



Samedi 26 Novembre 2016

8 h 30 - 17 h 30

Faculté de Médecine de Créteil

8 rue du Général Sarrail, 94000 Créteil

Métro Ligne 8, Station Créteil L'Échat

SOINS PARAMEDICAUX: LES 10 GESTES QUI SAUVENT LE PATIENT VENTILE

LILA BOUADMA

HOPITAL Bichat-Claude Bernard- Paris

lila.bouadma@bch.aphp.fr



Infection • Antimicrobiens • Modélisation • Evolution





Samedi 26 Novembre 2016

8 h 30 - 17 h 30

Faculté de Médecine de Créteil

8 rue du Général Sarrail, 94000 Créteil

Métro Ligne 8, Station Créteil L'Échat

SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE

LILA BOUADMA

HOPITAL Bichat-Claude Bernard- Paris

lila.bouadma@bch.aphp.fr



Infection • Antimicrobiens • Modélisation • Evolution



An approach to the Evaluation of quality Indicators of the Outcome of Care in Hospitalized Patients,
With a Focus on Nosocomial Infection Indicators

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY

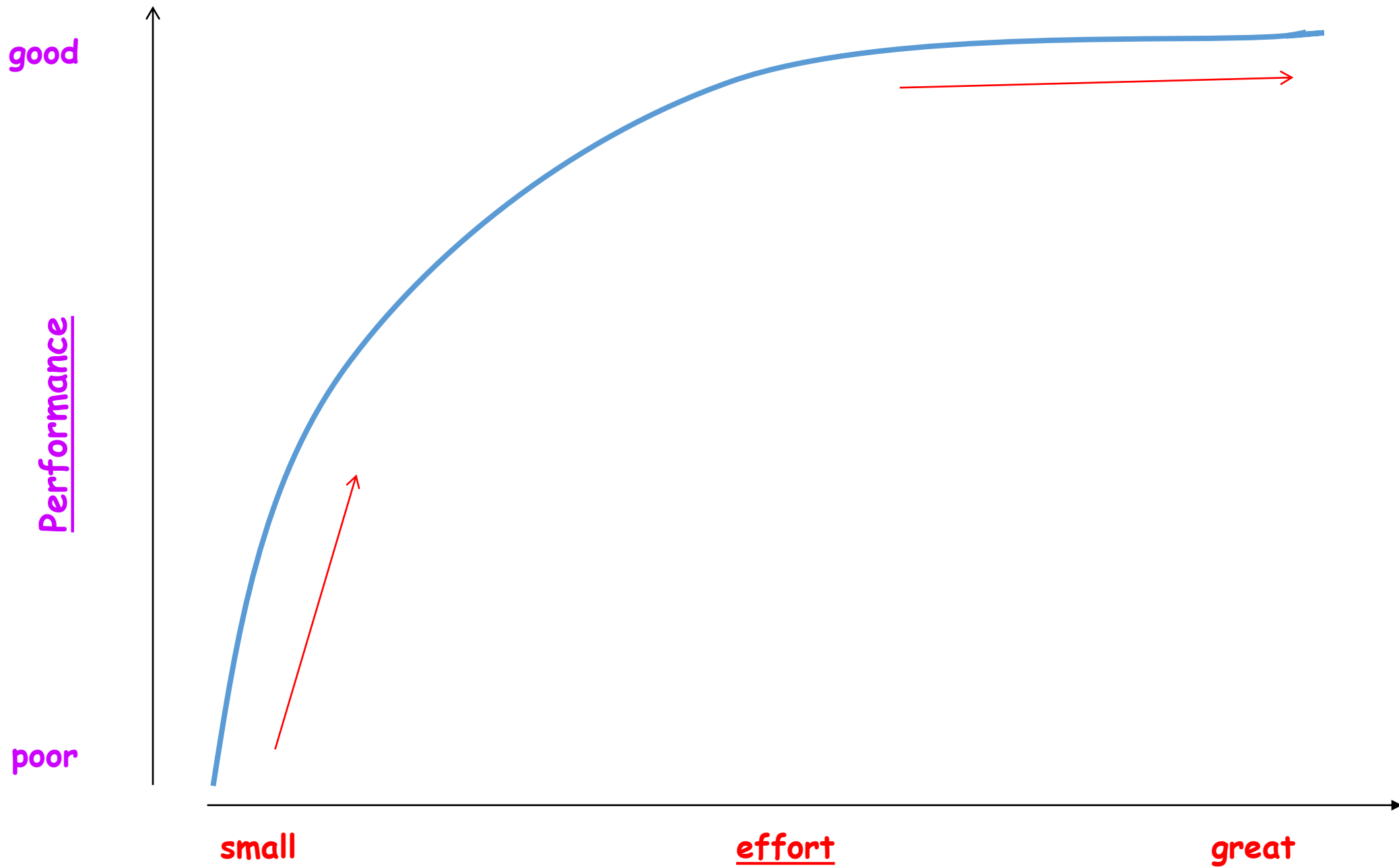
1995

Factors	Pneumonia*	Urinary tract	Surgical site	Bacteremia
Clear case definition	2+	4+	3+	4+
Ease of specimen collection	2+	4+	3+	4+
Ease of surveillance				
Laboratory	2+	4+	2+	4+
Clinical	2+	2+	3+	2+
Relative frequency of event	3+	4+	3+	2+
Importance of event				
Morbidity	3+	2+	3+	4+
Mortality	3+	1+	2+	4+
Potential of interventions to reduce rates	2+	3+	3+	3+
Ease of stratification				
Exposure risk factors	3+	4+	4+	4+
Severity of illness risk factors	3+	2+	3+	2+
Denominator by device-days				
Availability	Y	Y	N/A	Y
Ease of collection	V	V	N/A	V

*Factors are ranked from 1+ (least favorable) to 4+ (most favorable). Y, Yes; N/A, not applicable; V, varies with setting.

CRITERES DE CHOIX

HIERARCHISATION





HAUTE AUTORITÉ DE SANTÉ

ÉVALUATION ET AMÉLIORATION DES PRATIQUES

Développement professionnel continu (DPC)

