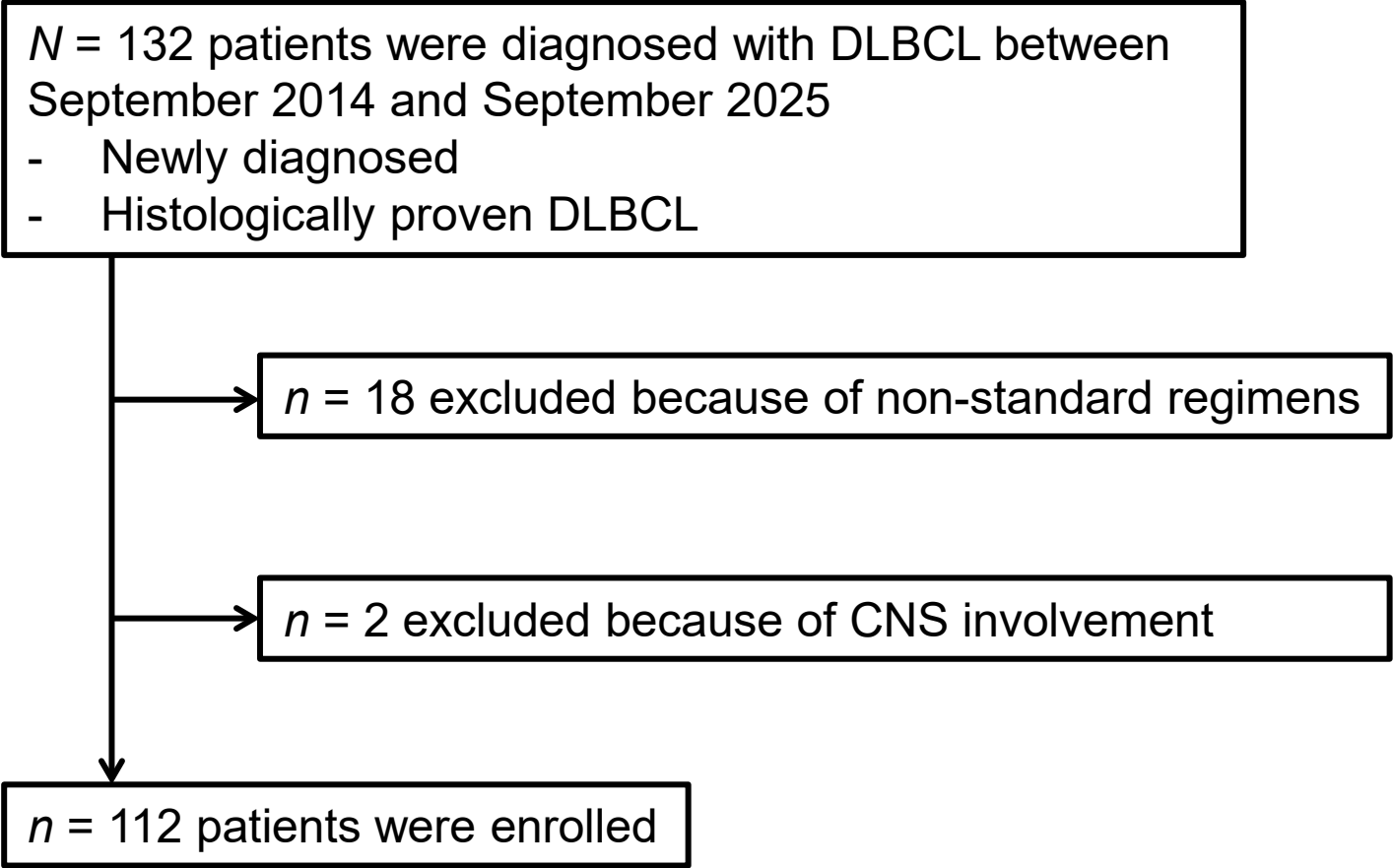
