Soins intensifs oncologiques
Revue annuelle

Jean-Paul Sculier
Service des soins intensifs et urgences oncologiques
Oncologie Thoracique
Institut Jules Bordet
ULB

Déclaration

Absence de conflits d’intérêt à rapporter

Pronostic

Scoring systems in cancer patients admitted for an acute complication in a medical intensive care unit

Jean-Paul Sculier, MD, PhD; Marianne Paesmans, MSc; Eveline Markiewicz, RN; Thierry Berghmans, MD

(Crit Care Med 2000; 28:2786–2792)

Variable	*Mortalité hospitalière*	*Survie après la sortie d'hospitalisation*
APACHE II	< 0,001	NS
IGS II	< 0,001	NS
Extension du cancer	NS	0,008
Phase du cancer	NS	0,0002

CHEST

Original Research

CRITICAL CARE

Use of Intensive Care in Patients With Nonresectable Lung Cancer

Anne-Claire Toffart, MD; Clémence Minet, MD; Bruno Raynard, MD; Carole Schwebel, MD, PhD; Rebecca Hamidfar-Roy, MD; Samia Diab, MD; Sébastien Quetant, MD; Denis Moro-Sibilot, MD, PhD; Elie Azoulay, MD, PhD; and Jean-François Timsit, MD, PhD

CHEST 2011; 139(1):101–108

2000 - 2007

Table 1—*Main Patient Characteristics*

Characteristic	All Patients (N = 103)	Alive at 90 d (n = 35)	Died Within 90 d (n = 61)	Lost to Follow-up[a] (n = 7)
Demographics				
Male sex	79 (77)	29 (37[b])	45 (57)	5 (6)
Age, y	61 (54-68)	60 (52-67)	61 (54-69)	67 (55-72)
ECOG-PS[c]				
0-2	76 (75)	30 (39)	41 (54)	5 (7)
3-4	26 (25)	5 (19)	20 (77)	1 (4)
Modified CCI	1 (0-2)	1 (0-3)	1 (0-2)	2 (1-3)
Cancer history				
Type of cancer				
Squamous cell carcinoma	33 (32)	11 (33)	18 (55)	4 (12)
Adenocarcinoma	26 (25)	7 (27)	18 (69)	1 (4)
Small cell lung cancer	21 (20)	9 (43)	11 (52)	1 (5)
Large cell lung cancer	11 (11)	4 (36)	6 (55)	1 (9)
Other	12 (12)	4 (33)	8 (67)	0 (0)
Extensive disease[c]				
No (I-IIIa)	26 (25)	11 (42)	13 (50)	2 (8)
Yes (IIIb-IV)	76 (75)	24 (32)	47 (62)	5 (6)
Metastasis at ICU admission	63 (61)	15 (24)	42 (67)	6 (9)
Cancer status				
Not yet treated	23 (22)	8 (35)	14 (61)	1 (4)
First-line treatment ongoing	31 (30)	13 (42)	16 (52)	2 (6)
Controlled	11 (11)	5 (46)	4 (36)	2 (18)
Recurrence/progression	20 (19)	6 (30)	14 (70)	0 (0)
Diagnosed in the ICU	18 (18)	3 (17)	13 (72)	2 (1)
Previous anticancer treatments				
Chemotherapy	59 (57)	23 (39)	32 (54)	4 (7)
Radiation therapy	16 (16)	9 (56)	7 (44)	0 (0)
Surgery	17 (1)	8 (47)	7 (41)	2 (12)
No previous anticancer treatment	41 (49)	11 (27)	27 (66)	3 (7)
Time since cancer diagnosis, d	95 (25-251)	152 (40-276)	86 (24-182)	150 (1-1,010)

Table 2—*Characteristics of the Critical Illnesses*

Characteristic	All Patients (N = 103)	Alive at 90 d (n = 35)	Died Within 90 d (n = 61)	Lost to Follow-up[a] (n = 7)
Reason for ICU admission				
Acute respiratory failure	58 (56)	21 (36[b])	34 (59)	3 (5)
Infection	18 (31)	3 (17)	14 (78)	1 (5)
Airway obstruction	9 (16)	3 (33)	4 (45)	2 (22)
Obstruction by the tumor	7 (78)	2 (29)	4 (57)	1 (14)
Superior vena cava syndrome	2 (3)	0 (0)	2 (100)	0 (0)
Pneumothorax	7 (12)	5 (71)	2 (29)	0 (0)
Pulmonary embolism	4 (7)	1 (25)	3 (75)	0 (0)
Pleural effusion	4 (7)	1 (25)	3 (75)	0 (0)
Hemoptysis	4 (7)	1 (25)	3 (75)	0 (0)
Acute pulmonary edema	4 (7)	4 (100)	0 (0)	0 (0)
Other	6 (10)	3 (50)	3 (50)	0 (0)
Shock	27 (26)	7 (26)	17 (63)	3 (11)
Septic	11 (41)	1 (9)	9 (82)	1 (9)
Cardiogenic	6 (22)	2 (33)	3 (50)	1 (17)
Other	10 (37)	4 (40)	5 (50)	1 (10)
Neurologic complications	7 (7)	3 (43)	3 (43)	1 (14)
Other	11 (11)	4 (36)	7 (64)	0 (0)
LOD score	3 (1-4)	1(0-4)	3 (1-4)	3 (1-5)
Number of organ failures	1 (1-2)	1 (0-1)	2 (1-2)	1 (1-3)
SAPS II	33 (25-46)	26 (22-35)	36 (30-52)	33 (26-46)
Treatments during the first 48 h				
Noninvasive ventilation	20 (19)	8 (40)	11 (55)	1 (5)
Invasive ventilation	41 (40)	9 (22)	30 (73)	2 (5)
Vasoactive drugs	33 (32)	7 (21)	25 (76)	1 (3)
Renal replacement therapy	5 (5)	2 (40)	3 (60)	0 (0)
LOD score on day 3	2 (0-5)	1 (0-4)	3 (1-10)	2 (1-5)
Number of organ failures on day 3	1 (0-3)	1 (0-1)	2 (1-2)	1 (1-2)
ICU length of stay, d	3 (2-7)	4 (2-7)	3 (1-7)	3 (2-6)
Hospital length of stay, d	9 (2-20)	12 (6-22)	6 (2-19)	9 (15-23)

Table 3—*Univariate and Multivariate Analyses of Factors Associated With 90-d Mortality*

Factor	Univariate Analysis[a]		Multivariate Analysis[a] (Model With SAPS II)		Multivariate Analysis (Model With LOD)	
	HR (95% CI)	*P* Value	HR (95% CI)	*P* Value	HR (95% CI)	*P* Value
Demographic feature						
Age > 61 y	1.00 (0.60-1.67)	.98	...	...	...	...
Male sex	0.74 (0.41-1.32)	.31	...	...	...	...
Performance status > 2	1.91 (1.10-3.33)	.02	1.96 (1.11-3.46)	.02	2.65 (1.43-4.88)	$< 10^{-2}$
Modified CCI	0.61 (0.31-1.16)	.14	...	...	...	...
Cancer history						
Cancer status						
Not yet treated	1.15 (0.63-2.13)	.64	...	...	...	...
First-line treatment ongoing	0.87 (0.48-1.56)	.64	...	...	...	...
Controlled	1.01 (0.61-1.67)	.98	...	...	...	...
Recurrence/progression	1.17 (0.62-2.22)	.63	...	...	...	...
Diagnosed in the ICU	1.09 (0.58-2.03)	.79	...	...	...	...
Metastasis at ICU admission	2.00 (1.14-3.49)	.01	...	...	1.90 (1.08-3.33)	$< 10^{-2}$
Cancer diagnosis for > 90 d	0.94 (0.56-1.59)	.82	...	...	...	...
Cancer excision surgery	0.68 (0.32-1.45)	.32	...	...	...	...
Reasons for ICU admission						
Acute respiratory failure[b]	0.90 (0.55-1.5)	.70	...	...	...	...
Shock	1.40 (0.79-2.50)	.25	...	...	...	...
Treatment in the first 72 h						
Invasive ventilation	1.90 (1.13-3.19)	.02	...	...	...	...
Noninvasive ventilation	0.83 (0.45-1.53)	.54	...	...	...	...
Vasoactive drugs	2.27 (1.33-3.87)	$< 10^{-2}$	...	...	...	...
Scores at ICU admission			...	...	...	...
LOD, per point	1.17 (1.05-1.29)	$< 10^{-2}$	...	...	1.19 (1.08-1.32)	$< 10^{-3}$
LOD > 3	1.99 (1.18-3.38)	.01	...	...	...	...
SAPS II, per point	1.03 (1.02-1.05)	$< 10^{-4}$	1.03 (1.02-1.05)	10^{-4}	...	...

The Akaike Information Criterion of the model was 376.1 with SAPS II and 366.9 with the LOD score. HR = hazard ratio. See Tables 1 and 2 for expansion of other abbreviations.

[a]Analysis stratified by center.

[b]Refers to the category in Table 2.

The Outcome of Medical Intensive Care for Lung Cancer Patients

The Case for Optimism

Ayman O. Soubani, MD, and John C. Ruckdeschel, MD†*

(*J Thorac Oncol.* 2011;6: 633–638)

TABLE 2. Literature Review of the Mortality of Lung Cancer Patients Admitted to the Medical ICU

Study	No. of Patients	Mechanical Ventilation (%)	ICU Mortality (%)	Hospital Mortality (%)	Long-Term Mortality[a] (%)
Ewer et al.[16]	46	100	85	91	98
Boussat et al.[17]	57	91	67	75	NR
Lin et al.[18]	81	100	73	85	NR
Reichner et al.[19]	47	49	43	60	NR
Soares et al.[20]	143	70	42	59	67
Mendoza et al.[15]	34	63	NR	43	NR
Adam et al.[7]	139	49	22	40	69
Roques et al.[21]	105	41	43	54	73
Toffart et al.[25]	103	40	31	48	63

[a] Long-term survival signifies survival >6 mo (except for Toffart et al., 3 mo) after medical ICU admission.
ICU, intensive care unit; NR, not reported.

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Original article

Prognosis of patients with haematological malignancies admitted to the intensive care unit: Sequential Organ Failure Assessment (SOFA) trend is a powerful predictor of mortality

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Table 1
Patient characteristics and variables divided by ICU survival.

1999-2005

	Total	ICU non-survivors	ICU survivors	Subgroup mortality
	n = 86	n = 48	n = 38	56%
Age (mean ± SD)	52 ± 13	52 ± 13	53 ± 13	
Male sex	50 (58%)	28 (58%)	22 (58%)	56%
Hematological malignancy				
Acute leukaemia	33 (38%)	20 (42%)	13 (34%)	61%
Other diseases	53 (62%)	28 (58%)	25 (66%)	53%
Disease status				
Active disease	62 (72%)	35 (73%)	29 (71%)	56%
Complete remission	24 (28%)	13 (27%)	11 (29%)	54%
Therapy				
Chemotherapy in last 30 days	54 (63%)	29 (60%)	25 (66%)	54%
Stem cell transplantation in last year	31 (36%)	19 (40%)	12 (32%)	61%
Autologous	11 (13%)	4 (8%)	7 (18%)	36%
Allogeneic, myeloablative	9 (10%)	9 (19%)	0 (0%)	100%†
Allogeneic, non-myeloablative	11 (13%)	6 (13%)	5 (13%)	55%
Therapy related complications				
Neutropenia on ICU admission	48 (56%)	29 (60%)	19 (50%)	60%
Neutropenia >21 days	19 (22%)	11 (23%)	8 (21%)	58%
Neutropenia persistent on ICU	23 (27%)	15 (31%)	8 (21%)	65%
Graft-versus-host disease	14 (16%)	7 (15%)	7 (18%)	50%
Chronic immunosuppressive medication	24 (28%)	14 (29%)	10 (26%)	58%
Cytomegalovirus reactivation	6 (7%)	6 (13%)	0 (0%)	100%*
Probable aspergillosis	5 (6%)	2 (4%)	3 (8%)	40%
Indication for ICU admission				
Respiratory failure	30 (35%)	17 (35%)	13 (34%)	57%
Sepsis	30 (35%)	19 (40%)	11 (29%)	63%
Heart failure	13 (15%)	6 (13%)	7 (18%)	46%
Post resuscitation	4 (5%)	2 (4%)	2 (5%)	50%
Neurological	3 (3%)	1 (2%)	2 (5%)	33%
Other	6 (7%)	3 (6%)	3 (8%)	50%
Organ failure scores (mean ± SD)				
APACHE-II score	28.8 ± 7.9	31.6 ± 8.0	24.9 ± 6.5	‡
SOFA score on day 1	10.1 ± 3.4	8.5 ± 3.0	11.5 ± 3.1	‡
Highest SOFA score in first week	11.5 ± 3.8	9.4 ± 3.6	13.2 ± 3.1	‡
Any SOFA score ≥ 15 in first week	18 (21%)	12 (27%)	6 (16%)	67%
Invasive mechanical ventilation (within 24 h)	45 (52%)	34 (71%)	11 (29%)	76%‡
PaO2/FiO2-ratio (mmHg, mean ± SD)	212 ± 112	192 ± 103	237 ± 119	
Vasopressor/ inotropic therapy	45 (52%)	34 (71%)	11 (29%)	76%‡
Resuscitation	14 (16%)	12 (25%)	2 (5%)	86%*
Left ventricular ejection fraction ≤ 40%	20 (23%)	11 (23%)	9 (24%)	
Positive blood culture	30 (35%)	19 (40%)	11 (29%)	
ICU duration (no. of days, mean ± SD)	9.4 ± 13	7.2 ± 11	12.4 ± 16	

* $p < 0.05$.
† $p < 0.01$.
‡ $p < 0.001$.

Table 4
Multivariate analysis of factors that were significantly associated with mortality on univariate analysis, using trend in SOFA score.