– Fiche méthode –

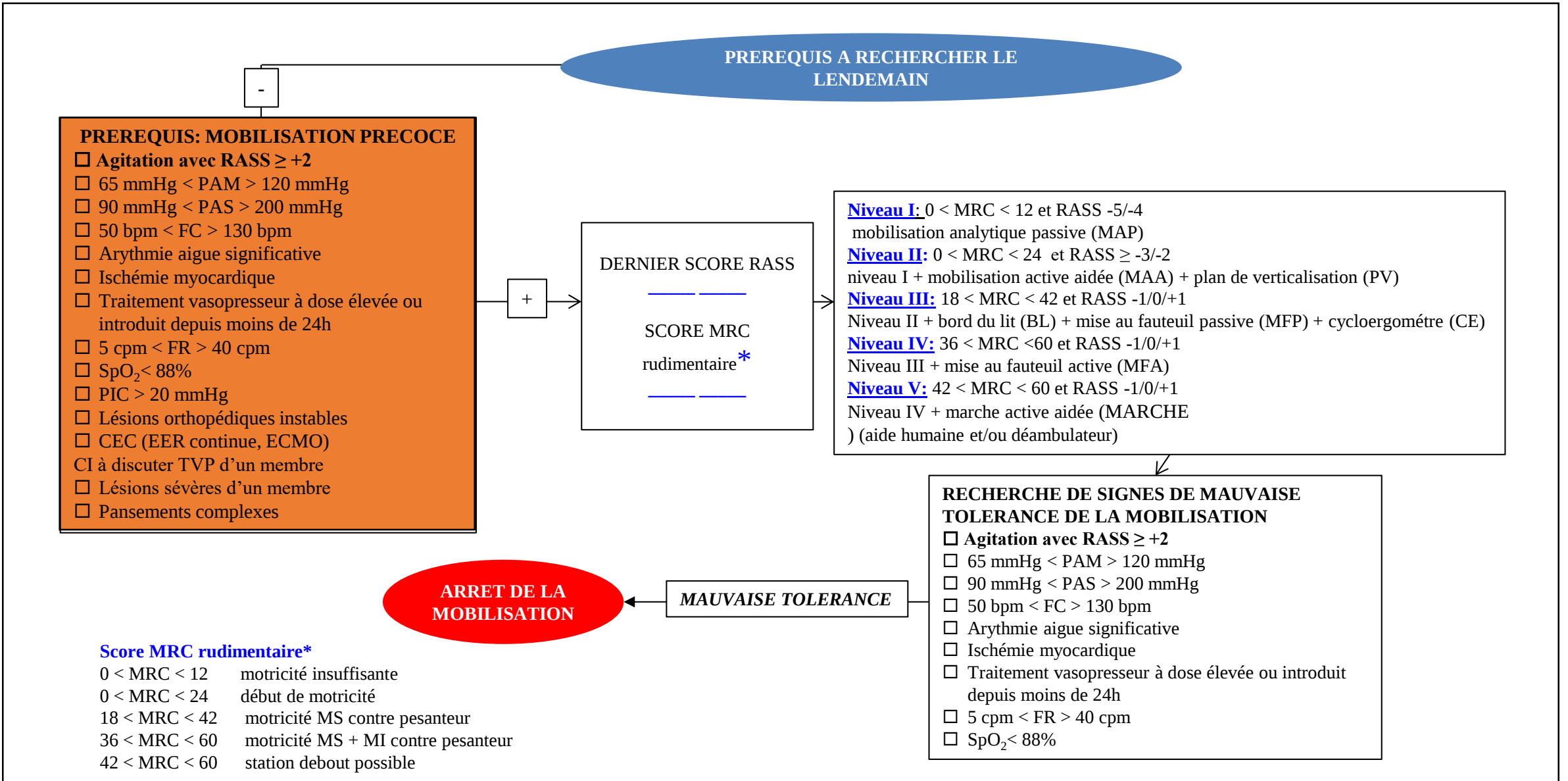
Le chemin clinique

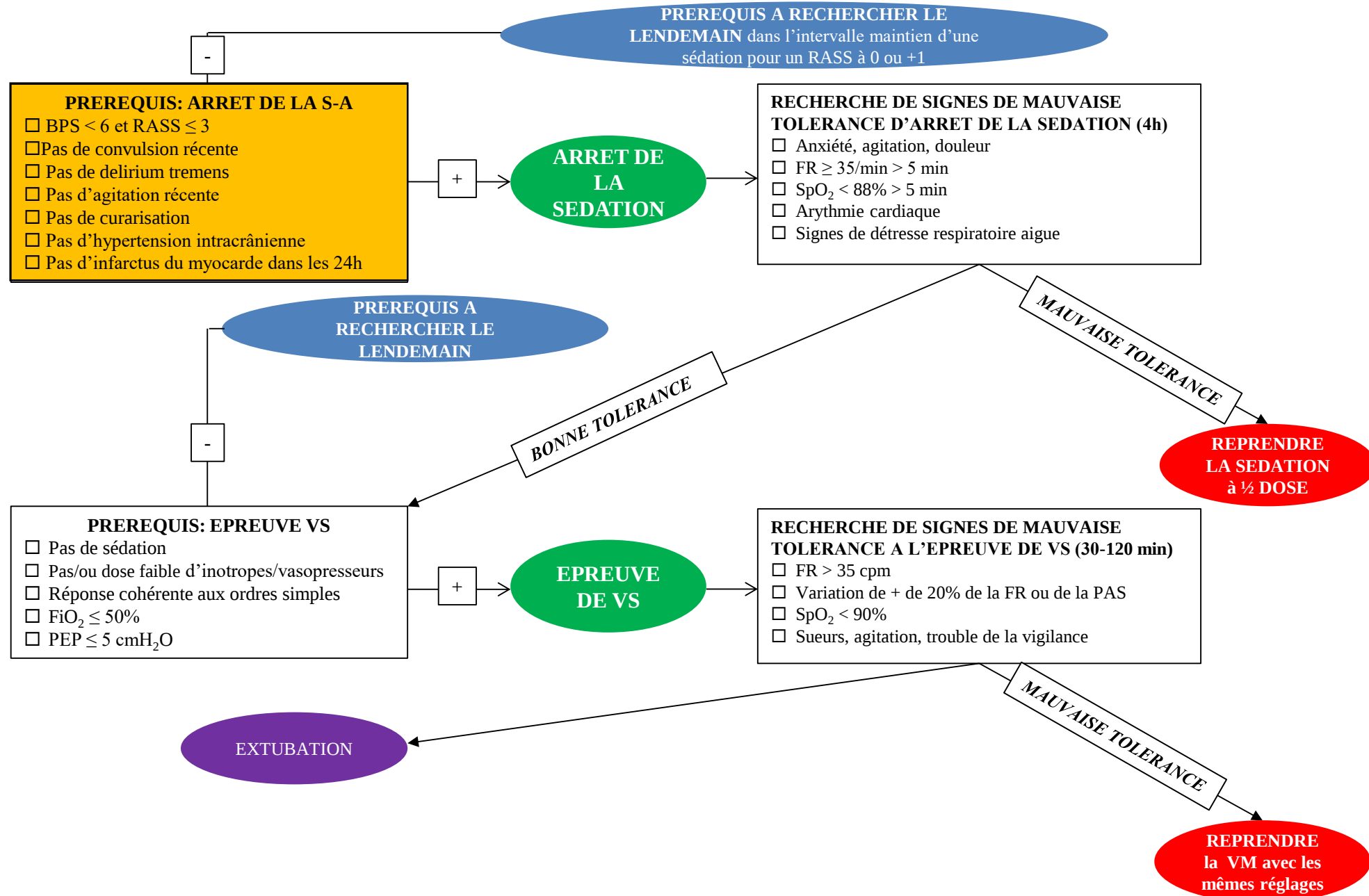
Mai 2014

Le chemin clinique est une méthode qui vise:

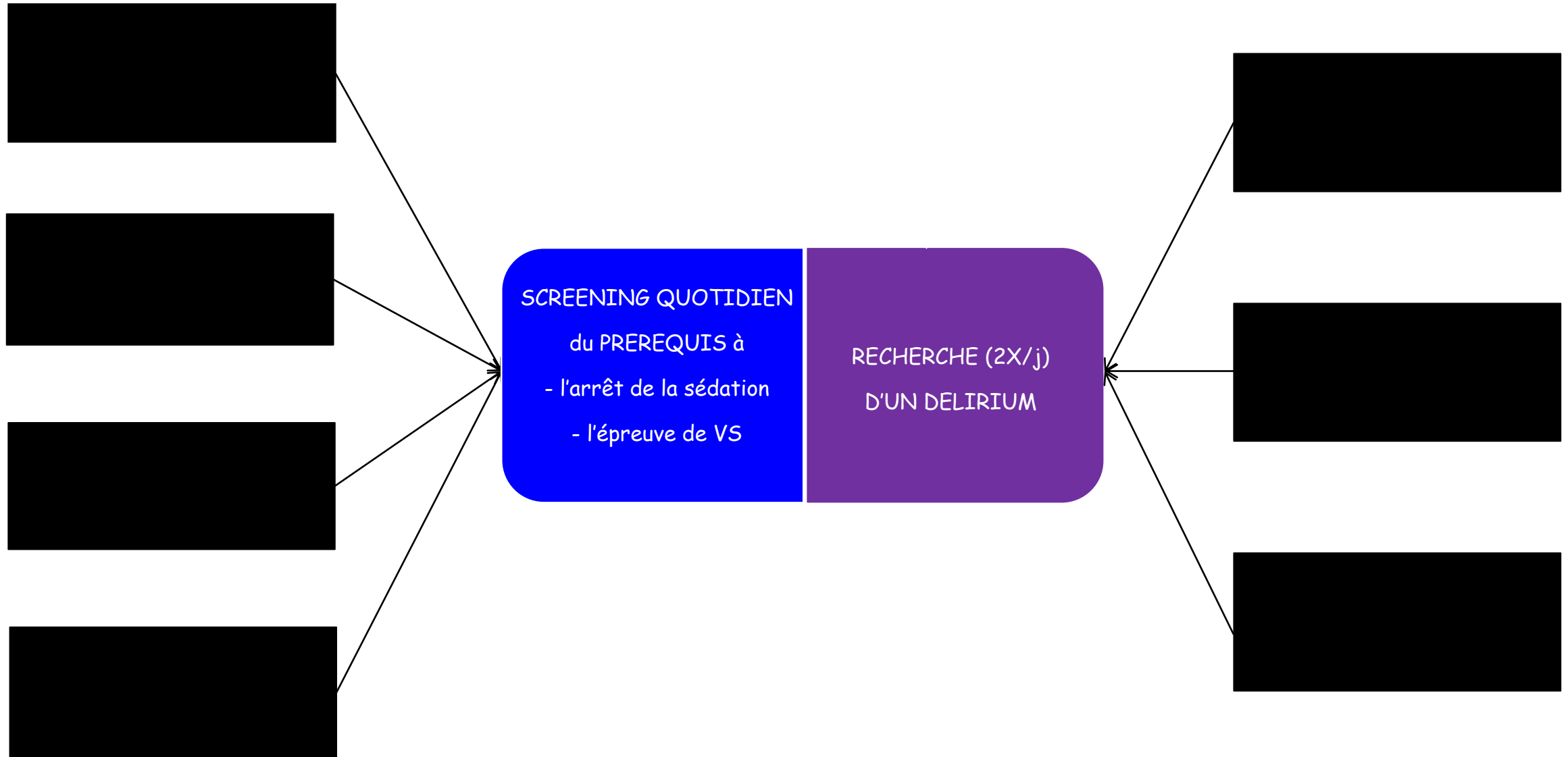
- à planifier, rationaliser et standardiser la prise en charge multi-professionnelle de patients
- pour un problème de santé comparable
- en se basant sur les recommandations afin de limiter la variabilité des pratiques.

CHEMIN CLINIQUE





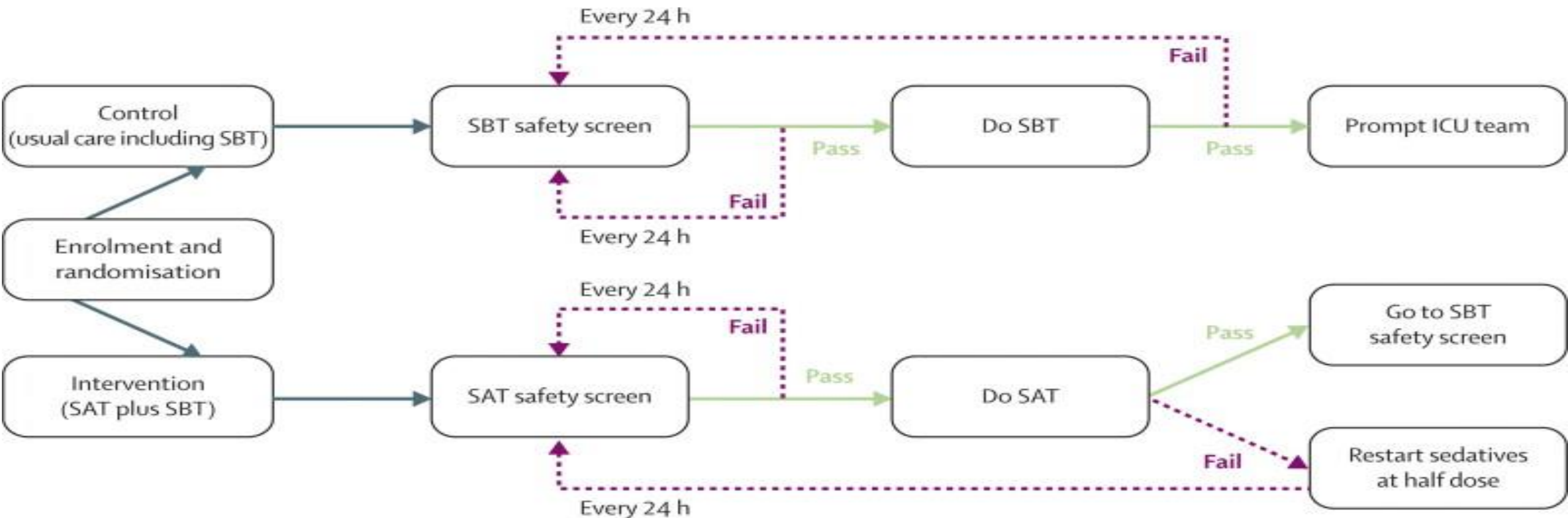
SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE



Articles

Efficacy and safety of a paired sedation and ventilator weaning protocol for mechanically ventilated patients in intensive care (Awakening and Breathing Controlled trial): a randomised controlled trial

Timothy D Girard, John P Kress, Barry D Fuchs, Jason W W Thomason, William D Schweickert, Brenda T Pun, Darren B Taichman, Jan G Dunn, Anne S Pohlman, Paul A Kinniry, James C Jackson, Angelo E Canonico, Richard W Light, Ayumi K Shintani, Jennifer L Thompson, Sharon M Gordon, Jesse B Hall, Robert S Dittus, Gordon R Bernard, E Wesley Ely

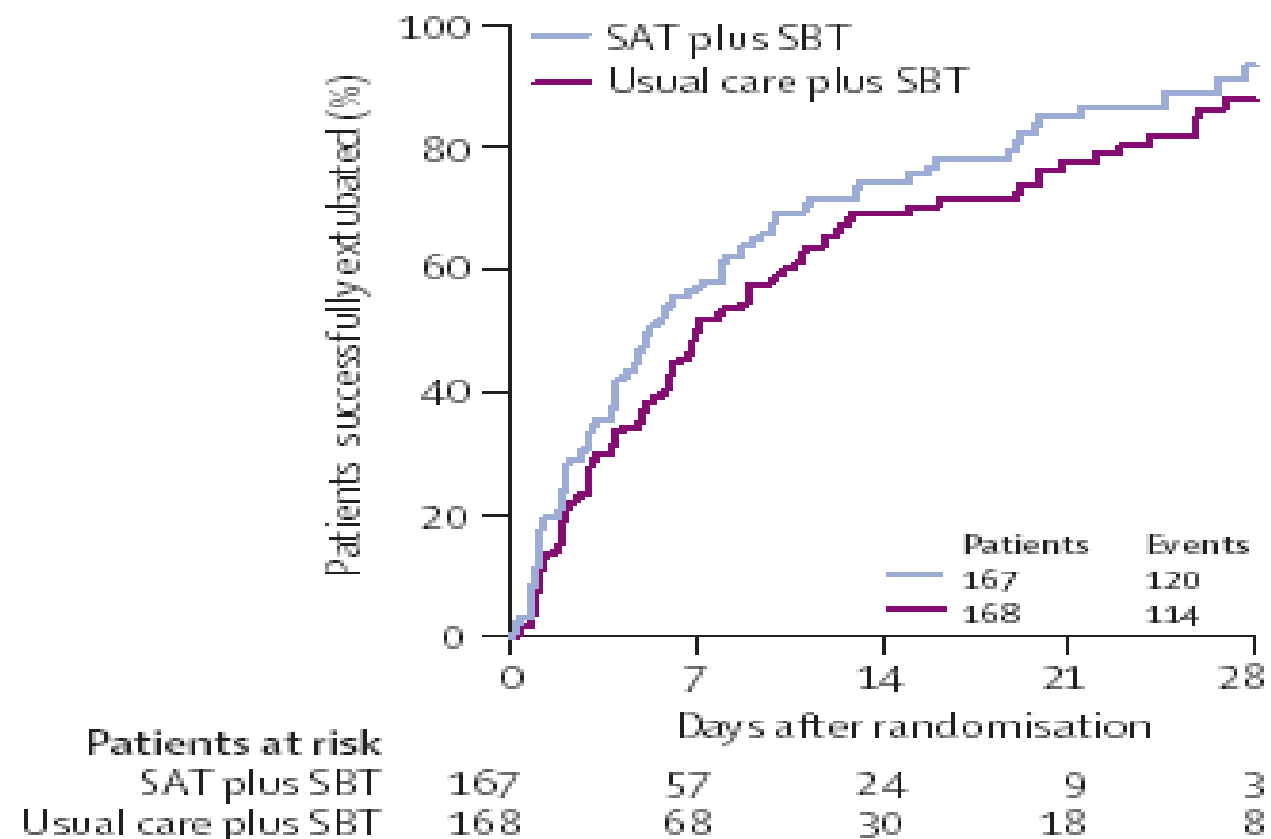


Articles

Efficacy and safety of a paired sedation and ventilator weaning protocol for mechanically ventilated patients in intensive care (Awakening and Breathing Controlled trial): a randomised controlled trial

Timothy D Girard, John P Kress, Barry D Fuchs, Jason W W Thomason, William D Schweickert, Brenda T Pun, Darren B Taichman, Jan G Dunn, Anne S Pohlman, Paul A Kinniry, James C Jackson, Angelo E Canonico, Richard W Light, Ayumi K Shintani, Jennifer L Thompson, Sharon M Gordon, Jesse B Hall, Robert S Dittus, Gordon R Bernard, E Wesley Ely

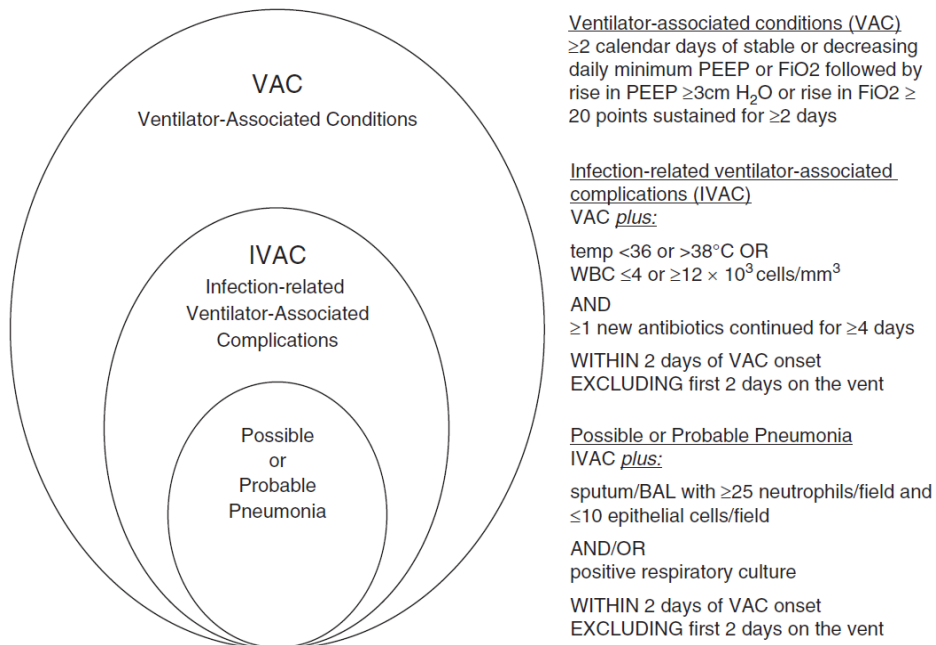
A





The Preventability of Ventilator-associated Events The CDC Prevention Epicenters Wake Up and Breathe Collaborative

Michael Klompas^{1,2*}, Deverick Anderson^{3*}, William Trick⁴, Hilary Babcock⁵, Meeta Prasad Kerlin⁶, Lingling Li¹, Ronda Sinkowitz-Cochran⁷, E. Wesley Ely^{8,9}, John Jernigan⁷, Shelley Magill⁷, Rosie Lyles⁴, Caroline O'Neil⁵, Barrett T. Kitch¹⁰, Ellen Arrington¹⁰, Michele C. Balas¹¹, Ken Kleinman¹, Christina Bruce¹, Julie Lankiewicz¹, Michael V. Murphy¹, Christopher E. Cox³, Ebbing Lautenbach⁶, Daniel Sexton³, Victoria Fraser⁵, Robert A. Weinstein¹², and Richard Platt^{1,2}, for the CDC Prevention Epicenters



5,164 episodes of mechanical ventilation

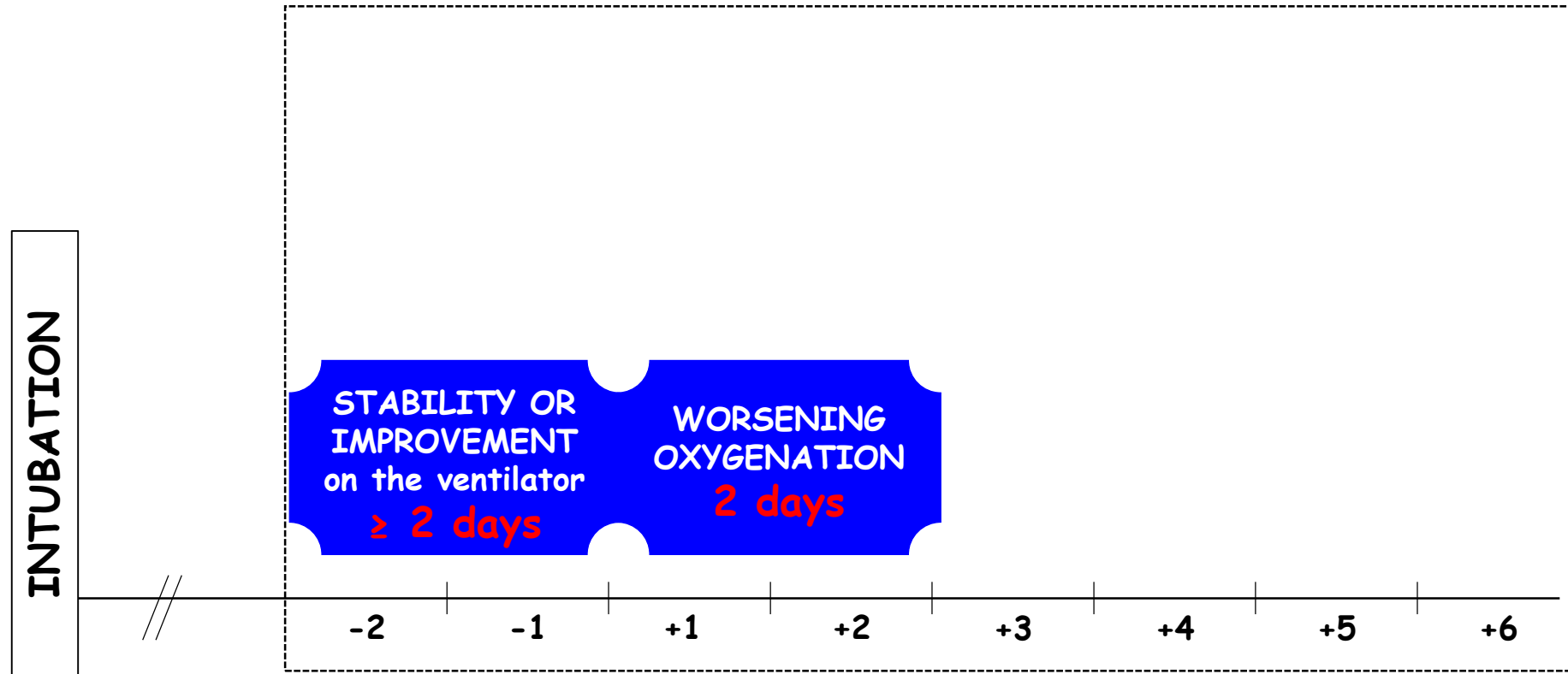
qualitative improvement collaborative

20 ICUs

SAT, SBT

Figure 1. CDC's ventilator-associated events framework and definitions. BAL = bronchoalveolar lavage; PEEP = positive end-expiratory pressure; WBC = white blood cell count.

