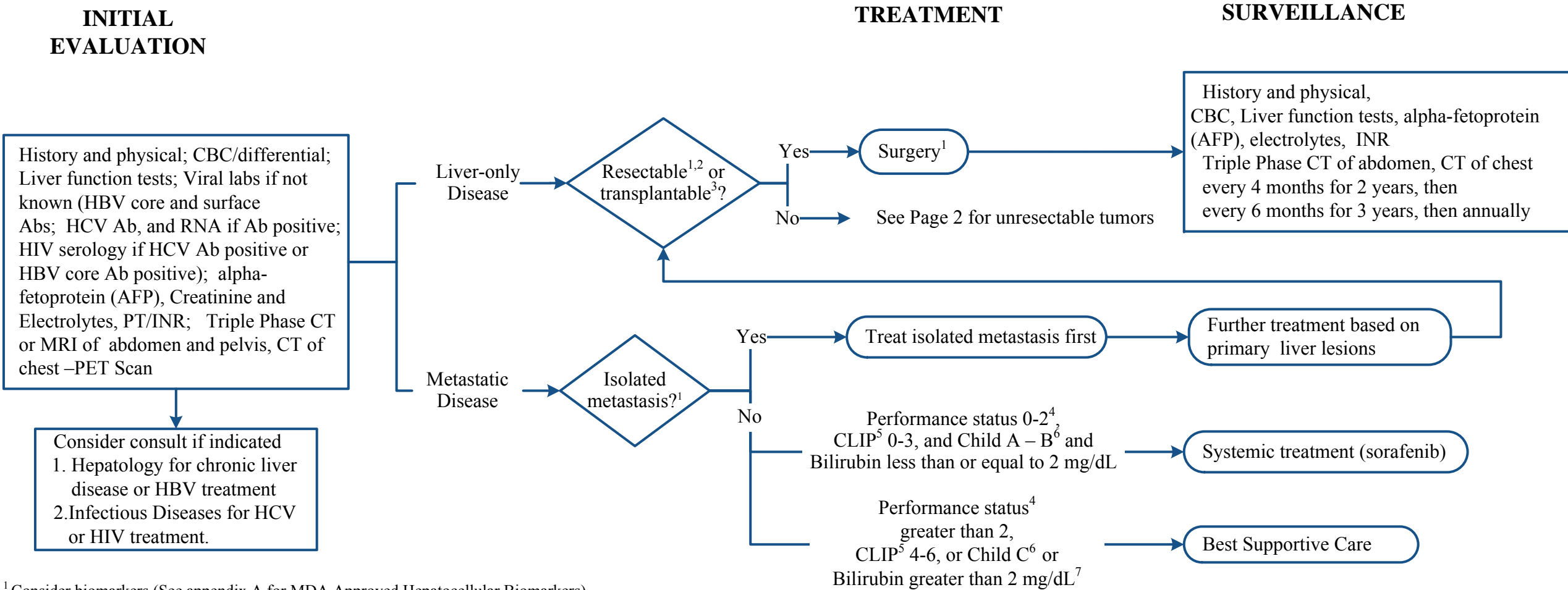


Hepatocellular Carcinoma

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Note: Consider Clinical Trials as treatment options for eligible patients.



