

Table S1 CTCAE grading of ir-hepatic adverse events

Adverse event	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
ALT/AST	(1–3) × ULN	(3–5) × ULN	(5–20) × ULN	>20 × ULN	Death
ALP/GGT	(1–2.5) × ULN	(2.5–5) × ULN	(5–20) × ULN	>20 × ULN	Death
BIL	(1–1.5) × ULN	(1.5–3) × ULN	(3–10) × ULN	>10 × ULN	Death

CTCAE, Common Terminology Criteria for Adverse Events; ir-hepatitis, immune-related hepatitis; ALT, alanine aminotransferase; AST, aspartate aminotransferase; ULN, upper limit of normal; ALP, alkaline phosphatase; GGT, gamma-glutamyl transferase; BIL, bilirubin.

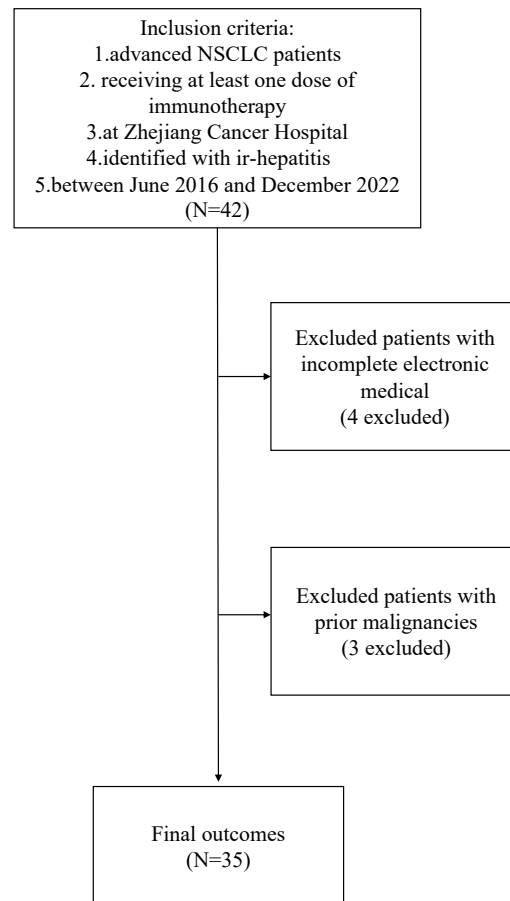


Figure S1 The flow chat. NSCLC, non-small cell lung cancer; ir-hepatitis, immune-related hepatitis.

