

Introduction

Primary liver cancer is the sixth most diagnosed cancer and the third leading cause of cancer death worldwide in 2020, with approximately 906,000 new cases per year and 830,000 deaths per year. Hepatocellular Carcinoma (HCC) comprises 85-90% of primary liver cancers. Risk factors for HCC vary by region. According to recent data, Hepatitis C Virus (HCV) accounts for approximately one-third of HCC cases in the United States (US). Studies have shown HCC and HCV disproportionately impact racial/ethnic minorities in the US. This population is encouraged to seek screening in 6-months intervals to avoid delays in diagnosis and progression of the disease. Moreover, socioeconomic status (SES) and insurance status may limit preventive and surveillance measures.

Our study aims to identify disparities in HCC stage by age, race, ethnicity, gender, or SES at the time of diagnosis. Also, we seek to determine average duration from diagnosis to treatment and identify if one group carries a higher burden of disease.

Methods

This was a retrospective chart review of HCV+ patients diagnosed with HCC at University Medical Center New Orleans (UMCNO) from March 2013 to May 2021. The medical record was reviewed to collect basic demographics, staging at the time of diagnosis according to Barcelona Clinic Liver Cancer (BCLC), as well as duration to treatment. Data was analyzed using SAS 9.4. We looked at associations between demographics, delays in treatment, and stage.

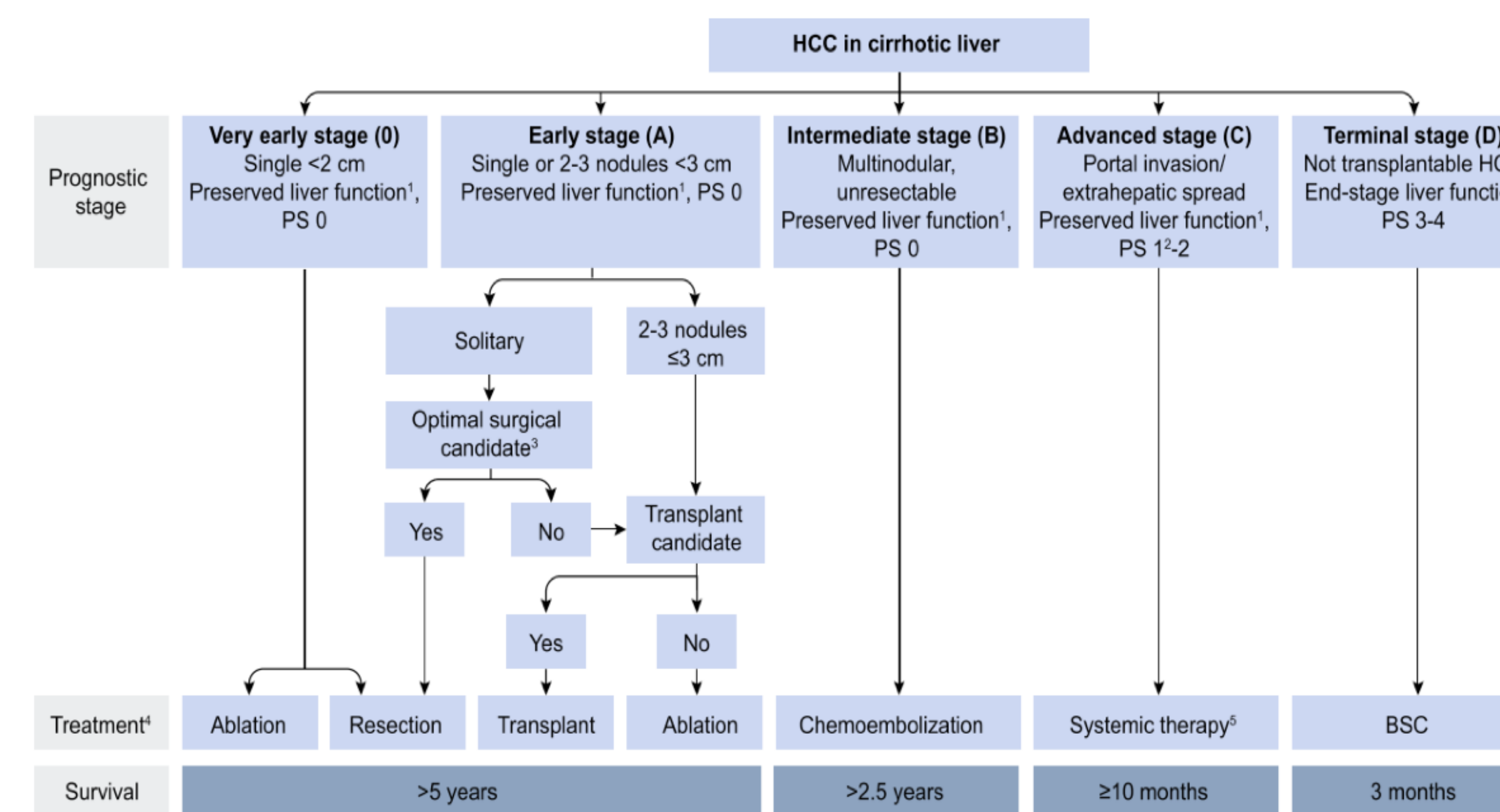


Figure 1: BCLC Staging system for HCC.