Variables	OR	95% CI	Wald	p-value
Inotropic/vasopressor therapy	6.84	1.44–32.53	5.849	0.016
Invasive mechanical ventilation within 24 h	5.16	1.31–20.38	5.486	0.019
Trend in SOFA score				
Decreasing SOFA score	1.00			
No change in SOFA score	9.24	1.67–50.95	6.508	0.011
Increasing SOFA score	7.01	1.09–45.01	4.201	0.040
Resuscitation	2.08	0.25–17.35	0.458	0.498
Male sex	0.69	0.16–2.87	0.264	0.607
Age	0.98	0.93–1.03	0.450	0.502

OR, odds ratio. CI, confidence interval. -2 Log likelihood 67.28.

Sélection initiale des patients

ETAPES DE LA MALADIE CANCEREUSE	*INDICATIONS POUR LA REANIMATION*
• diagnostic	• +
• traitement à visée curative	• +
• traitement à visée de rémission	• + (ou réanimation d'attente ?) - **sauf traitements expérimentaux (phase I)**
• stade pivot	
• soins palliatifs	

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ORIGINAL REPORT

Outcome Analyses After the First Admission to an Intensive Care Unit in Patients With Advanced Cancer Referred to a Phase I Clinical Trials Program

Siqing Fu, David S. Hong, Aung Naing, Jennifer Wheler, Gerald Falchook, Sijin Wen, Adrienne Howard, Diane Barber, Joseph Nates, Kristen Price, and Razelle Kurzrock

J Clin Oncol 29:3547-3552. *© 2011*

2007-2010

Table 1. Patient Demographics and Clinical Characteristics

Demographic or Clinical Characteristic	No. of Patients (N = 212)	%
Age, years		
Median	52	
Range	18-84	
Sex		
Women	102	48
Men	110	52
Race distribution		
White	148	70
African American	35	16
Hispanic	21	10
Others	8	4
APACHE II score at the initial ICU admission		
Median	18	
Range	2-43	
Best ECOG performance status before the initial ICU admission		
0 or 1	137	64
2	63	30
≥ 3	12	6
Received status of phase I therapy before the initial ICU admission	166	78
Presence of advance directives before the initial ICU admission	87	41
Presence of out-of-hospital orders for DNR	8	4
Presence of inpatient orders for DNR at the initial ICU admission	19	9
Interventional modality		
Surgical intervention	51	24
Nonsurgical intervention	161	76
Noninvasive critical care	114	
Mechanical ventilation only	40	
Cardiopulmonary resuscitation	7	

Abbreviations: APACHE II , Acute Physiology and Chronic Health Evaluation II; DNR, do not resuscitate; ECOG, Eastern Cooperative Oncology Group; ICU, intensive care unit.

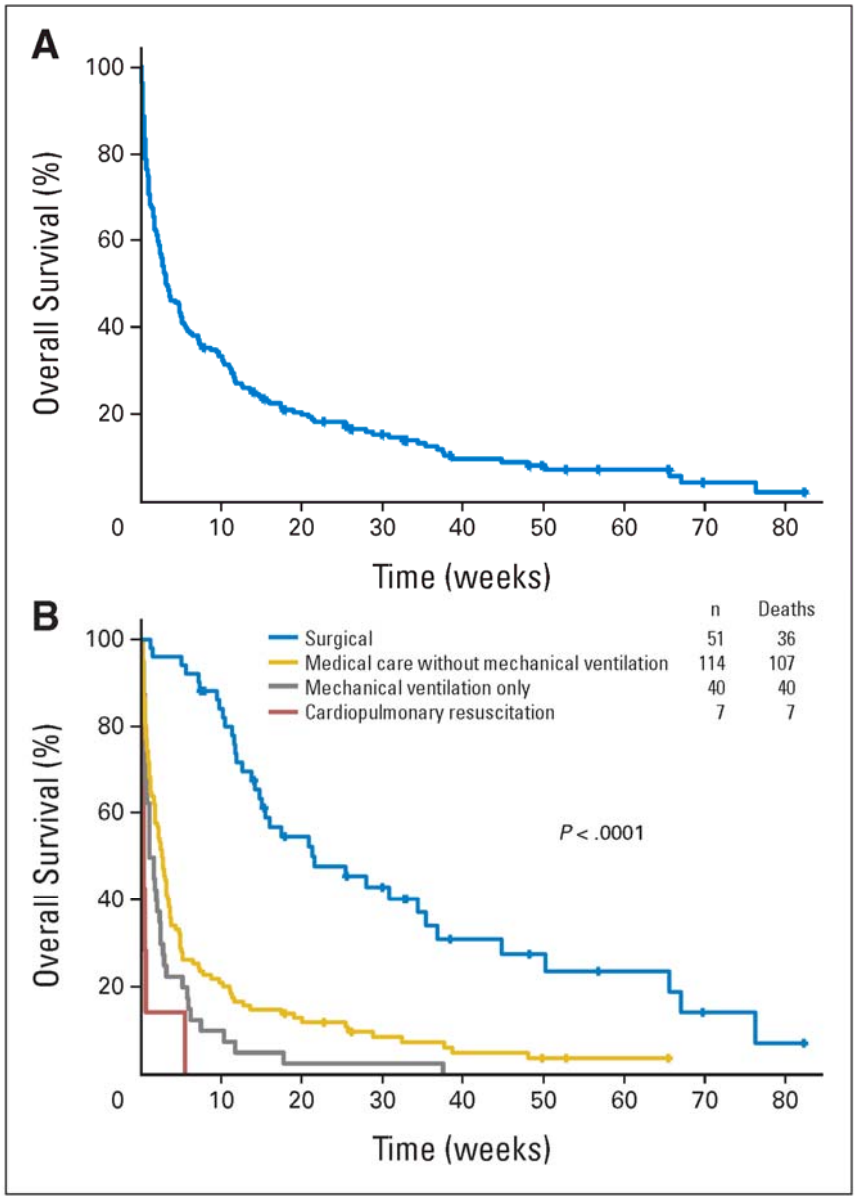

A
Overall Survival (%)
100
80
60
40
20
0
10
20
30
40
50
60
70
80
Time (weeks)
B
Overall Survival (%)
n
Deaths
Surgical 51 36
Medical care without mechanical ventilation 114 107
Mechanical ventilation only 40 40
Cardiopulmonary resuscitation 7 7
P < .0001
Time (weeks)

Table 4. Multivariate Analyses of Overall Survival by the Cox Regression Model

Potential Risk Factor for Worse Survival	Effect	SE	Hazard Ratio	*P*
Men	0.031	0.152	1.031	.840
Nonwhite	0.308	0.166	1.361	.064
Nonsurgical intervention	1.254	0.222	3.504	< .0001
Best ECOG performance (> 2)	0.585	0.320	1.795	.067
APACHE II score (≥ 18)	0.411	0.160	1.508	.010
Hypoalbuminemia	0.408	0.187	1.504	.029
Hyperbilirubinemia	0.075	0.205	1.078	.710
High lactate dehydrogenase	0.151	0.181	1.163	.400
Thrombocytosis	0.199	0.289	1.221	.490
Thromboembolism	0.225	0.163	1.252	.170
Intermediate- or high-grade histology	0.288	0.204	1.334	.160
Brain metastasis	0.131	0.193	1.140	.500
Liver metastasis	−0.119	0.162	0.888	.460
Phase I therapy not received	0.268	0.184	1.308	.140
Code status (full code)	0.434	0.277	1.543	.120

Abbreviations: APACHE II, Acute Physiology and Chronic Health Evaluation II; ECOG, Eastern Cooperative Oncology Group.

Impact of case volume on survival of septic shock in patients with malignancies*

Benjamin Zuber, MD; Thi-Chien Tran, MSc; Philippe Aegerter, MD, PhD; David Grimaldi, MD; Julien Charpentier, MD; Bertrand Guidet, MD; Jean-Paul Mira, MD, PhD; Frédéric Pène, MD, PhD; on behalf of the CUB-Réa Network

(Crit Care Med 2012; 40:55–62)

Table 1. Characteristics of patients and differences between survivors and nonsurvivors

Patient Characteristics	Patients (n = 3437)	Survivors (n = 1408)	Deceased (n = 2029)	Odds Ratio (95% Confidence Interval)	*p*
Age, years	62.2 ± 14.3	60.0 ± 14.6	63.6 ± 13.9	1.016 [1.011–1.021]	<.001
Gender, male	2242 (65.2%)	922 (65.4%)	1320 (65.1%)	1.030 [0.888–1.194]	.70
Type of admission, direct	1176 (34.2%)	490 (34.8%)	686 (33.8%)	0.958 [0.825–1.114]	.57
Admission category, medical	2720 (79.1%)	1080 (76.7%)	1640 (80.8%)	1.424 [1.186–1.710]	<.001
Type of malignancy					
Hematologic malignancy	1318 (38.3%)	502 (35.7%)	816 (40.2%)	1.373 [1.175–1.605]	<.001
Solid tumor	2119 (61.6%)	906 (64.3%)	1213 (59.8%)		
Neutropenia	871 (25.3%)	339 (24.1%)	532 (26.2%)	1.174 [0.995–1.385]	.06
Comorbidities					
Diabetes mellitus	170 (4.9%)	61 (4.3%)	109 (5.4%)	1.254 [0.909–1.017]	.02
Chronic pulmonary disease	319 (9.3%)	118 (8.4%)	201 (9.9%)	1.202 [0.947–1.525]	.13
Chronic heart failure	55 (1.6%)	20 (1.4%)	35 (1.7%)	1.218 [0.700–2.119]	.48
Chronic renal insufficiency	130 (3.8%)	51 (3.6%)	79 (3.9%)	1.077 [0.735–1.542]	.68
Cirrhosis	147 (4.2%)	45 (3.2%)	102 (5.0%)	1.603 [1.121–2.292]	.01
Simplified Acute Physiology Score II, points	63.4 ± 25.1	50.8 ± 17.2	72.1 ± 26.0	1.045 [1.040–1.049]	<.001
Site of infection					
Lung	1212 (49.3%)	457 (46.9%)	755 (50.8%)	1.250 [1.076–1.453]	.005
Abdominal	372 (15.1%)	163 (16.7%)	209 (14.1%)	0.828 [0.659–1.040]	.11
Urinary tract	171 (6.9%)	98 (10.1%)	73 (4.9%)	0.510 [0.370–0.703]	<.001
Others	197 (8.0%)	83 (8.5%)	114 (7.7%)	0.969 [0.713–1.318]	.22
Unknown	508 (20.6%)	173 (17.8%)	335 (22.5%)	1.472 [1.191–1.820]	<.001
Positive blood culture	1633 (47.5%)	729 (51.8%)	904 (44.6%)	0.750 [0.648–0.868]	<.001
Type of microorganisms					
Bacteria	1885 (55.9%)	839 (59.6%)	1046 (51.6%)	0.733 [0.635–0.847]	<.001
Gram-negative	1174 (34.2%)	512 (36.4%)	662 (32.6%)	0.841 [0.720–0.981]	.03
Gram-positive	859 (25.0%)	363 (25.8%)	496 (24.4%)	0.949 [0.775–1.163]	.11
Fungus	247 (7.2%)	82 (5.8%)	165 (8.1%)	1.526 [1.148–2.028]	.006
Parasite	36 (1.0%)	11 (0.8%)	25 (1.2%)	1.689 [0.808–3.531]	.16
Virus	54 (1.6%)	28 (2.0%)	26 (1.3%)	0.704 [0.403–1.229]	.21
Unknown	1430 (41.6%)	530 (37.6%)	900 (44.4%)	1.279 [1.105–1.481]	.002
Circulatory support	2961 (86.2%)	1092 (77.6%)	1869 (92.1%)	3.500 [2.826–4.334]	<.001
Invasive mechanical ventilation	2635 (76.7%)	779 (55.3%)	1856 (91.5%)	9.149 [7.504–11.153]	<.001
Renal replacement therapy	864 (25.1%)	186 (13.2%)	678 (33.4%)	3.527 [2.920–4.260]	<.001

Variables are reported as mean ± SD (continuous variables) or number and percentages (categorical variables), and are compared by hierarchical regression between survivors and nonsurvivors.

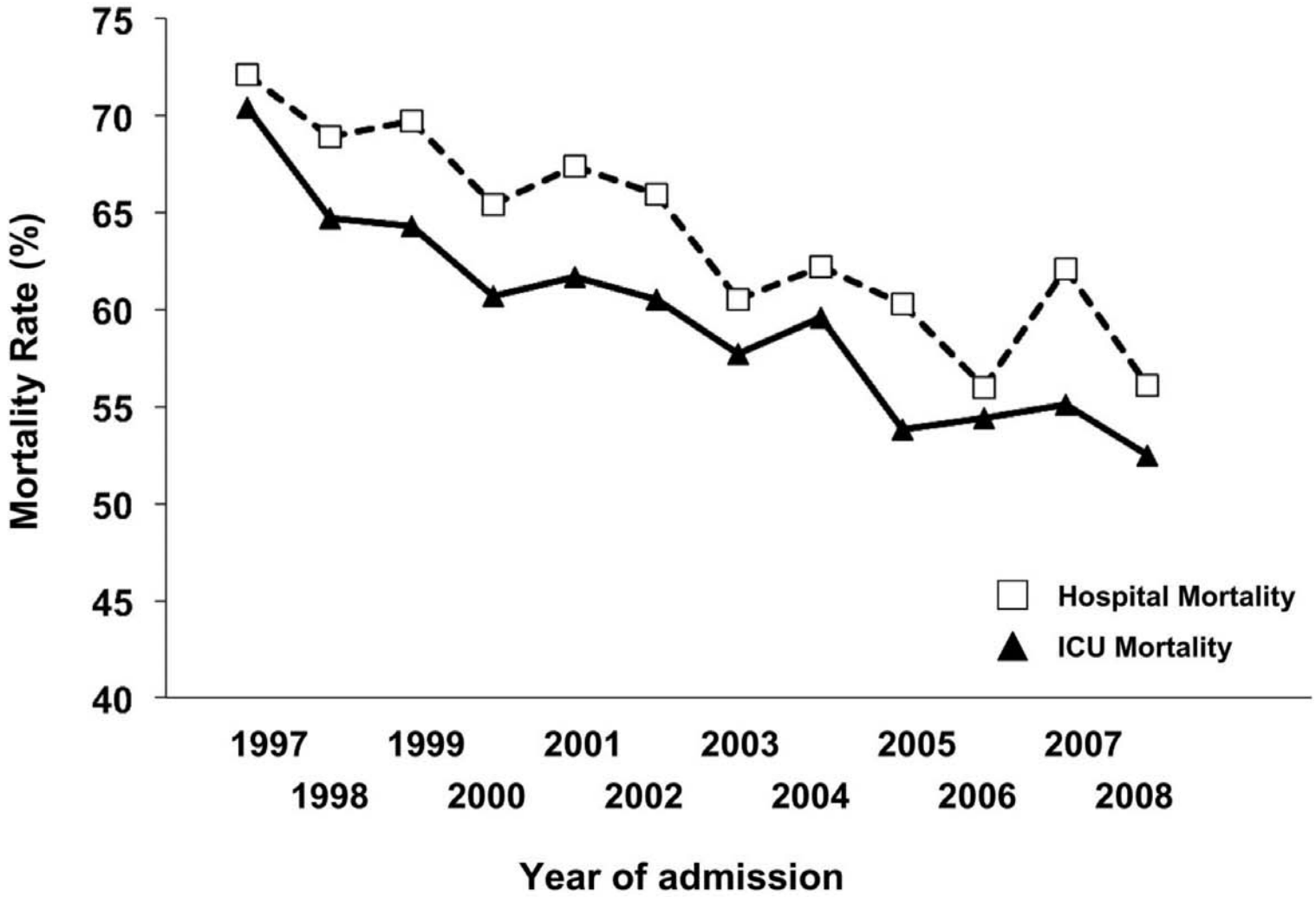


Figure 1. Intensive care unit (*ICU*) and hospital outcomes between 1997 and 2008. Chi-square test for trend over the study period for ICU and hospital mortality: $p < .001$

