Pooled analysis of studies evaluating fosnetupitant and risk factors for cisplatin-induced nausea and vomiting during the extended overall phase

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### Table S1 List of study sites in the phase II and phase III studies

# <Phase II study; jRCT20802233009>

Sendai Kousei Hospital

Hamamatsu University Hospital

Hiroshima City Hiroshima Citizens Hospital

Nagoya University Hospital

Fukujuji Hospital

Osaka International Cancer Institute

Kitasato University Hospital, The Kitasato Institute

Gunma Prefectural Cancer Center

Nagaoka Chuo General Hospital

Nagasaki University Hospital

Aichi Cancer Center Hospital

Yokohama Municipal Citizen's Hospital

Osaka Medical College Hospital

National Center for Global Health and Medicine Hospital

Aichi Cancer Center Aichi Hospital

Kyushu University Hospital

Tottori University Hospital

Teikyo University Hospital

Kanagawa Cancer Center

Niigata Cancer Center Hospital

Kyorin University Hospital

Tokyo Medical Center

Nagaoka Red Cross Hospital

Kameda General Hospital

National Hospital Organization Tokyo National Hospital

Ibaraki Prefectural Central Hospital

Saitama Medical University International Medical Center

Asahikawa Medical Center

Osaka City University Hospital

National Hospital Organization Kinki-Chuo Chest Medical Center

Kanazawa University Hospital

**IUHW Mita Hospital** 

National University Corporation Tohoku University

Saitama Cardiovascular and Respiratory Center

Funabashi Municipal Medical Center

Kurume University Hospital

Hokkaido University Hospital

Fujita Health University Hospital

Kobe City Medical Center General Hospital

Yokosuka Kyosai Hospital

Hiroshima University Hospital

St. Marianna University School of Medicine Hospital

Niigata City General Hospital

Fukushima Medical University Hospital

Kumamoto University Hospital

Tochigi Cancer Center

Tokyo Metropolitan Tama Medical Center

National Cancer Center Hospital

National Hospital Organization Himeji Medical Center

Toranomon Hospital

Ishikawa Prefectural Central Hospital

Shikoku Cancer Center

National Hospital Organization Nagasaki Medical Center

Okayama University Hospital

Keio University Hospital

Nara Medical University Hospital

Tokai University Hospital

St. Luke's International Hospital

National Hospital Organization, Yamaguchi Ube Medical Center

Tenri Hospital

Tokyo Medical University Hospital

Hyogo College Of Medicine College Hospital

Osaka Habikino Medical Center

National Hospital Organization Kyushu Medical Center

Saitama Medical Center

University of Tsukuba Hospital

Chiba Cancer Center

Hiratsuka Kyosai Hospital

National Disaster Medical Center

Jichi Medical University Hospital

Chiba University Hospital

University Hospital of Occupational and Environmental Health

Institute of Biomedical Research and Innovation Hospital

Iwate Prefectural Central Hospital

<Phase III study; jRCT2080224542>

Kobe Minimally Invasive Cancer Center

Kyushu University Hospital

Hamamatsu University Hospital

Hiroshima University Hospital

Nagoya University Hospital

Osaka City General Hospital

Kindai University Hospital

Saitama Cancer Center

Sendai Kousei Hospital

Hokkaido University Hospital

Gunma Prefectural Cancer Center

Osaka International Cancer Institute, Respiratory Internal Medicine

Osaka City University Hospital

Kitasato University Hospital

Tohoku University Hospital

Ureshino Medical Center

Tottori University Hospital

National Center for Global Health and Medicine

Funabashi Municipal Medical Center

Hiroshima City Hiroshima Citizens Hospital

Yokohama Municipal Citizen's Hospital

Shizuoka Cancer Center

Yamaguchi Ube Medical Center

Tokushima University Hospital

Ishikawa Prefectural Central Hospital

Kanazawa University Hospital

Hokkaido Cancer Center

Kanagawa Cancer Center

National Hospital Organization Himeji Medical Center

Tokyo Metropolitan Cancer and Infectious Diseases Center Komagome Hospital

Kinki-chuo Chest Medical Center

Hyogo Prefectural Amagasaki General Medical Center

Nagasaki University Hospital

The Cancer Institute Hospital of JFCR, Gastroenterological Chemotherapy

Ibaraki Prefectural Central Hospital

Nagaoka Red Cross Hospital

Japan Anti-Tuberculosis Association Fukujuji Hospital

Tochigi Cancer Center

Niigata Cancer Center Hospital

The Cancer Institute Hospital of JFCR, Thoracic Medical Oncology

National Hospital Organization Kyushu Medical Center

Saitama Medical University International Medical Center

Hyogo College of Medicine College Hospital

National Hospital Organization Tokyo National Hospital

Nagaoka Chuo General Hospital

Toho University Omori Medical Center

International University of Health and Welfare Mita Hospital

Osaka Medical College Hospital

Kurume University Hospital

Tokyo Medical University Hospital

Osaka International Cancer Institute, Head and Neck Surgery

National Hospital Organization Nagasaki Medical Center

Fujita Health University Hospital

Toranomon Hospital

Wakayama Medical University Hospital

Kyorin University Hospital

University Hospital, Kyoto Prefectural University of Medicine

St. Marianna University School of Medicine Hospital

Niigata University Medical & Dental Hospital

Osaka Habikino Medical Center

Yokosuka Kyosai Hospital

Saitama Cardiovascular and Respiratory Center

Nara Medical University Hospital

Teikyo University Hospital

Saitama Medical Center

Asahikawa Medical Center

St. Luke's International Hospital

National Hospital Organization Tokyo Medical Center

Okazaki City Hospital

Tenri Hospital

Kobe City Medical Center General Hospital

National Cancer Center Hospital East

Kumamoto University Hospital

Tokyo Metropolitan Tama Medical Center

Fukushima Medical University Hospital

Kyoto University Hospital

Okayama University Hospital

Kameda General Hospital

University of Tsukuba Hospital

Shonan Kamakura General Hospital

Niigata City General Hospital

Tokai University Hospital

Keiyukai Sapporo Hospital

Keio University Hospital

Table S2 Summary of background factors

Factor	FosNTP 81 mg	FosNTP 235 mg	Placebo	FosAPR	Total
	(N = 195)	(N = 587)	(N = 193)	(N = 393)	(N=1368)
	n (%)	n (%)	n (%)	n (%)	n (%)
Age					
≥55	170 (87.2)	515 (87.7)	169 (87.6)	343 (87.3)	1197 (87.5)
<55	25 (12.8)	72 (12.3)	24 (12.4)	50 (12.7)	171 (12.5)
Sex					
Male	146 (74.9)	449 (76.5)	147 (76.2)	302 (76.8)	1044 (76.3)
Female	49 (25.1)	138 (23.5)	46 (23.8)	91 (23.2)	324 (23.7)
Performance status					
0	125 (64.1)	368 (62.7)	123 (63.7)	260 (66.2)	876 (64.0)
1	70 (35.9)	219 (37.3)	70 (36.3)	133 (33.8)	492 (36.0)
Drinking history					
Yes	82 (42.1)	255 (43.4)	87 (45.1)	181 (46.1)	605 (44.2)
No or rarely	113 (57.9)	332 (56.6)	106 (54.9)	212 (53.9)	763 (55.8)
Smoking history					
Yes	162 (83.1)	485 (82.6)	153 (79.3)	321 (81.7)	1121 (81.9)

