoma (PDAC) is considered a non-immunogenic tumor, and immune checkpoint inhibitor monotherapy lacks efficacy in this dise</td>
</tr>
<tr>
<td>December 01, 2016</td>
<td>Mitochondrial Targeting of Metformin Enhances Its Activity against Pancreatic Cancer</td>
<td>Pancreatic cancer is one of the hardest-to-treat types of neoplastic diseases.</td>
</tr>
<tr>
<td>December 01, 2016</td>
<td>Suppression of Tumor Growth and Muscle Wasting in a Transgenic Mouse Model of Pancreatic Cancer by the Novel Histone Deacetylase Inhibitor AR-42</td>
<td>PURPOSE: Pancreatic ductal adenocarcinoma (PDAC) is the third leading cause of cancer death in the United States.</td>
</tr>
<tr>
<td>November 30, 2016</td>
<td>Assessment of murine colorectal cancer by micro-ultrasound using three dimensional reconstruction and non-linear contrast imaging</td>
<td>The relatively low success rates of current colorectal cancer (CRC) therapies have led investigators to search for more specific treatments.</td>
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<tr>
<td>November 01, 2016</td>
<td>Local checkpoint inhibition of CTLA-4 as a monotherapy or in combination with anti-PD1 prevents the growth of murine bladder cancer</td>
<td>ABSTRACT Checkpoint blockade of CTLA-4 results in long-lasting survival benefits in metastatic cancer patients.</td>
</tr>
<tr>
<td>October 24, 2016</td>
<td>Quantitative assessment of pancreatic cancer precursor lesions in IHC-stained tissue with a tissue image analysis platform</td>
<td>Tissue image analysis (tIA) is emerging as a powerful tool for quantifying biomarker expression and distribution in complex diseases and tissues.</td>
</tr>
<tr>
<td>October 12, 2016</td>
<td>Anti-VEGF therapy induces ECM remodeling and mechanical barriers to therapy in colorectal cancer liver metastases</td>
<td>The survival benefit of anti–vascular endothelial growth factor (VEGF) therapy in metastatic colorectal cancer (mCRC) patients is limited to a few mon</td>
</tr>
<tr>
<td>October 12, 2016</td>
<td>Ultrasound Triggered Tumor Oxygenation with Oxygen-Shuttle Nanoperfluorocarbon to Overcome Hypoxia-Associated Resistance in Cancer Therapies</td>
<td>Tumor hypoxia is known to be one of critical reasons that limit the efficacy of cancer therapies, particularly photodynamic therapy (PDT) and radiothe</td>
</tr>
<tr>
<td>September 08, 2016</td>
<td>Lack of immunoediting in murine pancreatic cancer reversed with neoantigen</td>
<td>In carcinogen-driven cancers, a high mutational burden results in neoepitopes that can be recognized immunologically.</td>
</tr>
<tr>
<td>September 01, 2016</td>
<td>Ultrasound-guided therapeutic modulation of hepatocellular carcinoma using complementary microRNAs</td>
<td>Treatment options for patients with hepatocellular carcinoma (HCC) are limited, in particular in advanced and drug resistant HCC.</td>
</tr>
<tr>
<td>August 17, 2016</td>
<td>A Multimodal Imaging Approach for Longitudinal Evaluation of Bladder Tumor Development in an Orthotopic Murine Model</td>
<td>Bladder cancer is the fourth most common malignancy amongst men in Western industrial- ized countries with an initial response rate of 70% for the non</td>
</tr>
<tr>
<td>August 01, 2016</td>
<td>Combination of Eribulin and Aurora A Inhibitor MLN8237 Prevents Metastatic Colonization and Induces Cytotoxic Autophagy in Breast Cancer</td>
<td>Recent findings suggest that the inhibition of Aurora A (AURKA) kinase may offer a novel treatment strategy against metastatic cancers.</td>
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<tr>
<td>August 01, 2016</td>
<td>Functional Flow Patterns and Static Blood Pooling in Tumors Revealed by Combined Contrast-Enhanced Ultrasound and Photoacoustic Imaging</td>
<td>Alterations in tumor perfusion and microenvironment have been shown to be associated with aggressive cancer phenotypes, raising the need for noninvasive imaging techniques. Photoacoustic imaging has evolved into a clinically translatable platform with the potential to complement existing imaging techniques for the management of tumors.</td>
</tr>
<tr>
<td>August 01, 2016</td>
<td>Photoacoustic Imaging in Oncology: Translational Preclinical and Early Clinical Experience</td>
<td>Photoacoustic imaging has evolved into a clinically translatable platform with the potential to complement existing imaging techniques for the management of tumors.</td>
</tr>
<tr>
<td>August 01, 2016</td>
<td>Nanotherapy silencing the interleukin-8 gene produces regression of prostate cancer by inhibition of angiogenesis</td>
<td>Interleukin-8 (IL-8) is a proangiogenic cytokine associated with aggressive prostate cancer (CaP).</td>
</tr>
<tr>
<td>June 20, 2016</td>
<td>Preclinical efficacy of bevacizumab with CRLX101, an investigational nanoparticle-drug conjugate, in treatment of metastatic triple-negative breast cancer</td>
<td>VEGF-pathway targeting antiangiogenic drugs, such as bevacizumab, when combined with chemotherapy have changed clinical practice for the treatment of metastatic cancer.</td>
</tr>
<tr>
<td>May 25, 2016</td>
<td>Monitoring the Growth of an Orthotopic Tumour Xenograft Model: Multi-Modal Imaging Assessment with Benchtop MRI (1T), High-Field MRI (9.4T), Ultrasound and Bioluminescence</td>
<td>Background: Research using orthotopic and transgenic models of cancer requires imaging methods to non-invasively quantify tumour burden. Inhibition of the vascular endothelial growth factor (VEGF) pathway has failed to improve overall survival of patients with glioblastoma (GBM).</td>
</tr>
<tr>
<td>April 19, 2016</td>
<td>Ang-2/VEGF bispecific antibody reprograms macrophages and resident microglia to anti-tumor phenotype and prolongs glioblastoma survival</td>
<td>Inhibition of the vascular endothelial growth factor (VEGF) pathway has failed to improve overall survival of patients with glioblastoma (GBM).</td>
</tr>
<tr>
<td>April 12, 2016</td>
<td>High Resolution Ultrasound and Photoacoustic Imaging of Orthotopic Lung Cancer in Mice: New Perspectives for Onco-Pharmacology</td>
<td>Objectives: We have developed a relevant preclinical model associated with a specific imaging protocol dedicated to onco-pharmacology studies in mice.</td>
</tr>
<tr>
<td>February 01, 2016</td>
<td>Cytosolic Phospholipase A 2 α Is Essential for Renal Dysfunction and End-Organ Damage Associated With Angiotensin II-Induced Hypertension</td>
<td>BACKGROUND: The kidney plays an important role in regulating blood pressure (BP).</td>
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<tr>
<td>February 01, 2016</td>
<td>Monitoring Prostate Tumor Growth in an Orthotopic Mouse Model Using Three-Dimensional Ultrasound Imaging Technique</td>
<td>Prostate cancer (CaP) is the most commonly diagnosed and the second leading cause of death from cancer in males in USA.</td>
</tr>
<tr>
<td>February 01, 2016</td>
<td>Preclinical Efficacy of Ado-trastuzumab Emtansine in the Brain Microenvironment</td>
<td>Background: Central nervous system (CNS) metastases represent a major problem in the treatment of human epidermal growth factor receptor 2 (HER2)–posi</td>
</tr>
<tr>
<td>February 01, 2016</td>