Low: < 5 cas/an; High : > 13 cas/an

Table 2. Characteristics of units and admissions within volume tertiles

Admission Characteristics	Low-Volume Tertile (n = 299)	Medium-Volume Tertile (n = 788)	High-Volume Tertile (n = 2350)	*p*
Annual number of ICU admissions	407.0 ± 142.8	467.6 ± 182	613.3 ± 235.9	<.001
Annual number of septic shock patients	19.6 ± 13.7	37.7 ± 17.7	76.9 ± 27.2	<.001
Annual number of septic shock cancer patients	2.8 ± 1.1	8.2 ± 2.3	23.6 ± 13.6	<.001
Age, years	64.0 ± 13.6	64.4 ± 13.5	61.24 ± 14.6	<.001
Age, >80	12.0	10.1	7.9	.005
Gender, male	68.2	67.6	64.0	.03
Comorbidities				
Diabetes mellitus	5.3	5.2	4.8	.58
Chronic pulmonary disease	8.0	9.0	9.3	.42
Chronic heart failure	0.3	1.2	1.8	.05
Chronic renal insufficiency	3.3	3.9	3.7	.92
Cirrhosis	4.6	4.8	4.0	.34
University hospital	56.9	64.3	92.7	<.001
Type of admission, direct	41.5	33.9	33.4	.06
Admission category, medical	78.3	78.8	79.4	.88
Specialized wards in hospital				
Hematology and oncology wards	42	52.6	75.5	<.001
Hematology or oncology ward	13.4	12.6	8.5	.08
No specialized ward	44.5	34.8	16.0	<.001
Type of malignancy				
Hematologic malignancy	28.4	28.4	42.9	<.001
Solid tumor	71.6	71.6	57.1	<.001
Neutropenia	21.7	23.9	26.3	.04
Simplified Acute Physiology Score II, points	63.4 ± 24.5	64.8 ± 24.7	63.0 ± 25.4	.21
Circulatory support	83.6	86.9	86.2	.36
Invasive mechanical ventilation	76.9	75.9	76.9	.84
Renal replacement therapy	19.4	25.5	26.2	.06
Length of ICU stay, days	12.7 ± 17.9	11.6 ± 15.1	12.1 ± 15.3	.99
ICU mortality	64.9	61.0	57.6	.05

ICU, intensive care unit. Variables are reported as mean ± SD (continuous variables) or percentages (categorical variables).

Table 3. Prognostic factors of intensive care unit mortality: results of the multivariate conditional logistic regression analysis after matching on the propensity score and on the year of admission

Variable	Odds Ratio (95% Confidence Interval)	*p*
Admission category, medical	1.73 [1.29–2.32]	<.001
Simplified Acute Physiology Score II (per point)	1.036 [1.03–1.04]	<.001
Invasive mechanical ventilation	5.52 [4.04–7.54]	<.001
Renal replacement therapy	1.74 [1.30–2.33]	.001
Fungal infection	1.95 [1.18–3.21]	.009
Microorganism unknown	1.64 [1.27–2.11]	<.001
Admission to medium- vs. low-volume unit	0.82 [0.59–1.14]	.78
Admission to high- vs. low-volume unit	0.63 [0.46–0.87]	.002

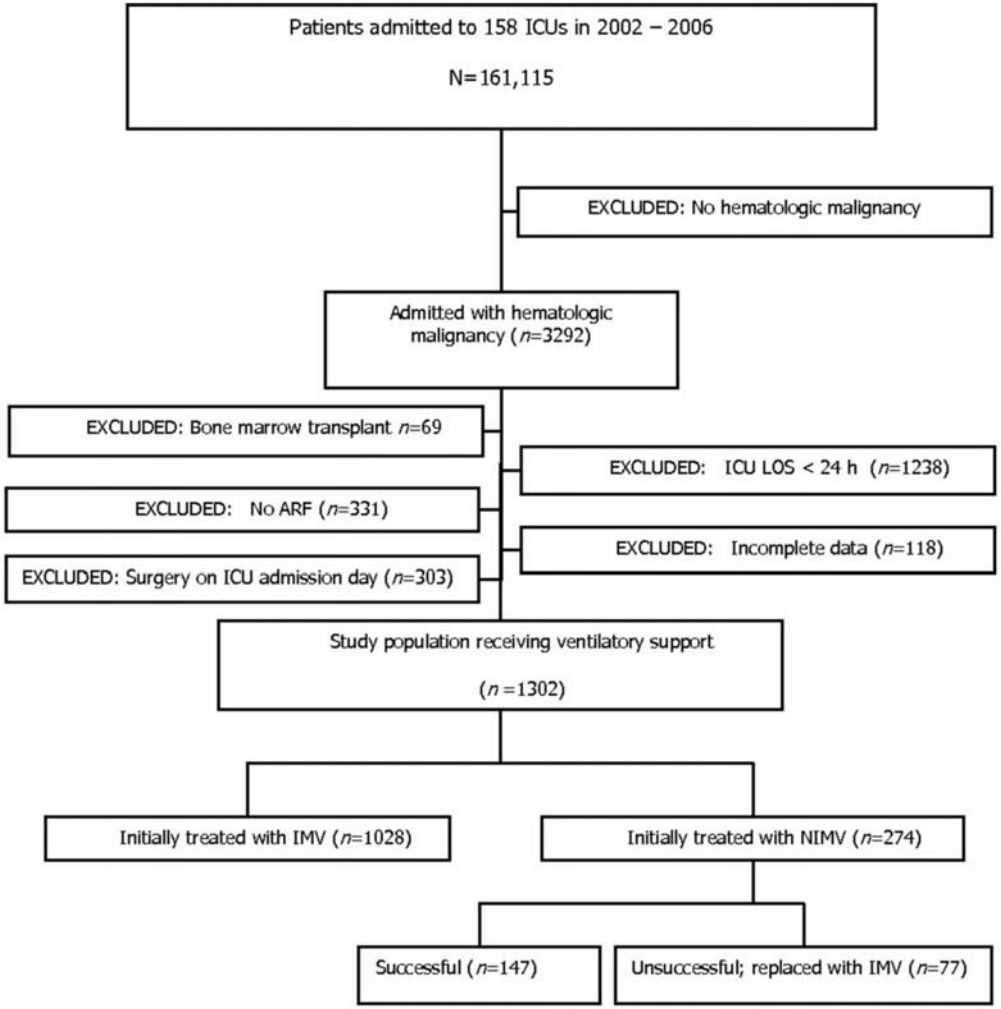
The goodness-of-fit of the model was checked by the Akaike information criterion.

Techniques de réanimation

Noninvasive versus invasive ventilation for acute respiratory failure in patients with hematologic malignancies: A 5-year multicenter observational survey*

Giuseppe R. Gristina, MD; Massimo Antonelli, MD; Giorgio Conti, MD; Alessia Ciarlone, MD; Silvia Rogante, MD; Carlotta Rossi, Stat Sci; Guido Bertolini, MD; on behalf of the GiViTI (Italian Group for the Evaluation of Interventions in Intensive Care Medicine)

(Crit Care Med 2011; 39:2232–2239)



ARF = acute respiratory failure; ICU = intensive care unit; IMV = invasive mechanical ventilation; LOS = length of stay

Figure 1. Study flow chart.

Table 1. Characteristics of the study population and the invasive mechanical ventilation and noninvasive mechanical ventilation subgroups

Population Characteristics	Total Population n = 1302	Invasive Mechanical Ventilation Group n = 1028	Noninvasive Mechanical Ventilation Group n = 274	*p*
Males–no. (%)	764 (59)	602 (59)	162 (59)	.95
Mean Age (SD), yrs	64 (15)	65 (15)	60 (16)	<.0001
Mean Simplified Acute Physiology Score II (SD)	56 (18)	58 (18)	49 (16)	<.0001
Median Glasgow Coma Score (interquartile range)	12 (8–15)	10 (7–15)	15 (14–15)	<.0001
Admission From Same Hospital–no. (%)	1053 (81)	807 (79)	246 (90)	<.0001
Clinical Conditions at Admission–no. (%)				
Neutropenia	149 (11.4)	103 (10.0)	46 (16.8)	.002
PaO_2/FIO_2				
≥200	459 (35.3)	384 (37.4)	75 (27.4)	<.0001
100–199	548 (42.1)	427 (41.5)	121 (44.2)	
<100	241 (18.5)	189 (18.4)	52 (20.0)	
Main Causes of Acute Respiratory Failure–no. (%)				
Atelectasis	49 (4)	41 (4)	8 (3)	.52
Infectious pneumonia	377 (29)	268 (26)	109 (40)	.0001
Inhalation pneumonia	25 (2)	24 (2)	1 (0.3)	.06
Pulmonary contusion	13 (1)	10 (1)	3 (1)	.07
Acute lung injury	167 (13)	110 (11)	57 (21)	<.0001
Adult respiratory distress syndrome	121 (9)	89 (9)	32 (12)	.13
Infections[a]–no. (%)				
Present on ICU admission	316 (41)	228 (39)	88 (50)	<.01
Onset during ICU stay	142 (18)	122 (21)	20 (11)	.01
Mean Duration of Care (SD), days				
Total hospital stay	30 (34)	30 (36)	30 (27)	.72
ICU stay	12 (15)	12 (16)	9 (10)	<.01
Duration of mechanical ventilation	—	11 (13)	4 (4)	<.0001
Mortality–no. (%)				
ICU				
All patients	617 (47)	511 (50)	106 (39)	<.01
Patients with acute lung injury or adult respiratory distress syndrome	171 of 288 (59)	119 of 199 (60)	52 of 89 (58)	.83
Hospital				
All patients	730 (56)	597 (58)	133 (49)	<.01
Patients with acute lung injury or adult respiratory distress syndrome	193 of 288 (67)	137 of 199 (69)	56 of 89 (63)	.32

ICU, intensive care unit.

[a]Information on infections is available only for 768 patients admitted during 2005–2006 (591 invasive mechanical ventilation group, 177 noninvasive mechanical ventilation group). None of the patients who had shock or stroke on admission received noninvasive mechanical ventilation group.

Table 2. Risk factors for mortality

Factor	Odds Ratio[a] Point Estimate (95% Confidence Limits)
Initial ventilatory support: Noninvasive Mechanical Ventilation vs. Invasive Mechanical Ventilation	0.73 (0.53–1.00)
Hematologic Malignancy: Admission Diagnosis vs. Comorbidity	1.34 (1.03–1.73)
Admission from Another Intensive Care Unit vs. Medical Ward	0.98 (0.60–1.60)
Admission from Emergency Department vs. Medical Ward	0.66 (0.49–0.88)
Admission from Surgical Ward vs. Medical Ward	0.62 (0.42–0.92)
Acute Lung Injury	1.69 (1.16–2.47)
Adult Respiratory Distress Syndrome	2.09 (1.32–3.31)
Stroke	2.29 (1.11–4.75)
Septic Shock	2.43 (1.61–3.65)
Other Type of Shock	2.16 (1.24–3.76)
Coagulopathy	1.59 (1.13–2.23)
Coma	1.68 (1.05–2.69)
Age	1.01 (1.01–1.02)
Simplified Acute Physiology Score II (each 4-point increase)	4.66 (2.98–7.28)
Propensity score	5.07 (1.40–18.32)

[a]Number of observations: 1302; Likelihood Ratio: chi-square: 195.39; Degrees of freedom: 15; $p <$ .0001; association of predicted probabilities and observed responses: Percent concordant: 73.1; Percent discordant: 26.7; Somers' D: 0.46; c statistic: 0.73.

Stroke, any form of shock, and coma refers to condition occurring after the study inclusion.

