

ONGOING PROJECTS SUPPORTED BY DIFFERENT ORGANIZATIONS

ALLEANZA CONTRO IL CANCRO – ISTITUTO SUPERIORE DI SANITA'

- Assistance needs in senior adults. Confounding variables in the patient-caregiver relationship
- National Telepathology Network (Teseo)
- National network for clinical trials and GMP structures for tumor biotherapy
- National network "START project" (State of the Art in Oncology)
- National Italian Network of hereditary/familial tumors: establishment of shared operative tools for assistance and research
- Development of idiotypic vaccines for phase I/II trials of subset-specific immunotherapy of B lymphomas
- Biological combined and target therapies in solid tumors: phase I-II studies
- National network of biobanks in oncology
- New molecules of inflammation: transfer from laboratory to patient bedside
- Development of new therapies in skeletal muscle sarcomas: comparison between immunotherapy and target therapy
- National network of tumor registries: indicators and cancer control in Italy
- National bioinformatics network in oncology
- National service of information in oncology
- Tumor microenvironment as therapeutic target
- Identification of markers for the prevision of the response to new antitumor drugs (HDAC inhibitors, tyrosine kinase and ionic pumps)
- Application of chemotherapy to the remodulation of the antitumoral immune response: a study of the "proof of concept" mechanisms in humans

ASSOCIAZIONE BIANCA GARAVAGLIA

- Research activity in pediatric tumors

ASSOCIAZIONE ITALIANA PER LA LOTTA AL NEUROBLASTOMA

- Different pathways involved in pediatric CNS tumors: molecular basis and applicative studies

ASSOCIAZIONE ITALIANA PER LA RICERCA SUL CANCRO

- Comprehensive diagnosis and treatment for intracranial pediatric ependymoma
- Early innovative diagnostic procedures of lung cancer progression
- Identification of genes expressed in human melanoma and regulating antitumor immunity
- Breast carcinoma extracellular matrix and response to therapy
- Molecular markers in lung carcinogenesis for early diagnosis, response to therapy and target identification
- Morphologic criteria and molecular targets in hepatocellular carcinoma: pre-clinical and clinical implications
- Tumor-host interaction affecting immunological and clinical responses in vaccinated colorectal cancer patients
- Anti-CD20 antibody before allogeneic transplantation: clinical and biological implications in B-cell lymphomas
- Molecular signatures from paraffin-embedded tissue predicting clinical outcome of breast cancer patients
- Wilms' tumor: molecular prognostic markers and candidate gene analyses
- Treatment with tandem ⁹⁰Y-DOTA-TATE and ¹⁷⁷Lu-DOTA-TATE of GEP tumors refractory to conventional therapy
- Identification of potential biopredictors of targeted treatments and monitoring of response/resistance balance
- Agonists and antagonists of Toll-like Receptor 9 in oncological experimental models
- Fhit degradation in breast cancer proliferation: a potential target of novel therapeutic strategies
- Identification of therapeutic targets for ovarian cancer by functional genomics and biomolecular analysis
- Extracellular matrix at the intersection between tumor and immune system
- Stemness signature and breast cancer progression: relationship and strategies of interference
- DNA damage responses and Chk2 regulation and interaction with novel targets
- Molecular mechanisms of epithelial thyroid carcinogenesis: role of selected molecules and pathways
- Expression profiling and functional analysis of microRNAs in prostate cancer
- Contribution of drug transporters to resistance to platinum compounds in ovarian cancer patients
- Anti-cancer vaccines in early disease for achieving effective immunological control of tumor progression
- Overcoming drug resistance by modulation of cytotoxic response and protective pathways
- Targeted therapy: disclosing the response limit in imatinib-treated tumors
- Relationships between FAK signaling, microtubule dynamics and drug response