National Healthcare Safety Network (NHSN) - CDC Surveillance for Ventilator-associated Events in Adults (VAC and IVAC)



Worsening is defined by one of the following:

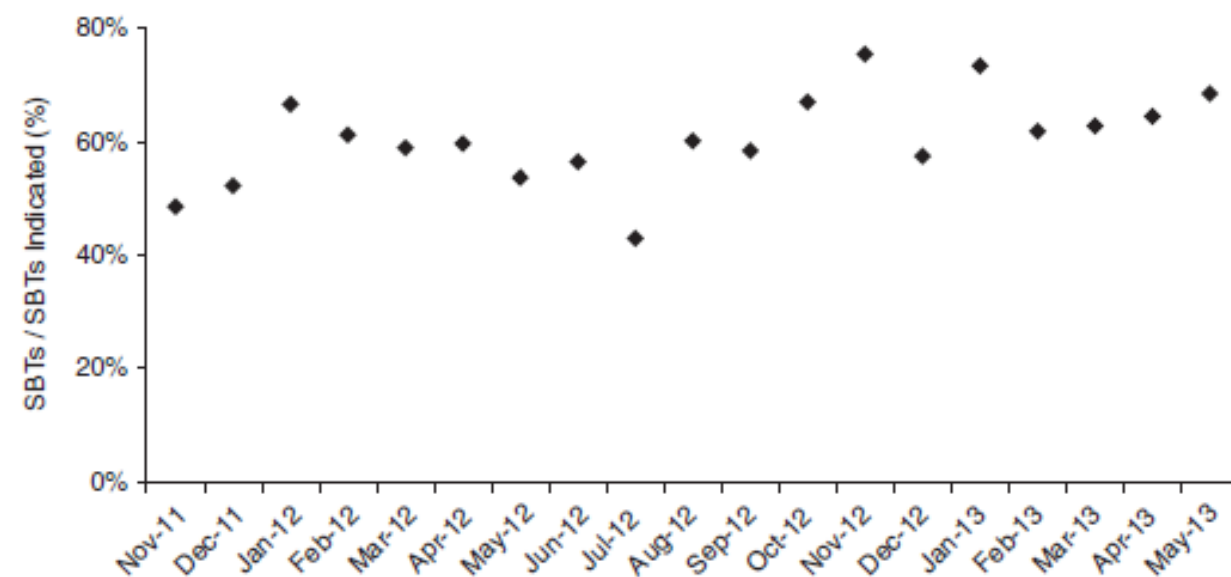
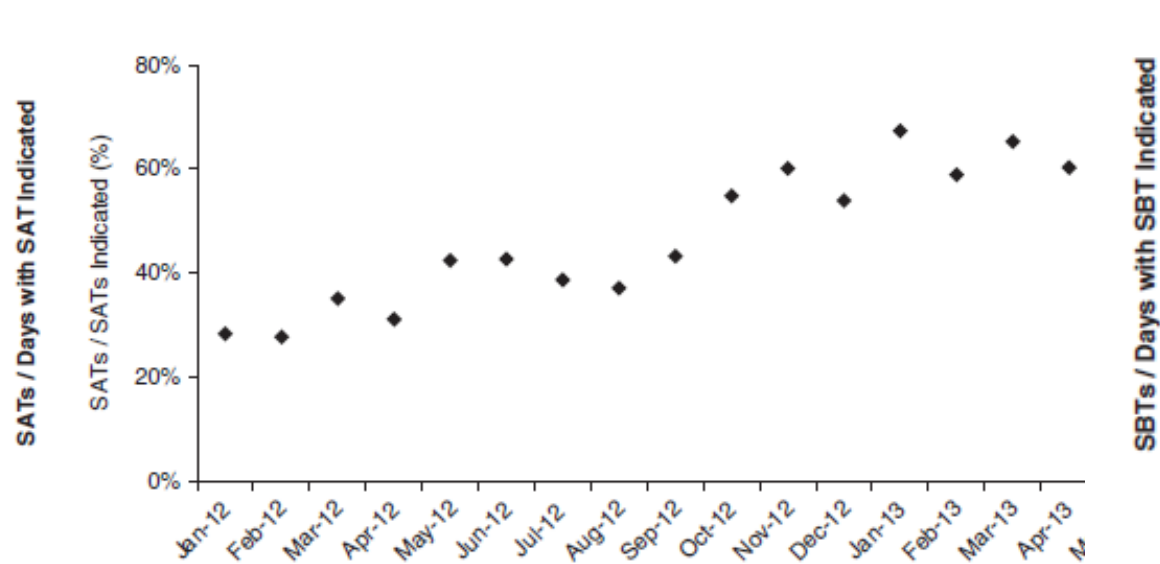
- Minimum daily FiO_2 value increases ≥ 2 0 points
- Minimum daily PEEP level increases ≥ 3 cmH_2O



The Preventability of Ventilator-associated Events

The CDC Prevention Epicenters Wake Up and Breathe Collaborative

Michael Klompas^{1,2*}, Deverick Anderson^{3*}, William Trick⁴, Hilary Babcock⁵, Meeta Prasad Kerlin⁶, Lingling Li¹, Ronda Sinkowitz-Cochran⁷, E. Wesley Ely^{8,9}, John Jernigan⁷, Shelley Magill⁷, Rosie Lyles⁴, Caroline O'Neil⁵, Barrett T. Kitch¹⁰, Ellen Arrington¹⁰, Michele C. Balas¹¹, Ken Kleinman¹, Christina Bruce¹, Julie Lankiewicz¹, Michael V. Murphy¹, Christopher E. Cox³, Ebbing Lautenbach⁶, Daniel Sexton³, Victoria Fraser⁵, Robert A. Weinstein¹², and Richard Platt^{1,2}, for the CDC Prevention Epicenters