Table 3. Comparison of the successful and unsuccessful noninvasive mechanical ventilation groups

Group Characteristics	Successful NIMV (n = 147 [54%])	Unsuccessful NIMV (n = 127 [46%])	*p*
Males–no. (%)	83 (56)	79 (63)	.30
Mean Age (SD), yrs	60 (17)	60 (14)	.73
Mean Simplified Acute Physiology Score II (SD)	47 (17)	51 (15)	.07
Median Glasgow Coma Scale (interquartile range)	15 (14–15)	15 (14–15)	.95
ALI-ARDS at Admission–no. (%)			
ALI	21 (14)	36 (28)	<.01
ARDS	15 (10)	17 (13)	.41
Infections[a]–no. (%)			
Present at ICU admission	46 (31)	42 (33)	.60
Onset during ICU stay	1 (1)	19 (15)	<.0001
Organ Failure–no. (%)			
Present at ICU admission	141 (96)	121 (95)	.80
Onset during ICU stay	40 (27)	80 (63)	.00005
Mean Duration of Care (SD)–days			
Total hospital stay	29 ± 24	32 ± 30	.39
ICU stay	6 ± 5	14 ± 12	<.0001
Duration of NIMV	5 ± 4	3 ± 3	<.0001
Mortality–no. (%)			
ICU mortality			
All patients	28 (19)	78 (61)	<.0001
Patients with ALI or ARDS	13 of 36 (36)	39 of 53 (74)	.0005
Hospital mortality			
All patients	50 (34)	83 (65)	<.0001
Patients with ALI or ARDS	15 of 36 (42)	41 of 53 (77)	.001

ALI, acute lung injury; ARDS, adult respiratory distress syndrome; ICU, intensive care unit; NIMV, noninvasive mechanical ventilation.

[a]Information on infections was available only for 768 patients admitted during 2005–2006 (591 invasive mechanical ventilation group, 177 NIMV group).

Table 4. Comparison of invasive mechanical ventilation and unsuccessful noninvasive mechanical ventilation groups

Group Characteristics	Invasive Mechanical Ventilation (n = 1028 [79%])	Unsuccessful Noninvasive Mechanical Ventilation (n = 127 [46%])	*p*
Males–no. (%)	602 (59)	79 (63)	.44
Mean Age (SD), yrs	64 (15)	60 (14)	<.01
Mean Simplified Acute Physiology Score II (SD)	58 (18)	51 (15)	<.0001
Median Glasgow Coma Score (interquartile range)	10 (7–15)	15 (14–15)	<.0001
Organ Failure at Admission	1002 (97)	121 (95)	.16
ALI–ARDS at Admission–no. (%)			
ALI	110 (11)	36 (28)	<.0001
ARDS	89 (9)	17 (13)	.08
Infections–no. (%)[a]			
Present at ICU admission	228 (39)	42 (52)	.02
Onset during ICU stay	122 (21)	19 (23)	.56
Organ Failure–no. (%)			
Present at ICU admission	1002 (97)	121 (95)	.16
Onset during ICU stay	434 (42)	80 (63)	<.0001
Mean Duration of Care (SD)–days			
Total hospital stay	29 (36)	32 (30)	.44
ICU stay	12 (16)	14 (12)	.27
Duration of mechanical ventilation	11 (13)	10 (11)	.63
Mortality–no. (%)			
ICU mortality			
All patients	511 (50)	78 (61)	.01
Patients with ALI or ARDS	119 of 199 (60)	39 of 53 (74)	.07
Hospital mortality			
All patients	597 (58)	83 (65)	.12
Patients with ALI or ARDS	137 of 199 (69)	41 of 53 (77)	.23
Mortality after ICU stay	88 (17)	5 (10)	.22

ALI, acute lung injury; ARDS, adult respiratory distress syndrome; ICU, intensive care unit.

[a]Information on infections was available only for 768 patients admitted during 2005–2006 (591 invasive mechanical ventilation group, 177 noninvasive mechanical ventilation group).

Urgences oncologiques

VOLUME 29 · NUMBER 19 · JULY 1 2011

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Why Do Patients With Cancer Visit Emergency Departments? Results of a 2008 Population Study in North Carolina

Deborah K. Mayer, Debbie Travers, Annah Wyss, Ashley Leak, and Anna Waller

J Clin Oncol 29:2683-2688. *© 2011*

Table 2. 2008 NC DETECT Categorized Chief Complaints for Visits (N = 37,760)

Chief Complaint	No.	Overall Rank
Pain	9,000	1
Chest pain	2,429	
Abdominal pain	3,044	
Back pain	900	
Extremity	888	
Other	1,971	
Respiratory	5,856	2
Respiratory distress/SOB	4,711	
Cough	591	
Hemoptysis	120	
Fever/possible pneumonia	282	
COPD	137	
Other	229	
GI	3,280	3
Nausea/vomiting	2,543	
Diarrhea	568	
Constipation	187	
Bowel obstruction	55	
Other	243	
Malaise	2,577	4
Neurologic	2,218	5
Bleeding	2,164	6
Fever	2,000	7
Injury	1,930	8
Falls	1,262	
Lacerations	81	
Bites	38	
MVA	133	
Other	447	
Cancer	1,724	9
Syncope	1,071	10
Blood clots	115	11
Allergic reaction	111	12
Psychiatric	99	13

Abbreviations: COPD, chronic obstructive pulmonary disease; MVA, motor vehicle accident; NC DETECT, North Carolina Disease Event Tracking and Epidemiologic Collection Tool; SOB, shortness of breath.

Table 3. Chief Complaint by Cancer Type*

Chief Complaint Category	Lung (n = 9,297)		Breast (n = 2,103)		Colon (n = 2,597)		Prostate (n = 1,654)		All Other Cancers (n = 16,973)	
	No.	%	No.	%	No.	%	No.	%	No.	%
Pain	2,114	22.7	673	32	873	33.6	576	34.8	4,892	28.8
Respiratory	2,967	32	268	12.7	218	8.4	198	12	2,309	13.6
GI	727	7.8	263	12.5	386	14.9	118	7.1	1,832	10.8
Malaise	787	8.5	144	6.9	210	8.1	121	7.3	1,367	8.1
Neurologic	635	6.8	78	3.7	107	4.1	110	6.7	1,310	7.7
Bleeding	466	5	104	4.9	299	11.5	152	9.2	1,171	6.9
Fever	379	4.1	156	7.4	134	5.2	62	3.8	1,292	7.6
Injury	435	4.7	179	8.5	123	4.7	158	9.6	1,061	6.3
Syncope	265	2.9	69	3.3	77	3	74	4.5	596	3.5
Blood clots	36	0.4	10	0.5	8	0.3	4	0.2	57	0.3
Allergic reaction	16	0.2	19	0.9	6	0.2	6	0.4	64	0.4
Psychiatric	21	0.2	13	0.6	6	0.2	5	0.3	55	0.3
Cancer	449	4.8	127	6	150	5.8	70	4.2	967	5.7
Missing chief complaint	1,011		840		—		640		3,325	

*Not all individuals had a chief complaint recorded, and the chief complaint categories are approximate and not exhaustive because they are based on the text searches. Therefore, the chief complaints by cancer type are approximate.

La fièvre chez les patients se présentant aux urgences d'un hôpital cancérologique : place de la neutropénie fébrile

Febrile neutropenia at the emergency department of a cancer hospital

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Rev Med Brux 2011 ; 32 : 74-82

Tableau 1 **: Caractéristiques des patients.**

	Neutropénies fébriles	Non neutropéniques	P
Nombre de patients	76	237	
Nombre d'épisodes fébriles	88	320	
Médiane d'âge (années)	56,5 (18-83)	58 (17-93)	
Sexe :			
• Hommes	22 (28,9 %)	91 (38,4 %)	
• Femmes	54 (71,1 %)	146 (61,6 %)	
Type de tumeur :			
• Tumeurs solides :	54 (71,1 %)	185 (78,1 %)	0,21
- Poumon	5 (9,3 %)	23 (12,4 %)	
- Sein	32 (59,3 %)	73 (39,5 %)	
- Gynécologique	1 (1,9 %)	10 (5,4 %)	
- Digestive	3 (5,6 %)	36 (19,5 %)	
- Urologique	1 (1,9 %)	22 (11,9 %)	
- ORL	2 (3,7 %)	3 (1,6 %)	
- Autres	10 (18,5 %)	18 (9,7 %)	
• Tumeurs hématologiques :	22 (28,9 %)	52 (21,9 %)	
- Leucémies	8 (36,4 %)	21 (40,4 %)	
- Lymphomes	11 (50 %)	21 (40,4 %)	
- Autres	3 (13,6 %)	10 (19,2 %)	
Extension des tumeurs solides :		*	
• Localisée	34 (63 %)	75 (41,9 %)	0,007
• Métastatique	20 (37 %)	104 (58,1 %)	
Phase néoplasique :		**	
• Diagnostic	2 (2,6 %)	3 (1,3 %)	
• Traitement	68 (89,5 %)	167 (71,1 %)	
• Pause thérapeutique	1 (1,3 %)	30 (12,8 %)	
• Rémission	2 (2,6 %)	29 (12,3 %)	
• Soins palliatifs	3 (3,9 %)	6 (2,6 %)	

* 4 patients pour lesquels nous n'avons pas ces données. Le pourcentage est donc calculé sur un total de 233.
** 2 patients pour lesquels nous n'avons pas ces données. Le pourcentage est donc calculé sur un total de 235.

Tableau 2 **: Caractéristiques de la consultation.**

	Neutropénies fébriles (N = 88)	Non neutropéniques (N = 320)	P
Motif de consultation :			
• Fièvre plainte principale	74 (84,1 %)	227 (70,9 %)	0,013
• Fièvre plainte associée	14 (15,9 %)	93 (29,1 %)	
Médiane température (°C)*	38,1 (35,6-40)	37,9 (34-40,2)	
Température ≥ 38,5 °C	29 (35,4 %)	83 (30,3 %)	
Frissons	33 (60 %)	117 (59,4 %)	
Plaintes focalisées à l'anamnèse	78 (88,6 %)	280 (87,5 %)	0,77
Signes à l'examen physique	65 (73,9 %)	244 (76,3 %)	0,64
Ni plainte focalisée ni signe physique	5 (5,7 %)	19 (5,9 %)	0,92
Chimiothérapie en cours	77 (87,5 %)	181 (56,9 %)	

* Les patients avec une température < 38 °C sont des patients dont la température pendant la consultation était < 38 °C mais qui avaient présenté de la fièvre à domicile.

Tableau 5 **: Diagnostic en salle d'urgences.**

	Neutropénies fébriles (N = 88)	Non neutropéniques (N = 320)
Infection avec foyer :	54 (61,4 %)	214 (67,3 %)
• Infection respiratoire	12 (22,2 %)	66 (30,8 %)
• Infection cutanée	4 (7,4 %)	29 (13,6 %)
• Infection ORL ou bucco-dentaire	21 (38,9 %)	17 (7,9 %)
• Infection urinaire	8 (14,8 %)	30 (14 %)
• Infection digestive	5 (9,3 %)	32 (15 %)
• Infection DAVI	1 (1,9 %)	4 (1,9 %)
• Infection articulaire	0 (0 %)	2 (0,9 %)
• Péricardite	0 (0 %)	1 (0,5 %)
• Collection surinfectée	0 (0 %)	7 (3,3 %)
• Virose	3 (5,6 %)	26 (12,1 %)
Infection sans foyer	33 (37,5 %)	0 (0 %)
Cause non infectieuse	1 (1,1 %)	22 (6,9 %)
Fièvre d'origine indéterminée	0 (0 %)	82 (25,8 %)

DAVI = dispositif d'accès intraveineux.
Il y a 2 consultations pour les non neutropéniques pour lesquelles nous n'avons pas de données concernant le diagnostic en salle d'urgences. Le pourcentage est donc calculé sur un total de 318 consultations.

Tableau 7 **: Evolution des patients.**

	Neutropénies fébriles (N = 88)	Non neutropéniques (N = 320)	P
Destination :			< 0,0005
• Domicile	8 (9,1 %)	82 (25,6 %)	
• Hospitalisation :			
- Salle	76 (86,4 %)	212 (66,3 %)	
- Soins intensifs	4 (4,5 %)	11 (3,4 %)	
• Sortie exigée	0 (0 %)	12 (3,8 %)	
• Transfert	0 (0 %)	3 (0,9 %)	
Médiane durée d'hospitalisation	6 (1-90)	7 (1-92)	
Evolution en fin d'hospitalisation :			
• Domicile	73 (92,4 %)	196 (87,9 %)	
• Décès	6 (7,6 %)	18 (8,1 %)	
• Transfert	0 (0 %)	9 (4 %)	

Nous n'avons pas de données concernant l'évolution en fin d'hospitalisation d'un des patients neutropéniques. Le pourcentage est donc calculé sur un total de 79 hospitalisations.