Factor	FosNTP 81 mg	FosNTP 235 mg	Placebo	FosAPR	Total
	(N = 195)	(N = 587)	(N = 193)	(N = 393)	(N = 1368)
	n (%)	n (%)	n (%)	n (%)	n (%)
No	33 (16.9)	102 (17.4)	40 (20.7)	72 (18.3)	247 (18.1)
Motion sickness					
No	176 (90.3)	524 (89.3)	166 (86.0)	360 (91.6)	1226 (89.6)
Yes	19 (9.7)	63 (10.7)	27 (14.0)	33 (8.4)	142 (10.4)
Pregnancy-related vomiting					
No	22 (44.9)	83 (60.1)	20 (43.5)	54 (59.3)	179 (55.2)
Yes	21 (42.9)	37 (26.8)	21 (45.7)	27 (29.7)	106 (32.7)
Not applicable	6 (12.2)	18 (13.0)	5 (10.9)	10 (11.0)	39 (12.0)
Cancer type					
Other	11 (5.6)	47 (8.0)	9 (4.7)	52 (13.2)	119 (8.7)
Lung	184 (94.4)	540 (92.0)	184 (95.3)	341 (86.8)	1249 (91.3)
CDDP dose					
<80 mg/m <sup>2</sup>	108 (55.4)	251 (42.8)	102 (52.8)	165 (42.0)	626 (45.8)
≥80 mg/m <sup>2</sup>	87 (44.6)	336 (57.2)	91 (47.2)	228 (58.0)	742 (54.2)

				Total
(N = 195)	(N = 587)	(N = 193)	(N = 393)	(N = 1368)
n (%)	n (%)	n (%)	n (%)	n (%)
0 (0.0)	0 (0.0)	193 (100.0)	0 (0.0)	193 (14.1)
0 (0.0)	0 (0.0)	0 (0.0)	393 (100.0)	393 (28.7)
195 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	195 (14.3)
0 (0.0)	587 (100.0)	0 (0.0)	0 (0.0)	587 (42.9)
124 (63.6)	445 (75.8)	106 (54.9)	279 (71.0)	954 (69.7)
70 (35.9)	142 (24.2)	87 (45.1)	114 (29.0)	413 (30.2)
	n (%)  0 (0.0)  0 (0.0)  195 (100.0)  0 (0.0)	n (%)  n (%)  0 (0.0)  0 (0.0)  0 (0.0)  195 (100.0)  0 (0.0)  587 (100.0)  124 (63.6)  445 (75.8)	n (%)     n (%)       0 (0.0)     0 (0.0)     193 (100.0)       0 (0.0)     0 (0.0)     0 (0.0)       195 (100.0)     0 (0.0)     0 (0.0)       0 (0.0)     587 (100.0)     0 (0.0)       124 (63.6)     445 (75.8)     106 (54.9)	n (%) $n$ (%) $n$ (%) $0$ (0.0)

Data were obtained from the full analysis set FosNTP fosnetupitant, FosAPR fosaprepitant, CDDP cisplatin, NK-1RA neurokinin 1 receptor antagonist

Table S3 Multivariate logistic analysis of the association of treatment failure with clinical variables in each phase in the overall population Overall (0-120 Delayed (24-Acute (0-24 N h) 120 h) Factor h) Univariate Multivariate Univariate Multivariate Univariate Multivariate analysis analysis analysis analysis analysis analysis Full model Backward elimination Full model Backward elimination Full model Backward elimination OR (95% CI) p OR (95% CI) OR (95% CI) p Age ≥55 1197 1 < 55 171 1.452 .029 1.382 .069 1.935 .008 1.798 .026 1.774 .028 1.375 .066 1.296 .154 (1.040-2.027)(0.979 - 1.932)(0.908-1.850)(0.975 - 1.958)(1.186 - 3.157)(1.074 - 3.008)(1.062 -2.962) Sex Male 1044 1 1 1 1 1 <.001 1.551 2.891 1.956 2.434 <.001 2.220 <.001 1.552 Female 324 2.146 1.528 1.529 .009 (1.129-2.131)(1.946-4.295)(1.183 - 3.234)(1.656-2.782)(1.114 -(1.587 -(1.707 - 2.885)(1.124 - 2.142)(1.110-2.107)2.095) 3.733) Performance status 0 876 1 492 1.400 .005 1.417 .006 1.404 .007 1.075 .724 1.143 .533 1.419 .004 1.423 .006 1.417 .007 (1.104-1.775)(1.105-1.817)(1.097 -(0.721-1.603)(0.751-1.739)(1.115-1.805)(1.105-1.833)(1.102-1.823)1.798) Drinking history Yes 605 1 1 1 1 1 1

		Overall (0–120						Acute (0–24						Delayed (24–					
Factor	N	h)						h)						120 h)					
		Univariate		Multivariate				Univariate		Multivariate				Univariate		Multivariate			
		analysis		analysis				analysis		analysis				analysis		analysis			
				Full model		Backward elir	ninatio	n		Full model		Backward el	iminatio	on		Full model		Backward elim	nination
		OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	) p	OR (95% CI)	p	OR (95% CI	) p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p
No or rarely	763	2.000	<.001	1.686	<.001	1.663	<.001	2.199	<.001	1.708	.025	1.854	.008	2.118	<.001	1.764	<.001	1.746	<.001
		(1.570–2.546)		(1.298–2.189)		(1.283–		(1.433–3.376	5)	(1.071–2.726)		(1.176–		(1.653–2.713)		(1.350–2.305)		(1.339–2.278)	
						2.155)						2.923)							
Smoking history																			
Yes	1121	1		1		1		1		1		_		1		1		1	
No	247	2.258	<.001	1.454	.034	1.466	.030	2.816	<.001	1.601	.082	_		2.376	<.001	1.499	.023	1.514	.020
		(1.701–2.997)		(1.029–2.055)		(1.038–		(1.861–4.261	.)	(0.942–2.719)				(1.786–3.162)		(1.057–2.126)		(1.068–2.145)	
						2.069)													
Motion sickness																			
No	1226	1		1		1		1		1		1		1		1		1	
Yes	142	1.930	<.001	1.491	.038	1.524	.028	2.470	<.001	1.676	.059	1.750	.039	2.118	<.001	1.632	.011	1.659	.009
		(1.355–2.750)		(1.022-2.175)		(1.047–		(1.504-4.055	5)	(0.980-2.866)		(1.028–		(1.485–3.020)		(1.117–2.384)		(1.138–2.420)	
						2.219)						2.978)							
Pregnancy-related																			
vomiting																			
No	179	1		_		_		1		_		_		1		_		_	
Yes	106	3.393	<.001	_		_		1.790	.071	_		_		3.613	<.001	_		_	
		(2.054–5.603)						(0.952–3.364	<b>!</b> )					(2.179–5.989)					