- Involvement of microRNAs in HER2-and estrogen-mediated pathways in human breast cancer
- Targeting autophagy in cancer therapy
- Melanoma interaction with the microenvironment: role of transcription factors and pro-inflammatory cytokines
- Classification of BRCA1 and BRCA2 alleles: integrating in vitro analyses and multifactorial likelihood models
- Randomized trial of diet, physical activity and breast cancer recurrences: the Diana-5 study
- Molecular and cellular imaging in cancer
- Efficacy of thermal treatment for respiratory airways in heavy smokers
- EPIC-ITALY: a molecular epidemiology prospective project on diet, genetic susceptibility and cancer risk
- Identification of immunodominant non-Hodgkin lymphoma-restricted antigen(s) as novel biotarget(s) for therapy
- Identification of telomere maintenance mechanism-related genes and miRNAs as prognostic and therapeutic tools
- Translational research on molecular markers in gastric cancer patients treated with adjuvant therapy
- Influence of lung tissue microenvironment on tumorigenesis
- Identification of progression markers for a clinical impact in metastatic melanoma
- Interactions between regulatory T cells and mast cells in cancer
- Altered choline metabolism in ovary cancer: prognostic relevance of choline kinase activity and expression
- Role of the heparanase/heparan sulfate system as a therapeutic target in sarcoma therapy
- Cell therapy with TRAIL-armed, genetically engineered or phenotypically redirected, effectors
- Personalized pain control in cancer care: the contribution of opioid pharmacogenomics
- Prostate cancer survival patients in Italy

COMPAGNIA DI SAN PAOLO

- EUROCARE 5 – EUROpean CAncer REgistry-based study on survival and CARE of European cancer patients. Differences between Italian areas and comparison with european countries
- Development of an in vitro and in vivo model for the study of lung cancer stem cells to develop selectively target innovative therapeutic approaches
- EPICOR 2 – Study on the risk of coronary heart disease related to behaviour, biological and genetic susceptibility markers in the EPICOR collaboration in Italy and Europe

EUROPEAN COMMISSION

- CONTICANET - CONnective Tissue CAncer NETwork to integrate european experience in adult and children
- Cancerimmunotherapy - Cancer immunology and immunotherapy
- IDEFICS - Identification and prevention of Dietary- and lifestyle-induced health Effects in Children and infantS
- SIGHT - Systems for in-situ theranostics using micro-particles triggered by ultrasound
- InterAct - Examination of the interaction of genetic and lifestyle factors on the incidence of type 2 diabetes
- EPCRC - Improved treatment of pain, depression, and fatigue through translation research (life sciences, genomics and biotechnology for health)
- CHEMORES - Molecular mechanisms underlying CHEMOtherapy RESistance, therapeutic escape, efficacy, and toxicity
- RARECARE - Surveillance of rare cancers in Europe
- DYNAMO-HIA - Development of a DYNAmic MOdelling tool to assess health impact of policies
- OPCARE9 – Optimizing Cancer Patient Care through the Advancement of Research and Education
- EUROCHIP-III Common Actions
- IMPASHS - Evaluation of the IMPAct of Smoke-free policies in Member States on exposure to second-hand smoke and tobacco consumption
- MAGNIFYCO - MAGnetic Nanocontainers For combined hyperthermia and COntrolled drug release
- SPIDIA - Standardisation and improvement of generic pre-analytical tools and procedures for in vitro diagnostics
- Three modality contrast imaging using multi-functionalized microballons (3MICRON)
- ENVIROGENOMARKERS. Genomic Biomarkers of Environmental Health

FONDAZIONE BANCA DEL MONTE DI LOMBARDIA

- Development of an innovative method based on mass spectrometry for early diagnosis and monitoring of cancer progression

FONDAZIONE CARIPLO

- SPARC, a matrix protein that supports tumor growth and protects tumor from therapies
- Identification and biomolecular characterization of cancer stem cells of ovarian cancer for the development of new diagnostic and therapeutic approaches
- Expression profiles and functional analysis of microRNA in prostate cancer