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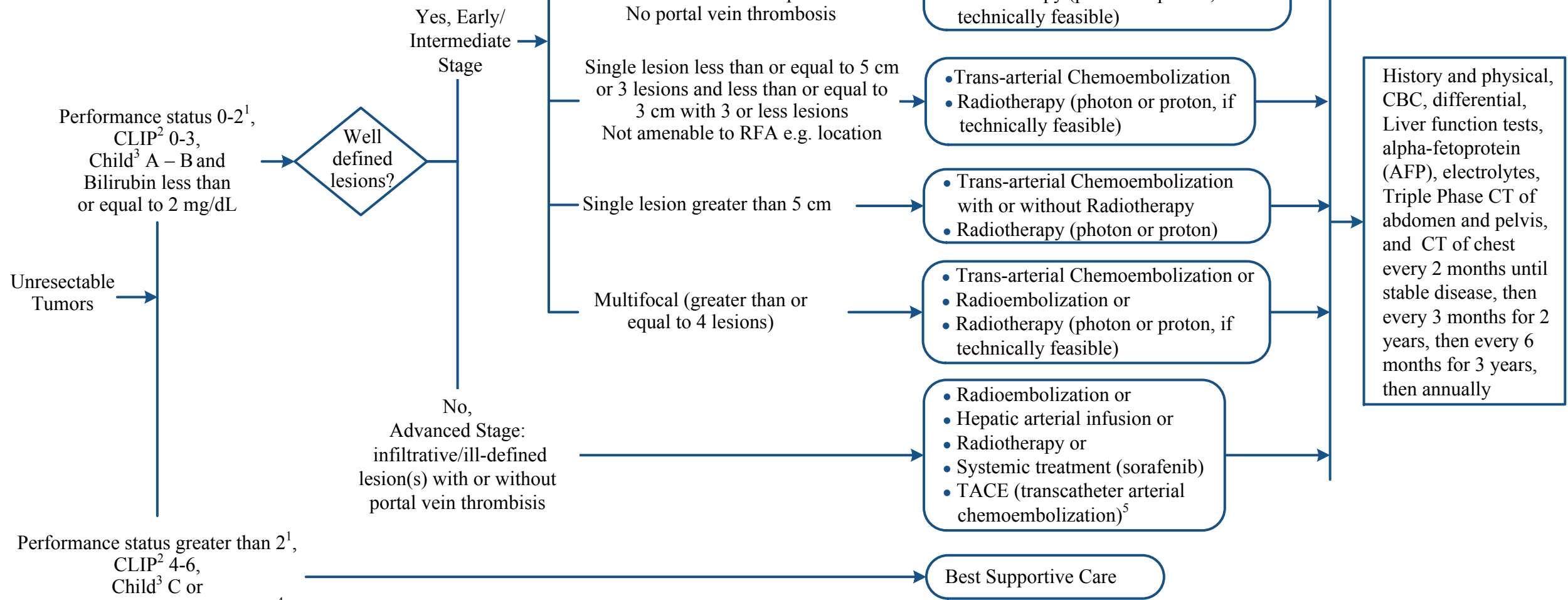
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CLINICAL PRESENTATION

STAGING

TREATMENT

RE-STAGING WORKUP



¹ See Appendix A for ECOG Performance Status
² CLIP – refer to Appendix B for determination of CLIP score
³ Child-Pugh – refer to Appendix C for Child-Pugh scores
⁴ Treatment may be considered in select cases with Bilirubin 2-3 mg/dL
⁵ TACE is a relative contraindication in the presence of portal vein thrombosis.

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APPENDIX A: Hepatocellular Carcinoma Molecular Markers – MD ANDERSON APPROVED¹

		BIOMARKER		
DISEASE SITE	CELL TYPE	FISH	IMMUNOHISTOCHEMISTRY	MOLECULAR
GI	Hepatocellular	MET	MET	

¹ Literature support for MD Anderson approved Biomarkers is available and can be found under Clinical Management Algorithms → “Biomarkers – MD Anderson Approved”

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APPENDIX B
EASTERN COOPERATIVE ONCOLOGY GROUP
(ECOG) PERFORMANCE STATUS CRITERIA

Grade	Scale
0	Fully active, able to carry on all pre-disease performance without restriction (Karnofsky 90-100)
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, i.e., light housework, office work (Karnofsky 70-80)
2	Ambulatory and capable of all self-care but unable to carry out any work activities. Up and about more than 50% of waking hours (Karnofsky 50-60)
3	Capable of only limited self-care, confined to bed or chair more than 50% of waking hours (Karnofsky 30-40)
4	Completely disabled. Cannot carry out any self-care. Totally confined to bed or chair (Karnofsky 10-20)
5	Dead

APPENDIX C
CLIP SCORING SYSTEM

Variables	0	1	2
Child-Pugh Stage	A	B	C
Tumor morphology	Uninodular and extension less than or equal to 50%	Multinodular and extension less than or equal to 50%	Massive or Greater than 50%
AFP	Less than 400 ng/dL	Greater than or equal to 400 ng/dL	
Portal vein thrombosis	No	Yes	

APPENDIX D
CHILD-PUGH SCALE

Chemical and Biochemical Parameters	Scores (Points) for Increasing Abnomality		
	1	2	3
Encephalopathy	None	1 - 2	3 - 4
Ascites	None	Slight	Moderate
Albumin	Greater than 3.5 g/dL	2.8 – 3.5 g/dL	Less than 2.8 g/dL
Prothrombin time prolonged	1 – 4 seconds	4 – 6 seconds	Greater than 6 seconds
Bilirubin	1 – 2 mg/dL	2 – 3 mg/dL	Greater than 3 md/dL
For primary biliary cirrhosis	1 – 4 mg/dL	4 – 10 mg/dL	Greater than 10 mg/dL

Class A = 5 to 6 points
Class B = 7 to 9 points
Class C = 10 to 15 points

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SUGGESTED READINGS

Child-Pugh scale:

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CLIP score:

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SUGGESTED READINGS - continued

SURGERY (Continued)

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DEVELOPMENT CREDITS

This practice guideline is based on majority expert opinion of the Gastrointestinal Center Faculty at the University of Texas, M.D. Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following medical oncologists, radiation oncologists, surgical oncologists, and interventional radiologists:

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