		Overall (0-120	)				Acute	(0-24		_				Delayed (24–		_			
Factor	N	h)					h)							120 h)					
		Univariate		Multivariate			Univa	riate	]	Multivariate				Univariate		Multivariate			
		analysis		analysis			analys	is	;	analysis				analysis		analysis			
				Full model		Backward elimina	tion		]	Full model		Backward el	iminatio	n		Full model		Backward elin	nination
		OR (95% CI)	p	OR (95% CI)	p	OR (95% CI) p	OR (9	5% CI) p		OR (95% CI)	p	OR (95% CI	) p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p
Not applicable	39	1.834	.091	_		_	0.538	.33	33 -	_		_		1.788	.108	_		_	
		(0.908–3.708)					(0.154	-1.886)						(0.880–3.633)					
Cancer type																			
Other	119	1		1		_	1			1		_		1		1		_	
Lung	1249	1.090	.683	0.822	.392	_	2.136	.10	)5	1.197	.714	_		1.095	.675	0.833	.434	_	
		(0.720–1.652)		(0.526–1.287)			(0.854	-5.345)	(	(0.457–3.138)				(0.717–1.672)		(0.527–1.316)			
CDDP dose																			
$<80 \text{ mg/m}^2$	626	1		1		_	1			1		1		1		1		_	
$\geq$ 80 mg/m <sup>2</sup>	742	0.957	.707	1.128	.343	_	1.790	.00.	)5	2.176	<.001	2.175	<.001	0.910	.430	1.073	.584	_	
		(0.759–1.206)		(0.880–1.445)			(1.189	-2.695)		(1.407–3.366)		(1.417–		(0.719–1.151)		(0.833–1.382)			
												3.338)							
NK-1RA																			
Placebo	193	1		1		1	1			1		1		1		1		1	
FosAPR	393	0.498	<.001	0.486	<.001	0.503 <.00	0.416	.00	)1 (	0.393	.001	0.383	<.001	0.481	<.001	0.471	<.001	0.483	<.001
		(0.348-0.712)		(0.335-0.706)		(0.347–	(0.243	-0.714)	(	(0.223–0.692)		(0.218–		(0.335-0.690)		(0.322–0.688)		(0.332-0.703)	ı
						0.727)						0.671)							

		Overall (0–120	)					Acute (0–24						Delayed (24–					
Factor	N	h)						h)						120 h)					
		Univariate		Multivariate				Univariate		Multivariate				Univariate		Multivariate			
		analysis		analysis				analysis		analysis				analysis		analysis			
				Full model		Backward el	liminatio	on		Full model		Backward	eliminatio	n		Full model		Backward elin	nination
		OR (95% CI)	p	OR (95% CI)	p	OR (95% C	I) p	OR (95% CI	) p	OR (95% CI)	p	OR (95%	CI) p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p
FosNTP	195	0.688	.072	0.681	.074	0.684	.077	0.631	.128	0.626	.138	0.611	.118	0.633	.030	0.621	.030	0.625	.032
81 mg		(0.457–1.034)		(0.446–1.038)		(0.449–		(0.348–1.142	2)	(0.337–1.163)		(0.330-		(0.419–0.957)		(0.405–0.955)		(0.407–0.959)	
						1.042)						1.133)							
FosNTP 235 mg	587	0.389	<.001	0.364	<.001	0.373	<.001	0.291	<.001	0.259	<.001	0.253	<.001	0.384	<.001	0.359	<.001	0.365	<.001
		(0.277–0.547)		(0.255–0.520)		(0.262-		(0.172-0.494	4)	(0.149–0.450)		(0.146–		(0.272-0.541)		(0.250-0.515)		(0.255–0.523)	
						0.531)						0.438)							
Treatment failure in (	<b>)</b> _																		
120 h																			
No	954	_		_		_		_		_		_		_		_		_	
Yes	413	_		_		_		_		_		_		_		_		_	

								Extended										
		Extended overall (0	)_					delayed (24–						Beyond delaye	d			
Factor	N	168 h)						168 h)						(120–168 h)				
				Multivariate				Univariate		Multivariate				Univariate		Multivariate		
		Univariate analysis		analysis				analysis		analysis				analysis		analysis		
				Full model		Backward elim	ination	_		Full model		Backward elimina	ation	-		Full model		Backward elimination
		OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	) p	OR (95% CI)	p	OR (95% CI) p		OR (95% CI)	p	OR (95% CI)	p	OR (95% CI) p
Age																		
≥55	1197	1		1		_		1		1		_		1		1		_
<55	171	1.355	.071	1.280	.159	_		1.267	.167	1.183	.346	_		1.086	.697	0.811	.400	_
		(0.974–1.886)		(0.908–1.806)				(0.906–		(0.834–1.678)				(0.716–1.649)		(0.498–1.321)		
								1.771)										
Sex																		
Male	1044	1		1		1		1		1		1		1		1		_
Female	324	2.042	<.001	1.486	.013	1.512	.009	2.070	<.001	1.465	.018	1.455 .0	)19	1.690	<.001	0.917	.700	_
		(1.580–2.638)		(1.087–2.031)		(1.111–2.059)		(1.599–		(1.069–2.008)		(1.063–1.991)		(1.241–2.302)		(0.590–1.425)		
								2.680)										
Performance statu	s																	
0	876	1		1		1		1		1		1		1		1		_
1	492	1.326	.017	1.344	.017	1.336	.019	1.336	.016	1.340	.020	1.329 .0	)23	1.434	.014	1.251	.202	_
		(1.051–1.674)		(1.053–1.714)		(1.049–1.701)		(1.056–		(1.048–1.714)		(1.040–1.697)		(1.076–1.911)		(0.887–1.762)		
								1.690)										
Drinking history																		
Yes	605	1		1		1		1		1		1		1		1		_

								T . 1.1											
								Extended											
		Extended overall (0-	_					delayed (24-	-					Beyond delaye	ed				
Factor	N	168 h)						168 h)						(120–168 h)					
				Multivariate				Univariate		Multivariate				Univariate		Multivariate			
		Univariate analysis		analysis				analysis		analysis				analysis		analysis			
				Full model		Backward elim	nination	_		Full model		Backward elim	nination	_		Full model		Backward elim	ination
		OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI	) p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p
No or rarely	763	2.015	<.001	1.746	<.001	1.733	<.001	2.094	<.001	1.796	<.001	1.780	<.001	1.809	<.001	1.257	.228	_	
		(1.593–2.549)		(1.355–2.250)		(1.348–2.227)		(1.649–		(1.388–2.324)		(1.378–2.298)		(1.343–2.436)		(0.866–1.825)			
								2.660)											
Smoking history																			
Yes	1121	1		1		1		1		1		1		1		1		_	
No	247	2.150	<.001	1.415	.046	1.443	.034	2.221	<.001	1.451	.034	1.454	.032	1.975	<.001	1.269	.320	_	
		(1.624–2.846)		(1.006–1.992)		(1.028–2.025)		(1.675–		(1.029–2.047)		(1.032–2.047)		(1.422–2.743)		(0.793–2.029)			
								2.945)											
Motion sickness																			
No	1226	1		1		_		1		1		1		1		1		_	
Yes	142	1.768	.001	1.388	.086	_		1.907	<.001	1.501	.034	1.521	.028	1.547	.041	0.984	.951	_	
		(1.244–2.513)		(0.955–2.018)				(1.340–		(1.032–2.184)		(1.047–2.210)		(1.019–2.350)		(0.595–1.630)			
								2.712)											
Pregnancy-related																			
vomiting																			
No	179	1		_		_		1		_		_		1		_		_	

							Extended									
		Extended overall (0-	-				delayed (24	-				Beyond delaye	d			
Factor	N	168 h)					168 h)					(120–168 h)				
				Multivariate			Univariate		Multivariate			Univariate		Multivariate		
		Univariate analysis		analysis			analysis		analysis			analysis		analysis		
				Full model		Backward elimination	<del>_</del>		Full model		Backward elimination	_		Full model		Backward elimination
		OR (95% CI)	p	OR (95% CI)	p	OR (95% CI) p	OR (95% C	I) p	OR (95% CI)	p	OR (95% CI) p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI) p
Yes	106	3.242	<.001	_		_	3.442	<.001	_		_	2.297	.003	_		_
		(1.965–5.348)					(2.080-					(1.315–4.011)				
							5.696)									
Not applicable	39	1.793	.102	_		_	1.743	.121	_		_	1.185	.700	_		_
		(0.891–3.608)					(0.864–					(0.499–2.819)				
							3.519)									
Cancer type																
Other	119	1		1		_	1		1		_	1		1		_
Lung	1249	1.154	.491	0.885	.583	_	1.173	.450	0.918	.706	_	0.957	.862	0.882	.688	_
		(0.767–1.736)		(0.571–1.371)			(0.775–		(0.587–1.433)			(0.584–1.569)		(0.478–1.628)		
							1.777)									
CDDP dose																
$< 80 \text{ mg/m}^2$	626	1		1		_	1		1		_	1		1		_
≥80 mg/m <sup>2</sup>	742	1.011	.926	1.185	.170	_	0.957	.709	1.117	.374	_	1.016	.912	1.123	.507	_
		(0.806–1.267)		(0.930–1.509)			(0.762–		(0.875–1.427)			(0.766–1.349)		(0.797–1.584)		
							1.203)									

