

Oncology Clinical Pathways Oligodendroglioma

October 2024 – V2.2024



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U.S. Department
of Veterans Affairs

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Oligodendroglioma – Presumptive Conditions

VA automatically presumes that certain disabilities were caused by military service. This is because of the unique circumstances of a specific Veteran's military service. If a presumed condition is diagnosed in a Veteran within a certain group, they can be awarded disability compensation.

Atomic Veterans Exposed to Ionizing Radiation

- Cancer of the Brain

Gulf War and Post 9/11 Veterans

If the patient served on or after Sept. 11, 2001, in Afghanistan, Djibouti, Egypt, Jordan, Lebanon, Syria, Uzbekistan, or Yemen or if you served in the *Southwest Asia theater of operations, or Somalia, on or after Aug. 2, 1990, specific conditions include:

- Brain Cancer

* The Southwest Asia theater of operations refers to Iraq, Kuwait, Saudi Arabia, the neutral zone between Iraq and Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, Oman, the Gulf of Aden, the Gulf of Oman, the Persian Gulf, the Arabian Sea, the Red Sea, and the airspace above these locations.

For more information, please visit [U.S. Department of Veterans Affairs - Presumptive Disability Benefits \(va.gov\)](https://www.va.gov)



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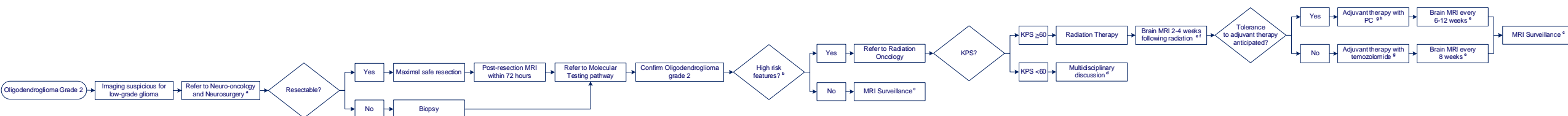
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Oligodendroglioma – Grade 2



Clinical trial(s) always considered on pathway. For assistance finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

^a Refer to Neuro-oncology via National TeleOncology consult if local VA Neuro-oncology unavailable

^b High Risk Features to include >40 years old and residual tumor, neurologic symptoms to include uncontrolled seizures, or atypical neuroimaging to include contrast enhancement; take into account high risk features as determined by Neuropathologist

^c MRI Surveillance at least every 4 months for first 5 years, every 6 months for years 5-10, at least annually >10 years

^d Multidisciplinary Discussion through local tumor board or National TeleOncology CNS Virtual Tumor Board

^e Imaging MRI with and without contrast; CT with contrast if MRI contraindicated

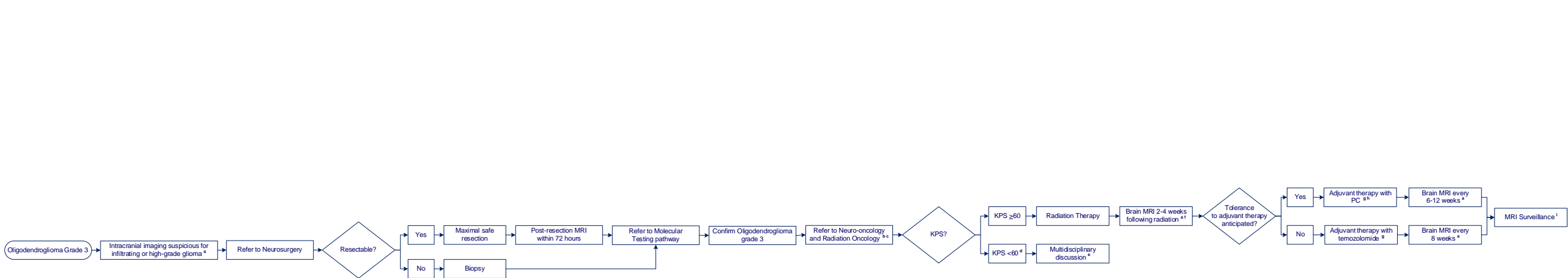
^f Pseudo Progression can occur inside the radiation field (defined as within the 80% isodose line) up to 12 weeks post-radiation

