Supplementary Figure S1. Risk of bias summary using the Cochrane Collaboration's tool for the randomized controlled trial (A) and the Risk of Bias Assessment Tool for Nonrandomized Studies (RoBANS) (B).
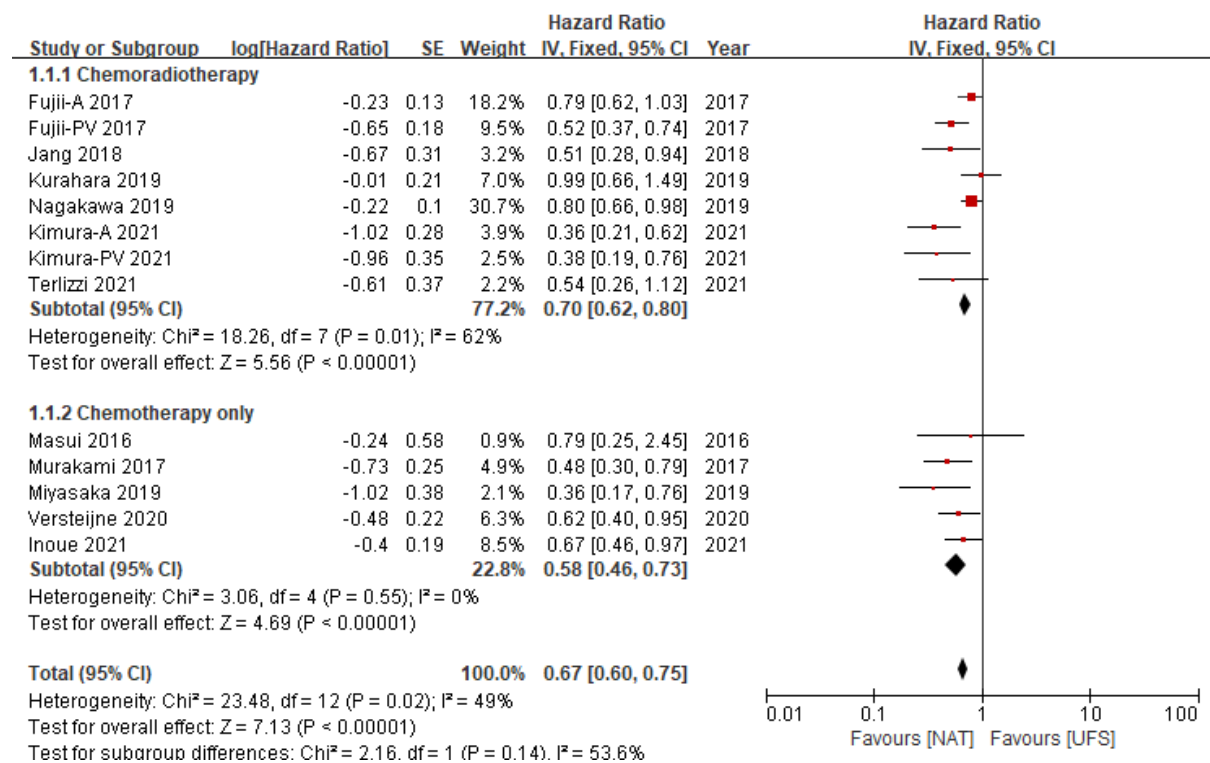

(A)

	Selection of participants	Confounding variables	Intervention measurement	Blinding of outcome assessment	Incomplete outcome data	Selective outcome reporting
Chaudhari 2021	+	?	+	+	+	+
Cho 2013	−		+	+	+	+
Chun 2010	−	?	+	+	+	+
Fujii-A 2017	+	−	+	+	+	+
Fujii-PV 2017	+	−	+	+	+	+
Hirono 2016	−	+	+	+	+	+
Ielpo 2017	+	−	+	+	+	+
Inoue 2021	+	+	+	+	+	+
Jang 2018						
Kimura-A 2021	+	+	+	+	+	+
Kimura-PV 2021	+	+	+	+	+	+
Kurahara 2019	+	+	+	+	+	+
Lee 2018	−	?	+	+	+	+
Masui 2016	+	+	+	+	+	+
Miyasaka 2019	+	+	+	+	+	+
Murakami 2017	+	+	+	+	+	+
Nagakawa 2019	+	+	+	+	+	+
Ren 2021	−	+	+	+	+	+
Sho 2015	−	−	+	+	+	+
Terlizzi 2021	+	+	+	+	+	+
Versteijne 2020						

(B)

Supplementary Figure S2. Overall survival of NAT versus UFS according to NAT protocol (chemotherapy only and chemoradiotherapy).

Study or Subgroup	log[Hazard Ratio]	SE	Weight	Hazard Ratio IV, Fixed, 95% CI	Year
1.1.1 Chemoradiotherapy					
Fujii-A 2017	-0.23	0.13	18.2%	0.79 [0.62, 1.03]	2017
Fujii-PV 2017	-0.65	0.18	9.5%	0.52 [0.37, 0.74]	2017
Jang 2018	-0.67	0.31	3.2%	0.51 [0.28, 0.94]	2018
Kurahara 2019	-0.01	0.21	7.0%	0.99 [0.66, 1.49]	2019
Nagakawa 2019	-0.22	0.1	30.7%	0.80 [0.66, 0.98]	2019
Kimura-A 2021	-1.02	0.28	3.9%	0.36 [0.21, 0.62]	2021
Kimura-PV 2021	-0.96	0.35	2.5%	0.38 [0.19, 0.76]	2021
Terlizzi 2021	-0.61	0.37	2.2%	0.54 [0.26, 1.12]	2021
Subtotal (95% CI)			77.2%	**0.70 [0.62, 0.80]**	
Heterogeneity: Chi² = 18.26, df = 7 (P = 0.01); I² = 62%					
Test for overall effect: Z = 5.56 (P < 0.00001)					
1.1.2 Chemotherapy only					
Masui 2016	-0.24	0.58	0.9%	0.79 [0.25, 2.45]	2016
Murakami 2017	-0.73	0.25	4.9%	0.48 [0.30, 0.79]	2017
Miyasaka 2019	-1.02	0.38	2.1%	0.36 [0.17, 0.76]	2019
Versteijne 2020	-0.48	0.22	6.3%	0.62 [0.40, 0.95]	2020
Inoue 2021	-0.4	0.19	8.5%	0.67 [0.46, 0.97]	2021
Subtotal (95% CI)			22.8%	**0.58 [0.46, 0.73]**	
Heterogeneity: Chi² = 3.06, df = 4 (P = 0.55); I² = 0%					
Test for overall effect: Z = 4.69 (P < 0.00001)					
Total (95% CI)			100.0%	**0.67 [0.60, 0.75]**	
Heterogeneity: Chi² = 23.48, df = 12 (P = 0.02); I² = 49%					
Test for overall effect: Z = 7.13 (P < 0.00001)					
Test for subgroup differences: Chi² = 2.16, df = 1 (P = 0.14), I² = 53.6%					

Hazard Ratio IV, Fixed, 95% CI

0.01   0.1   1   10   100

Favours [NAT]   Favours [UFS]

Supplementary Figure S3. Funnel plots for publication bias in comparison of survival outcome in ITT analysis.