Figure S1 Forest plot of the analysis for pre-DNA associated PFS

				Hazard Ratio	Haza	rd Ratio	
Study or Subgroup	log[Hazard Ratio]	SE	Weight	IV, Fixed, 95% C	I IV, Fixe	ed, 95% Cl	
JH Liang 2017	1.2	0.56	14.9%	3.32 [1.11, 9.95]			
L Wang 2015	-0.49	1.36	2.5%	0.61 [0.04, 8.81]	•		
QS Yang 2017	1.15	0.44	24.2%	3.16 [1.33, 7.48]			
WS Liu 2015	0.82	0.32	45.7%	2.27 [1.21, 4.25]			
ZY Wang 2012	0.08	0.61	12.6%	1.08 [0.33, 3.58]		-	
Total (95% CI)			100.0%	2.29 [1.50, 3.51]		•	
Heterogeneity: Chi ² = 3	3.42, df = 4 (P = 0.49)	; 2 = (0%			1 10	100
Test for overall effect: Z = 3.84 (P = 0.0001)					0.01 0.1 Favours High post-DNA	1 10 Favours Low	100 post-DNA

	Low pre-	-DNA	High pre-	-DNA		Risk Ratio		F	Risk Ratio		
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	1	М-Н,	Fixed, 95	% CI	
J Zhang 2017	14	17	38	68	37.8%	1.47 [1.09, 2.00]			-		
L Wang 2015	24	25	30	43	54.9%	1.38 [1.11, 1.70]					
Y Ito 2012 (1)	10	19	2	7	7.3%	1.84 [0.53, 6.41]				_	
Total (95% CI)		61		118	100.0%	1.45 [1.19, 1.75]			•		
Total events	48		70								
Heterogeneity: Chi ² =	0.37, df = 2	(P = 0.	83); l² = 0%	b			0.01	0.1	-	10	100
Test for overall effect:	Z = 3.77 (F	9 = 0.000	02)			Fa		experimer	ital] Favo	10 ours [con	

Figure S3 Forest plot of the analysis for pre-DNA associated ORR

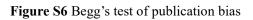
	Low pre-	DNA	High pre-	DNA		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	CI M-H, Fixed, 95% CI
J Zhang 2017	16	17	48	68	34.7%	1.33 [1.10, 1.62]] 🗖
JH Liang 2017	16	18	7	10	16.3%	1.27 [0.82, 1.97]	j + -
WS Liu 2015	34	56	22	53	40.8%	1.46 [1.00, 2.14]	j †
Y Ito 2012 (1)	18	19	2	7	5.3%	3.32 [1.02, 10.75]	ı ⊢
Y Ito 2012 (2)	19	21	1	5	2.9%	4.52 [0.78, 26.26]	ı
Total (95% CI)		131		143	100.0%	1.57 [1.27, 1.95]	」
Total events	103		80				
Heterogeneity: Chi ² = 6	6.79, df = 4	(P = 0.1	15); l² = 419	%			
Test for overall effect:	Z = 4.13 (P	< 0.000	01)			F	0.01 0.1 1 10 10 Favours [experimental] Favours [control]

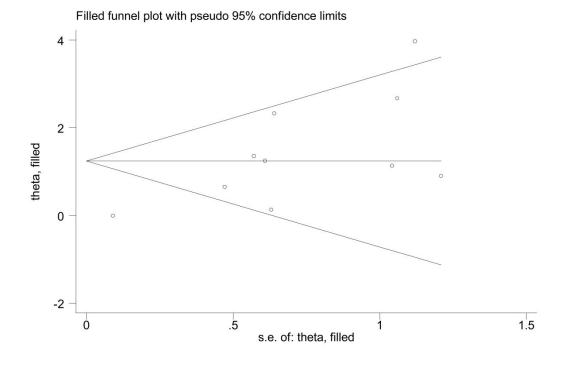
Figure S4 Forest plot of the analysis for post-DNA associated PFS

				Hazard Ratio	Hazard Ratio
Study or Subgroup	log[Hazard Ratio]	SE	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
L Wang 2015	1.07	1.04	6.6%	2.92 [0.38, 22.38]	
SH Lim 2016	0.54	0.5	28.4%	1.72 [0.64, 4.57]	
SJ Kim 2015	1.28	0.41	42.3%	3.60 [1.61, 8.03]	
ZY Wang 2012	0.41	0.56	22.7%	1.51 [0.50, 4.52]	
Total (95% CI)			100.0%	2.36 [1.40, 3.98]	◆
Heterogeneity: Chi ² = 2 Test for overall effect: 2		; ² = (0%		0.01 0.1 1 10 100 Favours High post-DNA Favours Low post-DNA