								Extended											
		Extended overall (	0–					delayed (24-						Beyond delaye	ed				
Factor	N	168 h)						168 h)						(120–168 h)					
				Multivariate				Univariate		Multivariate				Univariate		Multivariate			
		Univariate analysis	s	analysis				analysis		analysis				analysis		analysis			
				Full model		Backward elin	nination	_		Full model		Backward elim	ination	<u> </u>		Full model		Backward elin	nination
		OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI	) p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p
NK-1RA																			
Placebo	193	1		1		1		1		1		1		1		1		_	
FosAPR	393	0.543	<.001	0.531	<.001	0.539	<.001	0.533	<.001	0.526	<.001	0.538	<.001	0.719	.122	1.120	.659	_	
		(0.382-0.772)		(0.368–0.766)		(0.375–0.774)		(0.374–		(0.364–0.762)		(0.373–0.775)		(0.473–1.092)		(0.677–1.855)			
								0.760)											
FosNTP	195	0.722	.114	0.716	.116	0.707	.101	0.683	.066	0.674	.066	0.675	.066	0.743	.233	0.916	.763	_	
81 mg		(0.483–1.081)		(0.472–1.085)		(0.468–1.070)		(0.455–		(0.443–1.026)		(0.444–1.027)		(0.456–1.210)		(0.516–1.625)			
								1.026)											
FosNTP	587	0.388	<.001	0.363	<.001	0.370	<.001	0.388	<.001	0.364	<.001	0.370	<.001	0.477	<.001	0.779	.311	_	
235 mg		(0.277–0.544)		(0.256–0.516)		(0.261–0.523)		(0.276–		(0.255–0.518)		(0.260–0.526)		(0.317–0.718)		(0.480–1.263)			
								0.544)											
Treatment failure																			
in 0–120 h																			
No	954			_		_		_		_		_		1		1		1	
Yes	413	_		_		_		_		_		_		20.951	<.001	19.766	<.001	20.951	<.001
														(14.407–		(13.453–		(14.407–30.46	6)
														30.466)		29.043)			

Data were obtained from the full analysis set.

h hours, OR odds ratio, CI confidence interval, CDDP cisplatin, NK-IRA neurokinin 1 receptor antagonist, FosAPR fosaprepitant, FosNTP fosnetupitant

Table S4 Multivariate logistic analysis of the association of treatment failure with clinical variables in each phase in the neurokinin 1 receptor antagonist evaluable population

reatmen	t		Overall (0–					Acute (0–24	1				Delayed (24	_				
Group	Factor	N	120 h)					h)					120 h)					
			Univariate		Multivariate			Univariate		Multivariate			Univariate		Multivariate			
			analysis		analysis			analysis		analysis			analysis		analysis			
					Full model		Backward elimination	on		Full model		Backward elimination	1		Full model		Backward eli	ıminatior
			OR (95% CI)	р	OR (95% CI)	р	OR (95% CI) p	OR (95% C	I) p	OR (95% CI)	p	OR (95% CI) p	OR (95% C	I) p	OR (95% CI)	р	OR (95% CI)	) p
FosNTP	Age																	
235 mg	≥55	515	1		1		_	1		1		1	1		1		_	
	<55	72	1.449	.180	1.263	.418	_	2.674	.023	2.615	.031	2.641 .026	1.338	.305	1.127	.687	_	
			(0.843–2.489)	)	(0.718–2.224)			(1.148–6.22	29)	(1.090–6.272)		(1.126–6.191)	(0.767–2.33	2)	(0.629–2.021	)		
	Sex																	
	Male	449	) 1		1		_	1		1		_	1		1		_	
	Female	138	3 2.108	<.001	1.357	.233	_	1.592	.242	1.085	.861	_	2.119	<.001	1.286	.336	_	
			(1.389–3.197)	)	(0.821–2.241)			(0.731–3.46	58)	(0.437–2.690)			(1.389–3.23	2)	(0.770–2.147	)		
	Performance statu	s																
	0	368	3 1		1		_	1		1		_	1		1		_	
	1	219	1.368	.111	1.275	.233	_	1.065	.868	1.131	.752	_	1.417	.081	1.311	.192	_	
			(0.931–2.010)	)	(0.855–1.903)			(0.507–2.23	(8)	(0.526–2.434)			(0.958–2.09	5)	(0.872–1.971	)		
	Drinking history 1																	
	Yes	255	; 1		1		1	1		1		_	1		1		1	
	No or rarely	332	2 2.384	<.001	1.906	.004	2.017 .001	1.940	.102	1.855	.157	_	2.585	<.001	2.045	.002	2.172	<.001
			(1.582–3.593)	)	(1.231–2.952)		(1.317–3.089)	(0.877–4.28	39)	(0.788–4.370)			(1.692–3.94	9)	(1.303–3.211	)	(1.399–3.374	1)

Drinking history 2

Treatmen	nt		Overall (0–			Acute (0–24			Delayed (24–		
Group	Factor	N	120 h)			h)			120 h)		
			Univariate	Multivariate		Univariate	Multivariate		Univariate	Multivariate	
			analysis	analysis		analysis	analysis		analysis	analysis	
				Full model	Backward elimination	on	Full model	Backward elimination	1	Full model	Backward elimination
			OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p
	Regularly	_	_	_	_	_	_	_	_	_	_
	(once per day)										
	Occasionally	_	_	_	_	_	_	_	_	_	_
	(once per										
	week)										
	Rarely (once	_	_	_	_	_	_	_	_	_	_
	per month)										
	No	_	_	_	_	_	_	_	_	_	_
	Smoking history 1										
	Yes	485	5 1	1	1	1	1	_	1	1	1
	No	102	2 2.423 <.001	1.580 .096	5 1.842 .012	2.037 .084	1.688 .27	4 —	2.508 <.001	1.643 .076	1.860 .012
			(1.539–3.813)	(0.921–2.708)	(1.144–2.967)	(0.909–4.564)	(0.661–4.307)		(1.587–3.964)	(0.950–2.841)	(1.149–3.012)
	Smoking history 2										
	Smoker	_	_	_	_	_	_	_	_	_	_
	Stop smoking	_	_	_	_	_	_	_	_	_	_
	within										
	180 days										
	before										
	registration										