Tableau 8 **: Diagnostic en fin d'hospitalisation pour les neutropénies fébriles (N = 80).**

Infection :	58 (72,5 %)		
	Microbiologiquement documentée 31 (53,4 %)	Hémoculture + 9 (29 %)	Cliniquement documentée 27 (46,6 %)
• Respiratoire	8 (25,8 %)	2 (22,2 %)	6 (22,2 %)
• Digestive	0 (0 %)	0 (0 %)	2 (7,4 %)
• Cutanée	2 (6,5 %)	0 (0 %)	2 (7,4 %)
• ORL ou bucco-dentaire	1 (3,2 %)	1 (11,1 %)	12 (44,4 %)
• Urinaire	11 (35,5 %)	0 (0 %)	1 (3,7 %)
• DAVI	2 (6,5 %)	1 (11,1 %)	0 (0 %)
• Bactériémie isolée	4 (12,9 %)	4 (44,4 %)	0 (0 %)
• Collection surinfectée	0 (0 %)	0 (0 %)	0 (0 %)
• Péricardite	0 (0 %)	0 (0 %)	0 (0 %)
• Mixte	2 (6,5 %)	1 (11,1 %)	0 (0 %)
• Virose	1 (3,2 %)	0 (0 %)	4 (14,8 %)
Cause non infectieuse	0 (0 %)		
Fièvre d'origine indéterminée	22 (27,5 %)		

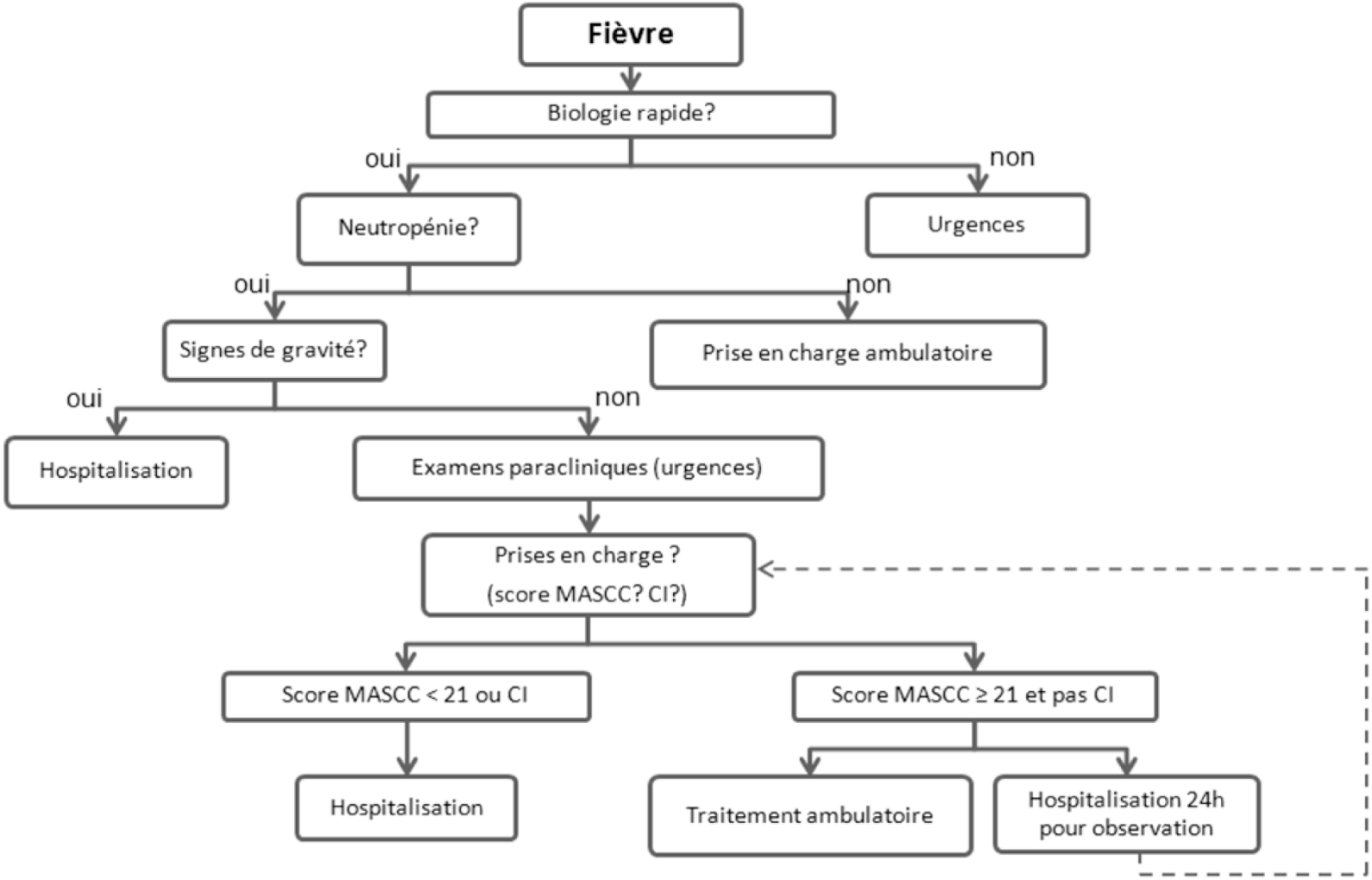


Figure **: Algorithme proposé pour la prise en charge du patient ambulatoire avec une neutropénie fébrile. CI : contre-indications.**

Toxicités graves des traitements cytotoxiques

VOLUME 29 · NUMBER 25 · SEPTEMBER 1 2011

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

High Incidence of Thromboembolic Events in Patients Treated With Cisplatin-Based Chemotherapy: A Large Retrospective Analysis

Russell A. Moore, Nelly Adel, Elyn Riedel, Manisha Bhutani, Darren R. Feldman, Nour Elise Tabbara, Gerald Soff, Rekha Parameswaran, and Hani Hassoun

J Clin Oncol 29:3466-3473. *© 2011*

Table 2. Overall Incidence of Thromboembolic Events (N = 932)

Thromboembolic Event	No. of Patients	%
Thrombosis	169	18.1
Types of thromboses (n = 169)		
DVT alone	84	49.7
PE alone	43	25.4
DVT + PE	23	13.6
Arterial thrombosis alone	14	8.3
DVT + arterial thrombosis	5	3.0
Subtypes of DVTs (n = 112)		
Proximal lower extremity	22	19.6
Proximal lower and distal lower extremity	18	16.1
Proximal lower extremity and central*	5	4.4
Proximal lower extremity and central* and distal lower extremity	1	0.9
Proximal upper extremity	2	1.8
Proximal upper and distal upper extremity	3	2.7
Proximal upper and internal jugular vein and distal upper extremity	4	3.6
Internal jugular vein	5	4.4
Internal jugular vein and distal upper extremity	1	0.9
Central*	27	24.1
Distal lower extremity	20	17.9
Distal lower and distal upper extremity	1	0.9
Distal upper extremity	3	2.7
Subtypes of arterial events (n = 19)		
Central†	6	31.6
Myocardial infarction	2	10.5
Cerebrovascular accident	10	52.6
Transient ischemic attack	1	5.3
Symptomatic or incidental event (n = 169)		
Symptomatic	95	56.2
Incidental	74	43.8

Abbreviations: DVT, deep venous thrombosis; PE, pulmonary embolus.

*Central venous thromboses sites include brachiocephalic vein (n = 1), gonadal vein (n = 7), hepatic vein (n = 1), inferior vena cava (n = 5), pelvic vein (n = 4), portal vein (n = 6), renal vein (n = 4), splenic vein (n = 3), superior mesenteric vein (n = 6), and superior vena cava (n = 3).

†Central arterial thromboses sites include aortic arch (n = 1), infrarenal aorta (n = 3), internal carotid (n = 1), splenic artery (n = 1), and superior mesenteric artery (n = 1).

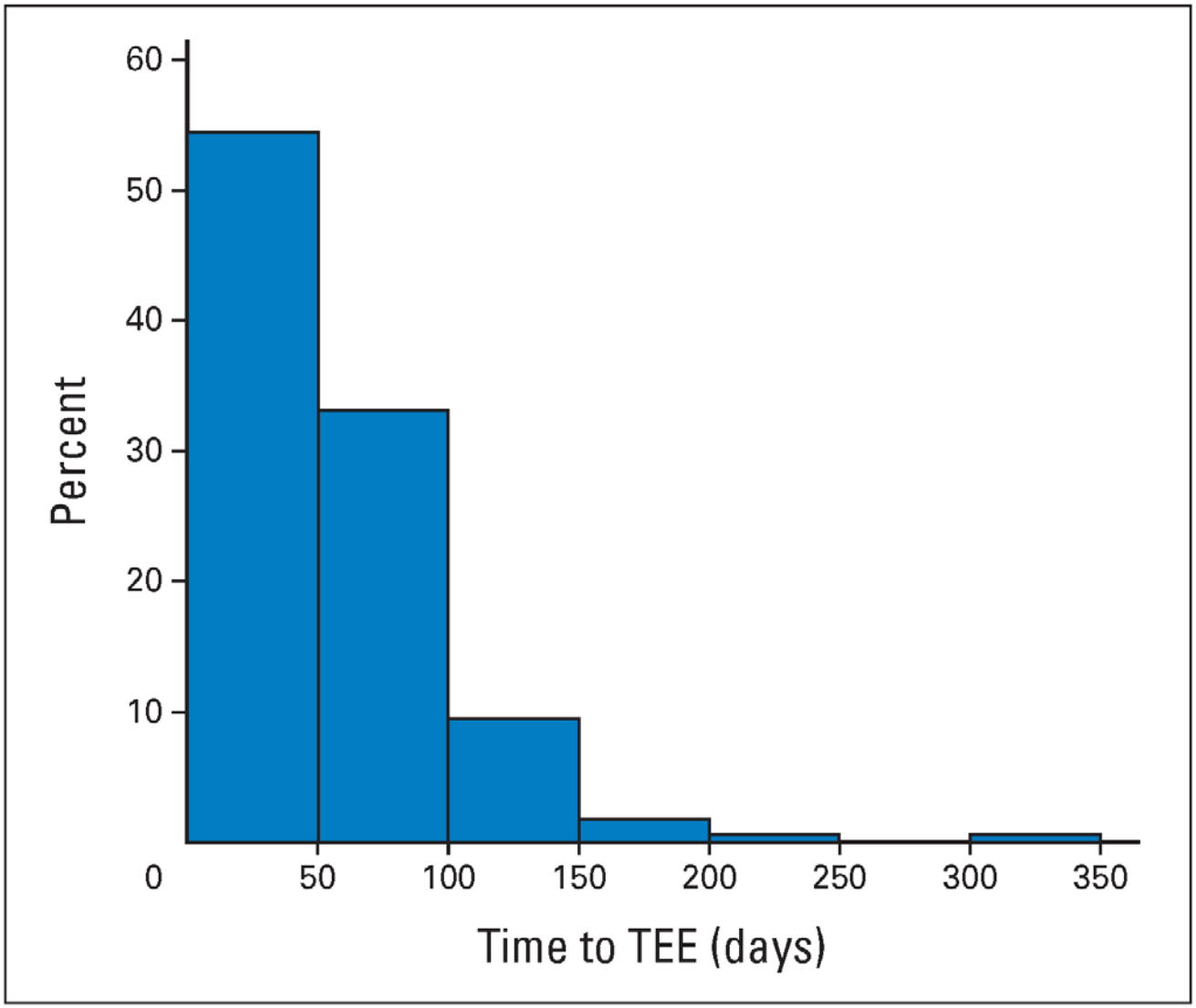


Fig 1. Time to thrombosis in patients who developed a thromboembolic event (TEE).

Table 4. Thromboembolic Rate According to Underlying Cancer and Treatment Regimen

Cancer Type and Treatment Regimen	No. of Patients*	%
Cancer diagnosis		
Colorectal/anal/small bowel	5/13	38.5
Pancreatic	29/79	36.7
Gallbladder/ampullary	3/10	30.0
Gastric/GE junction	31/114	27.2
Cholangiocarcinoma	5/18	27.8
Ovarian	12/57	21.0
Bladder	6/33	18.2
Sarcoma	2/11	18.2
Germ cell/seminoma	7/39	18.0
Esophageal	8/46	17.4
Endometrial	3/22	13.6
Melanoma	9/69	13.0
Head and neck	12/94	12.8
Lung	24/204	11.8
Cervical/uterine/vulvar	4/39	10.3
Hematologic malignancies	1/11	9.1
Neuroendocrine/carcinoid	0/11	0
Other	8/62	12.9
Chemotherapy regimens		
Cisplatin + docetaxel + fluorouracil/leucovorin + bevacizumab	11/16	68.8
Cisplatin + docetaxel + fluorouracil/leucovorin	7/11	63.6
Cisplatin IP + paclitaxel IV/IP + bevacizumab	6/13	46.2
Cisplatin + docetaxel + fluorouracil	5/17	29.4
Cisplatin + gemcitabine	38/134	28.4
Cisplatin + paclitaxel + ifosfamide	2/11	18.2
Cisplatin + irinotecan	15/89	16.9
Cisplatin + pemetrexed	6/43	14
Cisplatin + etoposide	10/80	12.5
Cisplatin + fluorouracil + epirubicin	2/16	12.5
Cisplatin + vinblastine + temozolomide	7/57	12.3
Cisplatin + pemetrexed + bevacizumab	4/33	12.1
Cisplatin + radiation	9/94	9.6
Cisplatin IP + paclitaxel IV/IP	3/33	9.1
Other cisplatin-based regimens	44/285	15.4

Abbreviations: GE, gastroesophageal; IP, intraperitoneal; IV, intravenous.
*Ratios represent No. of patients with TEE over the total No. of patients in respective categories.

Toxicités graves des thérapies ciblées

VOLUME 29 · NUMBER 6 · FEBRUARY 20 2011

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Congestive Heart Failure Risk in Patients With Breast Cancer Treated With Bevacizumab

Toni K. Choueiri, Erica L. Mayer, Youjin Je, Jonathan E. Rosenberg, Paul L. Nguyen, Georges R. Azzi, Joaquim Bellmunt, Harold J. Burstein, and Fabio A.B. Schutz

J Clin Oncol 29:632-638. *© 2011*

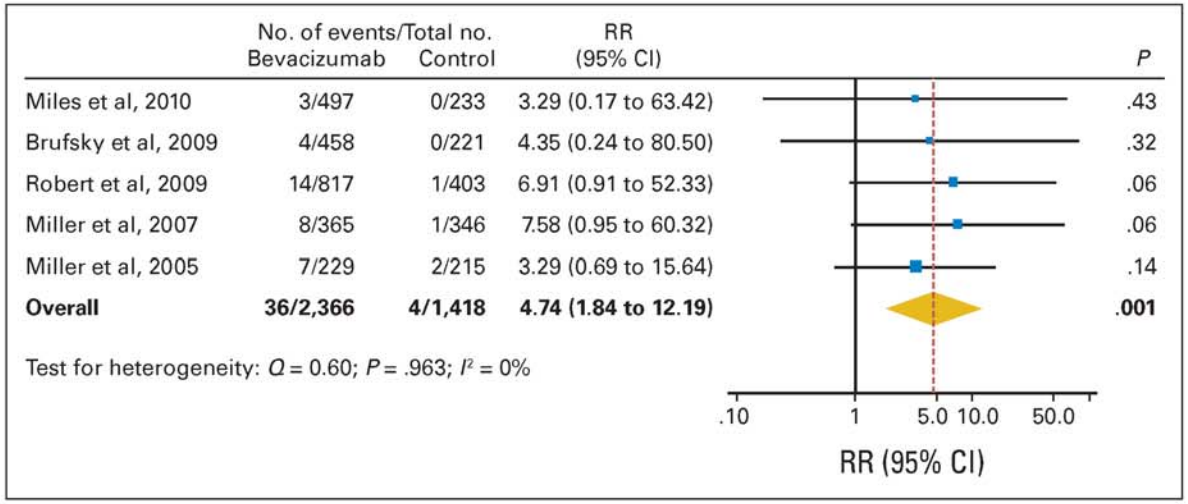


Fig 2. Relative risk of high-grade congestive heart failure events associated with bevacizumab versus control among patients with breast cancer. RR, relative risk.