- Phosphoproteomics of cutaneous melanoma: from biology of cancer stem cells to the identification of new therapeutic targets
- Inhibitors of apoptosis proteins (IAPs) as anticancer therapeutics
- The role of religious beliefs/practices and spirituality on life quality and adaptation to disease of oncological patients in advanced phase of disease

FONDAZIONE GUIDO BERLUCCHI

- The cerebral tumor in children: a help to parent children communication about the disease

FONDAZIONE ITALO MONZINO

- Characterization and use of molecular targets for immunobiological therapies in prostate cancer
- Prostate cancer research international active surveillance (PRIAS).

ISTITUTO SUPERIORE DI SANITÀ

- Surveillance of rare cancers in Italy
- Innovative management of patients with diffuse malignant peritoneal mesothelioma: clinical-diagnostic pathway and new therapeutic targets
- Genotype/phenotype analysis of neurodegenerative and again-prone syndromes caused by mutations in the DNA damage response/repair pathway
- Micro-RNA genes and antisense sequence
- Management of MILD project database, randomization, accrual of 200 smokers and proteomic analysis of at least 200 samples
- Identification of individual lung cancer risk in heavy smokers by proteomic profile analysis in subjects randomized in two groups (spiral CT vs observation) (Help-MILD Project)

LEGA ITALIANA PER LA LOTTA CONTRO I TUMORI

- Psychological evaluation in women with hereditary susceptibility to breast cancer submitted to screening test for BRCA1 and BRCA2 genes
- Lynch syndrome: predictive models of cancer risk and biomarkers for the identification of subjects with germinal mutations in MMR genes
- Anti-smoking counseling
- A study of the native fluorescence of plasma in the diagnosis of colorectal neoplasias

MINISTERO DELLA SALUTE

- Identification of new therapeutic targets and optimization of resistant tumors
- The effectiveness of the LCP in improving end-of-life care in hospital. A cluster randomized trial
- Regional cancer networks' models comparative assessment and study of their integration
- CAREMORE: joint Community and CANcer REgistry MOdel on REhabilitation
- Optimization of target therapies
- Cancer stem cells, drug resistance and niche in minimal residual disease
- New protocols and targets for the treatment of brain and other solid tumors
- Controlled extension of conventional criteria for liver transplantation in hepatocarcinoma (HCC): a prospective validation study
- Development of programs for weak subjects such as patients waiting kidney transplant for more than 10 years or seropositive subjects (optimal use of organs)
- New immunotherapeutic approaches to neuroblastoma
- Analytical and clinical validation of biomarkers for non-invasive early diagnosis of digestive tract carcinoma
- PET molecular imaging as prognostic and predictor indicator of response to therapy
- Diagnosis and molecular pathogenesis of virus-associated tumors
- Multidimensional characterization of solid tumors
- Detection of the oncologic disease at early stage
- Research of new prognostic and therapy oriented-biomarkers
- Tumor radioresistance and predictive markers of the response to radiotherapy
- Targeting of tumor-associated myeloid cells
- Validation of new biomarkers: their role in the prognosis and therapy guidance
- Identification of new vaccination strategies for the treatment of limited disease or the prevention of recurrences in patients