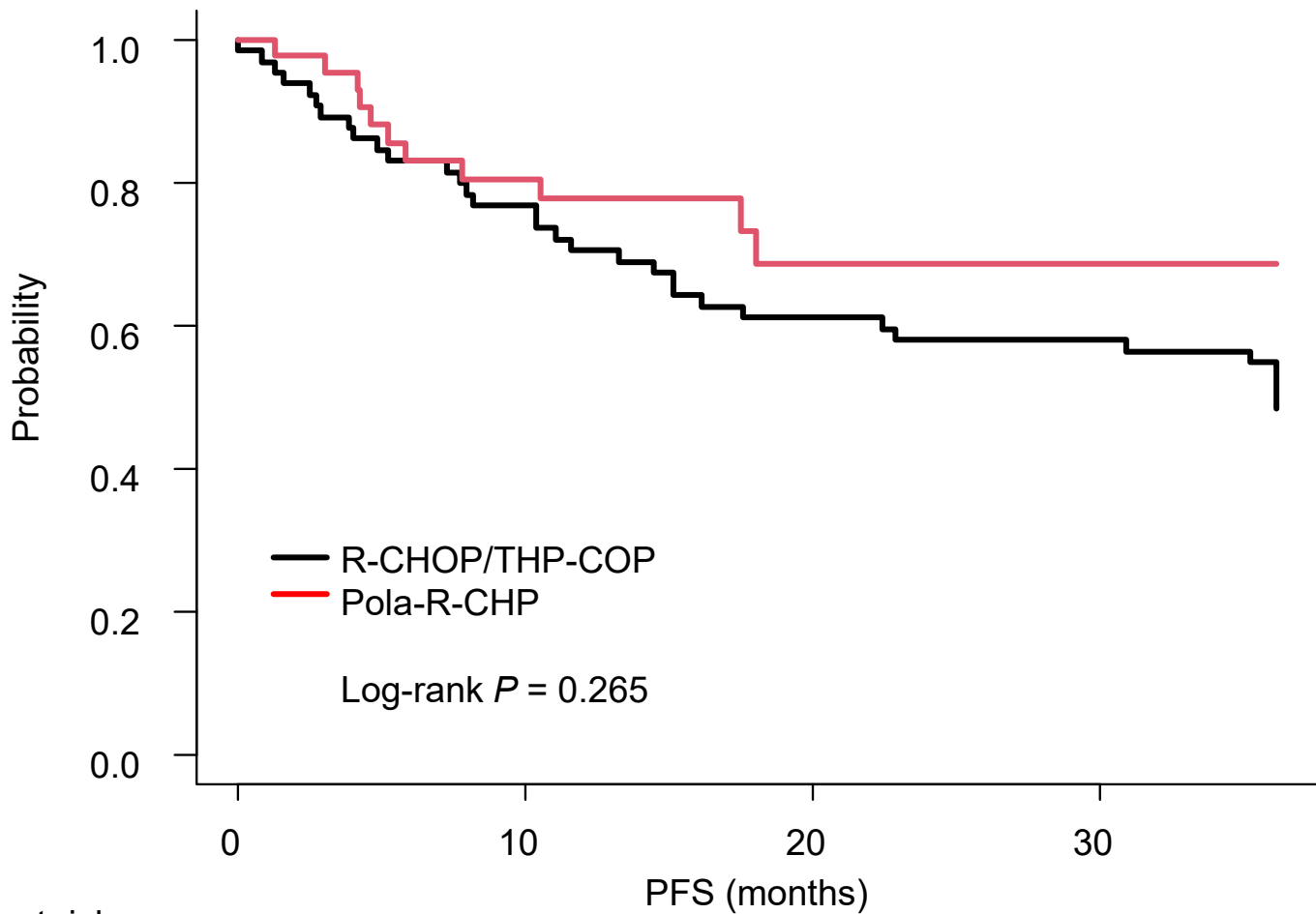