Treatment-Related Mortality With Bevacizumab in Cancer Patients

A Meta-analysis

Vishal Ranpura, MD
Sanjaykumar Hapani, MD
Shenhong Wu, MD, PhD

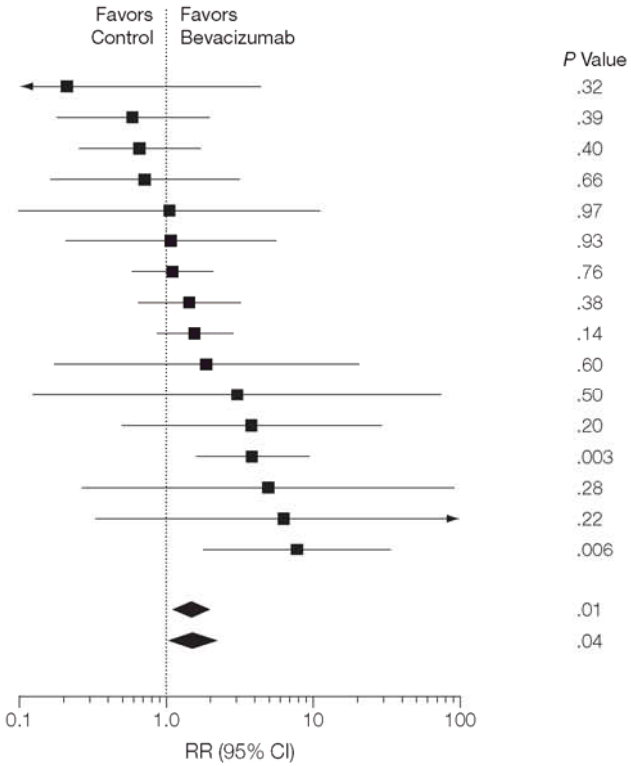
Context Fatal adverse events (FAEs) have been reported in cancer patients treated with the widely used angiogenesis inhibitor bevacizumab in combination with chemotherapy. Currently, the role of bevacizumab in treatment-related mortality is not clear.

JAMA. 2011;305(5):487-494

Figure 2. Relative Risk (RR) of Fatal Adverse Events Associated With Bevacizumab vs Control

Source	No. of Events/Total No. of Patients: Bevacizumab	Control	RR (95% CI)	*P* Value
Miller et al,[27] 2005	0/215	2/229	0.21 (0.01-4.41)	.32
Kabbinavar et al,[19] 2005	4/100	7/104	0.59 (0.18-1.97)	.39
Miles et al,[26] 2010	10/499	7/231	0.66 (0.26-1.71)	.40
Rini et al,[30] 2008	3/366	4/349	0.72 (0.16-3.17)	.66
Kabbinavar,[21] 2003	2/67	1/35	1.05 (0.10-11.13)	.97
Herbst et al,[25] 2007	4/78	2/42	1.08 (0.21-5.64)	.93
Reck et al,[24] 2009	29/659	13/327	1.11 (0.58-2.10)	.76
Saltz et al,[20] 2008	14/675	10/694	1.44 (0.64-3.22)	.38
Van Cutsem et al,[31] 2009	26/296	16/287	1.58 (0.86-2.87)	.14
Miller et al,[28] 2007	2/365	1/346	1.90 (0.17-20.81)	.60
Hurwitz et al,[18] 2004	1/393	0/397	3.03 (0.12-74.17)	.50
Johnson et al,[23] 2004	8/67	1/32	3.82 (0.50-29.26)	.20
Kelly et al,[10] 2010	23/524	6/526	3.85 (1.58-9.37)	.003
Giantonio et al,[22] 2007	4/521	0/285	4.93 (0.27-91.26)	.28
Escudier et al,[29] 2007	3/337	0/304	6.32 (0.33-121.79)	.22
Sandler et al,[11] 2006	15/427	2/440	7.73 (1.78-33.59)	.006
Overall				
Fixed-effects model	148/5589	72/4628	1.46 (1.09-1.94)	.01
Random-effects model	148/5589	72/4628	1.49 (1.02-2.17)	.04

Test for heterogeneity: Q = 20.441; $P = .16$; $I^2 = 26.62$



Overall summary risk of fatal adverse events was calculated using fixed- and random-effects models. For studies with 0 events in a cell, 0.5 was added to the cell frequency before calculation of the relative risk. CI indicates confidence interval.

original article

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Bevacizumab increases the risk of arterial ischemia: a large study in cancer patients with a focus on different subgroup outcomes

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Source	Bevacizumab No. of Events	Bevacizumab Total No.	Control No. of Events	Control Total No.	Weight, %	RR (95% CI)	*P* value
Allegra et al, 2009	25	1326	18	1321	21.22	1.38 (0.76-2.52)	.29
Moehler et al, 2009	1	29	0	17	0.77	1.80 (0.08-41.87)	.71
Reck et al, 2009	18	659	15	327	16.96	0.60 (0.30-1.17)	.10
Van Cutsem et al, 2009	9	296	8	287	8.70	1.09 (0.43-2.79)	.86
Miles et al, 2008	0	497	1	233	0.75	0.16 (0.01-3.83)	.26
Price et al, 2008	16	315	2	156	3.61	3.96 (0.92-17.02)	.06
Rini et al, 2008	10	366	1	349	1.82	9.54 (1.23-74.10)	.03
Saltz et al, 2008	12	694	7	675	8.94	1.67 (0.66-4.21)	.28
Escudier et al, 2007	5	337	2	304	2.88	2.26 (0.44-11.54)	.33
Giantonio et al, 2007	4	521	1	285	1.60	2.19 (0.25-19.48)	.48
Herbst et al, 2007	0	39	1	42	0.76	0.36 (0.02-8.54)	.53
Karrison et al, 2007	1	53	0	55	0.76	3.11 (0.13-74.72)	.48
Kindler et al, 2007	6	277	5	263	5.55	1.14 (0.35-3.69)	.83
Miller et al, 2007	7	365	0	346	0.94	14.22 (0.82-248.1)	.07
Sandler et al, 2006	8	420	4	427	5.39	2.03 (0.62-6.70)	.24
Kabbinavar et al, 2005	10	100	5	104	7.12	2.08 (0.74-5.87)	.17
Miller et al, 2005	1	229	1	215	1.00	0.94 (0.06-14.92)	.96
Hurwitz et al, 2004	20	501	5	396	8.13	3.16 (1.20-8.35)	.02
Johnson et al, 2004	3	66	1	32	1.55	1.45 (0.16-13.44)	.74
Kabbinavar et al, 2003	3	67	1	35	1.55	1.57 (0.17-14.52)	.69
Overall (fixed-effects model)	159	7157	78	5869		**1.46 (1.11-1.93)**	**.007**

Test for heterogeneity: Q=21.486, p=.311, I-squared=11.6%

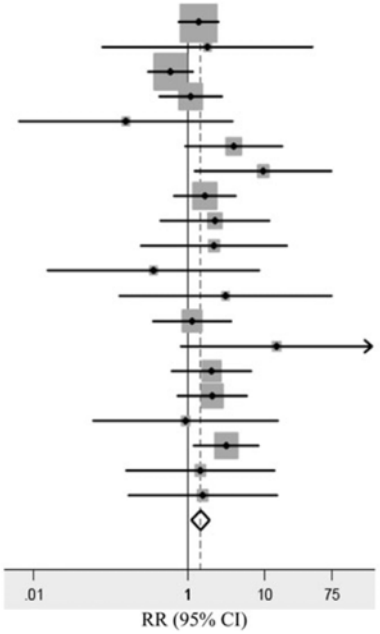

Figure 2. Relative risk (RR) of Arterial Thromboembolism Associated With Bevacizumab versus Control

VOLUME 29 · NUMBER 13 · MAY 1 2011

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Venous Thromboembolic Events With Chemotherapy Plus Bevacizumab: A Pooled Analysis of Patients in Randomized Phase II and III Studies

Herbert I. Hurwitz, Leonard B. Saltz, Eric Van Cutsem, James Cassidy, Jonas Wiedemann, Florin Sirzén, Gary H. Lyman, and Ulrich-Peter Rohr

J Clin Oncol 29:1757-1764. *© 2011*

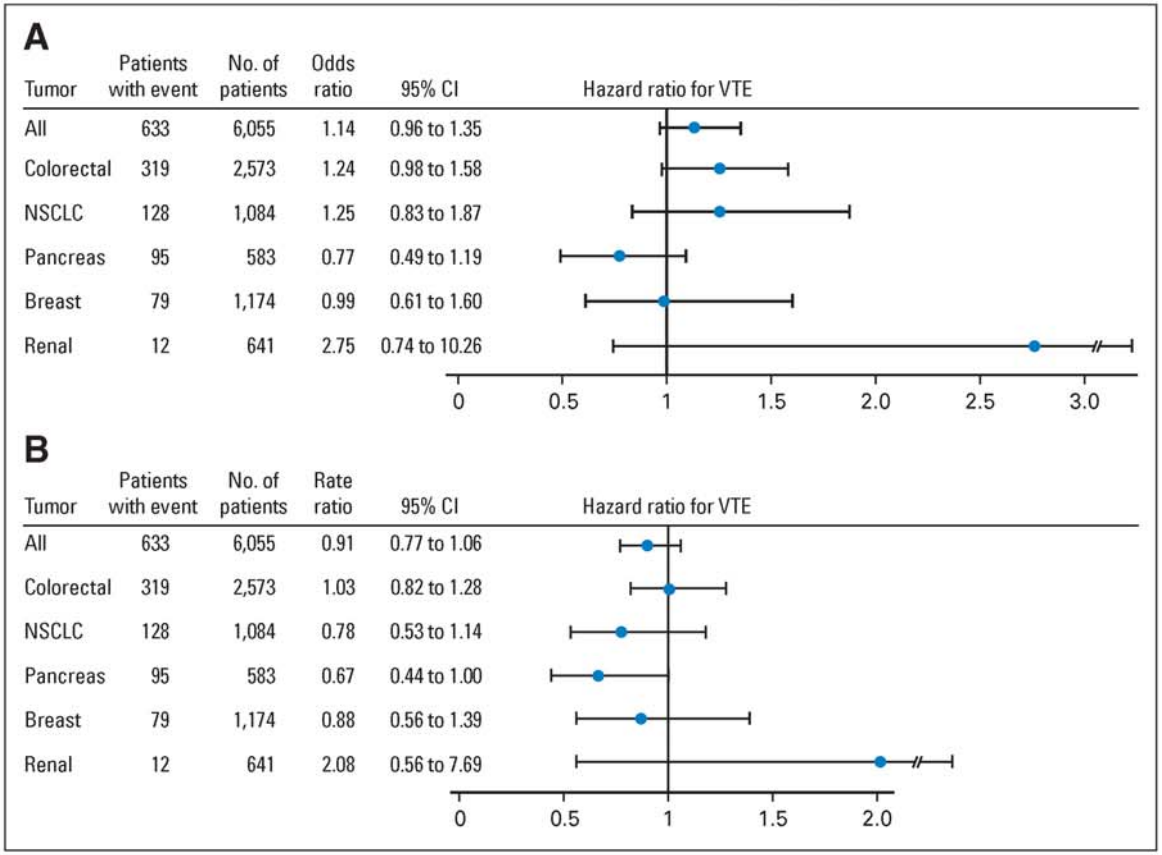

Fig 2. Forest plots of the risk of all-grade venous thromboembolisms (VTEs) according to (A) unadjusted incidence and (B) exposure-adjusted incidence. NSCLC, non–small-cell lung cancer.

VOLUME 29 · NUMBER 25 · SEPTEMBER 1 2011

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Incidence and Risk of Congestive Heart Failure in Patients With Renal and Nonrenal Cell Carcinoma Treated With Sunitinib

Christopher J. Richards, Youjin Je, Fabio A.B. Schutz, Daniel Y.C. Heng, Susan M. Dallabrida, Javid J. Moslehi, and Toni K. Choueiri

J Clin Oncol 29:3450-3456. *© 2011*

	Sunitinib		Control			
	No. of Events/ Total No.	Incidence, % (95% CI)	No. of Events/ Total No.	Incidence, % (95% CI)	Relative Risk (95% CI)	*P*
All-grade						
Demetri (2006)	22/202	10.9 (7.3 to 16.0)	3/102	2.9 (1.0 to 8.7)	3.70 (1.14 to 12.1)	.03
Motzer (2009)	78/375	20.8 (17.0 to 25.2)	44/360	12.2 (9.2 to 16.0)	1.70 (1.21 to 2.39)	.002
Overall	100/577	15.5 (8.0 to 27.9)	47/462	6.7 (1.6 to 24.1)	1.81 (1.30 to 2.50)	< .001
Heterogeneity test, Q		8.71		6.30	1.53	
P		.003		.012	.216	
I^2		88.5%		84.1%	34.8%	
High-grade						
Demetri (2006)	3/202	1.5 (0.5 to 4.5)	0/102	0.0	3.55 (0.19 to 68.1)	.40
Motzer (2009)	13/375	3.5 (2.0 to 5.9)	4/360	1.1 (0.4 to 2.9)	3.12 (1.03 to 9.48)	.05
Barrios (2010)	1/238	0.4 (0.1 to 2.9)	0/244	0.0	3.08 (0.13 to 75.1)	.49
Raymond (2011)	2/86	2.3 (0.6 to 8.8)	0/85	0.0	4.94 (0.24 to 101.5)	.30
Overall	19/901	2.6 (1.7 to 4.0)	4/791	0.8 (0.4 to 1.9)	3.30 (1.29 to 8.45)	.01
Heterogeneity test, Q		5.48		1.54	0.08	
P		.140		.672	.994	
I^2		45.3%		0.0%	0.0%	

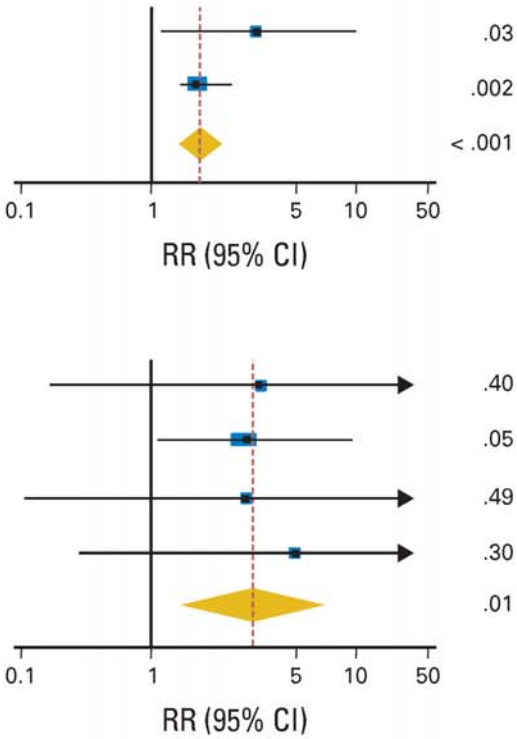

Fig 2. Forest plot of relative risk (RR) of all- and high-grade congestive heart failure (CHF) events associated with sunitinib versus control. RR of all- and high-grade CHF was calculated using fixed-effects model; size of squares is directly proportional to amount of data in each trial.