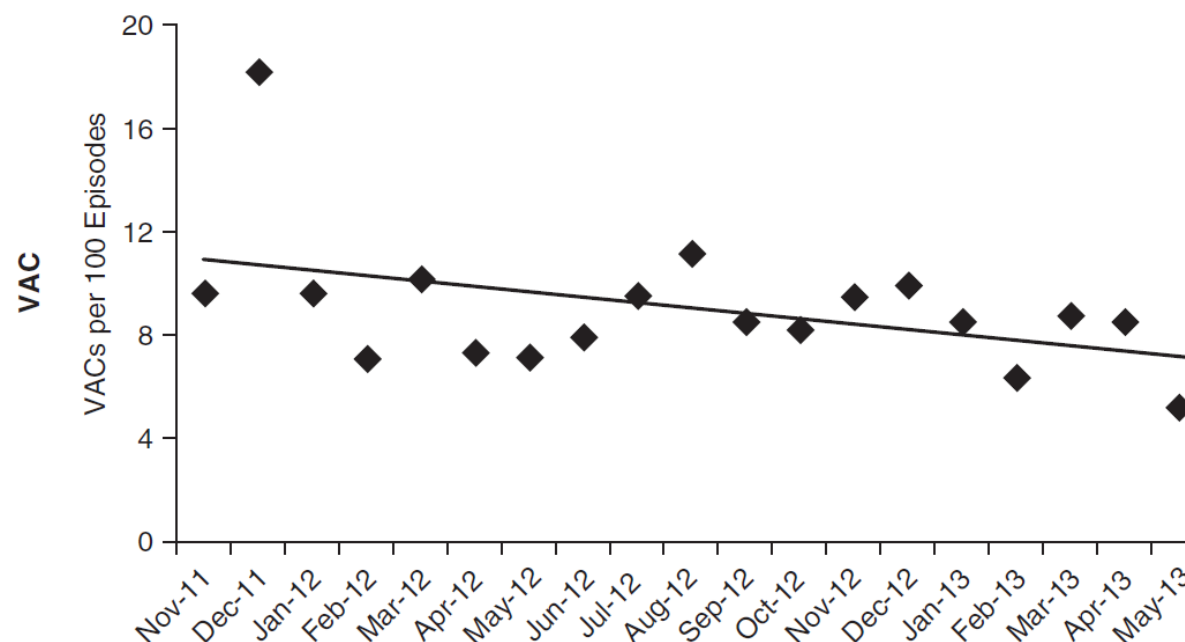




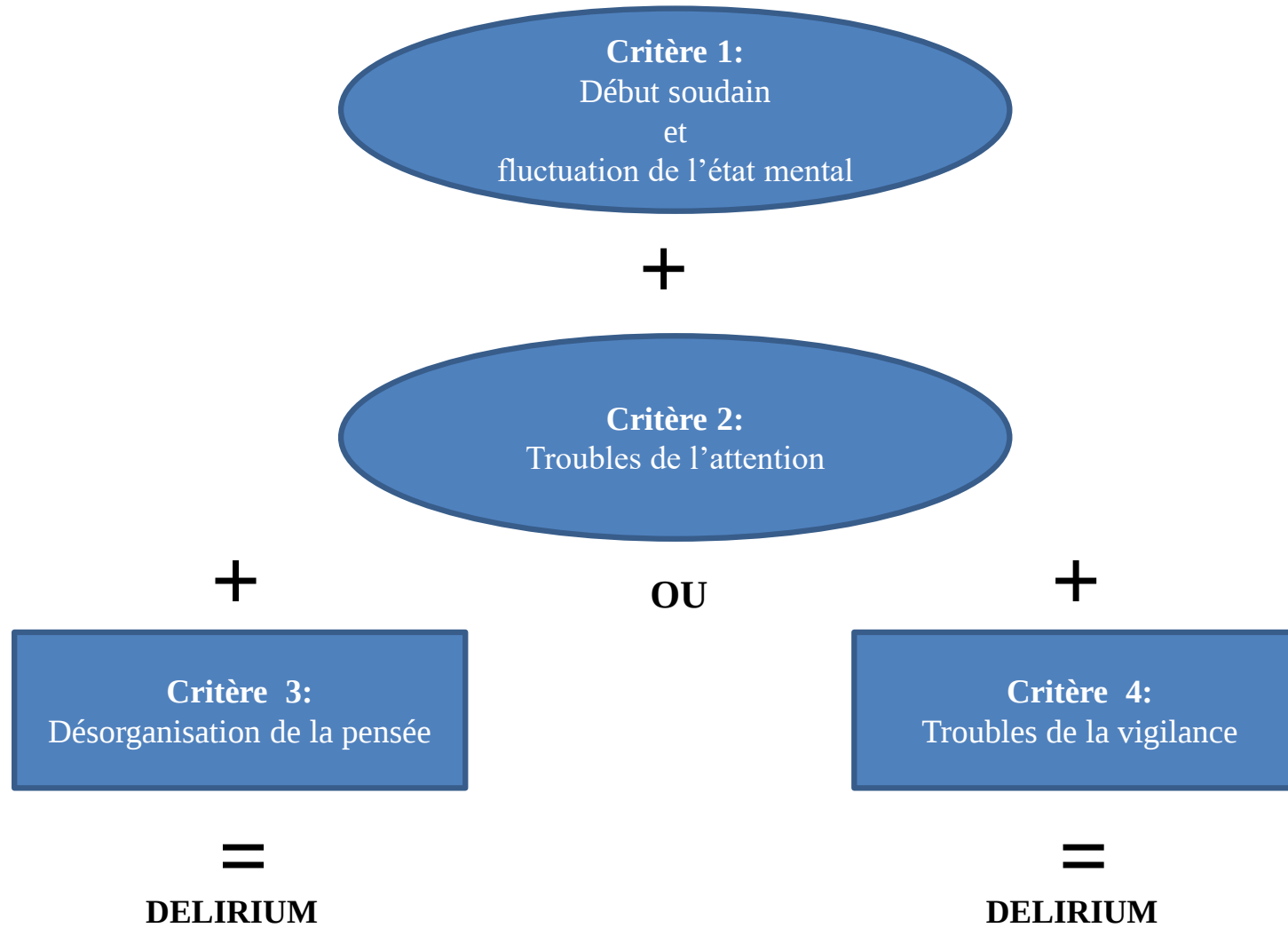
The Preventability of Ventilator-associated Events

The CDC Prevention Epicenters Wake Up and Breathe Collaborative

Michael Klompas^{1,2*}, Deverick Anderson^{3*}, William Trick⁴, Hilary Babcock⁵, Meeta Prasad Kerlin⁶, Lingling Li¹, Ronda Sinkowitz-Cochran⁷, E. Wesley Ely^{8,9}, John Jernigan⁷, Shelley Magill⁷, Rosie Lyles⁴, Caroline O'Neil⁵, Barrett T. Kitch¹⁰, Ellen Arrington¹⁰, Michele C. Balas¹¹, Ken Kleinman¹, Christina Bruce¹, Julie Lankiewicz¹, Michael V. Murphy¹, Christopher E. Cox³, Ebbing Lautenbach⁶, Daniel Sexton³, Victoria Fraser⁵, Robert A. Weinstein¹², and Richard Platt^{1,2}, for the CDC Prevention Epicenters



LE DELIRIUM

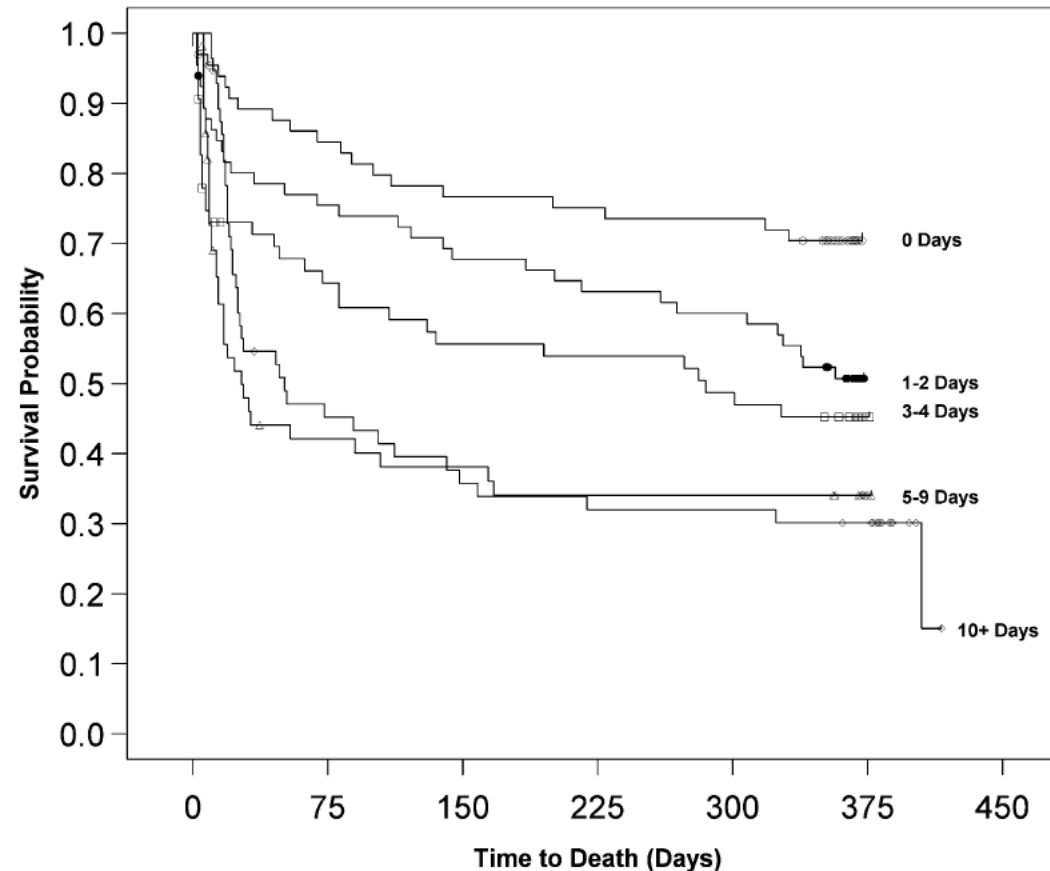


Days of Delirium Are Associated with 1-Year Mortality in an Older Intensive Care Unit Population

Margaret A. Pisani¹, So Yeon Joyce Kong², Stanislav V. Kasl², Terrence E. Murphy³, Katy L. B. Araujo³, and Peter H. Van Ness^{2,3}

¹Department of Internal Medicine, Pulmonary & Critical Care Section, and the Program on Aging, Yale University School of Medicine, New Haven;

²Yale School of Public Health, New Haven, and ³Department of Internal Medicine, Geriatrics Section, and the Program on Aging, Yale University School of Medicine, New Haven, Connecticut



Impact of delirium on weaning from mechanical ventilation in medical patients

KYEONGMAN JEON,^{1,2*} BYEONG-HO JEONG,^{2*} MYEONG GYUN KO,³ JIMYOUNG NAM,³ HONGSEOK YOO,² CHI RYANG CHUNG¹ AND GEE YOUNG SUH^{1,2}

¹Department of Critical Care Medicine, ²Division of Pulmonary and Critical Care Medicine, Department of Medicine and

³Intensive Care Unit Nursing Department, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul,

