



Corrigendum: Previous Radiotherapy Increases the Efficacy of IL-2 in Malignant Pleural Effusion: Potential Evidence of a Radio-Memory Effect?

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A Corrigendum on

Previous Radiotherapy Increases the Efficacy of IL-2 in Malignant Pleural Effusion: Potential Evidence of a Radio-Memory Effect?

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In the original article, there were mistakes in **Figure 1** and **Tables 1–3** as published.

In **Figure 1**, instead of “354 with any prior RT”, “288 with no prior RT”, “324 with prior extra-cranial RT” and “318 without prior extra-cranial RT”, it should be “324 with any prior RT”, “318 with no prior RT”, “288 with prior extra-cranial RT” and “354 without prior extra-cranial RT”, respectively.

Meanwhile, there were mistakes in **Table 1** due to some incorrect statistical results. Consequently, **Tables 2** and **3** also need to be revised as, after rechecking the data, ECOG score is not significant in **Table 2**. These errors were caused by the carelessness and mis-operation in statistics and have been identified by the authors so that this would not happen in the future. The corrected **Figure 1** and **Table 1** to **3** appear below.

Consequently, a correction has been made to “RESULTS”, “Survival Outcomes”: paragraphs 1 and 2:

“In univariate analysis of the 642 patients who received intrapleural IL-2, having had any prior radiotherapy ($p = 0.007$) and having had extracranial radiotherapy ($p = 0.003$) were associated with longer PFS. Multivariate analysis revealed that having had any radiotherapy and extracranial radiotherapy were independent predictors of PFS (**Table 2**).”

“In univariate analysis of the 642 patients who received intrapleural IL-2, having had any prior radiotherapy ($p < 0.001$) and extracranial radiotherapy ($p < 0.001$) were associated with longer OS.

Multivariate analysis revealed that having had any radiotherapy and extracranial radiotherapy were independent predictors of OS (Table 3).”

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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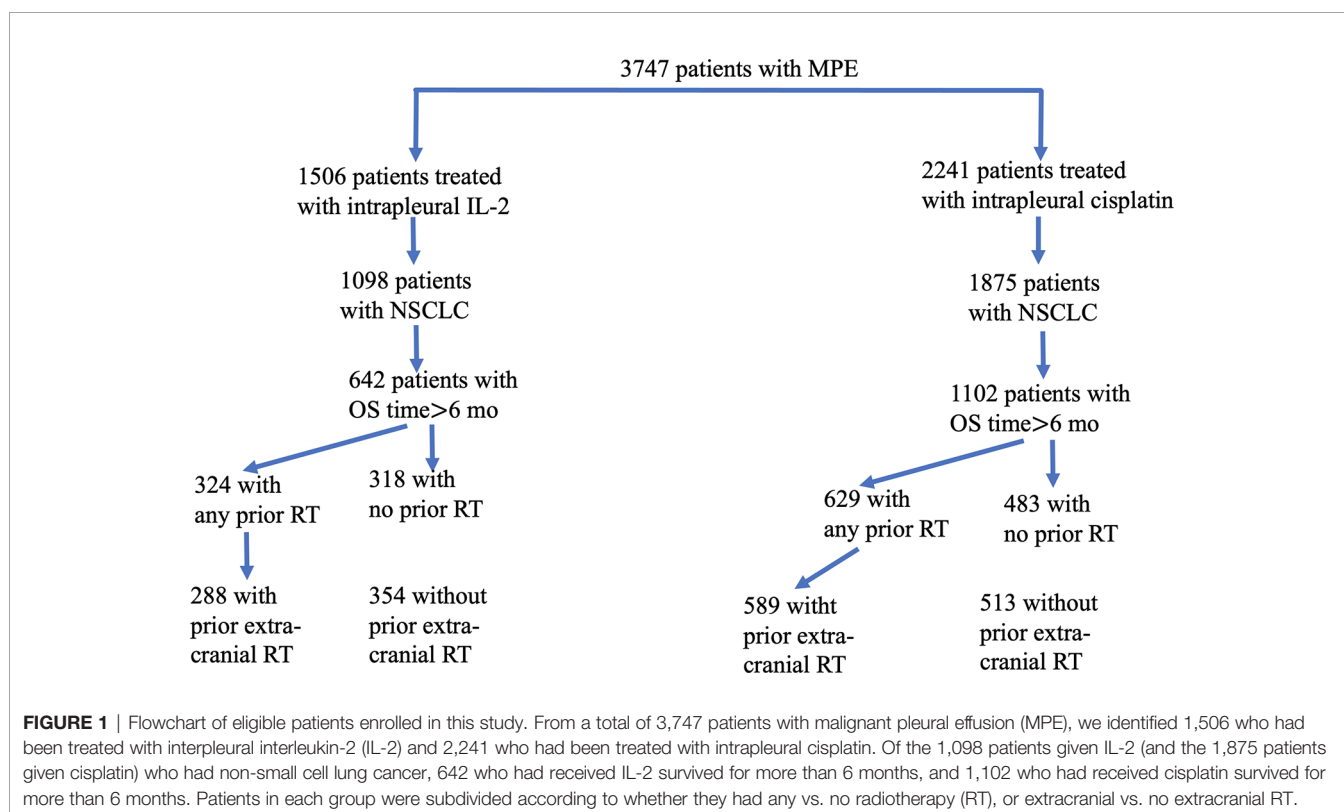