Aplasie médullaire compliquée

original article

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Impact of neutropenia on the outcomes of critically ill patients with cancer: a matched case–control study

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Received 7 August 2010; accepted 4 November 2010

Table 1. Main patients' characteristics and comparisons between neutropenic and non-neutropenic patients[a]

Variables	All patients (N = 188)	Neutropenic (n = 94, 50%)	Non-neutropenic (n = 94, 50%)	P value[b]
Age (years)	50 (32–65)	50 (30–63)	50 (34–67)	0.274
Male gender, n (%)	115 (61)	59 (63)	56 (60)	0.765
Type of admission, n (%)				
Medical	171 (91)	86 (92)	85 (90)	0.999
Emergency surgical	17 (9)	8 (8)	9 (10)	
Hospital days before ICU admission	3 (1–11)	4 (1–15)	2 (0–7)	0.003
SAPS II—first day of ICU (points)	61.6 ± 16.5	61.9 ± 16.2	61.2 ± 16.9	0.752
SOFA score—first day of ICU (points)	11 (8–14)	12 (8–15)	11 (8–13)	0.267
Type of cancer, n (%)				
Solid tumor	60 (32)	30 (32)	30 (32)	–
Hematological malignancy	128 (68)	64 (68)	64 (68)	
Cancer status, n (%)				
Controlled/remission	35 (19)	2 (2)	33 (35)	<0.001
Uncontrolled, newly diagnosed	99 (53)	62 (66)	37 (39)	
Uncontrolled, recurrence/progression	54 (29)	30 (32)	24 (26)	
Anticancer treatments before ICU admission, n (%)				
Chemotherapy	134 (71)	78 (83)	56 (60)	0.001
Radiation therapy	44 (23)	21 (22)	23 (24)	0.863
Weight loss > 10%, n (%)	28 (17)	12 (14)	16 (19)	0.428
Performance status, n (%)				
0–1	89 (47)	53 (56)	36 (38)	0.019
2–4	99 (53)	41 (44)	58 (62)	
Comorbidity score (ACE-27), n (%)				
None–moderate	174 (93)	88 (94)	86 (92)	0.781
Severe	14 (7)	6 (6)	8 (8)	
Mechanical ventilation on ICU admission, n (%)	162 (86)	81 (86)	81 (86)	–
Vasopressors on ICU admission, n (%)	130 (69)	65 (69)	65 (69)	–
Dialysis on ICU admission, n (%)	49 (26)	22 (23)	27 (29)	0.506
Severe sepsis/septic shock on ICU admission, n (%)	160 (85)	88 (94)	72 (77)	0.002
Outcome data (days)				
ICU LOS	7 (3–13)	7 (3–14)	7 (3–13)	0.432
Hospital LOS	19 (8–30)	22 (10–36)	16 (7–27)	0.066
End-of-life decisions, n (%)	67 (36)	34 (36)	33 (36)	0.999
ICU mortality, n (%)	124 (66)	62 (66)	62 (66)	0.999
Hospital mortality, n (%)	142 (76)	69 (73)	73 (78)	0.611
Six-month mortality, n (%)	163 (87)	81 (86)	82 (88)	0.849

[a]Results expressed as mean ± SD, median (25%–75% IQR), n (%).

[b]Reported P values refer to comparisons between neutropenic and non-neutropenic patients.

ICU, intensive care unit; SAPS, Simplified Acute Physiology Score; SOFA, Sequential Organ Failure Assessment; ACE-27, Adult Comorbidity Evaluation-27; LOS, length of stay; SD, standard deviation, IQR, interquartile range.

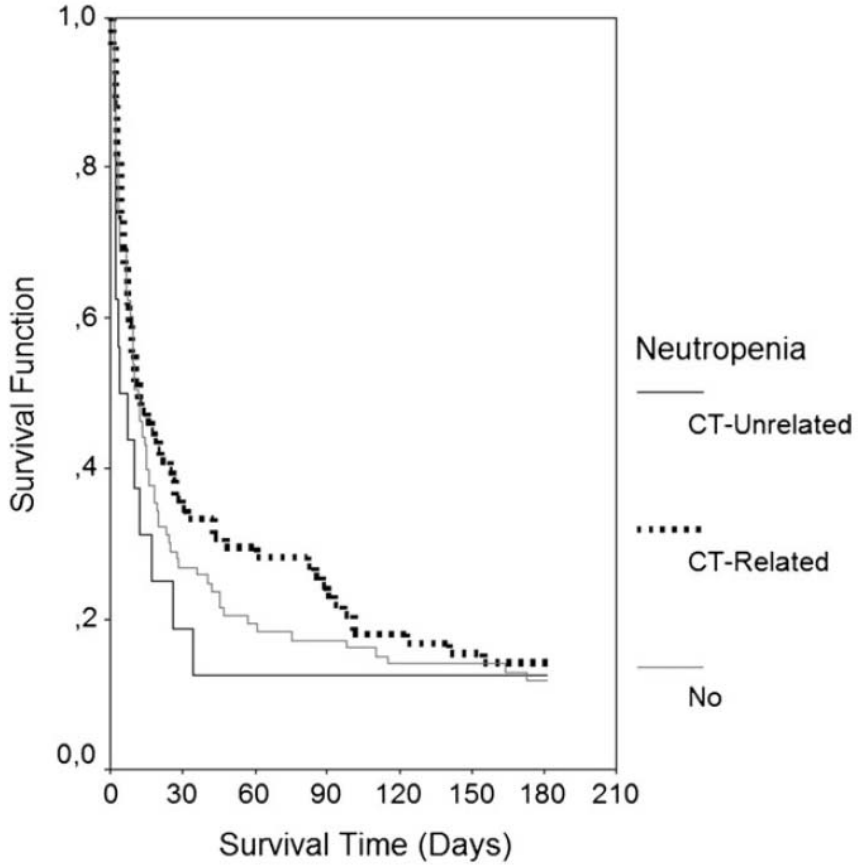

Figure 1. Six-month survival curves for patients with CT-related (dotted black line) and CT-unrelated neutropenia (solid black line) and non-neutropenic (solid gray line) patients (log-rank test: 2.000; $P = 0.368$). Patients were matched for the type of cancer, age, need for vasopressors and mechanical ventilation, SAPS II and SOFA scores. CT, chemotherapy; SAPS, Simplified Acute Physiology Score; SOFA, Sequential Organ Failure Assessment.

Table 3. Conditional multivariate analysis of factors associated with hospital mortality (n = 188)

Variables	Model containing SOFA score		Model containing SAPS II	
	Odds ratio (95% CI)	*P* value	Odds ratio (95% CI)	*P* value
Type of admission				
Emergency surgical	1.00		1.00	
Medical	7.06 (1.68–29.63)	0.008	7.82 (1.75–34.88)	0.007
Hospital days before ICU admission (ln+0.5)	1.49 (1.09–2.04)	0.012	1.50 (1.08–2.07)	0.014
Neutropenia at ICU admission				
No	1.00		1.00	
Chemotherapy related	0.52 (0.20–1.38)	0.188	0.64 (0.24–1.75)	0.388
Chemotherapy unrelated	1.00 (0.14–7.10)	0.998	0.66 (0.08–5.30)	0.695
SAPS II—first day of ICU (points)	–	–	1.06 (1.03–1.09)	<0.001
SOFA score—first day of ICU (points)	1.19 (1.06–1.33)	0.003	–	–
Performance status				
0–1	1.00		1.00	
2–4	2.84 (1.26–6.40)	0.012	2.43 (1.03–5.70)	0.042
Chemotherapy before ICU admission	0.30 (0.08–1.14)	0.077	0.19 (0.05–0.78)	0.021
Severe sepsis/septic shock on ICU admission	3.53 (1.20–10.33)	0.022	4.00 (1.37–11.73)	0.011

Model containing the SOFA score: area under receiver operating characteristic curve = 0.81 (95% CI 0.73–0.88); Hosmer–Lemeshow goodness-of-fit (χ^2 = 4.844; P = 0.774); model containing the SAPS II: area under receiver operating characteristic curve = 0.85 (95% CI 0.78–0.91); Hosmer–Lemeshow goodness-of-fit (χ^2 = 6.335; P = 0.0.610).

SOFA, Sequential Organ Failure Assessment; SAPS, Simplified Acute Physiology Score; CI, confidence interval; ICU, intensive care unit.

Toxicité biphosphonates

British Journal of Cancer (2011) 105, 881 – 883
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www.bjcancer.com

Short Communication

Intravenous bisphosphonate therapy and atrial fibrillation/flutter risk in cancer patients: a nationwide cohort study

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Table 1 Cancer patients exposed to intravenous bisphosphonates and non-exposed cancer patients matched by cancer type, presence of distant metastasis at diagnosis, age, and gender and the risk of subsequent atrial fibrillation/flutter, Denmark 2000–2008

	Cancer patients exposed to intravenous bisphosphonates	**Matched cancer patients with no intravenous bisphosphonate exposure**
Number	3981	7906
Females, *N* (%)	2416 (61)	4804 (61)
Males, *N* (%)	1565 (39)	3102 (39)
Median age at cancer diagnosis (years)	65.5	65.5
Cancer types, N (%)		
Breast cancer	1543 (39)	3083 (39)
Prostate cancer	597 (15)	1194 (15)
Lung cancer	231 (5.8)	462 (5.8)
Kidney cancers	33 (0.8)	65 (0.8)
Multiple myeloma	1021 (26)	2008 (25)
Other cancers	556 (14)	1094 (14)
Metastasis at cancer diagnosis, N (%)		
Distant metastasis	916 (23)	1811 (23)
No distant metastasis	1633 (41)	3256 (41)
Unknown	1432 (36)	2839 (36)
Comorbidities, N (%)		
Cardiovascular disease	826 (21)	1725 (22)
Diabetes	224 (5.6)	426 (5.4)
Pulmonary disease	248 (6.2)	571 (7.2)
Hyperthyroidism	89 (2.2)	181 (2.3)
Alcoholism	92 (2.3)	162 (2.1)
Renal failure	140 (3.5)	470 (5.9)
Treatments in the year before index, N (%)		
Surgery (any kind)	2841 (71)	4031 (51)
Chemotherapy	2201 (55)	1709 (22)
Radiation therapy	1052 (26)	952 (12)
Atrial fibrillation/flutter		
Number (%)	128 (3.2)	192 (2.4)
Crude hazard ratio	1.8 (95% CI: 1.4, 2.4)	1.0 (Reference)
Adjusted hazard ratio[a]	1.7 (95% CI: 1.2, 2.4)	1.0 (Reference)

Abbreviation: CI, Confidence interval. [a]Adjusted for the comorbidities and treatments listed in the table.

Complications respiratoires

Eur Respir J 2012; 39: 648–653
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Dexamethasone in patients with acute lung injury from acute monocytic leukaemia

É. Azoulay*, E. Canet*, E. Raffoux#, E. Lengliné#, V. Lemiale*, F. Vincent*, A. de Labarthe#, A. Seguin*, N. Boissel#, H. Dombret# and B. Schlemmer*

TABLE 1 Patient characteristics at intensive care unit (ICU) admission

Characteristic	Historical controls	Dexamethasone group	p-value
Subjects n	20	20	
Demographics			
Age yrs	50 (36–65)	42 (33–60)	0.38
Male	13 (65)	13 (65)	0.99
Respiratory symptoms at presentation			
Respiratory rate breaths·min^{-1}	33 (29–40)	31 (22–36)	0.11
Diffuse crackles at lung auscultation	11 (55)	10 (50)	0.88
P_{a,O_2} on room air at admission mmHg	44 (38–53)	44 (37–57)	0.67
Lower S_{p,O_2} on room air %	80 (55–92)	77 (60–95)	0.44
Time from dyspnoea onset days	2 (1–5)	3 (0–19)	0.50
Clinical presentation of AML FAB-M5 at ICU admission			
Headaches	4 (20)	4 (20)	0.99
Tonsil infiltration	7 (35)	6 (30)	0.45
Spleen and liver enlargement	14 (70)	17 (85)	0.14
Gingival infiltration	10 (50)	10 (50)	0.99
DIC	4 (20)	14 (70)	0.003
Temperature °C	38.4 (37.7–39.0)	38.7 (37.7–39.5)	0.66
Leukocyte count 1×10^9 cells·L^{-1}	98 (15–183)	149 (100–204)	0.08
Circulating blast cell count 1×10^9 cells·L^{-1}	100 (65–169)	106 (83–180)	0.87
Platelet count 1×10^9 cells·L^{-1}	32 (19–68)	52 (32–70)	0.20
Haemoglobin level g·dL^{-1}	9.2 (7.2–19)	8.9 (7.1–9.8)	0.48
Radiographic findings			0.14
Bilateral alveolar opacities	14 (60)	7 (35)	
Bilateral interstitial opacities	5 (25)	10 (50)	
Focal opacity	1 (5)	3 (15)	
Pleural effusion	3 (15)	5 (25)	

Data are presented as median (interquartile range) or n (%), unless otherwise stated. P_{a,O_2}: partial pressure of oxygen in arterial blood; S_{p,O_2}: arterial oxygen saturation measured by pulse oximetry; AML FAB-M5: acute monocytic leukaemia French–American–British subtype 5; DIC: diffuse intravascular coagulation.