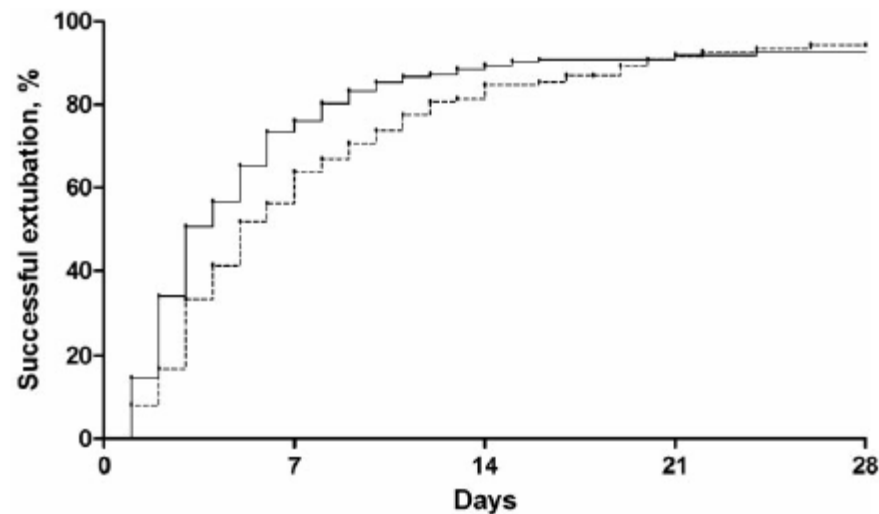
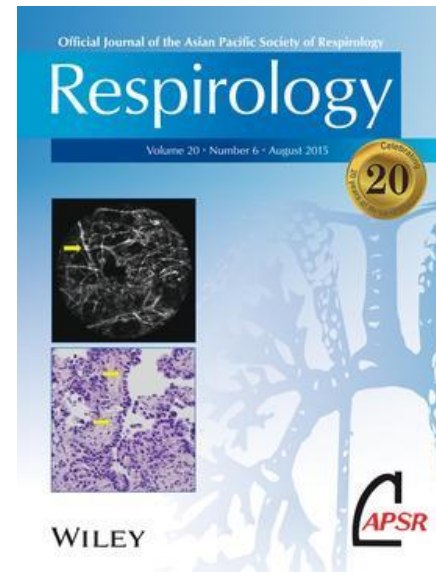
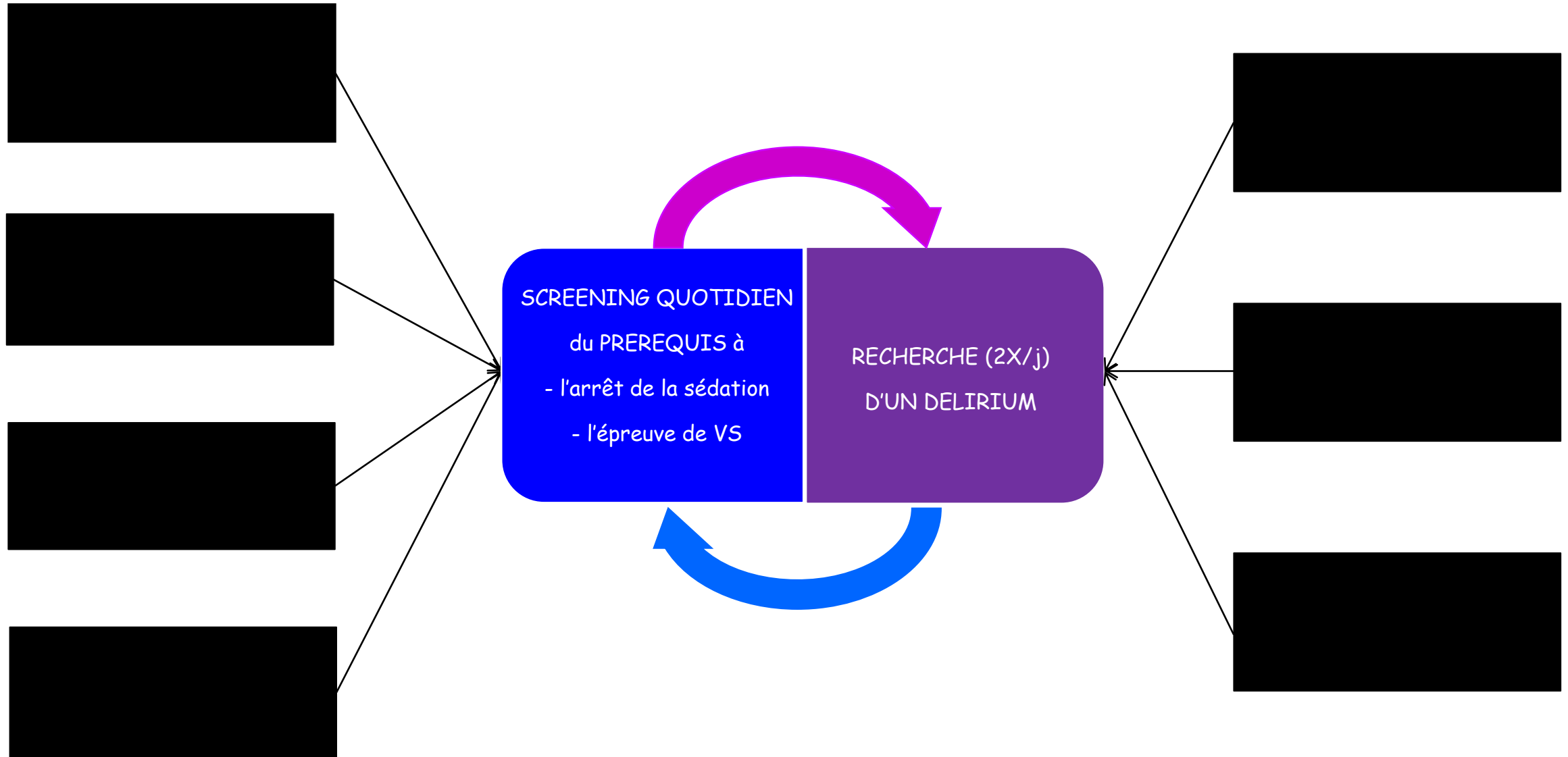


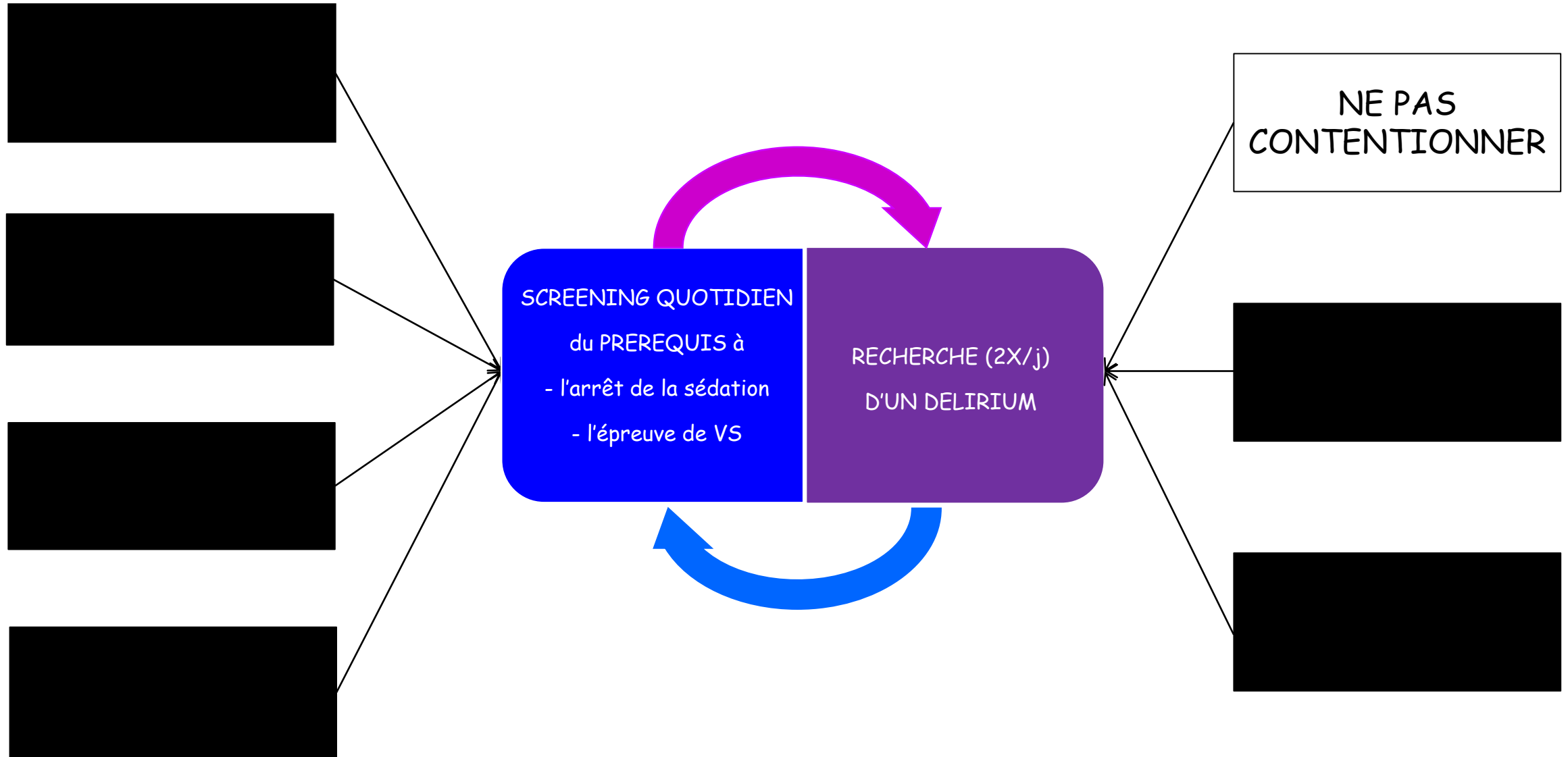
Figure 2 Kaplan–Meier curves of the probability of successful extubation after initiation of invasive mechanical ventilation on the basis of the results of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU) on the day of the first weaning trial (the solid line represents the CAM-ICU (–) group; the dotted line represents the CAM-ICU (+) group).



SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE



SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE





RESEARCH ARTICLE

Revisiting Unplanned Endotracheal Extubation and Disease Severity in Intensive Care Units

Ming-Lung Chuang^{1,2,3*}, Chai-Yuan Lee^{4*}, Yi-Fang Chen⁵, Shih-Feng Huang^{1,2}, I-Feng Lin⁶

Variables	Odds Ratio	95% CI	P value
APACHE II	0.91	(0.85, 0.97)	<0.01
Physical restraint	5.36	(1.99, 14.46)	<0.001
Pleural disorders	5.62	(1.61, 19.64)	<0.01
Coronary artery disease	5.31	(1.30, 21.67)	0.02
Urinary tract infection	3.79	(1.07, 13.39)	0.04
Respiratory infection	0.24	(0.09, 0.69)	<0.01

Prevalence, Risk Factors, and Outcomes of Delirium in Mechanically Ventilated Adults*

