

Recent patents in tumor detection and treatment

Patent number	Description	Assignee	Inventor	Date
US 9,915,660	Methods for determining the risk that a subject diagnosed with colorectal cancer will develop a recurrence of colorectal cancer and methods of predicting clinical outcome for a subject diagnosed with colorectal cancer by (i) determining the level of expression for each marker of a panel of markers in a panel of tumor compartments in a tumor tissue sample from the subject; (ii) determining the TAPPS score for said subject; and (iii) comparing the TAPPS score of the subject to the TAPPS score of a population of subjects diagnosed with colorectal cancer.	Morphotek (Exton, PA, USA)	O'Shannessy DJ, Nicolaides NC, Somers EB	3/13/2018
US 9,914,969	Methods to increase the expression of fatty acid desaturases (FADS) and increase cellular and tissue levels of highly unsaturated fatty acids (HUFA) by modulating one or more of the FADS via the action of specific classes of drugs (e.g., statins and LXR agonists). Also, methods of treating conditions (e.g., tumor and cancer) involving deficient function of FADS by administering statins and/or LXR agonists.	Cornell University (Ithaca, NY, USA)	Brenna JT, Reardon HT, Kothapalli SDK	3/13/2018
US 9,913,844	Reversing resistance to a B-Raf inhibitor for the treatment of a proliferative disease by obtaining a tumor sample from the patient and testing it for genetic alterations in a panel of genes comprising <i>BRAF</i> , <i>CRAF</i> , <i>CCND1</i> , <i>CDK4</i> , <i>HER2</i> , <i>IGF-1R</i> , <i>cMET</i> , <i>FGFR1</i> , <i>FGFR2</i> , <i>FGFR3</i> , <i>EGFR</i> , <i>MAP2K1</i> , <i>MAP2K2</i> , <i>NRAS</i> , <i>KRAS</i> , <i>HRAS</i> , <i>PTEN</i> , <i>PIK3CA</i> , and <i>P16</i> and administering a drug combination therapy comprising the B-Raf inhibitor and a second inhibitor which overcomes resistance to the B-Raf inhibitor, which second inhibitor is selected based on genetic alterations discovered in the tumor sample.	Novartis (Basel, Switzerland)	Caponigro G, Stuart D, De Parseval L	3/13/2018
US 9,910,043	Agents with tumor-inhibiting activity, and which are selective for cells expressing or abnormally expressing a tumor-associated antigen. Also, pharmaceutical compositions and kits comprising the agents as well as methods treating, diagnosing or monitoring a disease characterized by expression or abnormal expression of the tumor-associated antigen.	BioNTech (Mainz, Germany)	Tureci O, Sahin U, Helftenbein G, Schluter V	3/6/2018
US 9,909,186	Methods and reagents for identifying personalized tumor biomarkers for a patient that has a solid tumor, and methods of using such biomarkers to monitor patient responses to therapeutic treatments.	Chronix Biomedical (San Jose, CA, USA)	Schutz E, Beck J, Urnovitz H	3/6/2018
US 9,909,185	Genetic markers whose expression is correlated with breast cancer. Specifically, sets of markers whose expression patterns can be used to differentiate clinical conditions associated with breast cancer, such as the presence or absence of the estrogen receptor <i>ESR1</i> , and <i>BRCA1</i> and sporadic tumors, and to provide information on the likelihood of tumor distant metastases within five years of initial diagnosis.	Netherlands Cancer Institute (Amsterdam), Merck Sharp & Dohme (Rahway, NJ, USA)	Dai HY, He Y, Linsley PS, Mao M, Roberts CJ, Van't Veer LJ, Van de Vijver MJ, Bernards R, Hart AAM	3/6/2018
US 9,908,922	Peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides, that can, for example, serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells <i>ex vivo</i> and transfer into patients. Peptides bound to molecules of the major histocompatibility complex, or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.	Immatics Biotechnologies (Tuebingen, Germany)	Mahr A, Weinschenk T, Hoerzer H, Schoor O, Fritsche J, Singh H	3/6/2018
US 9,902,778	Treatment and/or prevention of tumor diseases associated with cells expressing <i>CLDN6</i> , in particular cancer and cancer metastasis using antibodies which bind to <i>CLDN6</i> . The binding of antibodies to <i>CLDN6</i> on the surface of tumor cells is sufficient to inhibit growth of the tumor and to prolong survival and extend the lifespan of tumor patients. Furthermore, binding of antibodies to <i>CLDN6</i> is efficient in inhibiting growth of <i>CLDN6</i> -positive germ cell tumors such as teratocarcinomas or embryonal carcinomas, in particular germ cell tumors of the testis.	Ganymed Pharmaceuticals (Mainz, Germany), Johannes Gutenberg University Mainz (Mainz, Germany)	Sahin U, Tureci O, Koslowski M, Walter K, Kreuzberg M, Luxen S	2/27/2018
US 9,902,766	Isolated monoclonal antibodies that specifically bind endoplasmic reticulum. Also, recombinant nucleic acids encoding these antibodies, expression vectors including these nucleic acids, and host cells transformed with these expression vectors. Useful for detecting and/or treating tumors that express endoplasmic reticulum, such as melanoma, breast cancer, head and neck squamous cell carcinoma, renal cancer, lung cancer, glioma, bladder cancer, ovarian cancer or pancreatic cancer.	University of Pittsburgh—of the Commonwealth System of Higher Education (Pittsburgh)	Ferrone S, Wang X, Conrads TP, Favoino E, Hood BL	2/27/2018

Source: European Patent Office (<https://www.epo.org>), United States Patent and Trademark Office (<http://www.uspto.gov>).