with solid tumors

- Targeting tumor-related immunosuppression for new combined approaches for immunotherapy
- Integrated genomic analyses for the identification of genetic markers of breast cancer metastasis
- Surrogate markers of antiangiogenic therapy in triple receptor negative breast cancer
- Cancer prevention: development of evidence-based intervention models
- Multidimensional characterization of human tumors: organizational structure for managing the integrated program and pathologists network for clinical validation of new tumor markers
- HUCARE - HUmanization of CAncer care in Italy: implementation of evidence-based REccomendations
- Analytical and clinical validation of new biomarkers for early diagnosis: the network, the resources, the methodology, the QC, the analysis of data
- Post-genomic approaches for the identification of high-risk cancers: evaluation and optimization of cost/benefits for the National Health System
- Experimental evaluation of the effectiveness of quality programs to improve pain management both in hospital and at home
- Innate immunity and gastrointestinal cancer as paradigm: from new molecules to bedside
- Centrosomes and centrosome-associated regulatory proteins in genome maintenance and in the DNA damage response
- New therapeutic strategies based on modulation of immune response in prostate cancer patients
- Melanoma and integrated chip technologies: identification of novel prognosticators and (immuno)therapeutic protocols
- Regulatory T cell immunotherapy after haploidentical stem cell transplantation
- Oncology project of molecular medicine: female tumors
- Use of integrated PET/CT as a first line re-staging technique in oncological patients
- Comprehensive host-and-tumor characterization for individualizing breast cancer treatment strategies
- Identification and isolation of normal and tumoral lung stem cells as a tool for the definition of new therapeutic strategies in lung cancer
- Integrated unit for the concerted translational early development of new drugs and/or therapeutic approaches in solid tumors
- Personalized treatment of sarcoma
- Hepato-Oncology: a multidisciplinary approach for an emerging specialty
- Efficacy of pharmacological prevention with Varenicline and subsequent screening with yearly CT in heavy smokers
- Development of radiolabelled radiopharmaceuticals for tumor characterization, molecular imaging and therapy
- Improvement of acute and chronic pain management at the "Fondazione IRCCS Istituto Nazionale dei Tumori"; research on the organization and implementation: - institution of an "acute, postoperative and procedure related pain team" - implementation of invasive procedures such as neural blockade or implantation of specialized devices for drug delivery in patients with severe pain difficult to control with systemic drug administration - implementation of chronic pain symptom control: multidisciplinary hospital team
- Research on health determinants and risk reduction interventions
- National epidemiological surveillance system for the prevention of occupational cancer cases
- A system of integrated skills to improve security in chemotherapy
- Rational combinations of molecularly targeted agents in lymphoproliferative disorders
- A regional network of oncologic biobanks for scientific research and care of cancer
- Women with BRCA1 and BRCA2 gene mutations: clinical and psychological care
- Information as first medicine: the National Assistance and Information service in Oncology
- Tumors in Italy: the portal of oncologic epidemiology for professionals and people
- Survival and care for tumors in Italy and Europe

MINISTERO DELL'UNIVERSITÀ E DELLA RICERCA

- Identification of disease genes by genotyping at high population density
- Identification of innovative antitumoral agents: from genomics to therapy
- New drugs for anticancer target therapy

REGIONE BASILICATA

- Controlled extension of conventional criteria for liver transplantation in hepatocarcinoma (HCC): a prospective randomised study using down-staging response and the metroticket model as predictors of survival (extension trial)

REGIONE LOMBARDIA

- Lombardy Network in Oncology
- Definition of the individual risk of cancer in smokers by functional and radiological analysis of the lung damage, genetic and proteomic profile

- Prevention of postoperative pain by using botulinic toxin in patients candidates to mastectomy and immediate reconstruction with expander and in patients candidates to additive contralateral mastoplastic in the second reconstructive phase
- Allogeneic transplantation of hematopoietic stem cells for the salvage therapy of non-Hodgkin's lymphomas
- Biobanks project for colorectal carcinoma
- Extracorporeal photochemotherapy for GVHD prophylaxis in patients submitted to allogeneic stem cell transplantation with reduced-intensity conditioning
- Patient transfusion safety: from safe and integrated transfusions in hospital to total blood traceability and management of clinical risk with Radio Frequency Identification (RFID) technology
- Adverse drug reaction signals in oncology
- Development of an experimental model within Lombardy Network in Oncology for identification and follow-up of women with and at risk for hereditary breast cancer
- An experimental model of a pediatric hemato-oncological network between Varese hospital and referring centers for the treatment of pediatric oncological pathology