<td>Squamous Cell Carcinoma Xenografts: Use of VEGFR2-targeted Microbubbles for Combined Functional and Molecular US to Monitor Antiangiogenic Therapy Effects</td>
<td>Purpose: To assess the ability of vascular endothelial growth factor receptor type 2 (VEGFR2)-targeted and nontargeted ultrasonography (US) to depict</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Tumor priming using metronomic chemotherapy with neovasculature-targeted, Nanoparticulate paclitaxel</td>
<td>Normalization of the tumor microenvironment is a promising approach to render conventional chemotherapy more effective.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Co-option of Liver Vessels and Not Sprouting Angiogenesis Drives Acquired Sorafenib Resistance in Hepatocellular Carcinoma</td>
<td>Background: The anti-angiogenic Sorafenib is the only approved systemic therapy for advanced hepatocellular carcinoma (HCC).</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Photoacoustic monitoring of tumor and normal tissue response to radiation</td>
<td>Hypoxia is a recognized characteristic of tumors that influences efficacy of radiotherapy (RT).</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Multifunctional Fe3O4 @ Au core/shell nanostars: a unique platform for multimode imaging and photothermal therapy of tumors</td>
<td>We herein report the development of multifunctional folic acid (FA)-targeted Fe3O4 @ Au nanostars (NSs) for targeted multi-mode magnetic resonance (MR</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Sonoporation with Acoustic Cluster Therapy (ACT®) induces transient tumour volume reduction in a subcutaneous xenograft model of pancreatic ductal adenocarcinoma</td>
<td>Pancreatic ductal adenocarcinoma (PDAC) remains one of the deadliest cancers with survival averaging only 3months if untreated following diagnosis.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Nutrition Modulation of Cardiotoxicity and Anticancer Efficacy Related to Doxorubicin Chemotherapy by Glutamine and -3 Polyunsaturated Fatty Acids</td>
<td>BACKGROUND: Doxorubicin (DOX) has been one of the most effective antitumor agents against a broad spectrum of malignancies.</td>
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<td>Date</td>
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<td>Summary</td>
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<tr>
<td>January 01, 2015</td>
<td>Ultrasound-guided photoacoustic imaging for the selective detection of EGFR-expressing breast cancer and lymph node metastases</td>
<td>We assessed the use of ultrasound (US)-guided photoacoustic imaging (PAI) and anti-EGFR antibody-conjugated gold nanorods (anti- EGFR-GNs) to non-inva</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Transdermal drug targeting and functional imaging of tumor blood vessels in the mouse auricle</td>
<td>Subcutaneously growing tumors are widely utilized to study tumor angiogenesis and the efficacy of antiangiogenic therapies in mice.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>High-Frequency Ultrasound-Guided Injection for the Generation of a Novel Orthotopic Mouse Model of Human Thyroid Carcinoma</td>
<td>Background: Thyroid carcinoma is the most common endocrine malignancy and has an increasing incidence.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Photodynamic Therapy Synergizes with Irinotecan to Overcome Compensatory Mechanisms and Improve Treatment Outcomes in Pancreatic Cancer</td>
<td>The ability of tumor cells to adapt to therapeutic regimens by activating alternative survival and growth pathways remains a major challenge in cancer</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Ultrasound Molecular Imaging of the Breast Cancer Neovasculature using Engineered Fibronectin Scaffold Ligands: A Novel Class of Targeted Contrast Ultrasound Agent</td>
<td>Molecularly-targeted microbubbles (MBs) are increasingly being recognized as promising contrast agents for oncological molecular imaging with ultrasound.</td>
</tr>
<tr>
<td>October 27, 2015</td>
<td>Tumor-Specific Formation of Enzyme-Instructed Supramolecular Self-Assemblies as Cancer Theranostics</td>
<td>Despite the effort of developing various nanodelivery systems, most of them suffer from undesired high uptakes by the reticuloendothelial system, such</td>
</tr>
<tr>
<td>September 02, 2015</td>
<td>Multimodal imaging guided preclinical trials of vascular targeting in prostate cancer</td>
<td>// James Kalmuk 1, 4, Margaret Folaron 1, 2, Julian Buchinger 1, 5, Roberto Pili 3, Mukund Seshadri 1, 2 1 Department of Pharmacology and Therapeu</td>
</tr>
<tr>
<td>August 01, 2015</td>
<td>Losartan treatment attenuates tumor-induced myocardial dysfunction</td>
<td>Fatigue and muscle wasting are common symptoms experienced by cancer patients.</td>
</tr>
<tr>
<td>Date</td>
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<tr>
<td>July 16, 2015</td>
<td>Mucin 1 is a potential therapeutic target in cutaneous T-cell lymphoma</td>
<td>Cutaneous T-cell lymphoma (CTCL) is an aggressive neoplasm with limited treatments for patients with advanced disease.</td>
</tr>
<tr>
<td>June 22, 2015</td>
<td>Impaired Coronary and Renal Vascular Function in Spontaneously Type 2 Diabetic Leptin-Deficient Mice</td>
<td>Background: Type 2 diabetes is associated with macro- and microvascular complications in man.</td>
</tr>
<tr>
<td>June 15, 2015</td>
<td>Breast Cancer Detection by B7-H3-Targeted Ultrasound Molecular Imaging</td>
<td>Ultrasound is a complimentary imaging modality to mammography in breast cancer detection in particular in patients with dense breast tissue, but is li</td>
</tr>
<tr>
<td>June 01, 2015</td>
<td>A Cre-conditional MYCN-driven neuroblastoma mouse model as an improved tool for preclinical studies</td>
<td>Neuroblastoma, a childhood cancer that originates from neural crest-derived cells, is the most common deadly solid tumor of infancy.</td>
</tr>
<tr>
<td>May 01, 2015</td>
<td>Ubiquinol reduces muscle wasting but not fatigue in tumor-bearing mice.</td>
<td>PURPOSE: Fatigue is the most common and distressing symptom reported by cancer patients during and after treatment.</td>
</tr>
<tr>
<td>April 30, 2015</td>
<td>Effect of Sodium-Glucose Cotransport Inhibition on Polycystic Kidney Disease Progression in PCK Rats</td>
<td>The sodium-glucose-cotransporter-2 (SGLT2) inhibitor dapagliflozin (DAPA) induces gluco- suria and osmotic diuresis via inhibition of renal glucose re</td>
</tr>
<tr>
<td>March 01, 2015</td>
<td>Vascular Endothelial Growth Factor Receptor Type 2–targeted Contrast-enhanced US of Pancreatic Cancer Neovasculature in a Genetically Engineered Mouse Model: Potential for Earlier Detection</td>
<td>PURPOSE: To test ultrasonographic (US) imaging with vascular endothelial growth factor receptor type 2 (VEGFR2)-targeted microbubble contrast material</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Urine Stasis Predisposes to Urinary Tract Infection by an Opportunistic Uropathogen in the Megabladder (Mgb) Mouse</td>
<td>PURPOSE: Urinary stasis is a risk factor for recurrent urinary tract infection (UTI).</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td>Preclinical Pharmacologic Evaluation of Pralatrexate and Romidepsin Confirms Potent Synergy of the Combination in a Murine Model of Human T-cell Lymphoma</td>