Treatmer	nt		Overall (0–			Acute (0–24			Delayed (24–		
Group	Factor	N	120 h)			h)			120 h)		
			Univariate	Multivariate		Univariate	Multivariate		Univariate	Multivariate	
			analysis	analysis		analysis	analysis		analysis	analysis	
				Full model	Backward elimination	n	Full model	Backward elimination	1	Full model	Backward elimination
			OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p
	Stop smoking	_	_	_	_	_	_	_	_	_	
	prior to										
	180 days										
	before										
	registration										
	Non-smoker	_	_	_	_	_	_	_	_	_	_
	Motion sickness										
	No	524	<b>1</b> 1	1	1	1	1	_	1	1	1
	Yes	63	2.289 .003	1.797 .045	1.901 .026	1.651 .323	1.245 .680	0 —	2.476 .001	1.964 .021	2.045 .013
			(1.327–3.947)	(1.014–3.183)	(1.082–3.342)	(0.611–4.466)	(0.439–3.532)		(1.433–4.278)	(1.106–3.490)	(1.160–3.606)
	Pregnancy-related										
	vomiting										
	No	83	1	_	_	1	_	_	1	_	_
	Yes	37	2.595 .020	_	_	1.132 .866	_	_	2.926 .009	_	_
			(1.165–5.777)			(0.267–4.796)			(1.304–6.566)		
	Not applicable	18	1.229 .710	_	_	0.755 .801	_	_	1.386 .559	_	_
			(0.414–3.651)			(0.085–6.687)			(0.464–4.142)		
	Cancer type										
	Other	47	1	1	_	1	1	_	1	1	_

Treatmer	nt		Overall (0–					Acute (0–24					Delayed (24	<u> </u>			
Group	Factor	N	120 h)					h)					120 h)				
			Univariate		Multivariate			Univariate		Multivariate			Univariate		Multivariate		
			analysis		analysis			analysis		analysis			analysis		analysis		
					Full model		Backward elimination	n		Full model		Backward elimination	<u> </u>		Full model		Backward elimination
					OR (95% CI)	p	OR (95% CI) p	OR (95% CI)	р	OR (95% CI)	p	OR (95% CI) p	OR (95% C	I) p	OR (95% CI)	p	OR (95% CI) p
	Lung	540	1.048	.897	0.858	.688	_	0.802	.725	0.451	.235	_	1.285	.514	1.084	.843	_
			(0.519–2.117)	)	(0.407–1.810)			(0.234–2.743	)	(0.121–1.679)			(0.605–2.73	0)	(0.486–2.416	)	
	CDDP dose																
	$<80 \text{ mg/m}^2$	251	1		1		_	1		1		1	1		1		_
	$\geq$ 80 mg/m <sup>2</sup>	336	0.953	.803	1.063	.766	_	2.681	.024	3.250	.010	2.659 .026	0.951	.800	1.054	.802	_
			(0.651–1.395)	)	(0.711–1.590)			(1.136–6.326	)	(1.324–7.979)		(1.124–6.292)	(0.645–1.40	2)	(0.699–1.590	)	
	Treatment failure																
	in 0–120 h																
	No	445	_		_		_	_		_		_	_		_		_
	Yes	142	· —		_		_	_		_		_	_		_		_

Treatmer	nt		Extended						Extended						Beyond					
Group			overall (0–						delayed (24–						delayed					
	Factor	N	168 h)						168 h)						(120–168 h)					
			Univariate		Multivariate				Univariate		Multivariate				Univariate		Multivariat	e		
			analysis		analysis				analysis		analysis				analysis		analysis			
					Full model		Backward 6	elimination	_		Full model		Backward	eliminatio	on		Full model		Backward	elimination
			OR		OR		OR		OR		OR		OR		OR		OR		OR	
			(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
	Age																			
	≥55	515	1		1		_		1		1		_		1		1		_	
	<55	72	1.387	.230	1.218	.487	_		1.268	.394	1.078	.797	_		1.549	.190	1.122	.788	_	
			(0.813–2.36	5)	(0.699–2.122	2)			(0.734–2.190	))	(0.609–1.909)				(0.805–2.983	)	(0.487–			
																	2.585)			
	Sex																			
	Male	449	1		1		_		1		1		_		1		1		_	
	Female	138	1.904	.002	1.184	.503	_		1.880	.003	1.103	.703	_		1.807	.025	0.797	.548	_	
			(1.262–2.87	1)	(0.721–1.944	4)			(1.241–2.848	3)	(0.666–1.828)				(1.078-3.030	)	(0.381–			
																	1.669)			
	Performance																			
	status																			
	0	368	1		1		_		1		1		_		1		1		_	
	1	219	1.255	.237	1.174	.422	_		1.323	.150	1.232	.302	_		1.397	.177	1.158	.637	_	
			(0.861–1.83	1)	(0.794–1.736	5)			(0.904–1.937	<b>'</b> )	(0.829–1.832)				(0.860–2.268	5)	(0.629–			
																	2.130)			

nent		Extended			_			Extended						Beyond					
		overall (0–						delayed (24–						delayed					
Factor	1	N 168 h)						168 h)						(120–168 h)					
		Univariate		Multivariate				Univariate		Multivariate				Univariate		Multivariate	<del>)</del>		
		analysis		analysis				analysis		analysis				analysis		analysis			
				Full model		Backward el	limination	_		Full model		Backward o	eliminatio	n		Full model		Backward	l eliminati
		OR		OR		OR		OR		OR		OR		OR		OR		OR	
		(95% CI)	9	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
Drinking hi	story																		
1																			
Yes	2:	55 1		1		1		1		1		1		1		1		_	
No or r	arely 3	32 2.333	<.001	1.941	.002	2.049	<.001	2.544	<.001	2.114	<.001	2.177	<.001	2.833	<.001	1.801	.096	_	
		(1.568–3.472)		(1.272–2.964	)	(1.359–3.09	0)	(1.691–3.828	)	(1.370–3.262)		(1.425–		(1.625–4.939	9)	(0.901–			
												3.326)				3.601)			
Drinking hi	story																		
2																			
Regula	rly –			_		_		_		_		_		_		_		_	
(once p	er																		
day)																			
Occasio	onally –			_		_		_		_		_		_		_		_	
(once p	er																		
week)																			
Rarely	(once -			_		_		_		_		_		_		_		_	
per moi	nth)																		
No	_																		

nt	-	F	Extended	_		_		-	Extended	_					Beyond	_			
		C	overall (0–						delayed (24-	_					delayed				
Factor		N 1	168 h)						168 h)						(120–168 h)				
		Ţ	Univariate		Multivariate				Univariate		Multivariate				Univariate		Multivariat	e	
		a	nalysis		analysis				analysis		analysis				analysis		analysis		
					Full model		Backward el	imination	_		Full model		Backward e	eliminatio	on		Full model		Backward elimina
		(	OR		OR		OR		OR		OR		OR		OR		OR		OR
		(	95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI) p
Smoking	history																		
1																			
Yes		485 1	l		1		1		1		1		1		1		1		_
No		102 2	2.352	<.001	1.675	.057	1.900	.007	2.397	<.001	1.731	.046	1.798	.015	2.502	<.001	1.557	.264	_
		(	1.503-3.680	0)	(0.985–2.848	3)	(1.194–3.02	2)	(1.527–3.76	1)	(1.010–2.966)		(1.120–		(1.459–4.29	0)	(0.716–		
													2.886)				3.385)		
Smoking	history																		
2																			
Smo	ker		_		_		_		_		_		_		_		_		_
Stop			_		_		_		_		_		_		_		_		_
smol	king																		
with	in																		
180	days																		
befor	re																		
regis	stration																		