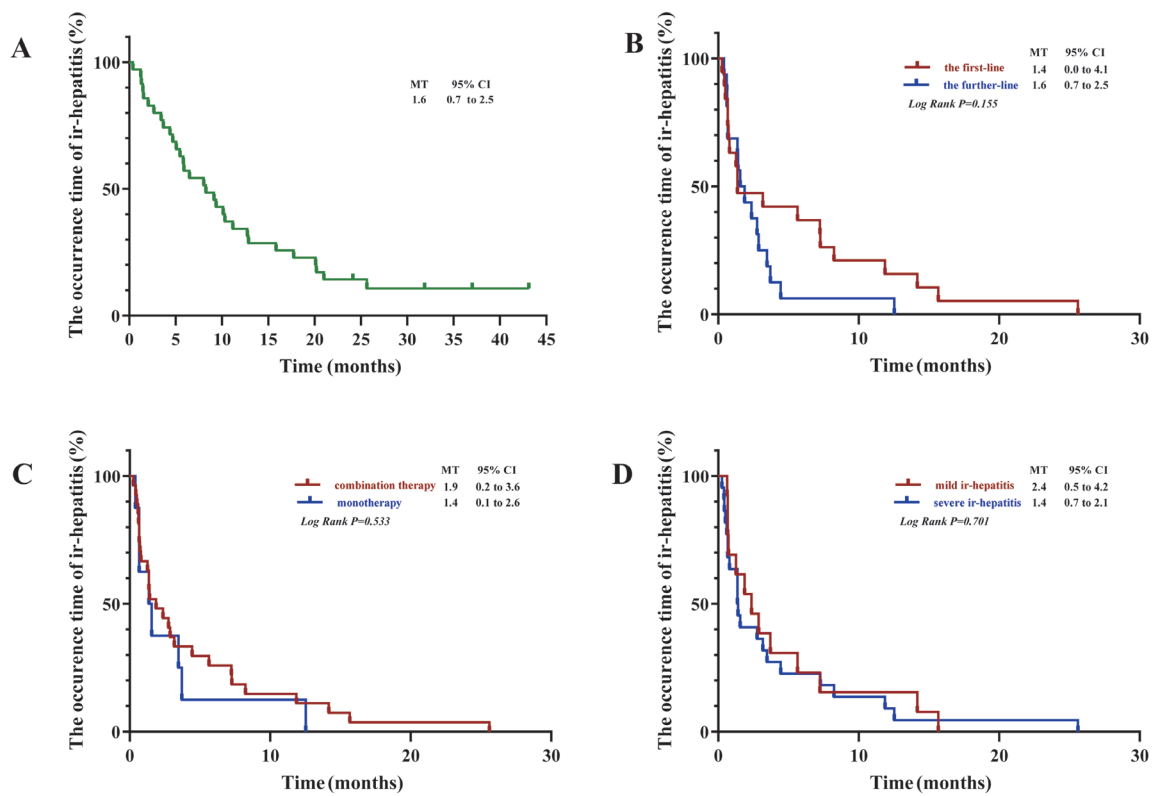


Figure S2 Kaplan-Meier curves of the occurrence of ir-hepatitis. (A) Kaplan-Meier curves of the occurrence of ir-hepatitis in all patients. (B) Kaplan-Meier curves of the occurrence of ir-hepatitis of patients with immunotherapy in the first line or the further line. (C) Kaplan-Meier curves of the occurrence of ir-hepatitis of patients administrated with combination therapy or monotherapy. (D) Kaplan-Meier curves of the occurrence of ir-hepatitis of patients with mild or severe ir-hepatitis. MT, mediana time; ir-hepatitis, immune-related hepatitis; CI, confidence interval.

Table S2 Baseline and peak parameters among different grades patients

Characteristics	All people	Grade 1	Grade 2	Grade 3	Grade 4	P value*
Baseline parameters						
ALT, median (IQR)	25.0 (8.0)	24.0 (NA)	23.5 (9.0)	28.0 (15.0)	33.5 (34.0)	0.574
AST, median (IQR)	29.0 (9.0)	23.0 (NA)	25.5 (11.0)	31.0 (8.0)	26.0 (18.0)	0.148
ALP, median (IQR)	76.0 (34.0)	74.0 (NA)	75.5 (30.0)	83.5 (37.0)	86.0 (64.0)	0.795
GGT, median (IQR)	46.0 (30.0)	39.0 (NA)	40.5 (25.0)	52.5 (40.0)	46.0 (23.0)	0.791
BIL, median (IQR)	6.6 (6.4)	8.1 (NA)	7.7 (6.0)	7.9 (10.0)	5.2 (1.9)	0.502
NLR, median (IQR)	3.7 (2.5)	2.3 (NA)	2.5 (1.8)	4.1 (4.1)	5.9 (5.4)	0.069
CRP, median (IQR)	3.2 (4.6)	6.2 (NA)	2.5 (3.7)	3.4 (32.8)	2.8 (21.3)	0.654
ALB, median (IQR)	40.7 (5.6)	37.1 (NA)	42.1 (5.1)	40.3 (8.6)	40.2 (4.1)	0.374
Peak parameters						
ALT, median (IQR)	212.0 (169.0)	51.0 (NA)	142.0 (96.3)	258.0 (100.0)	888.0 (887.0)	<0.001
AST, median (IQR)	163.0 (247.0)	54.0 (NA)	116.0 (67.0)	256.0 (211.0)	708.0 (374.0)	<0.001
ALP, median (IQR)	158.0 (197.0)	114.0 (NA)	154.5 (186.0)	149.0 (382.0)	168.0 (150.0)	0.398
GGT, median (IQR)	169.0 (237.0)	68.0 (NA)	170.0 (311.0)	241.0 (436.0)	169.0 (318.0)	0.223
BIL, median (IQR)	13.8 (16.5)	6.4 (NA)	8.5 (9.5)	22.6 (18.0)	12.7 (19.0)	0.010
NLR, median (IQR)	3.2 (3.5)	4.0 (NA)	2.4 (2.4)	4.7 (4.4)	4.6 (2.8)	0.143
CRP, median (IQR)	7.1 (21.9)	1.8 (NA)	5.5 (15.6)	10.3 (25.7)	23.8 (58.3)	0.113
ALB, median (IQR)	38.7 (6.4)	37.7 (NA)	40.6 (8.1)	38.2 (6.2)	36.4 (5.0)	0.212

*, P values were conducted by Wilcoxon rank-sum test. ALT, alanine aminotransferase; IQR, inter-quartile range; NA, not evaluated; AST, aspartate aminotransferase; ALP, alkaline phosphatase; GGT, gamma-glutamyl transferase; BIL, bilirubin; NLR, neutrophil-lymphocyte ratio; CRP, c-reaction protein; ALB, albumin.