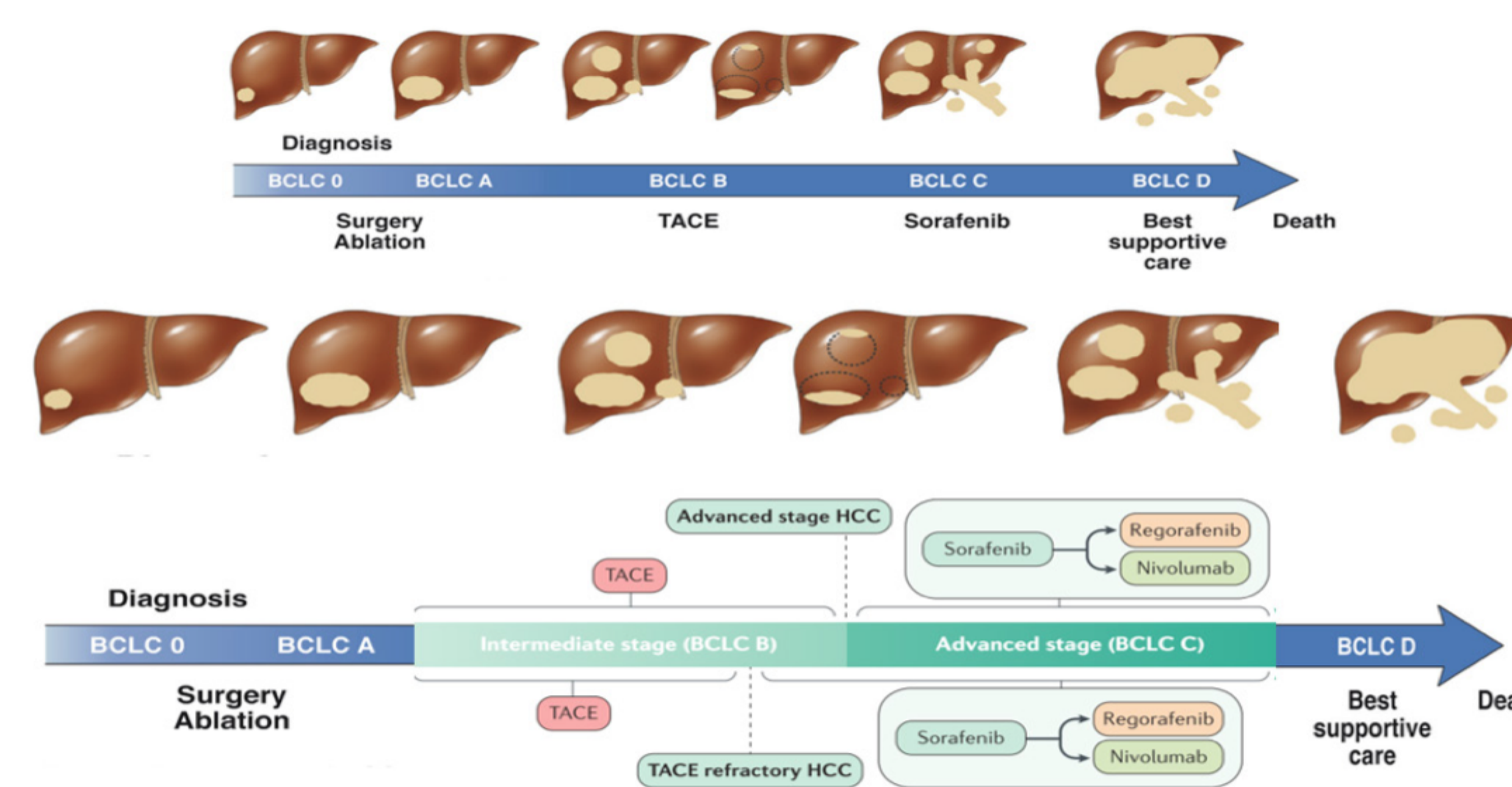


Figure 2: HCC treatment related to stage

While there were no statistically differences based on demographics, we observed a statistically significant relationship between HCC stage and delay in treatment ($p < 0.0001$ where most delays occurred in stage 2 patients and no delays mostly occurred in stage 3. Of all patients, 83% received HCC treatment with a median time to treatment of 79.5 days, with 65% experiencing a delay in treatment. There was no association between treatment delay and age, race, SES, or gender.