Supplementary figure 1. Flowchart of patient selection.



Abbreviations: DLBCL = diffuse large B-cell lymphoma; CNS = central nervous system.

Supplementary figure 2. Sensitivity analysis of progression-free survival with follow-up in the R-CHOP/R-THP-COP group censored at 36.1 months (maximum follow-up in the Pola-R-CHP group).

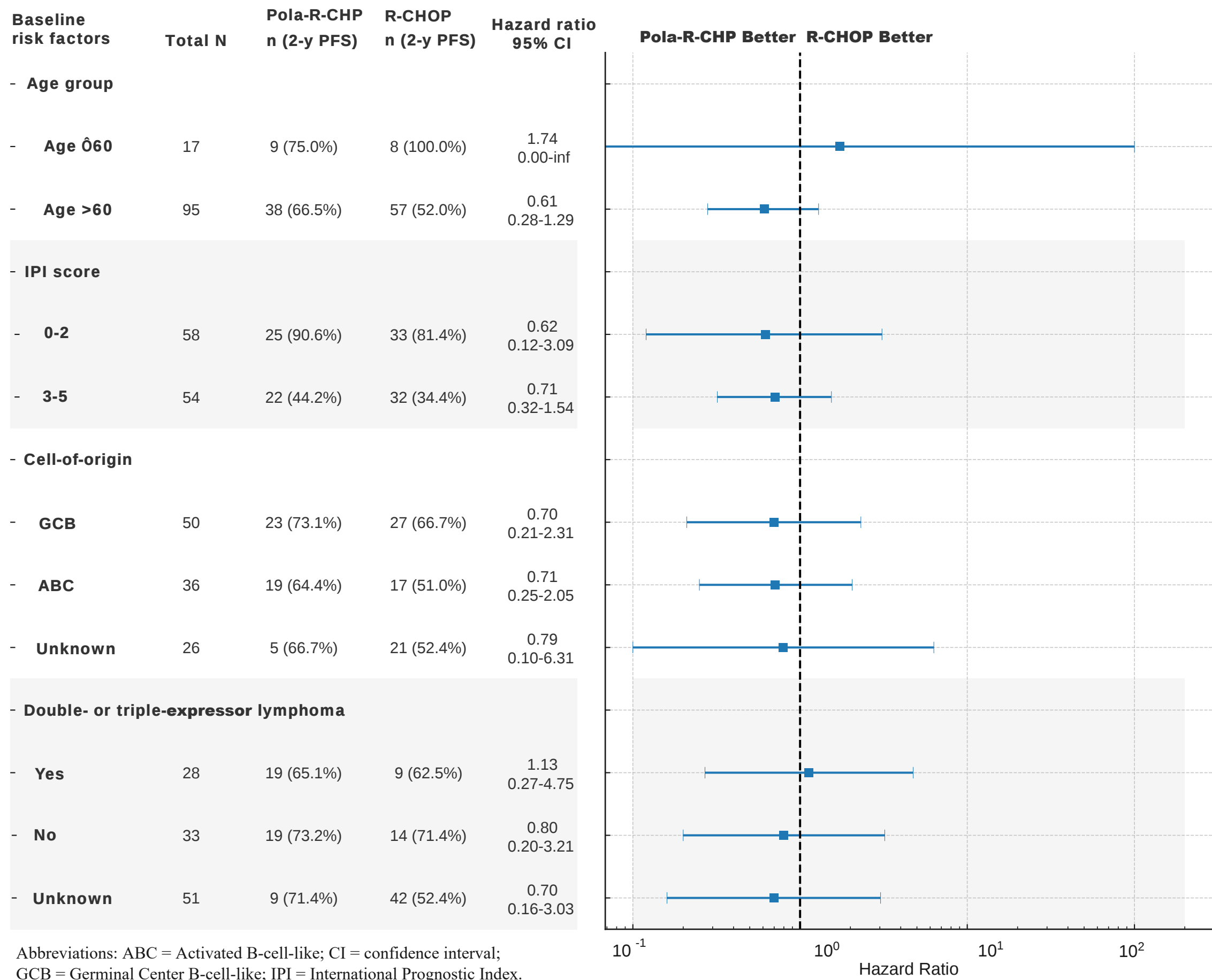


Number at risk:

R-CHOP/THP-COP	65	49	39	37
Pola-R-CHP	47	30	12	6

Abbreviations: PFS = progression-free survival; Pola-R-CHP = polatuzumab vedotin, rituximab, cyclophosphamide, doxorubicin, prednisolone; R-CHOP = rituximab, cyclophosphamide, doxorubicin, vincristine, prednisolone; R-THP-COP = rituximab, cyclophosphamide, tetrahydropyranyl adriamycin, vincristine, prednisolone.

Supplementary figure 3. Forest plot of hazard ratios for investigator-assessed progression free survival across clinical subgroups.



Supplementary table 1. Initial and relative dose intensity of chemotherapeutic agents stratified by treatment regimen.

	All patients		R-CHOP / R-THP-COP		Pola-R-CHP		<i>p</i> value
	(N = 112)		(n = 65)		(n = 47)		
IDI							
Average IDI, % - median, range	86.3	(42.4–104.1)	83.1	(45.9–102.1)	89.8	(42.4–104.1)	0.069
CPA-IDI, % - median, range	85.1	(45.2–108.7)	81.8	(45.2–108.7)	86.3	(46.4–105.1)	0.088
DXR/THP-IDI, % - median, range	81.8	(45.1–103.2)	80.3	(45.8–103.2)	85.4	(45.1–102.6)	0.175
VCR/Pola-IDI, % - median, range	98.4	(0.0–108.8)	90.0	(46.4–108.8)	99.5	(0.0–108.7)	0.003
RDI							
Average RDI, % - median, range	84.5	(12.0–126.4)	81.6	(15.2–126.4)	89.2	(12.0–104.4)	0.540
CPA-RDI, % - median, range	85.3	(12.2–126.8)	83.1	(16.7–126.8)	88.4	(12.2–102.3)	0.548
DXR/THP-RDI, % - median, range	86.0	(11.5–105.6)	83.4	(12.4–126.7)	85.1	(11.5–102.7)	0.804
VCR/Pola-RDI, % - median, range	85.1	(0.0–126.7)	80.0	(16.7–126.7)	92.0	(0.0–108.9)	0.031

