

ABSTRACT CATEGORIES



The AACR Annual Meeting 2022 abstract categories, along with their related subcategories and subclassifications, are listed below. When you use the Abstract Submission System, these options will be available for your selection. Please choose the appropriate category, subcategory, and subclassification that best describe the scientific content of the abstract and the particular scientific audience you wish to reach. This information will be utilized by the members of the Program Committee in their review of abstracts and planning of sessions at the AACR Annual Meeting 2022. Please note that these abstract categories may or may not be used as AACR Annual Meeting session titles. Before making your selection, please scan the entire list for the most appropriate abstract category, subcategory, and subclassification. **The regular abstract submission deadline is November 18, 2021 (11:59 p.m. ET) and the late-breaking and clinical trials abstract submission deadline is January 10, 2022 (11:59 p.m. ET).**

The AACR is committed to raising awareness about the enormous public health challenge of cancer health disparities and racial inequities. We encourage you to view the relevant abstract subcategories and subclassifications in the listing below. Also, the submission category, COVID-19 and Cancer, provides an opportunity to submit novel work in this timely and critically important area.

MCB Molecular/Cellular Biology and Genetics

MCB01 Cell Growth Signaling Pathways

Cell signaling
Cell-cell interactions
Growth factors
GTPases, their regulators, and effectors
Kinases and phosphatases
Receptors
Tumor-stromal cell interactions
Ubiquitin and ubiquitin-like proteins
Other

MCB02 Cell Death

Apoptosis
Autophagy
Bcl-2 family proteins
Caspases
Effectors of apoptosis
Inhibitor of apoptosis (IAP) family proteins
Necrosis and necroptosis
Transcriptional control of apoptosis
Other

MCB03 Oncogenes and Tumor Suppressor Genes

Cytoplasmic signal transducers
Genotype/phenotype correlations
Nuclear oncoproteins and tumor suppressor genes
Oncogene growth factors and their receptors
Tumor suppressor genes
Other

MCB04 Gene Regulation and Transcription Factors

Chromatin structure and function
Gene expression
Mechanisms of transcription
Oncogenic transcription factors
Posttranscriptional and translational control
Promoters and enhancers of transcription
Protein-protein interactions in transcription factor function
Regulation of transcription factor function
Transcriptional control of cell differentiation
Other

MCB05 Epigenetics and Epigenomics

Chromatin structure and function
DNA methylation
Epigenetic changes as molecular markers of cancer
Epigenomics
Gene silencing
Histone modification
Other

MCB06 Cell Cycle

CDKs and CDK inhibitors
Cell cycle checkpoints
Control of cell cycle progression
Telomeres and telomerase
Other

MCB07 DNA Damage and Repair

Chromosomal structural alterations/translocations
Genomic instability
Homologous recombination
Mechanisms of genomic alterations
Radiation-induced DNA damage
Other

MCB08 Metabolism and Cancer

Metabolic pathways
Metabolomics
Mitochondrial function
Signaling pathways that regulate metabolism
Other

MCB09 Genomics

(See also BCS01: Bioinformatics and Computational Biology)
Functional genomics
Genomic profiling of tumors
High-throughput sequencing
Large-scale approaches to cancer gene discovery
Microarrays
Other

MCB10 microRNAs and Other Noncoding RNAs

Epigenetic control of miRNA expression
miRNA profiling in cancer
miRNA regulation of cancer biology
miRNA-based diagnostics
miRNA-based therapeutics
miRNAs as tumor suppressors/oncogenes
Noncoding RNAs
Other

MCB11 Cellular Stress Responses

Hypoxia
Oxidative stress
Premature cellular aging
Senescence
Unfolded protein response
Other

BCS Bioinformatics, Convergence Science, and Systems Biology

BCS01 Bioinformatics and Computational Biology

(See also MCB09: Genomics)

Analytic pipeline optimization
Application of bioinformatics to cancer biology
Database resources
Molecular modeling
New algorithms
New software tools for data analysis
Sequence analysis
Statistical methods
Other

BCS02 Convergence Science and Systems Biology

Artificial intelligence and machine/deep learning
Digital pathology and artificial intelligence
Integrative cancer science
Mathematical modeling
Network biology
Physical sciences in oncology
Systems engineering
Other