<td>Purpose: T-cell lymphomas (TCLs) are aggressive diseases, which carry a poor prognosis.</td>
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<tr>
<td>January 01, 2015</td>
<td><strong>Quantitative Ultrasound Comparison of MAT and 4T1 Mammary Tumors in Mice and Rats Across Multiple Imaging Systems</strong></td>
<td>Objectives—Quantitative ultrasound estimates such as the frequency-dependent backscatter coefficient (BSC) have the potential to enhance noninvasive t</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Phototheranostic Porphyrin Nanoparticles Enable Visualization and Targeted Treatment of Head and Neck Cancer in Clinically Relevant Models</strong></td>
<td>Head and neck cancer is the fifth most common type of cancer worldwide and remains challenging for effective treatment due to the proximity to critical organs.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>An orthotopic mouse model of laryngeal squamous cell carcinoma</strong></td>
<td>Objective: This study aimed to create a reliable and reproducible orthotopic mouse model of laryngeal malignancy that recapitulates its biologic behavior</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Erythropoietin accelerates the regeneration of ureteral function in a murine model of obstructive uropathy.</strong></td>
<td>PURPOSE: Unilateral ureteral obstruction halts ureteral peristalsis, and may cause pain and lead to infection.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Semaphorin 3D autocrine signaling mediates the metastatic role of annexin A2 in pancreatic cancer.</strong></td>
<td>Most patients with pancreatic ductal adenocarcinoma (PDA) present with metastatic disease at the time of diagnosis or will recur with metastases after the primary tumor has been treated.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Collecting Duct-Derived Cells Display Mesenchymal Stem Cell Properties and Retain Selective In Vitro and In Vivo Epithelial Capacity.</strong></td>
<td>We previously described a mesenchymal stem cell (MSC)-like population within the adult mouse kidney that displays long-term colony-forming efficiency,</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Comparison of Photoacoustically Derived Hemoglobin and Oxygenation Measurements with Contrast-Enhanced Ultrasound Estimated Vascularity and Immunohistochemical Staining in a Breast Cancer Model</strong></td>
<td>In this preliminary study, we compared two noninvasive techniques for imaging intratumoral physiological conditions to immunohistochemical staining in breast cancer.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Quantitative volumetric imaging of normal, neoplastic and hyperplastic mouse prostate using ultrasound</strong></td>
<td>Abstract Background: Genetically engineered mouse models are essential to the investigation of the molecular mechanisms underlying human prostate path.</td>
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<tr>
<td>January 01, 2015</td>
<td><strong>Quantitative correlational study of microbubble-enhanced ultrasound imaging and magnetic resonance imaging of glioma and early response to radiotherapy in a rat model</strong></td>
<td>Purpose: Radiotherapy remains a major treatment method for malignant tumors.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Combined Inhibition of Cyclin-Dependent Kinases (Dinaciclib) and AKT (MK-2206) Blocks Pancreatic Tumor Growth and Metastases in Patient-Derived Xenograft Models</strong></td>
<td>KRAS is activated by mutation in the vast majority of cases of pancreatic cancer; unfortunately, therapeutic attempts to inhibit KRAS directly have be</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Induction of T-cell Immunity Overcomes Complete Resistance to PD-1 and CTLA-4 Blockade and Improves Survival in Pancreatic Carcinoma</strong></td>
<td>Disabling the function of immune checkpoint molecules can unlock T-cell immunity against cancer, yet despite remarkable clinical success with monoclon</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Prediction of Tumor Recurrence and Therapy Monitoring Using Ultrasound-Guided Photoacoustic Imaging</strong></td>
<td>Selection and design of individualized treatments remains a key goal in cancer therapeutics; prediction of response and tumor recurrence following a g</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Cell type–specific abundance of 4EBP1 primes prostate cancer sensitivity or resistance to PI3K pathway inhibitors</strong></td>
<td>The activity of the PI3K-AKT-mTOR signaling pathway is often increased in various cancer types.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Targeted Inhibition of Phosphoinositide 3-Kinase/Mammalian Target of Rapamycin Sensitizes Pancreatic Cancer Cells to Doxorubicin without Exacerbating Cardiac Toxicity.</strong></td>
<td>Pancreatic cancer has the lowest 5-year survival rate of all major cancers despite decades of effort to design and implement novel, more effective tre</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>Prostaglandin E synthase is upregulated by Gas6 during cancer-induced venous thrombosis.</strong></td>
<td>Venous thromboembolism (VTE) is a common complication of cancer.</td>
</tr>
<tr>
<td>January 01, 2015</td>
<td><strong>High-Fat, High-Calorie Diet Enhances Mammary Carcinogenesis and Local Inflammation in MMTV-PyMT Mouse Model of Breast Cancer</strong></td>
<td>Epidemiological studies provide strong evidence that obesity and the associated adipose tissue inflammation are risk factors for breast cancer; howeve</td>
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<tr>
<td>January 01, 2015</td>
<td><em>Melanoma brain metastasis is independent of lactate dehydrogenase A expression.</em></td>
<td>Background: The key metabolic enzyme lactate dehydrogenase A (LDHA) is overexpressed in many cancers, and several preclinical studies have shown encouragements.</td>
</tr>
<tr>
<td>August 08, 2014</td>
<td><em>High-Resolution Ultrasound Allows Percutaneous Initiation and Surveillance of Prostate Cancer in an Orthotopic Murine Model</em></td>
<td>Introduction: Prostate cancer xenografts should prefer orthotopic growth to subcutaneous tumors as the former more closely mimics the natural tumor.</td>
</tr>
<tr>
<td>August 01, 2014</td>
<td><em>Investigation and identification of etiologies involved in the development of acquired hydronephrosis in aged laboratory mice with the use of high-frequency ultrasound imaging</em></td>
<td>Laboratory mice develop naturally occurring lesions that affect biomedical research.</td>
</tr>
<tr>
<td>July 09, 2014</td>
<td><em>Anti-VEGF therapy reduces intestinal inflammation in Endoglin heterozygous mice subjected to experimental colitis</em></td>
<td>Chronic intestinal inflammation is associated with pathological angiogenesis that further amplifies the inflammatory response.</td>
</tr>
<tr>
<td>July 01, 2014</td>
<td><em>Tumor Microenvironment Regulates Metastasis and Metastasis Genes of Mouse MMTV-PymT Mammary Cancer Cells In Vivo</em></td>