^g Adjuvant Therapy PC cycles repeat every 6 weeks: Cycle 1- CCNU (Lomustine) 90mg/m² orally day 1 and procarbazine 60mg/m² orally days 8-21 of a 42-day cycle; Cycle 2- CCNU 100mg/m² orally day 1 (if no myelosuppression) and procarbazine 60mg/m² orally days 8-21; Cycles 3-6- CCNU 110mg/m² orally day 1 (if no myelosuppression) and procarbazine 60mg/m² orally days 8-21; ondansetron 8mg orally prior to each dose of CCNU; CBC prior to day 1 of each cycle; if low tolerance anticipated use temozolomide 150mg/m² days 1-5 of a 28-day cycle for cycle 1, then (if no myelosuppression) increase dose to 200mg/m² days 1-5 of a 28-day cycle for subsequent cycles up to cycle 12 with a CBC between day 22 and day 28, ondansetron 8mg daily before each temozolomide dose

^h PC is the procarbazine and CCNU of PCV; vincristine is omitted due to the lack of efficacy and increased toxicity

CCNU Lomustine
KPS Karnofsky Performance Status
PC Procarbazine and CCNU

Oligodendroglioma – Grade 3



Clinical trial(s) always considered on pathway. For assistance finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

^a **Imaging** MRI with and without contrast; CT with contrast if MRI contraindicated

^b **Refer to Neuro-oncology** via National TeleOncology consult if local VA Neuro-oncology unavailable

^c **Refer to Genetic Counseling** for patient with personal history of other primary cancers particularly if diagnosed \leq 45 years or first or second degree relative with cancer \leq 55 years, clinician discretion for those $>$ 55 years

^d **Life expectancy** \leq 6 months refer to Hospice

^e **Multidisciplinary Discussion** through local tumor board or National TeleOncology CNS Virtual Tumor Board

^f **Pseudo Progression** can occur inside the radiation field (defined as within the 80% isodose line) up to 12 weeks post-radiation

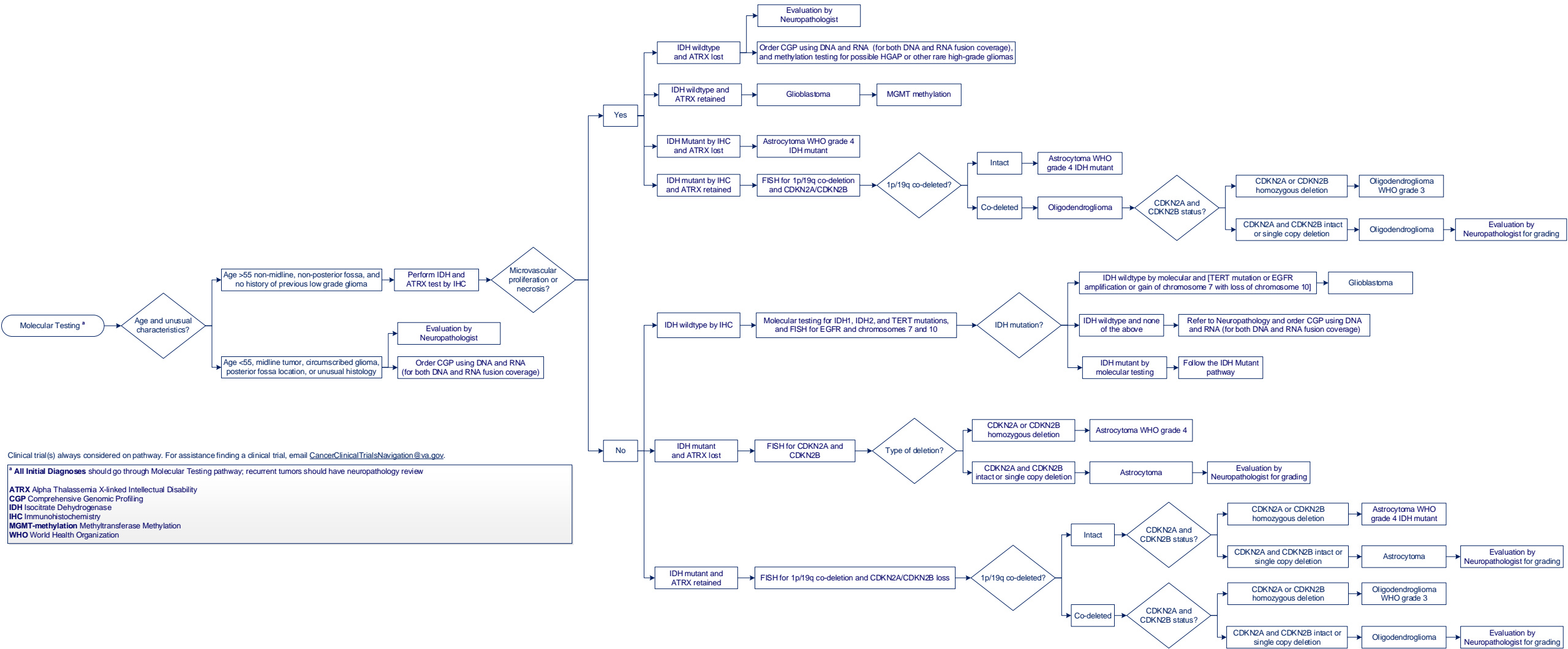
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^h **PC** is the procarbazine and CCNU of PCV; vincristine is omitted due to the lack of efficacy and increased toxicity

