

**Supplementary Table 4.** Delphi round agreement on the recommendations

The Delphi Committee rated each recommendation on a 9-point Likert scale from 1 (strongly disagree) to 9 (strongly agree). The mean value of each recommendation was calculated and classified into appropriate ( $\geq 7$ ), uncertain (4.0 to  $< 7$ ), or inappropriate ( $< 4$ ). A coefficient of variance  $\geq 0.5$  indicated non-consensus and the need for revision. The Delphi Panel agreement on each of the final recommendations is as below.

		Recommendations	Mean	Coefficient of variance
Diagnosis	[Diagnosis]	1. AIH is diagnosed by excluding liver injury from other causes and integrating laboratory findings (increased serum AST, ALT, and/or IgG), the presence of autoantibodies, and compatible histologic findings. (B1)	8.55	0.08
		2. If AIH is suspected, ANA and SMA are performed as screening tests. (B1) Anti-LKM1, anti-LC1, anti-SLA, or ANCA can be further examined if clinically necessary. (C1)	8.18	0.09
		3. AIH can be diagnosed with a revised diagnostic scoring system or a simplified diagnostic scoring system. (B2)	8.09	0.13
		4. If a patient with AIH shows a cholestatic pattern of liver function test, AMA and cholangiography should be performed considering the possibility of AIH-PBC overlap syndrome or AIH-PSC overlap syndrome. (C1)	8.55	0.06
	[Non-invasive fibrosis assessment]	1. Transient elastography can be useful in diagnosing advanced fibrosis ( $\geq F3$ ) or cirrhosis in patients with AIH and should be performed after hepatic inflammation has been resolved in patients undergoing induction therapy. (C2)	7.91	0.12
Treatment	[Treatment aims and indications]	1. The goal of AIH treatment is to achieve remission by controlling the liver inflammation, thereby suppressing the progression and complications of liver disease. (B1)	8.82	0.05
		2. Patients with active AIH should be treated with immunosuppressive therapy. (A1) When treatment is withheld in asymptomatic inactive patients with an HAI score of less than 4 without advanced fibrosis, liver enzyme levels and IgG markers should be monitored regularly. (C1)	8.55	0.06
		3. In patients with AIH, serum aminotransferase levels and IgG are measured regularly to evaluate the treatment response after initiation of treatment. (B1)	8.27	0.10
	[First-line treatments]	1. Prednisolone plus AZA (A1) or prednisolone alone (A2) is recommended as the first-line treatment for AIH.	8.55	0.06
2. After achieving a complete biochemical response in patients with AIH, AZA alone or prednisolone at the lowest dose capable of maintaining remission plus AZA is recommended as the maintenance treatment. (A1)		8.36	0.08	
3. Prednisolone alone (0.5–1 mg/kg/day) can be administered in patients with acute severe AIH (C2), but liver transplantation is considered when there is no response to treatment or when liver failure accompanied by hepatic encephalopathy occurs. (C1)		8.36	0.08	
	[Treatment withdrawal]	1. Treatment withdrawal is considered in patients with AIH showing complete biochemical remission for at least 2 years (C1). A liver biopsy prior to treatment withdrawal may be considered if clinically necessary (C2).	7.91	0.13

**Supplementary Table 4.** Continued

	Recommendations	Mean	Coefficient of variance
	2. Relapse after treatment withdrawal requires prompt reinstatement of the initial induction therapy in patients with AIH (C1). After achievement of complete biochemical response, transition to a long-term maintenance therapy may be considered (C2).	8.45	0.06
[Pretreatment evaluation and monitoring]	1. For patients with AIH $\geq$ 40 years of age or patients < 40 years of age with high risk factors for osteoporosis, the risk of fracture or bone mineral density should be evaluated before or within 6 months of the initiation of glucocorticoid treatment and followed up at regular intervals depending on the risk of fracture if glucocorticoid treatment is continued. (C1)	8.09	0.13
	2. Vaccination or infection status of viral hepatitis should be assessed in patients with AIH and vaccination should be performed if anti-HAV or HBsAg/anti-HBs are negative. (B1)	8.45	0.08
	3. In patients with AIH, complete blood count should be monitored during AZA treatment. (B1) Genotyping for <i>NUDT15</i> (B2) and/or <i>TPMT</i> (C2) may be considered before initiating AZA treatment.	7.82	0.08
[Second-line treatments]	1. In AIH patients with treatment failure to the first-line treatments, the confirmation of the diagnosis of AIH and medication adherence should be re-evaluated, and then the second-line treatments are considered in cases with intolerance to treatment, non-response, and insufficient response. (C1)	8.55	0.08
	2. MMF or tacrolimus is preferentially considered as the second-line treatment (C1), and cyclosporine, 6-MP and 6-TG also can be used in patients with AIH. (C2)	8.09	0.07
[Treatment of AIH in children]	1. Combination therapy of prednisolone and AZA is recommended as the first-line treatment for pediatric patients with AIH. (B1)	8.45	0.08
	2. After achieving a complete biochemical response, pediatric patients with AIH should be treated with AZA monotherapy or combination therapy of prednisolone at the lowest dose that can maintain remission and AZA. (B1)	8.27	0.10
	3. MMF (C1), cyclosporine (B2), or tacrolimus (C2) can be used as a second-line treatment in pediatric patients with AIH who showed no or incomplete response or intolerance to the first-line treatment.	8.27	0.08
	4. Treatment withdrawal is considered if a complete biochemical response is maintained for at least 2–3 years (C1), and a liver biopsy can be performed before withdrawal (C2) in pediatric patients with AIH.	8.36	0.08
[Treatment of special patient populations]	[Pregnancy] 1. The clinical course of AIH during pregnancy is highly variable, and the risk of flares is high for the early postpartum period, requiring close monitoring during pregnancy and the early postpartum period. (C1)	8.45	0.06
	2. For patients with AIH who plan to become pregnant, family planning should include achieving biochemical remission for at least 1 year prior to conception. (C1)	8.00	0.11
	3. In patients with AIH, MMF is contraindicated, (B1) whereas glucocorticoids and AZA can be maintained during pregnancy. (C1)	8.18	0.07

**Supplementary Table 4.** Continued

	<b>Recommendations</b>	<b>Mean</b>	<b>Coefficient of variance</b>
[AIH overlap syndromes]	1. Combination treatment with immunosuppressive drugs (glucocorticoids and/or AZA) and UDCA is preferred for AIH-PBC overlap syndrome. (B1) If PBC features are predominant, sequential treatment, starting UDCA treatment first and adding immunosuppressive drug according to UDCA response, can be considered. (C2)	8.55	0.06
[AIH with viral hepatitis]	1. Antiviral prophylaxis is recommended if AIH patients have a high or moderate risk of reactivation of CHB during immunosuppressive therapy. (A1)	8.55	0.08
Prognosis	1. HCC surveillance should be performed in AIH patients with LC. (A1)	8.73	0.07