ent			Extended					Extended						Beyond					
			overall (0–					delayed (24-	-					delayed					
Fac	ctor		168 h)					168 h)						(120–168 h)					
			Univariate	Multivariate				Univariate		Multivariate				Univariate		Multivariate	e		
			analysis	analysis				analysis		analysis				analysis		analysis			
				Full model		Backward e	limination			Full model		Backward	eliminatio	on		Full model		Backward o	eliminatio
			OR	OR		OR		OR		OR		OR		OR		OR		OR	
			(95% CI) p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
	Stop	_	_	_		_		_		_		_		_		_		_	
	smoking																		
	prior to																		
	180 days																		
	before																		
	registration																		
	Non-smoker	_	_	_		_		_		_		_		_		_		_	
Мо	otion sickness																		
	No	524	1	1		_		1		1		1		1		1		_	
	Yes	63	2.030 .011	1.618	.097	_		2.162	.005	1.743	.056	1.785	.044	2.086	.027	1.106	.811	_	
			(1.180–3.493)	(0.917–2.853)	)			(1.255–3.725	5)	(0.986–3.083	3)	(1.016–		(1.089–3.995	5)	(0.485–			
												3.138)				2.521)			
Pre	egnancy-related																		
	miting																		
	No	83	1	_		_		1		_		_		1		_		_	
	Yes		2.449 .028	_		_		2.753	.014	_		_		2.769	.035	_		_	
			(1.103–5.434)					(1.232–6.153						(1.073–7.149					

nent	Ex	xtended						Extended						Beyond					
)	ov	verall (0–						delayed (24-	-					delayed					
Factor	N 16	58 h)						168 h)						(120–168 h)					
	Uı	nivariate		Multivariate				Univariate		Multivariate				Univariate		Multivariate	·		
	an	alysis		analysis				analysis		analysis				analysis		analysis			
				Full model		Backward e	elimination	_		Full model		Backward	eliminatio	on		Full model		Backward e	elimination
	O	R		OR		OR		OR		OR		OR		OR		OR		OR	
	(9	5% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
Not	18 1.	160	.789	_		_		1.304	.633	_		_		1.870	.338	_		_	
applicable	(0	.391–3.438	8)					(0.438–3.885	5)					(0.520–6.723	)				
Cancer type																			
Other	47 1			1		_		1		1		_		1		1		_	
Lung	540 1.	171	.660	0.970	.937	_		1.453	.330	1.235	.603	_		1.684	.332	1.476	.542	_	
	(0	.580–2.362	2)	(0.463-2.036	)			(0.685–3.081	1)	(0.557–2.737)	)			(0.587–4.831	)	(0.422-			
																5.156)			
CDDP dose																			
<80 mg/m <sup>2</sup>	251 1			1		_		1		1		_		1		1		_	
≥80 mg/m²	336 1.0	057	.771	1.165	.446	_		1.076	.705	1.183	.411	_		1.280	.326	1.617	.135	_	
	(0	.728–1.53	5)	(0.787–1.726	)			(0.737–1.571	1)	(0.793–1.763)	)			(0.782–2.096	<u>(</u> )	(0.861–			
																3.037)			
Treatment failure																			
in 0–120 h																			
No	445 —	-		_		_		_		_		_		1		1		1	

Treatment	Extended			Extended			Beyond		
Group	overall (0–			delayed (24–			delayed		
Factor	N 168 h)			168 h)			(120–168 h)		
	Univariate	Multivariate		Univariate	Multivariate		Univariate	Multivariate	
	analysis	analysis		analysis	analysis		analysis	analysis	
				_					
		Full model	Backward elimination		Full model	Backward eliminatio	on	Full model	Backward elimination
	OR	Full model OR	Backward elimination  OR	OR	Full model OR	OR	OR OR	Full model OR	OR
	OR (95% CI) p			OR (95% CI) p					
Yes		OR	OR		OR	OR	OR	OR	OR
Yes	(95% CI) p	OR (95% CI) p	OR (95% CI) p	(95% CI) p	OR (95% CI) p	OR (95% CI) <i>p</i>	OR (95% CI) <i>p</i>	OR (95% CI) p	OR (95% CI) p

Treatmen	nt		Overall (0–											Delayed (24	_				
Group	Factor	N	120 h)					Acute (0–24 h	n)					120 h)					
			Univariate		Multivariate			Univariate		Multivariate				Univariate		Multivariate			
			analysis		analysis			analysis		analysis				analysis		analysis			
					-		Backward	<del></del>		-				_		-			
					Full model		elimination			Full model		Backward eli	mination			Full model		Backward e	limination
			OR		OR		OR			OR		OR		OR		OR		OR	
			(95% CI)	p	(95% CI)	p	(95% CI) p	OR (95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
FosAPR	Age																		
	≥55	343	1		1		_	1		1		_		1		1		_	
	<55	50	0.842	.616	0.780	.485	_	1.477	.451	1.266	.660	_		0.824	.584	0.752	.437	_	
			(0.429–1.650)	)	(0.388–1.566)			(0.536–4.066)	)	(0.443–3.620)				(0.413–1.64	5)	(0.366–1.543	)		
	Sex																		
	Male	302	. 1		1		_	1		1		1		1		1		_	
	Female	91	2.133	.003	1.685	.080	_	3.479	.002	2.684	.036	3.479	.002	2.421	<.001	1.875	.037	_	
			(1.305–3.485)	)	(0.940–3.020)			(1.610–7.518)	)	(1.066–6.757)		(1.610–7.518	)	(1.475–3.97	5)	(1.039–3.385	)		
	Performance																		
	status																		
	0	260	) 1		1		_	1		1		_		1		1		_	
	1	133	1.493	.082	1.549	.066	_	1.418	.374	1.533	.297	_		1.385	.166	1.433	.142	_	
			(0.950–2.346)	)	(0.971–2.469)			(0.656–3.064)	)	(0.687–3.424)				(0.873–2.19	5)	(0.886–2.316	)		
	Drinking history	7																	
	1																		
	Yes	181	. 1		1		_	1		1		_		1		1		_	

Treatmen	nt		Overall (0-												Delayed (24	4–				
Group	Factor	N	120 h)						Acute (0–24 h	1)					120 h)					
			Univariate		Multivariate				Univariate		Multivariate				Univariate		Multivariate			
			analysis		analysis				analysis		analysis				analysis		analysis			
							Backward		<del>_</del>						<del>_</del>					
					Full model		elimination	n			Full model		Backward e	limination			Full model		Backward e	elimination
			OR		OR		OR				OR		OR		OR		OR		OR	
			(95% CI)	p	(95% CI)	p	(95% CI)	p	OR (95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
	No or rarely	212	1.458	.095	1.205	.461	_		1.683	.198	1.126	.795	_		1.544	.061	1.245	.400	_	
			(0.936–2.27	1)	(0.734–1.976)				(0.762–3.720)	)	(0.459–2.761	1)			(0.981–2.42	29)	(0.747–2.075)	)		
	Drinking history																			
	2																			
	Regularly	_	_		_		_		_		_		_		_		_		_	
	(once per																			
	day)																			
	Occasionally	<i>_</i>	_		_		_		_		_		_		_		_		_	
	(once per																			
	week)																			
	Rarely (once	-	_		_		_		_		_		_		_		_		_	
	per month)																			
	No	_	_		_		_		_		_		_		_		_		_	
	Smoking history																			
	1																			
	Yes	321	1		1		1		1		1		_		1		1		1	

