

Central Nervous System Metastasis, the Biological Basis and Clinical Considerations

Cancer Metastasis – Biology and Treatment

VOLUME 18

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Central Nervous System Metastasis, the Biological Basis and Clinical Considerations

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List of Abbreviations

ADC	Apparent diffusion coefficient
AED	Antiepileptic drugs
BBB	Blood–brain barrier
BED	Biologically equivalent dose
BLI	Bioluminescence imaging
BM	Brain metastasis/metastases
BRAF	v-RAF murine sarcoma viral oncogene homolog B1
BTB	Blood–tumor barrier
CEA	Carcinoembryonic antigen
CNS	Central nervous system
COX-2	Cyclooxygenase-2
CSF	Cerebrospinal fluid
CT	Computed tomography
CTLA	Cytotoxic T lymphocyte antigen 4
DCE-MRI	Dynamic contrast-enhanced magnetic resonance imaging
Dmax	Maximum dose
DTI	Diffusion tensor imaging
DWI	Diffusion weighted imaging
ECOG	Eastern Cooperative Oncology Group
ECM	Extracellular matrix
EGFR	Epidermal growth factor receptor
EGFRmut	EGFR mutations
FACT	Functional Assessment of Cancer Therapy
FCI	Flow cytometry immunophenotyping
EORTC	European Organization for Research and Treatment of Cancer
FDG	2-[¹⁸ F]Fluoro-2-deoxy-D-glucose
FDOPA	3,4-Dihydroxyl-6-[¹⁸ F]-fluoro-L-phenylalanine
FI	Fluorescent imaging
FIM	Functional independence measure
FITC	Fluorescein isothiocyanate
FIS	Functionally independent survival

FLT	3'-deoxy-3'-[18F]-Fluorothymidine
Gd	Gadolinium
Gd-DTPA	Gadolinium-diethylenetriamine penta-acetic acid
GDNF	Glial cell line–derived neurotrophic factor
GFAP	Glial fibrillary acidic protein
GFP	Green fluorescent protein
GPA	Graded Prognostic Assessment
Gy	Gray
HDAC	Histone deacetylases
HER2	Human epidermal growth factor receptor 2
HS	Heparan sulfate
ICP	Intracranial pressure
IL-1 β	Interlukin-1 β
IL-2	Interleukin-2
IL-6	Interleukin-6
iv	Intravenous
KPS	Karnofsky Performance Score
LEF	Lymphoid enhancer binding factors
L-End	Endoglin long
LMD	Leptomeningeal dissemination
mg	Milligrams
MAPK	Mitogen-activated protein kinase
MDASI	M.D. Anderson Symptom Inventory
MRI	Magnetic resonance imaging
MRS	Magnetic resonance spectroscopy
MPLSM	Multiphoton laser scanning microscopy
MV	Megavoltage
NAA	N-acetylasparatate
NM	Neoplastic meningitis
NSCLC	Non–small cell lung cancer
PCI	Prophylactic cranial irradiation
PEDF	Pigment epithelium-derived factor
PET	Positron emission tomography
PSA	Prostate specific antigen
QOL	Quality of Life
RF	Radiofrequency
RFP	Red fluorescent protein
RO-VPS	Reservoir –on/off valve ventriculoperitoneal shunt
ROR	Receptor tyrosine kinase-like orphan receptor
RPA	Recursive partitioning analysis
RTOG	Radiation Therapy Oncology Group
SBRT	Stereotactic body radiotherapy
SCLC	Small cell lung cancer
SDF-1 α	Stromal cell derived factor 1- α

S-End	Endoglin short
SOCS-1	Suppressor of cytokine signaling
SPECT	Single photon emission computed tomography
SPIO	Superparamagnetic iron oxide
SQLI	Spitzer Quality of Life Index
SRS	Stereotactic radiosurgery
SRT	Stereotactic radiotherapy
SSEP	Somatosensory evoked potentials
STAT3	Signal transducer and activator of transcription 3
SWOG	Southwest Oncology Group
TCF	T-cell factors
TGF- β	Transforming growth factor β
TK-1	Thymidine kinase
TKI	Tyrosine kinase inhibitors
TMZ	Temozolomide
TNF- α	Tumor necrosis factor α
uPA	Urokinase-type plasminogen activator
VEGF	Vascular endothelial growth factor
VEGFR	Vascular endothelial growth factor receptors
WBRT	Whole brain radiation therapy or radiotherapy