TB Tumor Biology

TB01 Nonclinical Models of Cancer

3-D and tissue recombinant models
Developmental phenotypes of cancer genes
Human-in-mouse models of human cancer
Model organisms in drug discovery
Mouse models of human cancer
Noninvasive imaging in animal models
Organoids
Patient-derived xenograft models
Zebrafish models of cancer
Other animal and cell models of cancer
Other

TB02 Stem Cell Biology

Adult stem cells
Cancer stem cells
Developmental pathways in cancer
Embryonic stem cells
Stem cell markers
Stem cells and regenerative medicine in oncology
Other

TB03 Tumor Adhesion

Cell adhesion and extracellular matrix
Cell-cell adhesion
Drug resistance
Other

TB04 Metastasis

Actin cytoskeleton
Biomarkers of metastasis
Epithelial/mesenchymal transition (EMT and MET)
Expression profiling of tumor progression and metastasis
Genes that regulate migration and invasion
Imaging of tumor progression and metastasis
Invasion and migration
Metastasis suppressor genes
Metastasis-promoting genes
Premetastatic niche
Therapeutic metastasis prevention
Other

TB05 Angiogenesis

Angiogenesis and angiogenesis inhibitors
Host-tumor interactions
Molecular mechanisms of angiogenesis
Novel pro- and antiangiogenic factors
Tumor microcirculation and the microenvironment
Other

TB06 Tumor Microenvironment

Chemokines in the microenvironment
Drug targets in the microenvironment
Extracellular matrix and integrins
Gene expression in the microenvironment
Immune cells in the tumor microenvironment
Inflammatory cells as regulators of tumor growth
Microbiome
Organ-specific microenvironments
Proteases and inhibitors in the microenvironment
Tumor dormancy
Tumor/stromal interactions
Tumor-immune system interactions
Other

TB07 In Vivo Imaging

(See also CL01: Translational Research – Molecular Biology in Clinical Oncology)
Advanced nanotechnology and imaging
Application of imaging technology to the clinic
Imaging in animal models
Imaging of molecular and cellular events in the tumor microenvironment
Imaging of molecular and cellular events in tumors and tumor cells
Imaging the immune response
Imaging tumor metabolism
New targets for imaging
Other

TB08 Pediatric Cancer - Basic Science

(See also CL02: Pediatric Cancer - Clinical Investigations; CT04: Phase I, II, or III Clinical Trials in Pediatric Cancer)

Developmental origins and drivers of pediatric cancer
Pediatric cancer genomics and epigenomics
Pediatric cancer models
Pediatric cancer tumor microenvironment and tumor heterogeneity
Other

TB09 Radiation Science

(See also CL07: Radiation Oncology; ET09: Preclinical Radiotherapeutics)

Modulators of radiation response
Photobiology/photodynamic therapy
Radiation dose fractionation
Radiation-activated signaling pathways
Radiation-induced gene expression
Radiation-induced resistance
Radiobiology research
Radioprotectors and radiosensitizers
Other

TB10 Tumor Evolution and Heterogeneity

Causes and consequences of tumor heterogeneity
Clonal evolution
Complex adaptive systems
Methods to measure tumor evolution and heterogeneity
Other

TB11 Carcinogenesis

Chemical, environmental, and virus-induced carcinogenesis
Mutagenesis
Other

CH Chemistry

CH01 Drug Discovery, Design, and Delivery

Basic and applied nanotechnology and therapeutics
Cheminformatics, in silico screening, and computational methods
Drug delivery
Drug design
High-throughput screening (assays and libraries)
Lead identification
Lead optimization
Nanotechnology drug delivery
Natural products
Synthesis, metabolism, and disposition
Other

CH02 Structural and Chemical Biology

Chemical genetics and genomics
Nanotechnology in chemical biology
Small molecule, protein, and nucleic acid interactions
Target identification, small molecule probes, and libraries
X-ray and NMR structures
Other

CH03 Proteomics and Mass Spectrometry

Biological mass spectrometry and systems biology
Proteomics and biomarker discovery
Proteomics and signaling networks
Other

ET Experimental and Molecular Therapeutics

ET01 Drug Discovery

Antibody technologies
Biochemical modulators of the therapeutic index
Combination chemotherapies
Differentiation therapy
New targets
Novel assay technology
Novel drug delivery systems
Targeting the tumor microenvironment in drug development
Other