ⁱ **MRI Surveillance** at least every 4 months for first 5 years, every 6 months for years 5-10, at least annually $>$ 10 years

CCNU Lomustine
KPS Karnofsky Performance Status
PC Procarbazine and CCNU

Oligodendroglioma – Molecular Testing



Clinical trial(s) always considered on pathway. For assistance finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

*** All Initial Diagnoses** should go through Molecular Testing pathway; recurrent tumors should have neuropathology review

ATRX Alpha Thalassemia X-linked Intellectual Disability
CGP Comprehensive Genomic Profiling
IDH Isocitrate Dehydrogenase
IHC Immunohistochemistry
MGMT-methylation Methyltransferase Methylation
WHO World Health Organization

Oligodendroglioma – Molecular Testing Table

Eligibility	Test Category	Test Type	Recommended Vendors	NPOP Coverage	Specimen Type
Age > 55, Non-midline, Non-posterior fossa, AND No history of previous low grade glioma	IHC	IDH1 R132 mutation ATRX	Local VA or locally contracted vendor	No	Tumor Tissue
IDH-mutated	FISH	1p/19q FISH for codeletion CDKN2A/B homozygous loss	Local VA or locally contracted vendor	No	Tumor Tissue
IDH-wild type	Molecular	TERT promoter mutation testing	Local VA or locally contracted vendor	No	Tumor Tissue
	**FISH	EGFR for amplification Chromosomes 7 and 10 for gain 7/loss 10	Local VA or locally contracted vendor	No	Tumor Tissue
	**Microarray	Chromosomal microarray (aka Oncoscan FFPE)	Local VA or locally contracted vendor	No	Tumor Tissue
	Methylation Testing	MGMT promoter methylation testing	Local VA or locally contracted vendor	No	Tumor Tissue
Age < 55, Midline tumor, Circumscribed glioma, Posterior fossa location, Unusual histology, IDH-wildtype WITH loss of ATRX, OR IDH-wildtype WITHOUT glioblastoma-defining molecular alterations	Somatic NGS	DNA and RNA-based comprehensive genomic profiling (CGP)	Tempus	Yes	Tumor Tissue

* Testing should not be ordered indiscriminately on every case as it will inappropriately exhaust tissue. Instead, follow the pathological workup recommended on the Molecular Testing page for appropriate test utilization

** Choose FISH OR microarray. In most cases FISH can be done instead of microarray. If performing microarray, then FISH is not indicated.