Frequency Percent Row Percent Col Percent	delay	Table of delay by Stage					Total
		Stage					
		0	1	2	3	4	
No Delay	0	9	12	19	12	52	
	0.00	6.04	8.05	12.75	8.05	34.90	
	0.00	17.31	23.08	36.54	23.08		
	0.00	20.45	25.00	47.50	80.00		
Delay	2	35	36	21	3	97	
	1.34	23.49	24.16	14.09	2.01	65.10	
	2.06	36.08	37.11	21.65	3.09		
	100.00	79.55	75.00	52.50	20.00		
Total	2	44	48	40	15	149	
	1.34	29.53	32.21	26.85	10.07	100.00	

Table 1: Relationship between delay in treatment and stage of HCC.

Results

Our population consisted of 149 patients, 91% male, 61% black vs 33% white, 98% non-Hispanic. Of all patients, 6% had private insurance, 85% had Medicaid/Medicare, and 9% were uninsured. Median age at diagnosis was 61 years and 88% had either early, intermediate, or advanced stage HCC (BCLC Stages A, B, and C, respectively), 32% Stage B.

Conclusions

While there was no significant relationship to demographic or SES, most patients did experience a delay in treatment. No group carried a higher burden of disease. Results emphasize the importance of screening for HCC in the HCV population given that only 30% of the population was diagnosed with stages 0/A according to BCLC.

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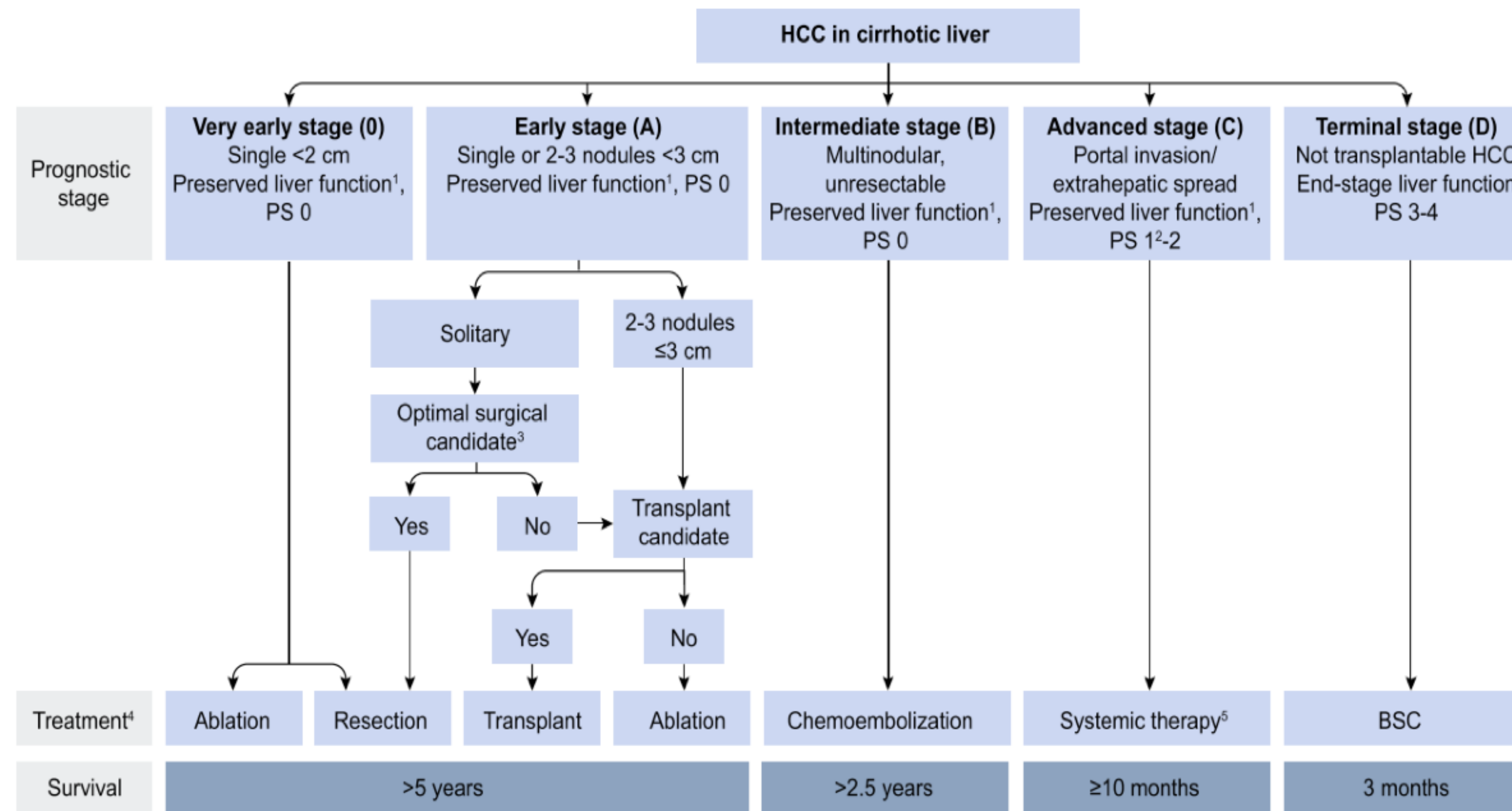