<td>Metastasis is the primary cause of death in breast cancer patients, yet there are challenges to modeling this process in vivo.</td>
</tr>
<tr>
<td>June 01, 2014</td>
<td><em>Comparison of dynamic contrast-enhanced MR, ultrasound and optical imaging modalities to evaluate the antiangiogenic effect of PF-03084014 and sunitinib</em></td>
<td>Noninvasive imaging has been widely applied for monitoring antiangiogenesis therapy in cancer drug discovery.</td>
</tr>
<tr>
<td>April 22, 2014</td>
<td><em>Multifunctional Albumin–MnO 2 Nanoparticles Modulate Solid Tumor Microenvironment by Attenuating Hypoxia, Acidosis, Vascular Endothelial Growth Factor and Enhance Radiation Response</em></td>
<td>Insufficient oxygenation (hypoxia), acidic pH (acidosis), and elevated levels of reactive oxygen species (ROS), such as H2O2, are characteristic abnorments.</td>
</tr>
<tr>
<td>April 01, 2014</td>
<td><em>307 Orthotopic tumorgrafts in nude mice: A new method to study human prostate cancer</em></td>
<td>Background: In vivo model systems in prostate cancer research that authentically reproduce tumor growth are still sparse.</td>
</tr>
<tr>
<td>March 01, 2014</td>
<td><em>Ultrasound Molecular Imaging in a Human CD276 Expression-Modulated Murine Ovarian Cancer Model.</em></td>
<td>Purpose: To develop a mouse ovarian cancer model that allows modulating the expression levels of human vascular targets in mouse xenograft tumors and...</td>
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<tr>
<td>February 01, 2014</td>
<td>Translational therapeutics in genetically engineered mouse models of cancer.</td>
<td>Advances in knowledge of the molecular alterations of human cancers, refinements in technologies for the generation of genetically engineered mouse mo</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td>p53 constrains progression to anaplastic thyroid carcinoma in a Braf-mutant mouse model of papillary thyroid cancer</td>
<td>Anaplastic thyroid carcinoma (ATC) has among the worst prognoses of any solid malignancy.</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td>Routes of Delivery for CpG and Anti-CD137 for the Treatment of Orthotopic Kidney Tumors in Mice</td>
<td>We have found previously that the tumor cell lines, Renca (a renal cancer) and MC38 (a colon tumor) which had been injected subcutaneously in mice, co</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td>High-resolution imaging diagnosis and staging of bladder cancer: comparison between optical coherence tomography and high-frequency ultrasound.</td>
<td>A comparative study between 1.3-microm optical coherence tomography (OCT) and 40-MHz high-frequency ultrasound (HFUS) is presented to enhance imaging</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td>Generation of orthotopic patient-derived xenografts from gastrointestinal stromal tumor</td>
<td>BACKGROUNDD: Gastrointestinal stromal tumor (GIST) is the most common sarcoma and its treatment with imatinib has served as the paradigm for developing</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td>Safety and Chemopreventive Effect of Polyphenon E in Preventing Early and Metastatic Progression of Prostate Cancer in TRAMP Mice</td>
<td>Prostate cancer treatment is often accompanied by untoward side effects.</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td>Tumor-Associated Hyaluronan Limits Efficacy of Monoclonal Antibody Therapy</td>
<td>Despite tremendous progress in cancer immunotherapy for solid tumors, clinical success of monoclonal antibody (mAb) therapy is often limited by poorly</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td>Targeting cancer stem-like cells as an approach to defeating cellular heterogeneity in Ewing sarcoma.</td>
<td>Plasticity in cancer stem-like cells (CSC) may provide a key basis for cancer heterogeneity and therapeutic response.</td>
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<tr>
<td>January 01, 2014</td>
<td><strong>Active curcumin nanoparticles formed from a volatile microemulsion template</strong></td>
<td>Mitochondria targeted phototherapy, including photodynamic therapy (PDT) and photothermal therapy (PTT), has excelled as an effective approach among o</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td><strong>Quantitative Assessment of Cancer Vascular Architecture by Skeletonization of High-resolution 3-D Contrast-enhanced Ultrasound Images: Role of Liposomes and Microbubbles.</strong></td>
<td>The accurate characterization and description of the vascular network of a cancer lesion is of paramount importance in clinical practice and cancer re</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td><strong>Multiparametric Spectroscopic Photoacoustic Imaging of Breast Cancer Development in a Transgenic Mouse Model</strong></td>
<td>OBJECTIVE: To evaluate the potential of multiparametric spectroscopic photoacoustic imaging using oxygen saturation, total hemoglobin, and lipid conte</td>
</tr>
<tr>
<td>January 01, 2014</td>
<td><strong>Silencing HoxA1 by intraductal injection of siRNA lipidoid nanoparticles prevents mammary tumor progression in mice.</strong></td>
<td>With advances in screening, the incidence of detection of premalignant breast lesions has increased in recent decades; however, treatment options rema</td>
</tr>
<tr>
<td>December 18, 2013</td>
<td><strong>Ultrasound-guided intra-tumor injection of combined immunotherapy cures mice from orthotopic prostate cancer</strong></td>
<td>Intra-tumor injection of immunotherapeutic agents is often the most effective, likely because of concomitant modification of tumor microenvironment.</td>
</tr>
<tr>
<td>November 15, 2013</td>
<td><strong>Crizotinib inhibits metabolic inactivation of gemcitabine in c-Met-driven pancreatic carcinoma.</strong></td>
<td>Pancreatic ductal adenocarcinoma (PDAC) remains a major unsolved health problem.</td>
</tr>
<tr>
<td>November 06, 2013</td>
<td><strong>Selective Permeabilization of the Blood-Brain Barrier at Sites of Metastasis</strong></td>
<td>BACKGROUND: Effective chemotherapeutics for primary systemic tumors have limited access to brain metastases because of the blood-brain barrier (BBB).</td>
</tr>
<tr>
<td>October 31, 2013</td>
<td><strong>Non-invasive Monitoring of Ultrasound-Stimulated Microbubble Radiation Enhancement Using Photoacoustic Imaging</strong></td>
<td>Modulation of the tumour microvasculature has been demonstrated to affect the effectiveness of radiation, stimulating the search for anti-angiogenic a</td>
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<tr>
<td>October 01, 2013</td>
<td>Phosphatidylserine-Targeting Antibody Induces M1 Macrophage Polarization and Promotes Myeloid-Derived Suppressor Cell Differentiation</td>
<td>Multiple tumor-derived factors are responsible for the accumulation and expansion of immune-suppressing myeloid-derived suppressor cells (MDSC) and M</td>
</tr>
<tr>
<td>July 23, 2013</td>
<td>CTGF antagonism with mAb FG-3019 enhances chemotherapy response without increasing drug delivery in murine ductal pancreas cancer.</td>
<td>Pancreatic ductal adenocarcinoma (PDA) is characterized by abundant desmoplasia and poor tissue perfusion.</td>
</tr>
<tr>
<td>May 01, 2013</td>