ET02 Mechanisms of Drug Action

Cell cycle mechanisms of anticancer drug action
Cellular responses to anticancer drugs
Interactions of new agents with radiation
Role of the microenvironment in therapeutic response
Other

ET03 Drug Resistance

Drug resistance in molecular targeted therapies
Drug transport and metabolism
Novel mechanisms
Regulation of gene expression in drug resistance
Reversal of drug resistance
Other

ET04 Molecular Targets

Cell death pathways and treatment
DNA damage response
Identification of molecular targets
Modulation of DNA repair
Molecular classification of tumors for diagnostics, prognostics, and therapeutic outcomes
New nonclinical models for targets
Other

ET05 Pharmacology, Pharmacogenetics, and Pharmacogenomics

(See also CT01: Phase I Adult Clinical Trials)
Cellular pharmacology
Molecular pharmacology
Pharmacogenetics and therapeutic response
Pharmacogenomics
Pharmacokinetics and pharmacodynamics
Preclinical toxicology
Other

ET06 Small Molecule Therapeutic Agents

DNA-reactive agents
Epigenetic targets
HDAC and methyltransferase inhibitors
Novel antitumor agents
Novel targets and pathways
PI3K/AKT inhibitors
Proteasome inhibitors
Topoisomerases
Tubulin agents
Tyrosine kinase and phosphatase inhibitors
Other

ET07 Biological Therapeutic Agents

(See also CL06: Immunoncology; IM02: Preclinical Immunotherapy)
Antireceptors
Apoptosis: Therapeutic manipulation
Growth factor receptors and other surface antigens as targets for therapy
Oncogenes, tumor suppressor genes, and gene products as targets for therapy
Protein kinases and phosphatases as targets for therapy
Role of microenvironment in therapeutic response
Other

ET08 Gene and Vector-Based Therapy

Antisense molecules
Gene therapy and radiation studies
Immune modulators
Vector systems and targeting strategies
Other

ET09 Preclinical Radiotherapeutics

(See also TB09: Radiation Science; CL07: Radiation Oncology)
Modification of radiosensitivity
Molecular targets of radiation response
Normal tissue/cellular stress responses to radiation
Radioprotectors and radiosensitizers
Radiotherapeutic combinations
Other

IM Immunology

IM01 Tumor Immunobiology

Adaptive immunity in tumors
Epigenetic regulation of tumor immunity
Inflammation and cancer: Metastasis
Inflammation and cancer: Tumor initiation and progression
Innate immunity to tumors
Microbiome, inflammation, and cancer
Novel animal models
Oncogenic pathway-mediated regulation of inflammation and tumor immunity
Tumor antigenicity/processing and presentation
Tumor-induced immune suppression: Extrinsic factors
Tumor-induced immune suppression: Intrinsic factors
Other

IM02 Preclinical Immunotherapy

(See also CL06: Immunoncology; ET07: Biological Therapeutic Agents)
Adoptive cell therapy
Combination immunotherapies
Immune checkpoints
Immune mechanisms invoked by other therapies including chemotherapy
Immune mechanisms invoked by radiation therapy
Immune monitoring/clinical correlates
Immune response to therapies
Immunomodulatory agents and interventions
Inflammation, immunity, and cancer
Modifiers of the tumor microenvironment
Therapeutic antibodies, including engineered antibodies
Vaccines (oncolytic and prophylactic)
Other

CT Clinical Trials

All clinical trials should be submitted by the January 10, 2022 clinical trials abstract deadline.

CT01 Phase I Adult Clinical Trials
(See also ET05: Pharmacology, Pharmacogenetics, and Pharmacogenomics)

CT02 Phase II Adult Clinical Trials

CT03 Phase III Adult Clinical Trials

CT04 Phase I, II, or III Clinical Trials in Pediatric Cancer
(See also CL02: Pediatric Cancer – Clinical Investigations; TB08: Pediatric Cancer – Basic Science)

CT05 Phase I, II, or III Clinical Trials in the Elderly

CT06 Phase I, II, or III Clinical Trials in Minorities and Medically Underserved Populations

CT07 COVID-19, Cancer, and Clinical Trials
(See also COVID01: COVID-19 and Cancer)

Phase I
Phase II
Phase III
Phase IV, observational, and expanded access
Clinical trials in progress