Abbreviations: CPA = cyclophosphamide, DXR =doxorubicin; IDI = initial dose intensity; VCR = vincristine; Pola = polatuzumab vedotin;

Pola-R-CHP = polatuzumab vedotin, rituximab, cyclophosphamide, doxorubicin, prednisolone; R-CHOP = rituximab, cyclophosphamide,

doxorubicin, vincristine, prednisolone; RDI = relative dose intensity; R-THP-COP = rituximab, cyclophosphamide, tetrahydropyranyl

adriamycin, vincristine, prednisolone; THP = tetrahydropyranyl adriamycin.

Supplementary table 2. Occurrence of severe non-hematologic toxicity (grade ≥ 3) and febrile neutropenia stratified by treatment regimen.

	All patients (N = 112)		R-CHOP / R-THP-COP (n = 65)		Pola-R-CHP (n = 47)		<i>p</i> value
Any nonhematologic toxicities - n (%)	71	(63.4)	41	(63.1)	30	(63.8)	0.999
Anorexia - n (%)	21	(18.8)	12	(18.5)	9	(19.2)	0.999
Lung infection - n (%)	18	(16.1)	8	(12.3)	10	(21.3)	0.297
Sepsis - n (%)	13	(11.6)	9	(13.9)	4	(8.5)	0.552
Urinary tract infection - n (%)	9	(8.0)	7	(10.8)	2	(4.3)	0.299
Peripheral neuropathy - n (%)	5	(4.5)	4	(6.2)	1	(2.1)	0.397
Treatment-related mortality - n (%)	9	(8.0)	5	(7.7)	4	(8.5)	0.999
Febrile neutropenia - n (%)	53	(47.3)	26	(40.0)	27	(57.5)	0.085

Abbreviations: Pola-R-CHP = polatuzumab vedotin, rituximab, cyclophosphamide, doxorubicin, prednisolone; R-CHOP = rituximab, cyclophosphamide, doxorubicin, vincristine, prednisolone; R-THP-COP = rituximab, cyclophosphamide, tetrahydropyranyl adriamycin, vincristine, prednisolone.

Supplementary table 3. Occurrence of severe non-hematologic toxicity (grade ≥3) and febrile neutropenia during each treatment course.

	All duration (N = 112)		Cycle 1 (n = 112)		Cycle 2 (n = 105)		Cycle 3 (n = 99)		Cycle 4 (n = 84)		Cycle 5 (n = 78)		Cycle 6 (n = 71)		Cycle 7 (n = 4)		Cycle 8 (n = 3)	
Any nonhematologic toxicity - n (%)	71	(63.4)	45	(40.2)	24	(22.9)	17	(17.2)	22	(26.2)	18	(23.1)	13	(18.3)				
Anorexia - n (%)	21	(18.8)	12	(10.7)	7	(6.7)	5	(5.1)	5	(6.0)	3	(3.9)	3	(4.2)				
Lung infection - n (%)	18	(16.1)	3	(2.7)	7	(6.7)	5	(5.1)	3	(3.6)			3	(4.2)				
Sepsis - n (%)	13	(11.6)	5	(4.5)	6	(5.7)	3	(3.0)	2	(2.4)	3	(3.9)						
COVID-19 infection- n (%)	9	(8.0)	3	(2.7)	2	(1.9)			1	(1.2)	3	(3.9)						
Urinary tract infection - n (%)	9	(8.0)	3	(2.7)	1	(1.0)			2	(2.4)	1	(1.3)	2	(2.8)				
Skin infection - n (%)	4	(3.6)	3	(2.7)	1	(1.0)												
Delirium - n (%)	4	(3.6)	2	(1.8)	2	(1.9)	1	(1.0)										
Treatment-related mortality - n (%)	9	(8.0)	2	(1.8)	2	(1.9)	3	(3.0)	2	(2.4)								
Febrile neutropenia - n (%)	53	(47.3)	26	(23.2)	15	(14.3)	18	(18.2)	15	(17.9)	10	(12.8)	10	(14.1)				

Abbreviations: COVID-19 = SARS-Cov-2 disease.