<td>Struvite Urolithiasis and Chronic Urinary Tract Infection in a Murine Model of Urinary Diversion</td>
<td>OBJECTIVE: To characterize the clinical course after cutaneous vesicostomy (CV) in megabladder (mgb(-/-)) mice with functional urinary bladder obstruction</td>
</tr>
<tr>
<td>April 01, 2013</td>
<td>Rapid decrease in tumor perfusion following VEGF blockade predicts long-term tumor growth inhibition in preclinical tumor models.</td>
<td>Vascular endothelial growth factor (VEGF) is a key upstream mediator of tumor angiogenesis, and blockade of VEGF can inhibit tumor angiogenesis and de</td>
</tr>
<tr>
<td>April 01, 2013</td>
<td>Enhanced Sonographic Imaging to Diagnose Lymph Node Metastasis: Importance of Blood Vessel Volume and Density</td>
<td>Lymph node size is an important variable in ultrasound diagnosis of lymph node metastasis.</td>
</tr>
<tr>
<td>March 28, 2013</td>
<td>Mitochondrial activation by inhibition of PDKII suppresses HIF1a signaling and angiogenesis in cancer</td>
<td>Most solid tumors are characterized by a metabolic shift from glucose oxidation to glycolysis, in part due to actively suppressed mitochondrial functi</td>
</tr>
<tr>
<td>March 26, 2013</td>
<td>Ultrasound-Guided Intramural Inoculation of Orthotopic Bladder Cancer Xenografts: A Novel High-Precision Approach</td>
<td>Orthotopic bladder cancer xenografts are essential for testing novel therapies and molecular manipulations of cell lines in vivo.</td>
</tr>
<tr>
<td>January 01, 2013</td>
<td>Progressive development of polycystic kidney disease in the mouse model expressing Pkd1 extracellular domain.</td>
<td>Autosomal dominant polycystic kidney disease (ADPKD) is characterized by slow progression of multiple cysts in both kidneys that lead to renal insuffi</td>
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<tr>
<td>January 01, 2013</td>
<td>Imaging of thyroid tumor angiogenesis with microbubbles targeted to vascular endothelial growth factor receptor type 2 in mice</td>
<td>BACKGROUND: To evaluate whether Contrast Enhanced Ultrasund (CEUS) with microbubbles (MBs) targeted to VEGFR-2 is able to characterize in vivo the VEG</td>
</tr>
<tr>
<td>January 01, 2013</td>
<td>CHARACTERIZATION OF THYROID CANCER IN MOUSE MODELS USING HIGH-FREQUENCY QUANTITATIVE ULTRASOUND TECHNIQUES</td>
<td>Currently, the evaluation of thyroid cancer relies on the use of fine-needle aspiration biopsy, as noninvasive imaging methods do not provide sufficie</td>
</tr>
<tr>
<td>January 01, 2013</td>
<td>Bio-ink properties and printability for extrusion printing living cells</td>
<td>Angiogenesis is a common pathological characteristic of many solid tumors and vulnerable atherosclerotic plaques.</td>
</tr>
<tr>
<td>January 01, 2013</td>
<td>Pancreatic Cancer</td>
<td>Ultrasonography is a powerful imaging modality that enables noninvasive, real-time visualization of abdominal organs and tissues.</td>
</tr>
<tr>
<td>January 01, 2013</td>
<td>Angiopoietin-2 functions as a Tie2 agonist in tumor models, where it limits the effects of VEGF inhibition.</td>
<td>The angiopoietins Ang1 (ANGPT1) and Ang2 (ANGPT2) are secreted factors that bind to the endothelial cell-specific receptor tyrosine kinase Tie2 (TEK)</td>
</tr>
<tr>
<td>January 01, 2013</td>
<td>Earlier detection of breast cancer with ultrasound molecular imaging in a transgenic mouse model.</td>
<td>While there is an increasing role of ultrasound for breast cancer screening in patients with dense breast, conventional anatomical ultrasound lacks se</td>
</tr>
<tr>
<td>January 01, 2013</td>
<td>Intraluminal gel ultrasound and eco-color doppler: new tools for the study of colorectal cancer in mice.</td>
<td>AIM: Azoxymethane (AOM) is a potent carcinogen that induces colorectal cancer in mice.</td>
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<tr>
<td>Date</td>
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<td>Summary</td>
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<tr>
<td>December 11, 2012</td>
<td>Molecular application of spectral photoacoustic imaging in pancreatic cancer pathology</td>
<td>Spectral imaging is an advanced photo-acoustic (PA) mode that can discern optical absorption of contrast agent(s) in the tissue micro-environment.</td>
</tr>
<tr>
<td>November 01, 2012</td>
<td>The Vascular Disrupting Agent STA-9584 Exhibits Potent Antitumor Activity by Selectively Targeting Microvasculature at Both the Center and Periphery of Tumors</td>
<td>Vascular disrupting agents (VDAs) are an emerging class of therapeutics targeting the existing vascular network of solid tumors.</td>
</tr>
<tr>
<td>July 01, 2012</td>
<td>In vitro and in vivo anticancer effects of destruxin B on human colorectal cancer.</td>
<td>AIM: The study of the anticancer effects of destruxin B (DB) is rare and its anticancer mechanism remains unknown.</td>
</tr>
<tr>
<td>June 01, 2012</td>
<td>Assessment of endothelin-A receptor expression in subcutaneous and orthotopic thyroid carcinoma xenografts in vivo employing optical imaging methods.</td>
<td>Endothelin (ET) receptor dysregulation has been described in a number of pathophysiological processes, including cardiovascular disorders, renal failu</td>
</tr>
<tr>
<td>May 15, 2012</td>
<td>Real-time monitoring of rare circulating hepatocellular carcinoma cells in an orthotopic model by in vivo flow cytometry assesses resection on metastasis.</td>
<td>The fate of circulating tumor cells (CTC) is an important determinant of metastasis and recurrence, which leads to most deaths in hepatocellular carci</td>
</tr>
<tr>
<td>May 15, 2012</td>
<td>Dinitroazetidines are a novel class of anticancer agents and hypoxia-activated radiation sensitizers developed from highly energetic materials.</td>
<td>In an effort to develop cancer therapies that maximize cytotoxicity, while minimizing unwanted side effects, we studied a series of novel compounds ba</td>
</tr>
<tr>
<td>May 15, 2012</td>
<td>Dependence of Wilms tumor cells on signaling through insulin-like growth factor 1 in an orthotopic xenograft model targetable by specific receptor inhibition</td>
<td>We have previously demonstrated an increased DNA copy number and expression of IGF1R to be associated with poor outcome in Wilms tumors.</td>
</tr>
<tr>
<td>April 01, 2012</td>
<td>Vascular Normalization by Loss of Siah2 Results in Increased Chemotherapeutic Efficacy</td>
<td>Tumor hypoxia is associated with resistance to antiangiogenic therapy and poor prognosis.</td>
</tr>
<tr>
<td>March 12, 2012</td>
<td>Gamma secretase inhibition promotes hypoxic necrosis in mouse pancreatic ductal adenocarcinoma.</td>
<td>Pancreatic ductal adenocarcinoma (PDA) is a highly lethal disease that is refractory to medical intervention.</td>
</tr>
<tr>
<td>Date</td>
<td>Title</td>
<td>Summary</td>
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<tr>
<td>March 01, 2012</td>
<td>Oral infusion of pomegranate fruit extract inhibits prostate carcinogenesis in the TRAMP model.</td>
<td>We earlier provided evidence that oral consumption of pomegranate fruit extract (PFE) inhibits prostate cancer (PCa) cell growth in nude mice.</td>
</tr>
<tr>
<td>March 01, 2012</td>