Figure S5 Sensitivity Analysis

				Hazard Ratio	Hazard Ratio
Study or Subgroup	log[Hazard Ratio]	SE	Weight	IV, Fixed, 95% C	IV, Fixed, 95% CI
HS Kim 2009	0.13	0.63	13.6%	1.14 [0.33, 3.91]	
JH Liang 2017	1.36	0.57	16.6%	3.90 [1.27, 11.91]	· · · · · · · · · · · · · · · · · · ·
KI Lei 2002	1.13	1.04	5.0%	3.10 [0.40, 23.77]	
L Wang 2015	5.47	226.46	0.0%	237.46 [0.00, 1.376E195]	+
QS Yang 2017	0.65	0.47	24.4%	1.92 [0.76, 4.81]	
R Liang 2016	1.25	0.61	14.5%	3.49 [1.06, 11.54]	
R Suzuki 2011	2.67	1.06	4.8%	14.44 [1.81, 115.30]	· · · · · ·
Y Ito 2012 (1)	2.33	0.64	13.2%	10.28 [2.93, 36.03]	
Y Ito 2012 (2)	3.97	1.12	4.3%	52.98 [5.90, 475.88]	
ZY Wang 2012	0.9	1.21	3.7%	2.46 [0.23, 26.35]	
Total (95% CI)			100.0%	3.59 [2.28, 5.66]	•
Heterogeneity: Chi ² =	15.45, df = 9 (P = 0.0	3); I ² = 42	2%		
Test for overall effect:	Z = 5.50 (P < 0.0000	1)			0.01 0.1 1 10 100 Favours Low pre-DNA Favours High pre-DNA
	84	S			Favours Low pre-DINA Favours Flight pre-DINA





Stratified Analysis	No. of	No. o	f	<i>P</i> -value ^a	Heterogeneity	
Stratified Analysis	studies	pts	HR (95% CI)	<i>P</i> -value ^a	I^2	P-value ^a
Number of Particip	ants					
≥50	4	303	1.02 [0.86, 1.21]	0.84	0	0.49
<50	7	202	5.18 [2.28, 11.78]	<0.0001	53	0.05
Sample of Quantifi	cation of E	BV-DNA				
plasma	8	400	3.06 [1.30, 7.16]	0.01	73	0.0005
whole blood	3	105	4.95 [0.84, 29.07]	0.08	78	0.01
Ann Arbor stage						
I-II	2	137	2.46 [0.23, 26.35]	0.46	0	0.98
III-IV	1	32	3.90 [1.27, 11.91]	0.02	NA	NA
I-IV	6	284	1.93 [0.98, 3.81]	0.06	62	0.02
Cut-off value						
0	2	153	0.99 [0.83, 1.18]	0.91	0	0.98
500	2	150	1.98 [0.84, 4.67]	0.12	0	0.85
others	7	202	5.18 [2.28, 11.78]	<0.0001	53	0.05

Supplementary Table 1. Results of subgroup analyses for pre-DNA associated OS

Abbreviations: No. : number; pts : patients; HR : hazard ratio; CI : confidence interval; NA : not applicable.

a Statistically significant results are shown in bold.

Stratified Analysis	No. of	No.	of		D 1 a	Heterogeneity	
Stratified Analysis	studies	pts		HR (95% CI)	P-value ^a	I^2	P-value ^a
Number of Particip	ants						
≥50	4	293		2.77 [1.36, 5.63]	0.005	0	0.83
<50	1	27		1.67 [0.51, 5.40]	0.40	NA	NA
Sample of Quantifi	cation of E	BV-DNA					
plasma	3	191		2.81 [0.92, 8.56]	0.07	0	0.65
whole blood	2	129		2.27 [1.10, 4.69]	0.03	0	0.51
Ann Arbor stage							
I-II	2	137		2.33 [0.62, 8.77]	0.21	0	0.43
I-IV	3	183		2.44 [1.23, 4.84]	0.01	0	0.68

Supplementary Table 2. Results of subgroup analyses for post-DNA associated OS

Abbreviations: No. : number; pts : patients; HR : hazard ratio; CI : confidence interval; NA : not applicable.

a Statistically significant results are shown in bold.