Treatme	nt		Overall (0–												Delayed (24	1—				
Group	Factor	N	120 h)						Acute (0–24 h	n)					120 h)					
			Univariate		Multivariate				Univariate		Multivariate				Univariate		Multivariate			
			analysis		analysis				analysis		analysis				analysis		analysis			
							Backward		_						_					
					Full model		elimination				Full model		Backward eli	imination			Full model		Backward e	elimination
			OR		OR		OR				OR		OR		OR		OR		OR	
			(95% CI)	p	(95% CI)	p	(95% CI)	p	OR (95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
	No	72	2.169	.004	1.604	.149	2.160	.005	2.150	.071	1.299	.626	_		2.437	.001	1.679	.117	2.434	.001
			(1.278–3.681	.)	(0.845–3.045)		(1.268–		(0.935–4.942)	)	(0.454–3.715	)			(1.431–4.15	52)	(0.878–3.210	)	(1.423–4.16	56)
							3.679)													
	Smoking history																			
	2																			
	Smoker	_	_		_		_		_		_		_		_		_		_	
	Stop	_	_		_		_		_		_		_		_		_		_	
	smoking																			
	within																			
	180 days																			
	before																			
	registration																			
	Stop	_	_		_		_		_		_		_		_		_		_	
	smoking																			
	prior to																			
	180 days																			
	before																			
	registration																			
	Non-smoker	_	_		_		_		_		_		_		_		_		_	

Treatmen	nt		Overall (0–												Delayed (24	_				
Group	Factor	N	120 h)						Acute (0–24 h	1)					120 h)					
			Univariate		Multivariate				Univariate		Multivariate				Univariate		Multivariate			
			analysis		analysis				analysis		analysis				analysis		analysis			
							Backward		_						_		-			
					Full model		elimination				Full model		Backward eli	mination			Full model		Backward e	elimination
			OR		OR		OR				OR		OR		OR		OR		OR	
			(95% CI)	p	(95% CI)	p	(95% CI)	p	OR (95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
	Motion sickness																			
	No	360	1		1		1		1		1		_		1		1		1	
	Yes	33	2.197	.033	2.052	.064	2.181	.037	3.256	.018	2.227	.134	_		2.428	.016	2.274	.036	2.422	.019
			(1.066–4.529	))	(0.958–4.394)		(1.049–		(1.222–8.678)		(0.781–6.350	)			(1.176–5.01	4)	(1.055–4.898	)	(1.159–5.06	61)
							4.534)													
	Pregnancy-																			
	related vomiting																			
	No	54	1		_		_		1		_		_		1		_		_	
	Yes	27	3.700	.008	_		_		1.136	.835	_		_		3.700	.008	_		_	
			(1.403–9.754	·)					(0.340–3.797)						(1.403–9.75	4)				
	Not	10	1.451	.600	_		_		< 0.001	.971	_		_		1.451	.600	_		_	
	applicable		(0.362–5.821	.)					(<0.001-						(0.362–5.82	1)				
									>999.999)											
	Cancer type																			
	Other	52	1		1		_		1		1		_		1		1		_	
	Lung	341	0.818	.530	0.658	.225	_		4.562	.140	3.128	.280	_		0.738	.343	0.574	.111	_	
			(0.438–1.530	))	(0.334–1.294)				(0.607–34.269	9)	(0.396–24.71	5)			(0.394–1.38	3)	(0.289–1.137	)		

Treatme	nt		Overall (0–											Delayed (24	<b>I</b> –				
Group	Factor	N	120 h)					Acute (0–24 l	h)					120 h)					
			Univariate	Multivariate				Univariate		Multivariate				Univariate		Multivariate			
			analysis	analysis				analysis		analysis				analysis		analysis			
						Backward													
				Full model		elimination				Full model		Backward el	imination			Full model		Backward 6	elimination
			OR	OR		OR				OR		OR		OR		OR		OR	
			(95% CI) p	(95% CI)	p	(95% CI)	p	OR (95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
	CDDP dose																		
	<80 mg/m <sup>2</sup>	165	1	1		_		1		1		_		1		1		_	
	$\geq 80 \text{ mg/m}^2$	228	1.099 .675	1.264	.326	_		1.667	.218	1.746	.199	_		1.050	.832	1.226	.404	_	
			(0.706–1.712)	(0.792–2.018)				(0.739–3.760)	)	(0.746–4.082)	)			(0.669–1.64	8)	(0.760–1.981	)		
	Treatment failure	e																	
	in 0–120 h																		
	No	279	_	_		_		_		_		_		_		_		_	
	Yes	114	_	_		_		_		_		_		_		_		_	

eatment		Extended					Extended						Beyond					
oup		overall (0-					delayed (24-	-					delayed (120	_				
Factor	N	168 h)					168 h)						168 h)					
		Univariate	Multivariate				Univariate		Multivariate	•			Univariate		Multivariate			
		analysis	analysis				analysis		analysis				analysis		analysis			
			Full model		Backward el	iminatio	n		Full model		Backward elin	nination	_		Full model		Backward e	limination
		OR	OR		OR		OR		OR		OR		OR		OR		OR	
		(95% CI) p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
Age																		
≥55	343	1	1		_		1		1		_		1		1		_	
<55	50	0.761 .415	0.683	.274	_		0.734	.367	0.649	.227	_		0.562	.206	0.571	.283	_	
		(0.395–1.467)	(0.344–1.353)				(0.375–1.437	7)	(0.322–1.30	9)			(0.230–1.373	5)	(0.205–1.588	)		
Sex																		
Male	302	1	1		1		1		1		1		1		1		_	
Female	91	2.351 <.00	1 1.959	.021	2.351	<.001	2.598	<.001	2.130	.010	2.446	<.001	2.170	.006	1.540	.283	_	
		(1.453–3.804)	(1.108–3.465)		(1.453–3.804	1)	(1.601–4.216	<b>5</b> )	(1.201–3.78	0)	(1.498–3.994)		(1.251–3.765	5)	(0.700–3.388	)		
Performance																		
status																		
0	260	1	1		_		1		1		_		1		1		_	
1	133	1.425 .113	1.484	.089	_		1.299	.249	1.343	.214	_		1.692	.047	1.484	.216	_	
		(0.919–2.209)	(0.941–2.340)				(0.833–2.025	5)	(0.844–2.13	6)			(1.007–2.844	4)	(0.795–2.771	)		
Drinking history	1																	
Yes	181	1	1		_		1		1		_		1		1		_	