CT08 Clinical Trials in Progress
Phase I clinical trials in progress
Phase II clinical trials in progress
Phase III clinical trials in progress

CL Clinical Research [not including clinical trials; see also the Clinical Trials (CT) categories]

CL01 Translational Research – Molecular Biology in Clinical Oncology
(See also: TB07: In Vivo Imaging)

Clinical imaging
Cytogenetics and clinical molecular genetics
Epigenetic therapy
Functional and molecular imaging
Laboratory correlates for targeted agents
Molecular classification of tumors
Radiomics
Tumor staging: Correlation of clinical and molecular markers
Other

CL02 Pediatric Cancer – Clinical Investigations
(See also CT04: Phase I, II, or III Clinical Trials in Pediatric Cancer; TB08: Pediatric Cancer – Basic Science)

Adolescent and young adult oncology
Childhood cancer drug development
Immunotherapeutic approaches to pediatric cancer
Pediatric cancer predisposition and surveillance
Survivorship, late effects, and second cancers
Therapeutic dosing, resistance, and combination therapy approaches in pediatric oncology
Translational pediatric cancer research
Other

CL03 Clinical Research in the Elderly
Aging, immunity, and cancer
Other

CL04 Clinical Research in Racial and Ethnic Minorities and Other Underserved Populations
Biobanking/biospecimen collection
Clinical trial design
Community-engaged research/
community-based participatory research
Community outreach and patient accrual
Impact of COVID-19 on patient accrual
Other

CL05 Biostatistics in Clinical Trials
Design and analysis of clinical trials
New study designs: Theory, methodology, and modeling
Statistical modeling for cancer studies
Other

CL06 Immuno-oncology
(See also ET07: Biological Therapeutic Agents; IM02: Preclinical Immunotherapy)

Adoptive cell therapy
Combination immunotherapies
Immune checkpoints
Immune mechanisms invoked by other therapies including chemotherapy
Immune mechanisms invoked by radiation therapy
Immune monitoring/clinical correlates
Immune response to therapies
Immunomodulatory agents and interventions
Inflammation, immunity, and cancer
Modifiers of the tumor microenvironment
Therapeutic antibodies, including engineered antibodies
Vaccines (oncolytic and prophylactic)
Other

CL07 Radiation Oncology
(See also TB09: Radiation Science; ET09: Preclinical Radiotherapeutics)

Clinical radiotherapeutic studies
Interventional radiology
Modification of radiosensitivity
Radiation-immunotherapy and other radiotherapeutic combinations
Radiation-induced late effects/second cancers
Radiation-induced resistance
Other

CL08 Surgical Oncology (including Prophylactic Surgery)
Surgical oncology

CL09 Clinical Endocrinology
(See also EN01: Molecular, Preclinical, and Clinical Endocrinology)

Endocrine-related cancers
Hormone receptors and diagnosis/prognosis
Hormone signaling and inhibitors
Hormone synthesis, metabolism, and inhibitors
Neuroendocrine and other endocrine factors
Nuclear receptors: Structure and function
Preclinical studies of endocrine-related cancers
Receptors and signal transduction
Steroid hormone receptors
Other

CL10 Survivorship Research and Supportive Care

Biology of cell and tissue damage
Cardio-oncology
Comparative effectiveness research and cost-effective studies
Late effects of cancer and its treatment, including second cancers
Psycho-oncology
Supportive care, palliation, and pain management
Translational survivorship research
Other

CL11 Biomarkers

Biomarkers predictive of therapeutic benefit
Diagnostic biomarkers
Early detection biomarkers
Liquid biopsies: Circulating DNA
Liquid biopsies: Circulating tumor cells
Metastasis biomarkers
Prognostic biomarkers
Spatial proteomics and transcriptomics
Other

CL12 Clinical Outcomes Research
Clinical outcomes research

CL13 Real-World Data (RWD) and Real-World Evidence (RWE)
Analyses using clinico-genomic databases
Clinical informatics and data science
Retrospective clinical analyses
Other