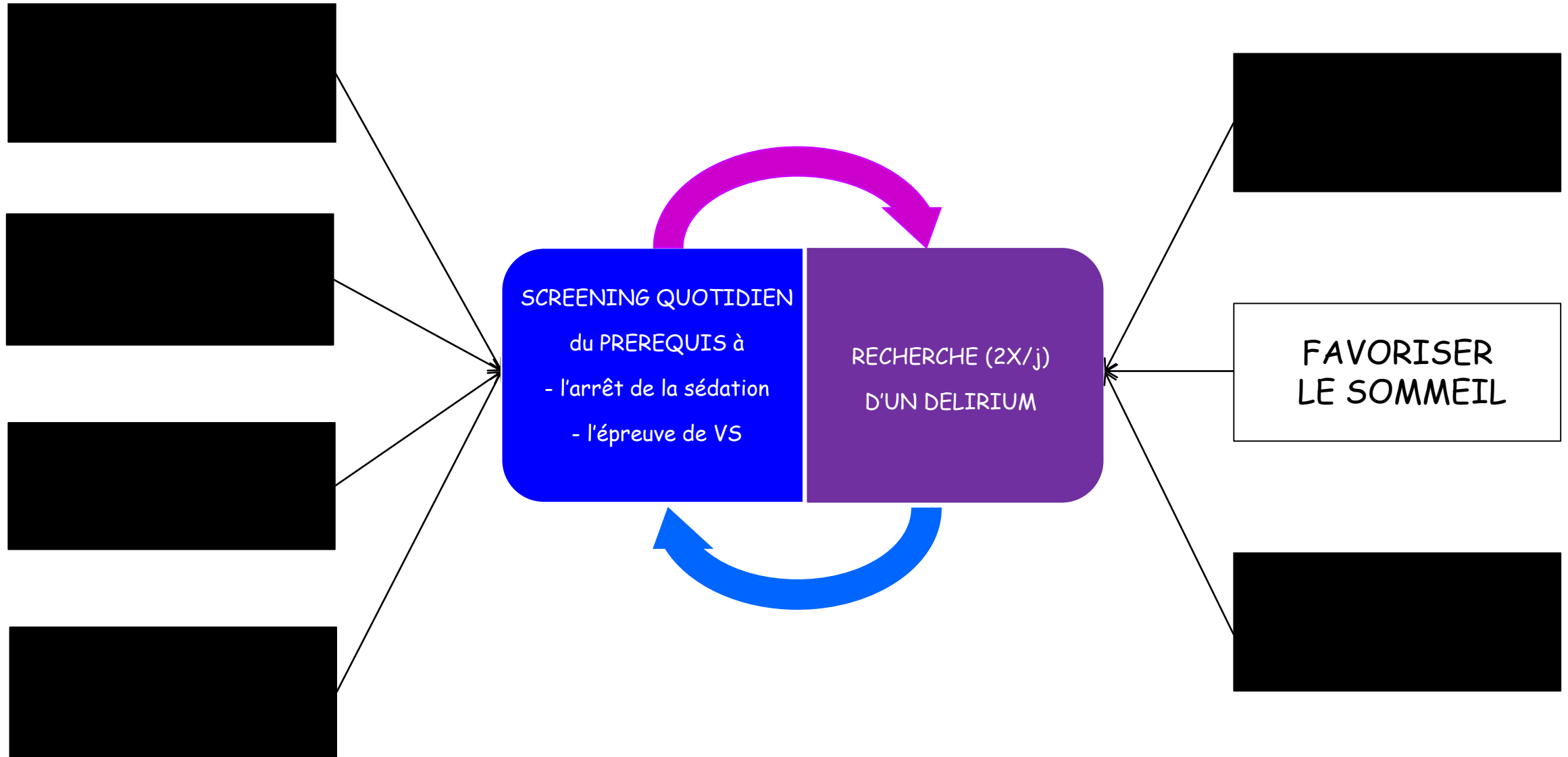
Sangeeta Mehta
Maureen Meade
John Granton, MD
Robert Fowler, MD
Ranjeeta Mallick
for the SLEAP I

TABLE 2. Variables Associated With Delirium, Multivariate Analysis (226 Delirium vs 163 No Delirium)

Variable	Hazard Ratio	95% CI	p
Age (yr)			
< 40	Reference	Reference	
41–65	0.92	0.59, 1.43	0.71
66–80	0.91	0.53, 1.56	0.73
> 80	0.85	0.38, 1.88	0.69
Acute Physiology and Chronic Health Evaluation II			
< 19	Reference	Reference	
19–24	0.94	0.63, 1.42	0.78
24–29	0.98	0.63, 1.55	0.95
> 29	0.64	0.38, 1.09	0.098
Tobacco	1.40	0.96, 2.06	0.08
Alcohol (two or more drinks per day)	1.18	0.69, 1.99	0.54
Neurologic condition ^a	0.86	0.52, 1.41	0.55
Cardiac disease ^b	1.33	0.64, 2.76	0.44
Randomization group ^c	0.94	0.68, 1.29	0.69
Coma ^d	0.55	0.25, 1.22	0.14
Renal replacement	1.05	0.63, 1.73	0.86
Physical restraint ^e	1.87	1.33, 2.63	0.0003
Total midazolam (1 mg increase) ^f	0.998	0.997, 1.0	0.049
Total fentanyl (0.1 mg increase) ^g	1.0	1.0, 1.0	0.87
Antipsychotic use in ICU	1.67	1.01, 2.77	0.047

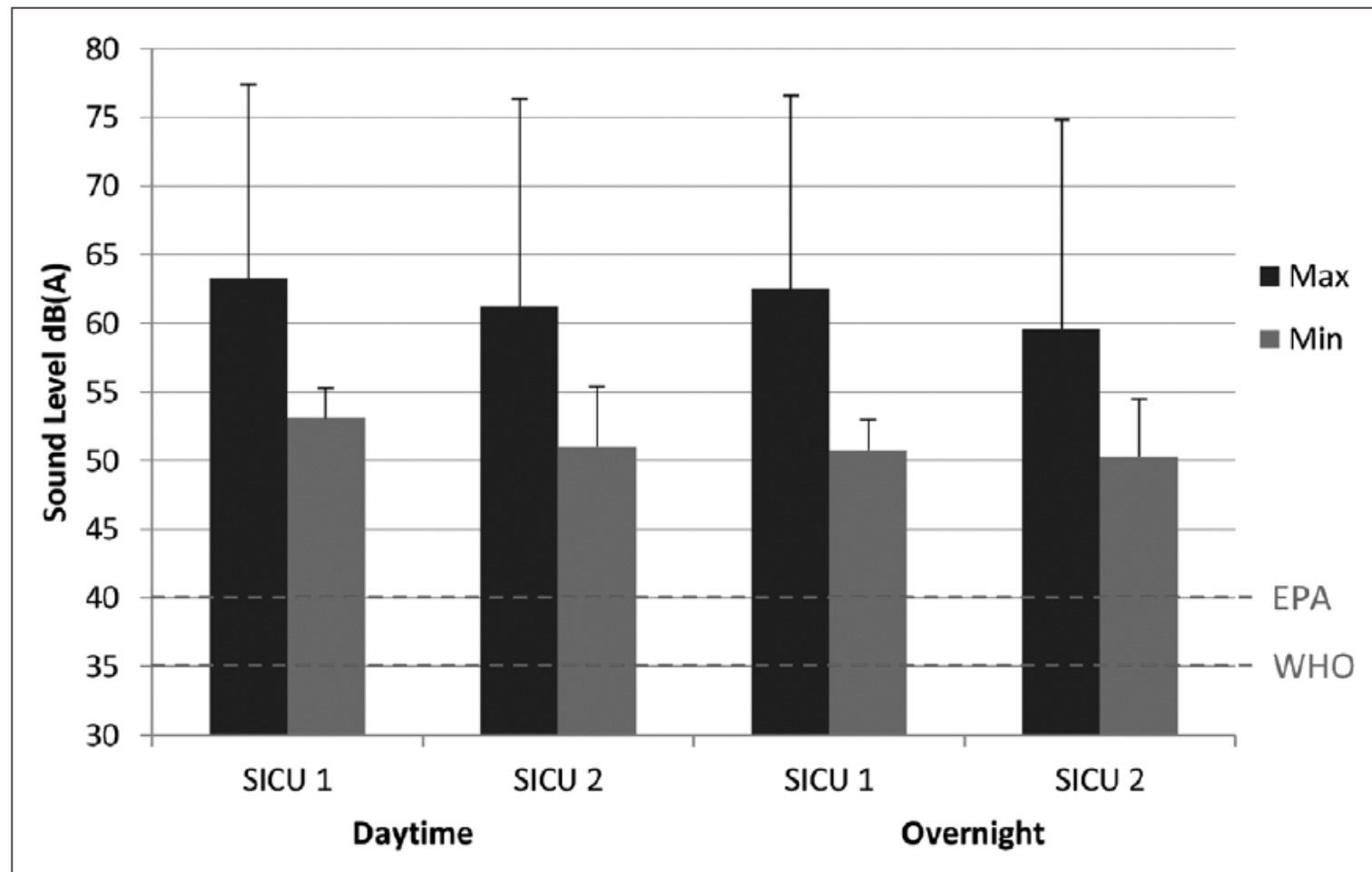


SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE



Noise Levels in Surgical ICUs Are Consistently Above Recommended Standards

Christopher R. Tainter, MD¹; Alexander R. Levine, PharmD²; Sadeq A. Quraishi, MD, MHA³; Arielle D. Butterly, MD³; David L. Stahl, MD⁴; Matthias Eikermann, MD, PhD³; Haytham M. Kaafarani, MD, MPH⁵; Jarone Lee, MD, MPH⁶



The Efficacy of Earplugs as a Sleep Hygiene Strategy for Reducing Delirium in the ICU: A Systematic Review and Meta-Analysis*

Edward Litton, MBChB, FCICM, MSc^{1,2}; Vanessa Carnegie, MBBS³; Rosalind Elliott, RN, PhD⁴; Steve A. R. Webb, MBBS, FRACP, FCICM, MPH, PhD^{5,6}