<td>Low-dose metronomic oral dosing of a prodrug of gemcitabine (LY2334737) causes antitumor effects in the absence of inhibition of systemic vasculogenesis.</td>
<td>Metronomic chemotherapy refers to the close, regular administration of conventional chemotherapy drugs at relatively low, minimally toxic doses, with</td>
</tr>
<tr>
<td>February 15, 2012</td>
<td>Optical imaging with her2-targeted affibody molecules can monitor hsp90 treatment response in a breast cancer xenograft mouse model.</td>
<td>PURPOSE: To determine whether optical imaging can be used for in vivo therapy response monitoring as an alternative to radionuclide techniques.</td>
</tr>
<tr>
<td>January 01, 2011</td>
<td>A Polymeric Nanoparticle Encapsulated Small-Molecule Inhibitor of Hedgehog Signaling (NanoHHI) Bypasses Secondary Mutational Resistance to Smoothened Antagonists</td>
<td>Aberrant activation of the hedgehog (Hh) signaling pathway is one of the most prevalent abnormalities in human cancer.</td>
</tr>
<tr>
<td>January 01, 2011</td>
<td>Experimental orthotopic prostate tumor in nude mice: Techniques for local cell inoculation and three-dimensional ultrasound monitoring</td>
<td>Objectives: Orthotopic prostate cancer models are of great importance for cancer research. Orthotopic models in mice have been described previously.</td>
</tr>
<tr>
<td>January 01, 2011</td>
<td>Modulation of the tumor microvasculature by phosphoinositide-3 kinase inhibition increases doxorubicin delivery in vivo.</td>
<td>PURPOSE: Because effective drug delivery is often limited by inadequate vasculature within the tumor, the ability to modulate the tumor microenvironment</td>
</tr>
<tr>
<td>January 01, 2011</td>
<td>A comparison between detectors of high frequency oscillations</td>
<td>Objective—High frequency oscillations (HFOs) are a biomarker of epileptogenicity.</td>
</tr>
<tr>
<td>January 01, 2011</td>
<td>Tumor development, growth characteristics and spectrum of genetic aberrations in the TH-MYCN mouse model of neuroblastoma.</td>
<td>BACKGROUND: The TH-MYCN transgenic neuroblastoma model, with targeted MYCN expression to the developing neural crest, has been used to study neuroblas</td>
</tr>
<tr>
<td>December 06, 2011</td>
<td>Imaging guided trials of the angiogenesis inhibitor sunitinib in mouse models predict efficacy in pancreatic neuroendocrine but not ductal carcinoma.</td>
<td>Preclinical trials in mice represent a critical step in the evaluation of experimental therapeutics.</td>
</tr>
<tr>
<td>Date</td>
<td>Title</td>
<td>Abstract/Description</td>
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<tr>
<td>December 01, 2011</td>
<td>Innate immune responses to Pseudomonas aeruginosa infection</td>
<td>Selective inhibition of oncogenic targets and associated signaling pathways forms the basis of personalized cancer medicine.</td>
</tr>
<tr>
<td>December 01, 2011</td>
<td>Monitoring antivascular therapy in head and neck cancer xenografts using contrast-enhanced MR and US imaging.</td>
<td>BACKGROUND: The overall goal of this study was to non-invasively monitor changes in blood flow of squamous cell carcinoma of the head and neck (SCCHN).</td>
</tr>
<tr>
<td>November 15, 2011</td>
<td>Volumetric and Angiogenic Evaluation of Antitumor Effects with Acoustic Liposome and High-Frequency Ultrasound</td>
<td>Acoustic liposomes (AL) have their inherent echogenicity and can add functionality in serving as drug carriers with tissue specificity.</td>
</tr>
<tr>
<td>September 27, 2011</td>
<td>Monitoring transplanted islets by high-frequency ultrasound</td>
<td>Islet transplantation is a cell replacement therapy to improve glycometabolic control in type 1 diabetic patients.</td>
</tr>
<tr>
<td>September 15, 2011</td>
<td>Mast Cell Targeting Hampers Prostate Adenocarcinoma Development but Promotes the Occurrence of Highly Malignant Neuroendocrine Cancers</td>
<td>Mast cells (MC) are c-Kit-expressing cells, best known for their primary involvement in allergic reactions, but recently reappraised as important play</td>
</tr>
<tr>
<td>August 01, 2011</td>
<td>In vivo activity of combined PI3K/mTOR and MEK inhibition in a Kras(G12D);Pten deletion mouse model of ovarian cancer.</td>
<td>The phosphatidylinositol 3-kinase (PI3K)/Akt pathway is commonly dysregulated in human cancer, making it an attractive target for novel anticancer the</td>
</tr>
<tr>
<td>June 01, 2011</td>
<td>Effects of a synthetic PEG-ylated Tie-2 agonist peptide on endotoxemic lung injury and mortality.</td>
<td>PURPOSE: To develop targeted molecular imaging probes for the noninvasive detection of breast cancer lymph node metastasis.</td>
</tr>
<tr>
<td>June 01, 2011</td>
<td>Mutationally Activated BRAFV600E Elicits Papillary Thyroid Cancer in the Adult Mouse</td>
<td>Mutated BRAF is detected in approximately 45% of papillary thyroid carcinomas (PTC).</td>
</tr>
<tr>
<td>June 01, 2011</td>
<td>In Vivo Targeted Contrast Enhanced Micro-Ultrasound to Measure Intratumor Perfusion and Vascular Endothelial Growth Factor Receptor 2 Expression in a Mouse Orthotopic Bladder Cancer Model</td>
<td>Purpose: We evaluated the feasibility of using targeted contrast enhanced micro-ultrasound imaging to assess intratumor perfusion and vascular endothel</td>
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<tr>
<td>Date</td>
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<tr>
<td>June 01, 2011</td>
<td>Proangiogenic factor PlGF programs CD11b(+) myelomonocytes in breast cancer during differentiation of their hematopoietic progenitors.</td>
<td>Tumor-mobilized bone marrow-derived CD11b(+) myeloid cells promote tumor angiogenesis, but how and when these cells acquire proangiogenic properties i</td>
</tr>
<tr>
<td>April 29, 2011</td>
<td>Preclinical Models for Neuroblastoma: Establishing a Baseline for Treatment</td>
<td>BACKGROUND: Preclinical models of pediatric cancers are essential for testing new chemotherapeutic combinations for clinical trials.</td>
</tr>
<tr>
<td>April 21, 2011</td>
<td>In Vivo High-Frequency, Contrast-Enhanced Ultrasonography of Uveal Melanoma in Mice: Imaging Features and Histopathologic Correlations</td>
<td>PURPOSE: To evaluate the usefulness of in vivo imaging of uveal melanoma in mice using high-frequency contrast-enhanced ultrasound (HF-CE-US) with 2D</td>
</tr>
<tr>
<td>April 01, 2011</td>
<td>A perspective on vascular disrupting agents that interact with tubulin: preclinical tumor imaging and biological assessment.</td>
<td>The tumor microenvironment provides a rich source of potential targets for selective therapeutic intervention with properly designed anticancer agents</td>
</tr>
<tr>
<td>April 01, 2011</td>
<td>Magnitude of enhanced permeability and retention effect in tumors with different phenotypes: 89Zr-albumin as a model system.</td>
<td>UNLABELLED: Targeted nanoparticle-based technologies show increasing prevalence in radiotracer design.</td>
</tr>
<tr>
<td>February 15, 2011</td>
<td>Fes Tyrosine Kinase Expression in the Tumor Niche Correlates with Enhanced Tumor Growth, Angiogenesis, Circulating Tumor Cells, Metastasis, and Infiltrating Macrophages</td>
<td>Fes is a protein tyrosine kinase with cell autonomous oncogenic activities that are well established in cell culture and animal models, but its involv</td>