TABLE 1 | Baseline characteristics.

Variable	Previous radiotherapy				Previous extracranial radiotherapy		
	N	No (n=318)	Yes (n=324)	p value	No (n=354)	Yes (n=288)	p value
Sex							
Male	360	168(53%)	192(59%)	0.101	198(56%)	162(56%)	0.936
Female	282	150(47%)	132(41%)		156(44%)	126(44%)	
Age, years							
≥55	312	144(45%)	168(52%)	0.497	174(49%)	138(48%)	0.755
<55	330	174(55%)	156(48%)		180(51%)	150(52%)	
ECOG PS Score							
0	122	60(19%)	62(19%)	0.992	70(20%)	52(18%)	0.859
1	412	204(64%)	208(64%)		225(63%)	187(65%)	
2	108	54(17%)	54(17%)		59(17%)	49(17%)	
Histopathological classification							
Squamous cell	198	90(28%)	108(33%)	0.168	120(34%)	78(27%)	0.063
Adenocarcinoma or other	444	228(72%)	216(67%)		234(66%)	210(73%)	
Smoking history							
Never-smoker	402	210(66%)	192(59%)	0.076	233(66%)	169(58%)	0.409
Former/current smoker	240	108(34%)	132(41%)		121(34%)	119(42%)	
Diagnosis method							
CT guided biopsy	264	126(40%)	138(43%)	0.001	138(39%)	126(44%)	0.001
Pleural effusion cytology	144	78(25%)	66(20%)		90(25%)	54(19%)	
Thoracotomy	174	72(23%)	102(31%)		78(22%)	96(33%)	
Neck lymph node biopsy	60	42(12%)	18(6%)		48(14%)	12(4%)	
Color of Pleural Effusion							
Bloody	426	222(70%)	204(63%)	0.066	246(69%)	180(63%)	0.062
Light yellow	216	96(30%)	120(37%)		108(31%)	108(37%)	
Hematologic Findings							
Neutrophil count, mean ± IQR, × 10 ³ /μl		6.12 ± 1.78	4.48 ± 1.34	0.032	6.09 ± 1.81	4.4 ± 1.32	0.034
Total lymphocyte count, mean ± IQR, × 10 ³ /μl		1.34 ± 0.35	2.21 ± 0.70	0.021	1.35 ± 0.36	2.19 ± 0.69	0.022
Neutrophil-to-lymphocyte ratio		4.56 ± 1.36	2.06 ± 0.70	<0.01	4.52 ± 1.41	2.02 ± 0.75	<0.01
Intrapeural chemotherapy before IL-2							
Yes	528	258(81%)	270(83%)	0.466	286(81%)	242(84%)	0.286
No	114	60(19%)	54(17%)		68(19%)	46(19%)	
History of brain metastases							
No. Of previous systemic therapies, mean (range)		2(0-5)	2(0-5)	0.017	2(0-5)	3(0-6)	0.021
Previous systemic therapies before IL-2							
Yes	486	236(74%)	250(77%)	0.384	259(73%)	227(79%)	0.097
No	156	82(26%)	74(23%)		95(27%)	61(21%)	
Radiotherapy schedule before distant metastasis							
ChT→CCRT			140(43%)			140(49%)	
CCRT→ChT			61(19%)			61(21%)	
ChT→RT			66(20%)			66(23%)	
CCRT alone			21(7%)			21(7%)	
Intracranial radiotherapy			36(11%)			0	
Radiotherapy technology							
Conventional radiotherapy			164(%)			148(51%)	
3D-CRT/MRT			160(%)			140(49%)	
Previous SABR							
Yes	20		20(%)			20(7%)	
No	622		304(%)			268(93%)	

