

Diffuse Lower Grade (Grades II-III) Glioma (LrGG)

GTR=gross total resection
 NTR=near total resection
 STR=subtotal resection

A= MANDATORY
B= OPTIMAL
C= OPTIONAL

Diffuse Glioma

Resectable lesion (non eloquent cortex)
 Intra-operative adjuncts may be used (B)

Lesion in eloquent area
 (unresectable tumor, deep ganglio-capsular location)

Maximal safe resection (A)

Safe surgery with intra-op mapping & monitoring (awake if required) (A)

Stereotactic Bx (A)

Not amenable to safe STBx

GTR/NTR

STR

Histo-morphology, Grading, IHC (A)

Histo-morphology (Oligo or Astro) (A)
 WHO Grading (II or III) (A)
 IHC for IDH, ATRX, p53 (A)
 Further extended molecular work-up as appropriate (B,C)

High-risk Grade II Glioma (Tx >4cm, age >40 years, Residual Tx >1cm, Astro morphology) Upfront Adjuvant RT + CTh (A)
 Focal Conformal RT: 55.8Gy/31#

GTR/NTR

Re-look surgery if amenable safely (B)

Grade III Glioma Upfront Adjuvant RT + CTh (A)
 Focal Conformal RT: 55.8-59.4Gy/31-33#

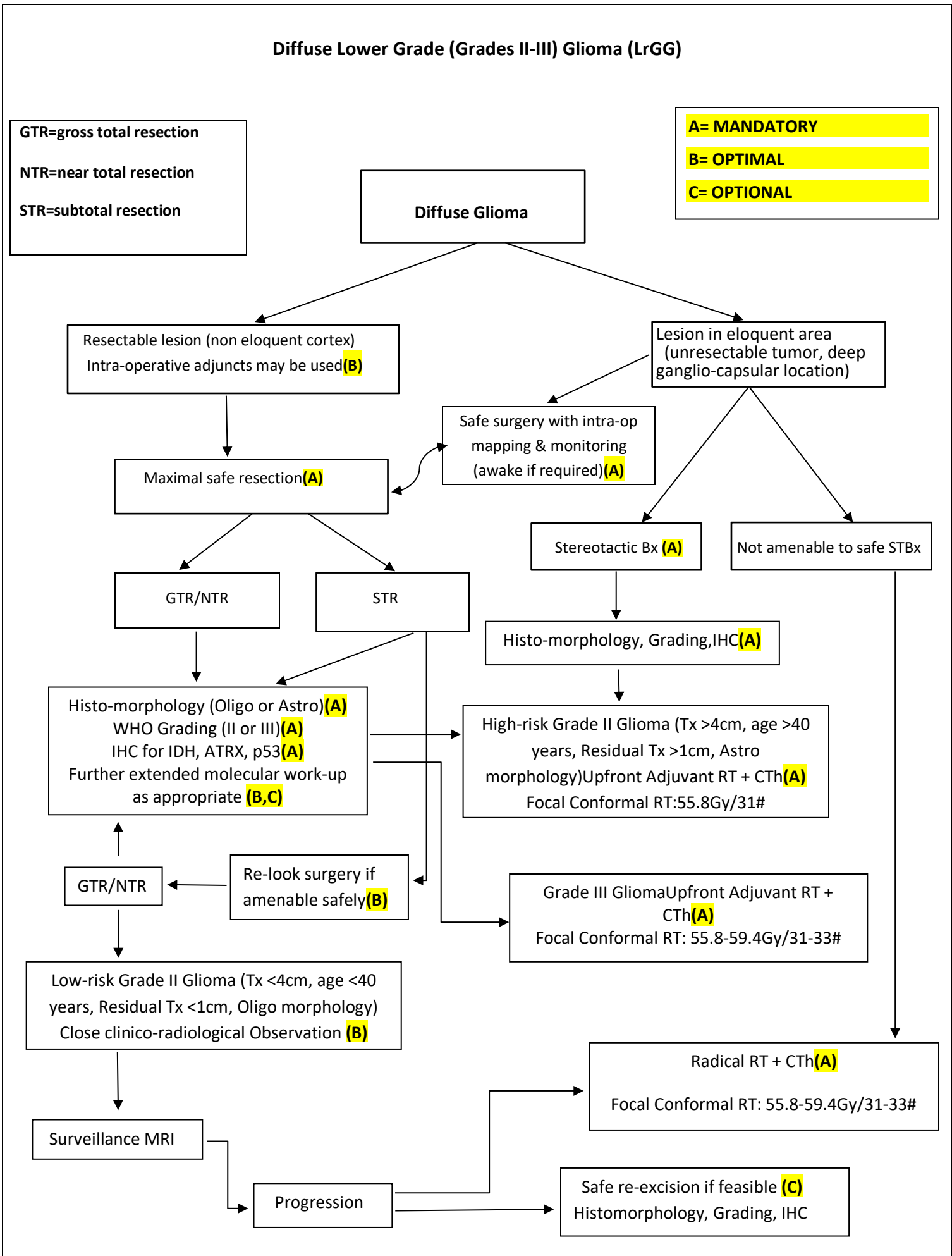
Low-risk Grade II Glioma (Tx <4cm, age <40 years, Residual Tx <1cm, Oligo morphology)
 Close clinico-radiological Observation (B)

Radical RT + CTh (A)
 Focal Conformal RT: 55.8-59.4Gy/31-33#

Surveillance MRI

Progression

Safe re-excision if feasible (C)
 Histo-morphology, Grading, IHC



Chemotherapy regimens for Diffuse LrGG

Concurrent chemotherapy during RT

Temozolomide (TMZ): 75mg/m² per orally daily throughout the course of RT with anti-emetic and PCP prophylaxis

Adjuvant chemotherapy following RT

Temozolomide: 150-200mg/m² D1-D5 per orally cycled 4-weekly for 12 cycles

Alternative adjuvant chemotherapy regimen

Drugs	Dose	Days and Route
RTOGPCV Regimen (6 cycles every 6-weekly)		
Procarbazine	100mg/m ²	Day 8 -21 orally
Vincristine	1.5mg/m ²	Day 8 and 29 IV
Lomustine	100mg/m ²	Day 1 only orally
OR		
MRC-UK PCV Regimen (6 cycles every 6-weekly)		
Procarbazine	100mg/m ²	Days 1-10 orally
Vincristine	1.5mg/m ²	Day 1 only IV
Lomustine	100mg/m ²	Day 1 only orally
OR		
Single agent CCNU (6 cycles every 6-weekly)		
CCNU	100mg/m ²	Day 1 only orally