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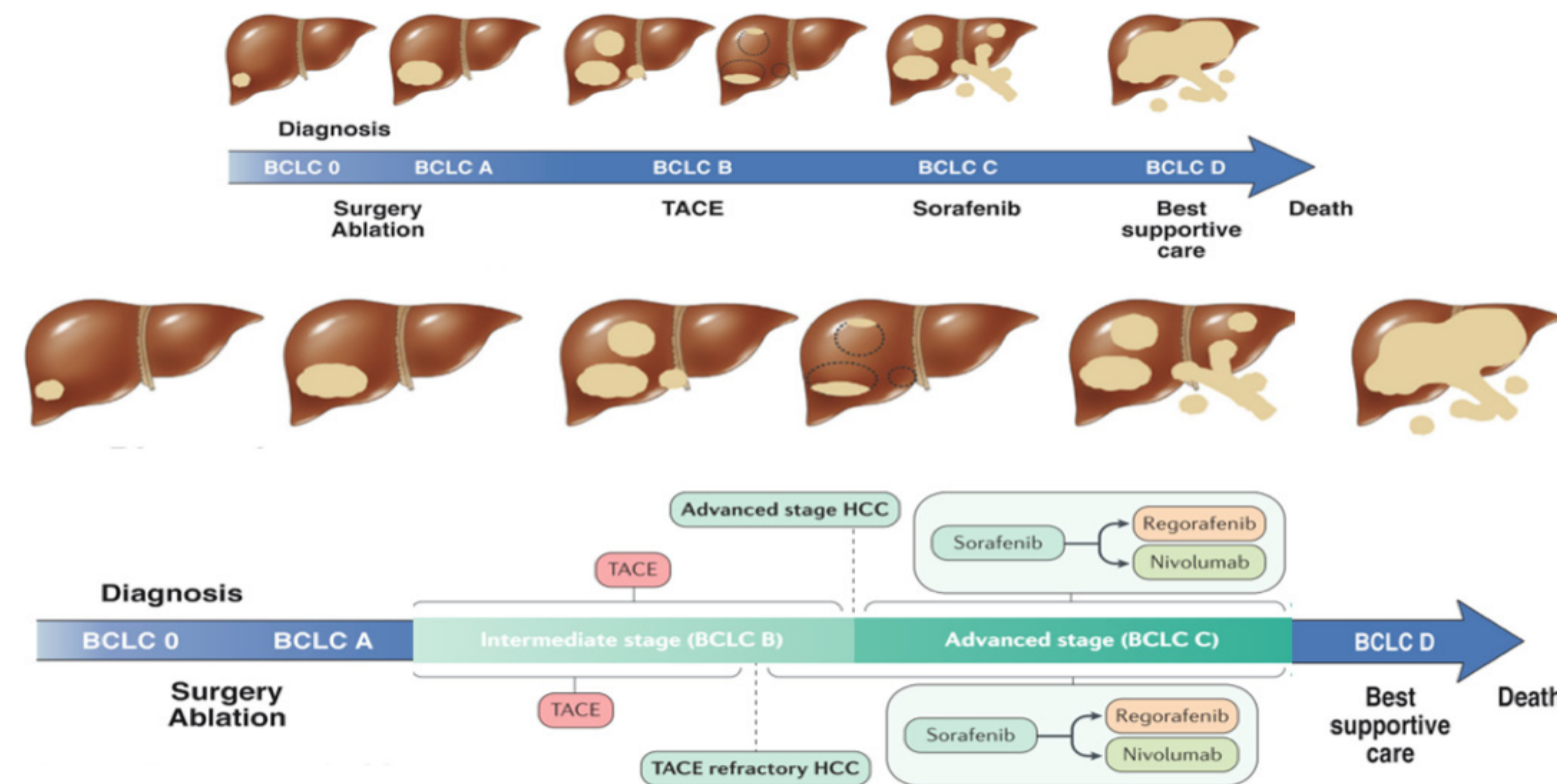


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