TABLE 2 Intensive care unit (ICU) management in historical control patients and in patients given dexamethasone

	Historical controls	Dexamethasone group	p-value
Subjects n	20	20	
SAPS II at ICU admission	44 (35–51)	39 (29–50)	0.54
Time from hospital to ICU admission days	1 (0–3)	0.5 (0–3)	0.85
Bronchoscopy and BAL performed	20 (100)	5 (20)	0.01
Deterioration of respiratory status after chemotherapy initiation			
None	0 (0)	4 (20)	0.07
Increased oxygen needs	4 (20)	6 (30)	
Invasive mechanical ventilation	15 (75)	10 (50)	
Use of NIV	11 (55)	3 (15)	0.01
Need for NIV or invasive MV	15 (75)	11 (55)	0.18
Cardiac arrest after chemotherapy initiation	3 (15)	1 (5)	0.29
ICU-acquired events			
Invasive fungal infection	3 (15)	1 (5)	0.37
Hospital-acquired infection	7 (35)	2 (10)	0.05
Septic shock	11 (55)	6 (30)	0.10
Length of ICU stay days	8 (3.5–18.5)	7 (3.5–14)	0.67
ICU mortality	10 (50)	4 (20)	0.04

Data are presented as median (interquartile range) or n (%), unless otherwise stated. SAPS II: Simplified Acute Physiology Score version II; BAL: bronchoalveolar lavage; NIV: noninvasive mechanical ventilation; MV: mechanical ventilation.

TABLE 3 Factors independently associated with intensive care unit (ICU) mortality by multivariable analysis

	Odds ratio	95% confidence interval	p-value
Respiratory rate at admission per point	1.22	1.01–1.48	0.036
Dexamethasone (*versus* historical controls)	0.12	0.01–1.23	0.054
Time from hospital to ICU admission per day	1.17	0.97–1.40	0.098
SAPS II score at ICU admission per point	1.06	0.96–1.17	0.216

SAPS II: Simplified Acute Physiology Score version II.

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ORIGINAL

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Fiberoptic bronchoscopy under noninvasive ventilation and propofol target-controlled infusion in hypoxemic patients

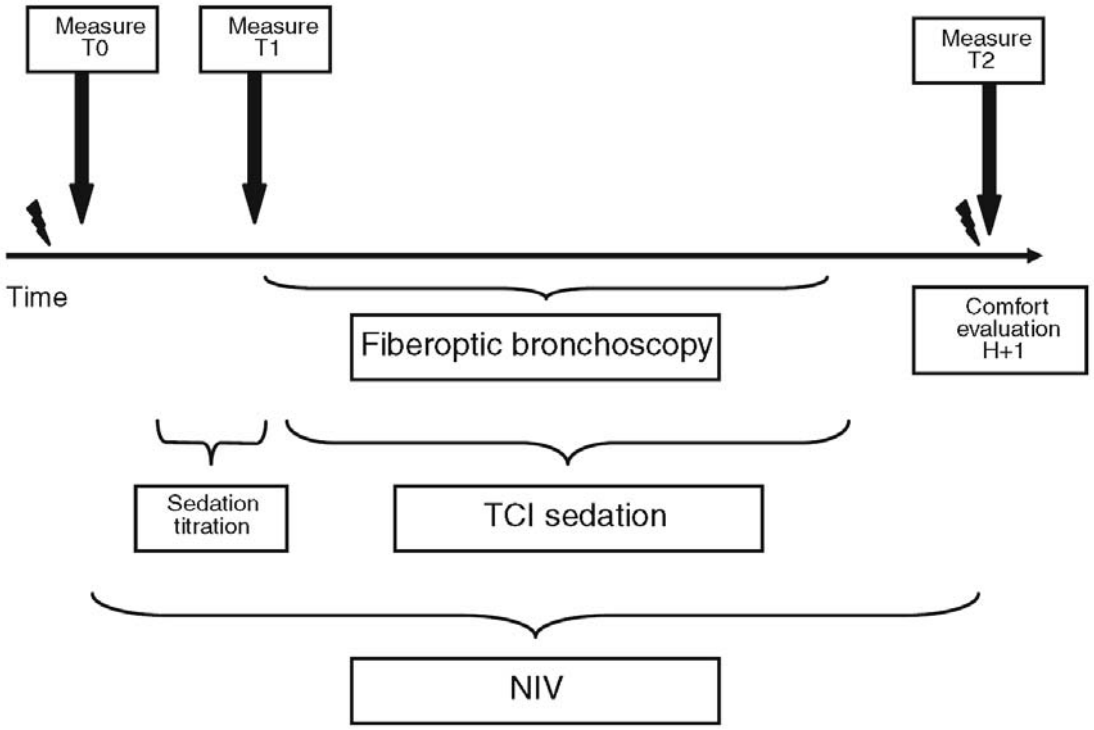

Fig. 1 Design of procedure. Clinical parameters (respiratory rate, heart rate, and blood pressure) were recorded at the following times: before sedation (*T0*), during sedation but before bronchoscopy (*T1*), and 1 h after bronchoscopy (*T2*). Electrocardiography and pulse oximetry (SpO_2) were continuously monitored throughout the procedure. Arterial blood samples were collected 15 min before and at 1 h after the FOB-BAL. Arterial blood gases under NIV. *FOB-BAL* fiberoptic bronchoscopy–bronchoalveolar lavage, *NIV* noninvasive ventilation, *TCI* target-controlled infusion

Fig. 2 Patient undergoing FOB during NIV. FOB was performed by introducing the bronchoscope into the nose through the T-seal adapter and the full-face mask as shown in the picture. The mask had been secured with headstraps. The face mask was connected to a mechanical ventilator (not shown). We used a full-face mask (King Systems®) allowing us to match the nose to the T-seal adapter aperture

Table 2 Physiological parameters over the study period ($n = 24$)

	T0	T1	T2
pH	7.44 ± 0.5 [7.42–7.47]	Not done	7.44 ± 0.06 [7.41–7.46] $p = 0.4$ vs T0
PaO_2/FiO_2	181 ± 50 [160.1–202.5]	Not done	211 ± 103 [167.3–255.1] $p = 0.95$ vs T0
PCO_2 (kPa)	5.07 ± 0.96 [4.66–5.48]	Not done	5.02 ± 1 [4.6–5.45] $p = 0.1$ vs T0
SaO_2 (%)	95.25 ± 3.45 [93.7–96.7]	98.41 ± 1.41 [97.8–99] $p = 0.109$ vs T0	96.37 ± 3.65 [95.8–99] $p = 0.113$ vs T0
Respiratory rate (bpm)	25.5 ± 6.7 [22.6–28.3]	23.4 ± 7.2 [20.3–26.4] $p = 0.22$ vs T0	24.6 ± 6.7 [21.8–27.5] $p = 0.05$ vs T0
Heart rate (bpm)	93 ± 16 [86.2–99.7]	88.9 ± 17 [81.7–96.1] $p < 0.001$* vs T0	93.62 ± 19 [85.6–101.6] $p = 0.28$ vs T0
Mean arterial blood pressure (mmHg)	91.8 ± 17.8 [84.3–99.3]	84.35 ± 15.5 [77.8–90.9] $p = 0.02$* vs T0	81.95 ± 14.7 [75.7–88.1] $p = 0.29$ vs T0

Data are presented as mean ± SD [95% CI]
T0 before sedation and before FOB-BAL, *T1* under sedation and NIV before FOB-BAL, *T2* 1 h after FOB

Table 3 Tolerance of bronchoscopy evaluated by the VAS

VAS	Comfort	Pain	Memories	Undergo it again
4	0	0	0	0
3	0	0	0	0
2	3	2	3	6
1	20	22	21	17
0	1	0	0	1

Number of patients in each category ($n = 24$). One hour after FOB, the patients self-evaluated their comfort using a verbal analogous scale (VAS) that included four closed questions, with only one answer allowed for each question:

1. How did you feel about the fibroscopy? Very uncomfortable (4), uncomfortable (3), comfortable (2), very comfortable (1), or I don't know (0)
2. How would you describe any pain felt during the fibroscopy? Very intense (4), intense (3), moderated (2), no pain (1), or I don't know (0)
3. What do you remember about the fibroscopy? Remember all the details (4), remember the majority of details (3), remember some details (2), no memory (1), or I don't know (0)
4. If it was necessary, would you agree to undergo fibroscopy again under the same conditions? Certainly not (4), probably not (3), probably yes (2), certainly yes (1), or I don't know (0)

Complications neurologiques

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ORIGINAL REPORT

Pre- and Post-Transplantation Risk Factors for Delirium Onset and Severity in Patients Undergoing Hematopoietic Stem-Cell Transplantation

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Table 1. Summary Statistics for Pretransplantation and Post-Transplantation Variables

Variable	% of Patients With Missing Data*	All Patients (N = 90)		Patients With Delirium Episode† (n = 45)		Patients With No Delirium Episode (n = 45)	
		No.	%	No.	%	No.	%
Before transplantation							
Age, years	0						
Mean		41.5		44.2		38.8	
SD		9.9		9.7		9.5	
Female	0	36	40	21	46.7	15	33.3
Race	0						
White		85	94.4	42	93.3	43	95.6
Hispanic		3	3.3	2	4.4	1	2.2
Native American		1	1.1	1	2.2	0	0
Other		1	1.1	0	0	1	2.2
Diagnosis	0						
CML		38	42.2	17	37.8	21	46.7
ALL or AML		25	27.8	10	22.2	15	33.3
BR or OV		11	12.2	9	20	2	4.4
MDS or MM		10	11.1	5	11.1	5	11.1
NHL		6	6.7	4	8.9	2	4.4
Stem-cell type	0						
Bone marrow		66	73.3	30	66.7	36	80
Peripheral stem cell		24	26.7	15	33.3	9	20
Donor type	0						
Allogeneic		73	81.1	33	73.3	40	88.9
Autologous		17	18.9	12	26.7	5	11.1
Trail Making B test, T score	4.4						
Mean		51.8		50.2		53.6	
SD		11.6		12.7		10.1	

Table 3. Results of Multivariable Models for Time to Delirium Onset and Delirium Severity

	Delirium Onset			Delirium Severity		
Variable	HR	95% CI	*P*	β	95% CI	*P*
Before transplantation						
Trail Making B test, T score	0.96	0.93 to 1.00	.06	−0.03	−0.06 to 0.00	.049
Alkaline phosphatase	1.02	1.01 to 1.04	.01	0.03	0.01 to 0.04	< .01
Blood urea nitrogen	1.28	1.14 to 1.43	< .01	0.18	0.06 to 0.30	< .01
SF-12 physical component score	0.98	0.93 to 1.04	.55	0.01	−0.03 to 0.05	.55
Disease stage (more advanced)				0.43	−0.30 to 1.17	.25
Total-body irradiation				0.05	−0.72 to 0.82	.90
After transplantation						
Pain	1.19	0.98 to 1.46	.08	0.20	0.12 to 0.27	< .01
Lagged pain	1.12	0.93 to 1.35	.24	0.16	0.08 to 0.23	< .01
Opioids (10 mg morphine IV)	1.05	1.02 to 1.08	< .01	0.04	0.02 to 0.07	< .01
Anticholinergics				0.03	−0.06 to 0.11	.52
Alkaline phosphatase				−0.01	−0.01 to 0.00	.054
Blood urea nitrogen				0.05	0.03 to 0.06	< .01

NOTE. Delirium onset is modeled using the stepwise Cox proportional hazards model. Reported effects are HRs. Delirium severity is modeled using stepwise linear mixed effects models for Memorial Delirium Assessment Scale (MDAS). Reported effects are linear effects on MDAS. Included variables are those in the final model based on improving fit using the Bayesian information criterion.

Abbreviations: HR, hazard ratio; SF-12, Medical Outcomes Study 12-item short form; IV, intravenous.

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MISE AU POINT / *UPDATE* **DOSSIER**

Encéphalites paranéoplasiques et auto-immunes : quand y penser, comment en faire le diagnostic

Paraneoplastic and autoimmune encephalitis when to consider and how to diagnose it

T. de Broucker

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Méningoencéphalites — Encéphalites paranéoplasiques : les encéphalites limbiques

Meningo-encephalitis — Paraneoplastic encephalitis: the limbic encephalitides

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REVUE / *REVIEW* **DOSSIER**

Encéphalites auto-immunes à anticorps antirécepteurs-NMDA, une cause fréquente d'encéphalite en réanimation

Anti-NMDA-receptor encephalitis, a frequent cause of encephalitis in the intensive care unit

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En Résumé

- confirmation des caractéristiques de la complication (et non du cancer) comme facteurs pronostics du patient cancéreux admis à l'USI
- pronostic particulièrement mauvais des patients admis après avoir été inclus dans un programme de phase I
- importance pronostique de l'expérience de l'équipe de réanimation (traduite par le volume de cas traités) pour le choc septique
- place grandissante de la VNI dans le traitement de l'insuffisance respiratoires aiguës
- mauvais pronostic de la ventilation invasive après échec de la VNI
- premières publications originales sur les patients cancéreux consultant aux urgences
- nouvelles toxicités graves dues aux thérapies ciblées (décompensation cardiaque, thromboses, perforations digestives, hémorragies)
- indication de la dexaméthasone dans le traitement de l'atteinte pulmonaire lésionnelle compliquant une leucémie aiguë monoblastique.