</tr>
<tr>
<td>February 01, 2011</td>
<td>Potential Role of Coregistered Photoacoustic and Ultrasound Imaging in Ovarian Cancer Detection and Characterization</td>
<td>Currently, there is no adequate technology to detect early stage ovarian cancers.</td>
</tr>
<tr>
<td>February 01, 2011</td>
<td>Pharmacokinetic modeling of tumor bioluminescence implicates efflux, and not influx, as the bigger hurdle in cancer drug therapy.</td>
<td>In vivo bioluminescence imaging is a powerful tool for assessing tumor burden and quantifying therapeutic response in xenograft models.</td>
</tr>
<tr>
<td>January 01, 2010</td>
<td>High-Resolution Ultrasound in Research of Mouse Orthotopic Glioma and Ultrasound-Guided Cell Implant</td>
<td>The purpose is to evaluate the feasibility of imaging mouse brain with high resolution ultrasound (HiRes US), and generation of mouse brain tumor (gli</td>
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<tr>
<td>Date</td>
<td>Title</td>
<td>Summary</td>
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<tr>
<td>January 01, 2010</td>
<td>Improved detection of regional melanoma metastasis using 18F-6-fluoro-N-[2-(diethylamino)ethyl] pyridine-3-carboxamide, a melanin-specific PET probe, by perilesional administration.</td>
<td>UNLABELLED: The efficacy of differing routes of administration of 18F-6-fluoro-N-[2-(diethylamino)ethyl] pyridine-3-carboxamide (18F-MEL050), a new be</td>
</tr>
<tr>
<td>January 01, 2010</td>
<td>Use of ultrasound biomicroscopy to evaluate induced ovarian follicular growth and ovulation in mice.</td>
<td>Recent advances in image technology, including significant gains in spatial resolution, have made realtime sequential ovarian evaluations possible in</td>
</tr>
<tr>
<td>January 01, 2010</td>
<td>Development of an orthotopic human pancreatic cancer xenograft model using ultrasound guided injection of cells.</td>
<td>Mice have been employed as models of cancer for over a century, providing significant advances in our understanding of this multifaceted family of dis</td>
</tr>
<tr>
<td>January 01, 2010</td>
<td>Assessment and Monitoring Tumor Vascularity With Contrast-Enhanced Ultrasound Maximum Intensity Persistence Imaging</td>
<td>Objectives: Contrast-enhanced ultrasound imaging is increasingly being used in the clinic for assessment of tissue vascularity.</td>
</tr>
<tr>
<td>December 01, 2010</td>
<td>Pathogenesis of Renal Injury in the Megabladder Mouse: A Genetic Model of Congenital Obstructive Nephropathy</td>
<td>Congenital obstructive nephropathy (CON) is the most common cause of chronic renal failure in children, often leading to end stage renal disease.</td>
</tr>
<tr>
<td>October 01, 2010</td>
<td>Anti-alpha(v) integrin monoclonal antibody intetumumab enhances the efficacy of radiation therapy and reduces metastasis of human cancer xenografts in nude rats.</td>
<td>We previously reported that intetumumab (CNTO 95), a fully human anti-αv integrin monoclonal antibody, is a radiosensitizer in mice with xenograft tum</td>
</tr>
<tr>
<td>April 01, 2010</td>
<td>Correlation of quantified contrast-enhanced sonography with in vivo tumor response.</td>
<td>OBJECTIVE: The purpose of our study was to establish in vivo criteria for monitoring tumor treatment response using 3-dimensional (3D) volumetric gray</td>
</tr>
<tr>
<td>March 01, 2010</td>
<td>IFN-beta restricts tumor growth and sensitizes alveolar rhabdomyosarcoma to ionizing radiation.</td>
<td>Ionizing radiation is an important component of multimodal therapy for alveolar rhabdomyosarcoma (ARMS).</td>
</tr>
<tr>
<td>Date</td>
<td>Title</td>
<td>Details</td>
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<tr>
<td>March 01, 2010</td>
<td><strong>Targeted contrast-enhanced ultrasound imaging of tumor angiogenesis with contrast microbubbles conjugated to integrin-binding knottin peptides.</strong></td>
<td>UNLABELLED: Targeted contrast-enhanced ultrasound imaging is increasingly being recognized as a powerful imaging tool for the detection and quantifica</td>
</tr>
<tr>
<td>January 01, 2009</td>
<td><strong>Antiangiogenic Cancer Therapy : Monitoring with Molecular US and a Clinically Translatable Contrast Purpose : Methods : Results :</strong></td>
<td>Purpose: Materials and Methods: To develop and test human kinase insert domain receptor (KDR)-targeted microbubbles (MBs) (MB KDR) for imaging KDR at</td>
</tr>
<tr>
<td>January 01, 2009</td>
<td><strong>Correlation between 2- and 3- dimensional assessment of Tumor Volume and Vascular Density by Ultrasonography in a Transgenic mouse model of Mammary carcinoma</strong></td>
<td>Objective. Visualization and quantification of angiogenesis are instrumental in development of antiangiogenic therapy.</td>
</tr>
<tr>
<td>December 08, 2009</td>
<td><strong>Complementarity of ultrasound and fluorescence imaging in an orthotopic mouse model of pancreatic cancer</strong></td>
<td>BACKGROUND: Pancreatic cancer is a devastating disease characterized by dismal 5-year survival rates and limited treatment options.</td>
</tr>
<tr>
<td>October 01, 2009</td>
<td><strong>Morphological Ultrasound Microimaging of Thyroid in Living Mice</strong></td>
<td>The objective of the study was to explore high-frequency ultrasound (HFUS) for noninvasive microimaging of thyroid in living mice.</td>
</tr>
<tr>
<td>September 15, 2009</td>
<td><strong>Inhibition of Tumor Growth Progression by Antiandrogens and mTOR Inhibitor in a Pten-Deficient Mouse Model of Prostate Cancer</strong></td>
<td>Androgen receptors have been shown to play a critical role in prostate cancer.</td>
</tr>
<tr>
<td>June 12, 2009</td>
<td><strong>Inhibition of Hedgehog Signaling Enhances Delivery of Chemotherapy in a Mouse Model of Pancreatic Cancer</strong></td>
<td>Pancreatic ductal adenocarcinoma (PDA) is among the most lethal human cancers in part because it is insensitive to many chemotherapeutic drugs.</td>
</tr>
<tr>
<td>May 01, 2009</td>
<td><strong>Sunitinib and PF-562,271 (FAK/Pyk2 inhibitor) effectively block growth and recovery of human hepatocellular carcinoma in a rat xenograft model.</strong></td>
<td>EXPERIMENTAL DESIGN: To investigate the antitumor effect of sunitinib and FAK/Pyk2 tyrosine kinase inhibitor (PF-562,271)combination therapy in vivo,</td>
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<tr>
<td>Date</td>
<td>Title</td>
<td>Purpose/Background</td>
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<tr>
<td>March 15, 2009</td>
<td><strong>Quantitative ultrasound characterization of responses to radiotherapy in cancer mouse models.</strong></td>
<td><strong>PURPOSE:</strong> Currently, no imaging modality is used routinely to assess tumor responses to radiotherapy within hours to days after the delivery of treatme</td>
</tr>
<tr>
<td>January 01, 2009</td>
<td><strong>High-resolution ultrasound biomicroscopy for monitoring ovarian structures in mice</strong></td>
<td><strong>BACKGROUND:</strong> Until recently, the limit of spatial resolution of ultrasound systems has prevented characterization of structures</td>
</tr>
<tr>
<td>December 23, 2008</td>