	overall (0– 168 h) Univariate analysis  OR (95% CI) 2 1.588 (1.035–2.43	p .034	Multivariate analysis Full model  OR (95% CI) 1.359 (0.843–2.190)	<i>p</i> .209	OR (95% CI)	eliminatio:	delayed (24- 168 h)  Univariate analysis  OR (95% CI)  1.626 (1.053-2.51	<i>p</i>	Multivariate analysis Full model  OR (95% CI)  1.358 (0.834–2.209	p .219	OR (95% CI) p	delayed (12 168 h)  Univariate analysis  tion  OR (95% CI) 1.373 (0.818–2.30	p .230	Multivariate analysis Full model  OR (95% CI) 1.060 (0.543–2.072)	<i>p</i> .864	OR (95% CI)	imination p
/ 212	Univariate analysis  OR (95% CI) 2 1.588	.034	analysis Full model  OR (95% CI)  1.359	.209	OR (95% CI)		Univariate analysis  OR (95% CI)  1.626	.028	analysis Full model OR (95% CI) 1.358	p .219	OR (95% CI) p	Univariate analysis tion  OR (95% CI)  1.373	.230	analysis Full model OR (95% CI) 1.060	.864	OR (95% CI)	
	OR (95% CI) 2 1.588	.034	analysis Full model  OR (95% CI)  1.359	.209	OR (95% CI)		analysis  OR (95% CI)  1.626	.028	analysis Full model OR (95% CI) 1.358	p .219	OR (95% CI) p	analysis  OR (95% CI)  1.373	.230	analysis Full model OR (95% CI) 1.060	.864	OR (95% CI)	
	OR (95% CI) 2 1.588	.034	OR (95% CI) 1.359	.209	OR (95% CI)		OR (95% CI)	.028	OR (95% CI) 1.358	.219	OR (95% CI) p	OR (95% CI) 1.373	.230	OR (95% CI) 1.060	.864	OR (95% CI)	
	(95% CI) 2 1.588	.034	OR (95% CI) 1.359	.209	OR (95% CI)		OR (95% CI) 1.626	.028	OR (95% CI) 1.358	.219	OR (95% CI) p	OR (95% CI) 1.373	.230	OR (95% CI) 1.060	.864	OR (95% CI)	
	(95% CI) 2 1.588	.034	(95% CI)	.209	(95% CI)	p	(95% CI)	.028	(95% CI)	.219	(95% CI) p	(95% CI)	.230	(95% CI)	.864	(95% CI)	р
	(95% CI) 2 1.588	.034	(95% CI)	.209	(95% CI)	p	(95% CI)	.028	(95% CI)	.219	(95% CI) p	(95% CI)	.230	(95% CI)	.864	(95% CI)	p
					_						_						
	(1.035–2.43	36)	(0.843–2.190)		_		(1.053–2.51	1)	(0.834–2.209	9)		(0.818–2.30	3)	(0.543–2.072)	)		
	· <u> </u>		_		_												
_			_		_												
							_		_		_	_		_		_	
у —	· —		_		_		_		_		_	_		_		_	
е —	_		_		_		_		_		_	_		_		_	
_	. —		_		_		_		_		_	_		_		_	
1																	
321	l 1		1		_		1		1		_	1		1		_	
			1 408	.290	_		2.297	.002	1.466	.239	_	1.945	.028	1.069	.879	_	
72	2.097	.005	1.700														
,	321	 1 321 1	321 1		321 1 1	321 1 1 — —	321 1 1 — —	321 1	321 1	321 1 1 — 1 1	321 1 1 1 1	321 1 1 — 1 — — — —	321 1 1 - 1 1 - 1	321 1 1 - 1 1 - 1	321 1 1 - 1 1 1 - 1	321 1 1 - 1 1 1 - 1	321 1 1 - 1 1 - 1 - 1

ent		Extended				Ext	ended						Beyond					
		overall (0-				del	ayed (24-						delayed (120	<b>—</b>				
Factor	N	168 h)				168	3 h)						168 h)					
		Univariate	Multivariate			Un	ivariate		Multivariate				Univariate		Multivariate			
		analysis	analysis			ana	lysis		analysis				analysis		analysis			
			Full model		Backward elimina	ation			Full model		Backward elin	ninatior	1		Full model		Backward el	limination
		OR	OR		OR	OR			OR		OR		OR		OR		OR	
												_						
		(95% CI) p	(95% CI)	p	(95% CI) p	(95	% CI) p	,	(95% CI)	p	(95% CI)	p	(95% CI)	р	(95% CI)	p	(95% CI)	р
Smoking history	y 2																	
Smoker	_	_	_		_	_			_		_		_		_		_	
Stop smoki	ng —	_	_		_	_			_		_		_		_		_	
within																		
180 days																		
before																		
registration																		
Stop smoki	ng —	_	_		_	_			_		_		_		_		_	
prior to																		
180 days																		
before																		
registration																		
Non-smoke	er —	_	_		_	_			_		_		_		_		_	
Motion sickness	S																	
No	360	) 1	1		_	1			1		1		1		1		_	
Yes	33	2.322 .021	2.076	.060	_	2.5	12 .0	012	2.256	.036	2.143	.043	2.801	.008	2.240	.102	_	
		(1.133–4.761)	(0.971–4.438)	)					(1.053-4.834									

ent			Extended						Extended						Beyond					
			overall (0-						delayed (24-	_					delayed (120	<u></u>				
Fa	actor	N	168 h)						168 h)						168 h)					
			Univariate		Multivariate				Univariate		Multivariate	e			Univariate		Multivariate			
			analysis		analysis				analysis		analysis				analysis		analysis			
					Full model		Backward el	iminatio	n		Full model		Backward el	imination	_		Full model		Backward el	liminatio
			OR		OR		OR		OR		OR		OR		OR		OR		OR	
			(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p	(95% CI)	p
Pr	regnancy-related																			
vo	omiting																			
	No	54	1		_		_		1		_		_		1		_		_	
	Yes	27	4.037	.006	_		_		4.037	.006	_		_		1.855	.226	_		_	
			(1.495–						(1.495–						(0.683–5.042	2)				
			10.906)						10.906)											
	Not	10	1.700	.443	_		_		1.700	.443	_		_		1.352	.692	_		_	
	applicable		(0.438–6.604	4)					(0.438–6.604	4)					(0.305–5.994	<b>!</b> )				
Cı	ancer type																			
	Other	52	1		1		_		1		1		_		1		1		_	
	Lung	341	0.924	.800	0.692	.278	_		0.852	.610	0.632	.180	_		0.641	.204	0.540	.166	_	
			(0.500–1.708	8)	(0.355–1.347)	ı			(0.460–1.57	7)	(0.324–1.23	36)			(0.322–1.273	3)	(0.226–1.292)	)		
CI	DDP dose																			
	$<80~\text{mg/m}^2$	165	1		1		_		1		1		_		1		1		_	
	≥80 mg/m²	228	1.243	.320	1.452	.109	_		1.160	.501	1.360	.192	_		1.046	.865	1.013	.969	_	
			(0.809–1.910	0)	(0.920–2.291)	)			(0.752–1.79	0)	(0.857–2.16	50)			(0.624–1.753	3)	(0.544–1.886)	)		

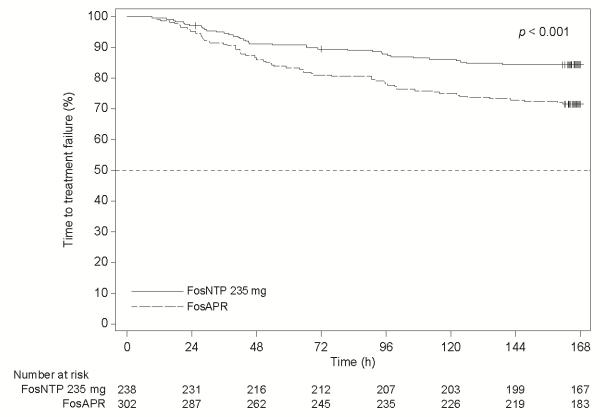
Treatme	nt		Extended			Extended			Beyond		
Group			overall (0–			delayed (24–			delayed (120–		
	Factor	N	168 h)			168 h)			168 h)		
			Univariate	Multivariate		Univariate	Multivariate		Univariate	Multivariate	
			analysis	analysis		analysis	analysis		analysis	analysis	
				Full model	Backward elimination	on	Full model	Backward elimination	<u> </u>	Full model	Backward elimination
			OR	OR	OR	OR	OR	OR	OR	OR	OR
			OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p	OR (95% CI) p
	Treatment failure	e									
	Treatment failure in 0–120 h	e									
	in 0–120 h	279	(95% CI) p	(95% CI) p	(95% CI) p	(95% CI) p	(95% CI) p	(95% CI) p		(95% CI) p	(95% CI) p

Data were obtained from the full analysis set.

h hours, OR odds ratio, CI confidence interval, CDDP cisplatin, FosAPR fosaprepitant, FosNTP fosnetupitant

Figure S1 Comparison of the time to treatment failure curve classified by the number of risk factors at 0–168 hours in the neurokinin 1 receptor antagonist-evaluable population. **a** No risk factors; **b** One or more risk factors

#### a. No risk factors.



# b. One or more risk factors.