CL14 Precision Oncology
Combination therapy
Molecular targeted therapy
Other

EN Endocrinology

EN01 Molecular, Preclinical, and Clinical Endocrinology
(See also CL09: Clinical Endocrinology)
Endocrine-related cancers
Growth factors, receptors, and signal transduction
Hormone receptors and diagnosis/prognosis
Hormone signaling and inhibitors
Hormone synthesis, metabolism, and inhibitors
Neuroendocrine and other endocrine factors
Nuclear receptors: Structure and function
Preclinical studies of endocrine-related cancers
Receptors and signal transduction
Steroid hormone receptors
Other

PS Population Sciences

PS01 Population Sciences

Aging as a risk factor
Biomarkers of endogenous or exogenous exposures, early detection, and biologic effects
Biomarkers of prognosis
Cancer health disparities research
Descriptive epidemiology, covering cancer incidence, mortality, clusters, and trends
Diet, alcohol, tobacco use, and other lifestyle risk factors
Environmental and occupational risk factors
Familial and hereditary cancers
Functional studies of genetic variants
Gene-gene and gene-environment interactions
Genome-wide association studies (GWAS)/post-GWAS
Health services and comparative effectiveness research
Infection and immune factors
Next-generation sequencing in epidemiology studies (whole genome, exome, targeted, or fine-mapping)
Pathway and candidate gene studies of risk or prognosis
Pharmacoepidemiology
Preneoplastic and tumor markers
Primary and secondary intervention studies
Risk prediction models for incidence, prognosis, and/or mortality
Screening and early detection
Statistical and epidemiological methodology
Survivorship research
Other

PR Prevention, Early Detection, and Interception

PR01 Preclinical Prevention, Early Detection, and Interception

Animal models in prevention
Biological and biochemical mechanisms in prevention
Biomarkers and intervention studies
Cellular models
Chemoprevention studies
Diet, nutrition, and cancer
Microbiome and prevention
Molecular markers in prevention research
Molecular targets for prevention
New agent development
Screening and early detection
Other

PR02 Clinical Prevention, Early Detection, and Interception

Application of molecular pathology in clinical prevention
Biomarkers and intervention studies
Cancer health disparities research
Cancer surveillance and screening studies
Chemoprevention clinical trials
Genetic markers as surrogate endpoints in prevention trials
Genomics and proteomics in cancer risk and response assessment
Infections and virus-related cancers
Microbiome and prevention
Prevention and treatment of premalignant lesions (intraepithelial neoplasia)
Prevention of second cancers
Recruitment of racial and ethnic minorities and other underserved populations in clinical prevention trials
Screening and early detection
Other

PR03 Implementation Science

Behavioral science and prevention
Cancer communication and decision-making
Cancer health disparities research
Genetic testing and counseling
Health policy and outcomes
Obesity, diet, physical activity, and energy balance
Quality of life/late effects/survivorship
Other

COVID COVID-19 and Cancer

COVID01 COVID-19 and Cancer

Cancer drug repurposing to treat COVID-19
Cancer prevention and early detection during the COVID-19 pandemic
Clinical trials [See also CT07: COVID-19, Cancer, and Clinical Trials (Phase I-Phase IV and Trials in Progress)]
Continuity of cancer care
COVID-19 vaccine development
COVID-19 vaccines and immune responses among cancer patients
Diagnostics for COVID-19 testing: Design, development, and validation
Effects of cancer immunotherapies on patients with COVID-19 (with or without cancer)
Effects of COVID-19 on cancer survivorship
Epidemiology and registries of COVID-19 and cancer (including biorepositories)
Health inequities and disparities during the COVID-19 pandemic
Intersection of the biology of SARS-CoV-2 and cancer
Risk factors and comorbidities resulting in adverse outcomes for cancer patients with COVID-19
Science and public policy
Other

RSP Regulatory Science and Policy

RSP01 Regulatory Science and Policy

Biosimilars and generics
Clinical trial design and accrual
Combination therapies and codevelopment of investigational agents and diagnostics
Data science and informatics
Novel endpoints and biomarkers
Real-world evidence and retrospective analyses
Tobacco and e-cigarette regulation
Other

SHP Science and Health Policy

SHP01 Science and Health Policy

Cancer health disparities
Cancer survivorship
Comparative effectiveness research
Implementation science
Patient advocacy and engagement
Value and cost issues in cancer care
Other

**DECODING
CANCER COMPLEXITY**

**INTEGRATING
SCIENCE**

**TRANSFORMING
PATIENT OUTCOMES**