<td><strong>Comparison of mouse mammary gland imaging techniques and applications: Reflectance confocal microscopy, GFP Imaging, and ultrasound</strong></td>
<td><strong>BACKGROUND:</strong> Genetically engineered mouse models of mammary gland cancer enable the in vivo study of molecular mechanisms and signaling during developm</td>
</tr>
<tr>
<td>December 01, 2008</td>
<td><strong>A method for assessing the microvasculature in a murine tumor model using contrast-enhanced ultrasonography.</strong></td>
<td><strong>OBJECTIVE:</strong> The purpose of this study was to develop a method for assessing tumor vascularity in a preclinical model of breast cancer using contrast-en</td>
</tr>
<tr>
<td>November 15, 2008</td>
<td><strong>Molecular imaging of therapeutic response to epidermal growth factor receptor blockade in colorectal cancer.</strong></td>
<td><strong>PURPOSE:</strong> To evaluate noninvasive molecular imaging methods as correlative biomarkers of therapeutic efficacy of cetuximab in human colorectal cancer c</td>
</tr>
<tr>
<td>September 01, 2008</td>
<td><strong>An orally bioavailable small-molecule inhibitor of Hedgehog signaling inhibits tumor initiation and metastasis in pancreatic cancer.</strong></td>
<td>Recent evidence suggests that blockade of aberrant Hedgehog signaling can be exploited as a therapeutic strategy for pancreatic cancer.</td>
</tr>
<tr>
<td>September 01, 2008</td>
<td><strong>Dual-targeted Contrast Agent for US Assessment of Tumor Angiogenesis in Vivo</strong></td>
<td>Purpose: To develop and validate a dual-targeted ultrasound imaging agent that attaches to both vascular endothelial growth factor receptor-2 (VEGFR2)</td>
</tr>
<tr>
<td>May 01, 2008</td>
<td><strong>Zebrafish as a Cancer Model</strong></td>
<td>The zebrafish has developed into an important model organism for biomedical research over the last decades.</td>
</tr>
<tr>
<td>Date</td>
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<td>Abstract</td>
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<tr>
<td>January 15, 2008</td>
<td>Targeting Notch signaling in autoimmune and lymphoproliferative disease</td>
<td>Patients with autoimmune lymphoproliferative syndrome (ALPS) and systemic lupus erythematosis (SLE) have T-cell dysregulation and produce abnormal, ac</td>
</tr>
<tr>
<td>December 01, 2007</td>
<td>TRA-8 anti-DR5 monoclonal antibody and gemcitabine induce apoptosis and inhibit radiologically validated orthotopic pancreatic tumor growth.</td>
<td>PURPOSE: To evaluate agonistic TRA-8 monoclonal antibody to human death receptor 5 (DR5) and gemcitabine in vitro and in an orthotopic pancreatic canc</td>
</tr>
<tr>
<td>September 15, 2007</td>
<td>Combination treatment with TRA-8 anti death receptor 5 antibody and CPT-11 induces tumor regression in an orthotopic model of pancreatic cancer.</td>
<td>PURPOSE: Evaluate the response of human pancreatic cancer cell lines and orthotopic tumors to TRA-8, an agonistic antibody to death receptor 5, in com</td>
</tr>
<tr>
<td>August 01, 2007</td>
<td>Detecting vascular changes in tumour xenografts using micro-ultrasound and micro-ct following treatment with VEGFR-2 blocking antibodies.</td>
<td>Blockade of vascular endothelial growth factor (VEGF) binding to its receptors on endothelial cells has been shown preclinically to induce tumour grow</td>
</tr>
<tr>
<td>July 17, 2007</td>
<td>Ultrasound biomicroscopy permits in vivo characterization of zebrafish liver tumors</td>
<td>Zebrafish are a valuable vertebrate model to study carcinogenesis, but noninvasive imaging is challenging because adult fish are not transparent.</td>
</tr>
<tr>
<td>March 15, 2007</td>
<td>Functional neoangiogenesis imaging of genetically engineered mouse prostate cancer using three-dimensional power Doppler ultrasound.</td>
<td>We report the first application of high-frequency three-dimensional power Doppler ultrasound imaging in a genetically engineered mouse (GEM prostate</td>
</tr>
<tr>
<td>January 01, 2007</td>
<td>Endothelial Growth Factor Receptor</td>
<td>Objective.</td>
</tr>
<tr>
<td>January 01, 2007</td>
<td>Ovarian Volume Measurements in Mice with high resolution ultrasonography</td>
<td>The aim of our study was to evaluate the intraobserver and interobserver variability of ovarian volume measurements in mice with high-resolution 2-d</td>
</tr>
<tr>
<td>Date</td>
<td>Research Area</td>
<td>Summary</td>
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<tr>
<td>September 22, 2006</td>
<td>Therapy-induced acute recruitment of circulating endothelial progenitor cells to tumors.</td>
<td>The contribution of bone marrow-derived circulating endothelial progenitor cells (CEPs) to tumor angiogenesis has been controversial, primarily because...</td>
</tr>
<tr>
<td>September 15, 2006</td>
<td>Rapamycin improves lymphoproliferative disease in murine autoimmune lymphoproliferative syndrome (ALPS).</td>
<td>Autoimmune lymphoproliferative syndrome (ALPS) is a disorder of abnormal lymphocyte survival caused by defective Fas-mediated apoptosis, leading to ly...</td>
</tr>
<tr>
<td>July 14, 2006</td>
<td>Transgenic expression of Angiopoietin 1 in the liver leads to changes in lymphatic and blood vessel architecture.</td>
<td>To investigate the possible role of the Angiopoietins in vessel remodelling, we overexpressed one of the angiopoietins, Angiopoietin-1 (Ang1), in the...</td>
</tr>
<tr>
<td>May 21, 2006</td>
<td>Volume measurement variability in three-dimensional high-frequency ultrasound images of murine liver metastases.</td>
<td>The identification and quantification of tumour volume measurement variability is imperative for proper study design of longitudinal non-invasive imag...</td>
</tr>
<tr>
<td>May 05, 2006</td>
<td>Nanosecond pulsed electric fields cause melanomas to self-destruct.</td>
<td>We have discovered a new, drug-free therapy for treating solid skin tumors.</td>
</tr>
<tr>
<td>April 01, 2006</td>
<td>Targeted anti-vascular endothelial growth factor receptor-2 therapy leads to short-term and long-term impairment of vascular function and increase in tumor hypoxia.</td>
<td>Because antiangiogenic therapies inhibit the growth of new tumor-associated blood vessels, as well as prune newly formed vasculature, they would be ex...</td>
</tr>
<tr>
<td>November 01, 2005</td>
<td>Establishment of a serum tumor marker for preclinical trials of mouse prostate cancer models.</td>
<td>Current prostate cancer research in both basic and preclinical trial studies employ genetically engineered mouse models.</td>
</tr>
<tr>
<td>November 01, 2005</td>
<td>The use of three-dimensional ultrasound micro-imaging to monitor prostate tumor development in a transgenic prostate cancer mouse model.</td>
<td>Longitudinal studies of mouse cancer models required large cohorts since autopsy was the only reliable method to evaluate treatment efficacy.</td>
</tr>
<tr>
<td>June 15, 2005</td>
<td>Three-dimensional high-frequency ultrasound imaging for longitudinal evaluation of liver metastases in preclinical models.</td>
<td>Liver metastasis is a clinically significant contributor to the mortality associated with melanoma, colon, and breast cancer.</td>
</tr>
</tbody>
</table>