Adult Chronic Hepatitis B (CHB) Summary Sheet (adapted from 2016 AASLD guidelines)

Initial Evaluation

1. H&P: Assess for s/sx cirrhosis, alcohol and metabolic risk factors, FHx HCC, vaccination status
2. Labs: CBC, CMP, INR, HBeAg/eAb, HBV DNA, HAV Ab, HCV Ab
   +/- HIV if no prior screening, AFP if HCC screening indication, HDV Ab if RFs, tests to rule out other causes of chronic liver dz if elevated ALT
3. Imaging/Staging: Liver ultrasound and fibrosis assessment (elastography and/or serum fibrosis panel; liver bx in select pts)
   METAVIR fibrosis score F0/F1 = no or minimal fibrosis, F2 = portal fibrosis with few septa, F3 = numerous septa without cirrhosis, F4 = cirrhosis

Follow-up Evaluation and Treatment Indications

	ALT ULN = 19 if female; 30 if male	**HBV DNA** (IU/mL)	**Interval management**	**Treatment (Tx)**
HBeAg + w/o cirrhosis[1]	< 1 x ULN *Immune-tolerant phase*	>1,000,000	q6mo ALT and HBV DNA, q6-12mo HBeAg	Consider tx if F3+ AND age > 40yo
	1-2 x ULN	>20,000	q3mo ALT and HBV DNA, q6-12mo HBeAg Reassess fibrosis	Consider tx if F2+, age > 40yo, or FHx HCC
	> 2 x ULN *Immune-active phase*		q1-3mo ALT and HBV DNA, q6-12mo HBeAg Rule out other causes of elevated ALT	Tx if persistent[3]
HBeAg - w/o cirrhosis[1]	< 1 x ULN *Inactive phase*	< 2000	q6-12mo ALT and HBV DNA q1-2y HBsAg for clearance	None
	1-2 x ULN	>2000	q3mo ALT and HBV DNA Reassess fibrosis	Consider tx if F2+, age > 40yo, or FHx HCC
	> 2 x ULN *Immune reactivion phase*		HBV core promotor/precore mutation testing optional	Tx if persistent[4]

Antiviral Tx Monitoring

1. If evidence of cirrhosis, initiate antiviral tx indefinitely regardless of HBeAg status, HBV DNA level, or ALT level to decrease risk of worsening liver-related complications.
2. Once on tx, follow ALT and HBV DNA q3-6mo. If HBV DNA not undetectable or rising after 12mo tx initiation, eval for med inadherence.
3. HBeAg+ adults without cirrhosis who seroconvert to HBeAg- on tx may discontinue tx after a consolidation period of at least 12mo of persistently nL ALT and undetectable serum HBV DNA levels.
4. Indefinite antiviral therapy for adults with HBeAg- immune activation, unless HBsAg seroclearance or a competing rationale for tx discontinuation
5. If antiviral is discontinued, monitor hepatic enzymes (e.g. ALT, tbili) for post-treatment flare (e.g. at 1, 3, and 6mo).

1st line Antiviral Tx (based on efficacy and low level resistance profiles; PAP programs available for ETV, TDF, and TAF):

Drug	**Dose/Administration**	**Pregnancy Category**	**Potential Side Effects**	**Monitoring on Treatment**
Entecavir ETV (Baraclude)	0.5mg daily (or *1.0mg daily) on an empty stomach (2h before or after a meal)	C	Lactic acidosis/hepatomegaly	Lactic acid levels if clinical concern
Tenofovir disoproxil fumarate TDF (Viread)	300mg daily without regard to meals	B Preferred tx for pregnant women or women of child-bearing age	Acute renal failure/Fanconi syndrome Osteomalacia/decreased BMD Lactic acidosis/hepatomegaly	CrCl at baseline If at risk for renal impairment, CrCl, serum phos, urine glucose and protein annually Consider bone density study at baseline and during tx in persons with history of fracture or risk for osteopenia Lactic acid levels if clinical concern
Tenofovir alafenamide TAF (Vemlidy)	25mg daily with food	N/A	Acute renal failure/Fanconi syndrome (< TDF) Lactic acidosis/hepatomegaly	CrCl at baseline If at risk for renal impairment, CrCl, serum phos, urine glucose and protein annually Lactic acid levels if clinical concern

*If lamuvidine or telbivudine experienced or decompensated cirrhosis

2nd line Antiviral Tx (consider referral to specialist if considering initiation given high level resistance and side effect profiles):
Peg- IFNa, lamuvidine, telbivudine, adefovir

HCC Screening (Tx with antivirals does not eliminate risk of HCC and surveillance for HCC should continue in persons at risk)

1. Indications: Advanced fibrosis/cirrhosis, FHx HCC/cirrhosis, age/ethnicity (Asian males > 40yo; Asian females > 50yo; African/black: any age)
2. Method: RUQ US q6-12mo +/- AFP
   If US read as indeterminate, discuss clinical case with radiologist re: rec for follow-up MRI vs. CT liver and plan for subsequent HCC screening