ECOG, Eastern Cooperative Oncology Group; IMRT, intensity modulated radiotherapy; 3D-CRT, three dimensional conformal radiotherapy; SBRT, stereotactic body radiotherapy or stereotactic radiosurgery.

TABLE 2 | Predictors associated with progression free survival (PFS).

	PFS*		Any previous RT and PFS†			Previous extracranial RT and PFS†		
	Wald x2	p value	HR	95% CI	p value	HR	95% CI	p value
Sex (Male vs Female)	1.778	0.182						
Age (≥55 vs <55)	0.056	0.812						
ECOG PS Score (0 vs 1 vs 2)	0.104	0.747						
Histopathological classification (Adenocarcinoma and other vs Squamous)	1.860	0.173						
Smoking history (Never vs Former/current)	2.845	0.092	0.892	0.747-1.064	0.204	0.862	0.721-1.029	0.101
Colour (Bloody vs Yellow)	0.178	0.673						
Previous systematic therapy (Yes vs No)	1.931	0.165						
Previous intrapleural chemotherapy (Yes vs No)	1.859	0.173						
Any previous radiotherapy (Yes vs No)	7.299	0.007	0.805	0.677-0.957	0.014			
Previous extracranial radiotherapy (Yes vs No)	9.048	0.003				0.752	0.632-0.895	0.001

Progression-free survival was defined as the time from the first administration of I.P. IL-2 to disease progression or death. HR, hazard ratio. *Univariate analysis.

†Multivariate analysis.

TABLE 3 | Predictors associated with overall survival (OS)

	OS*		Any previous RT and OS†			Previous extracranial RT and OS†		
	Wald x2	p value	HR	95% CI	p value	HR	95% CI	p value
Sex (Male vs Female)	1.610	0.205						
Age (≥55 vs <55)	0.030	0.863						
ECOG PS Score (0 vs 1 vs 2)	0.071	0.790						
Histopathological classification (Adenocarcinoma and other vs Squamous)	1.456	0.228						
Smoking history (Never vs Former/current)	3.747	0.053	0.884	0.740-1.054	0.169	0.875	0.733-1.046	0.142
Colour (Bloody vs Yellow)	0.269	0.604						
Previous systematic therapy (Yes vs No)	1.994	0.158						
Previous intrapleural chemotherapy (Yes vs No)	1.673	0.196						
Any previous radiotherapy (Yes vs No)	15.033	<0.001	0.726	0.611-0.864	<0.001			
Previous extracranial radiotherapy (Yes vs No)	17.101	<0.001				0.653	0.549-0.778	<0.001

Overall survival was defined as the time from the first dose of intrapleural interleukin-2 until disease progression or death. OS, overall survival.