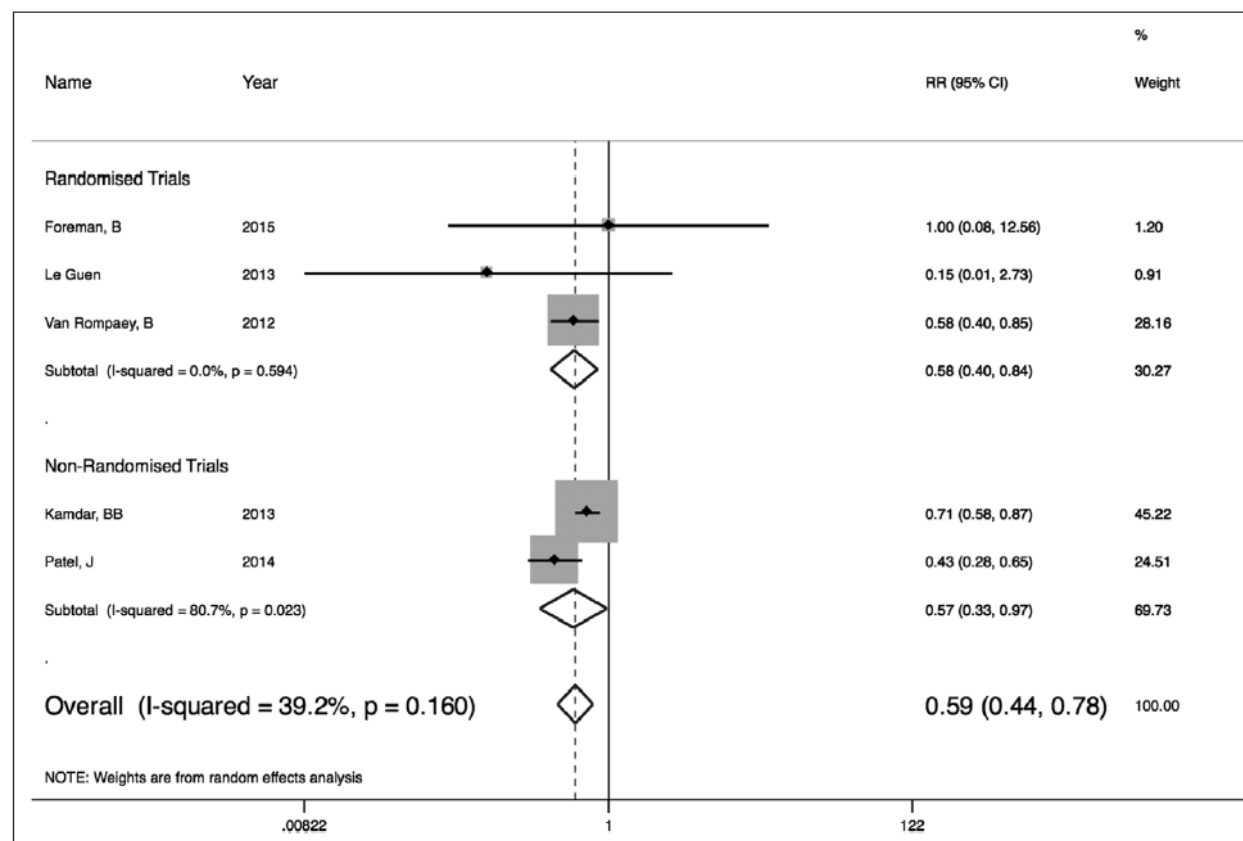
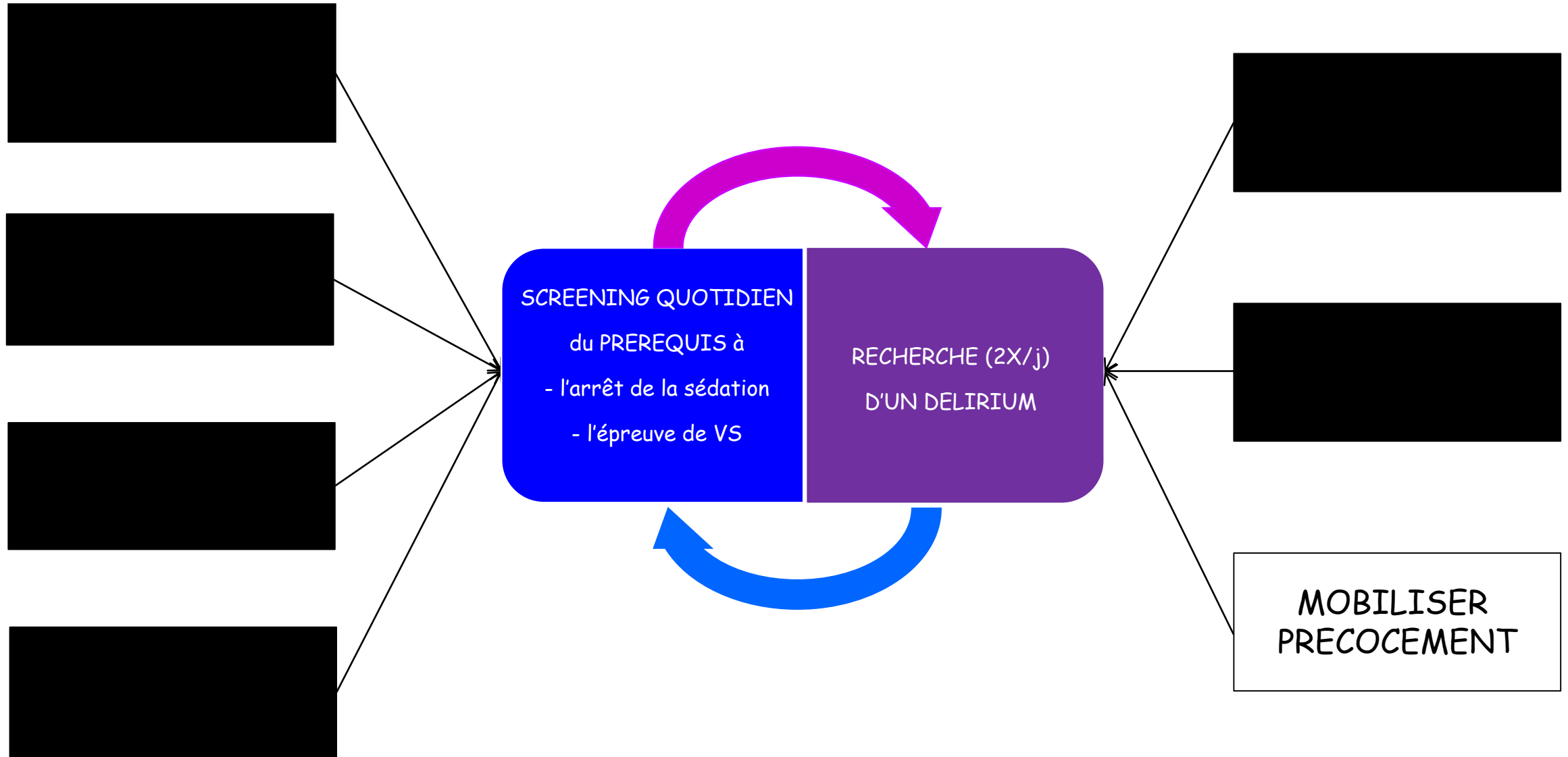


Figure 2. Forrest plot relative risk (RR) of delirium with earplugs.

SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE



"Bioethics continues to be a cultural flashpoint where disagreements run deep, the stakes continue to be high, and the voices and opinions of authority diverse."

2009

Early physical and occupational therapy in mechanically ventilated, critically ill patients: a randomised controlled trial

William D Schweickert, Mark C Pohlman, Anne S Pohlman, Celerina Nigos, Amy J Pawlik, Cheryl L Esbrook, Linda Spears, Megan Miller, Mietka Franczyk, Deanna Deprizio, Gregory A Schmidt, Amy Bowman, Rhonda Barr, Kathryn E McCallister, Jesse B Hall, John P Kress

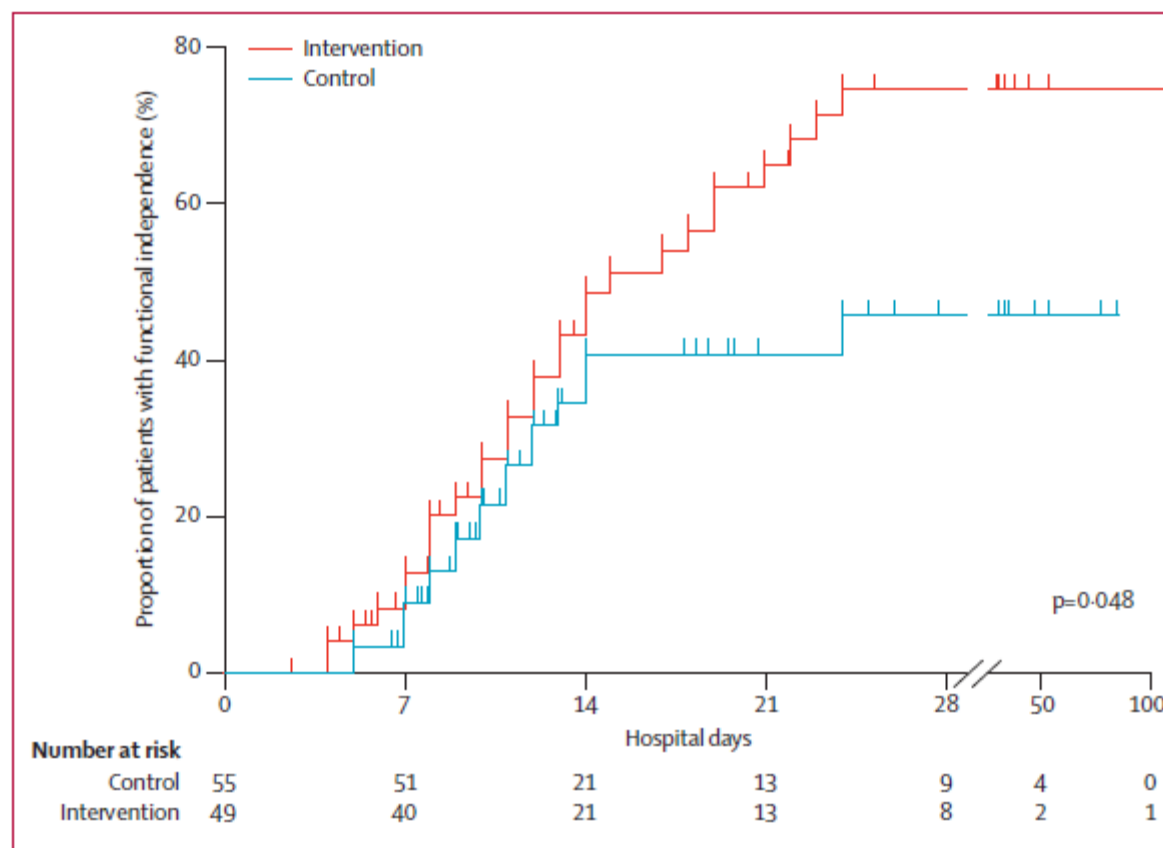


Figure 2: Probability of return to independent functional status in intervention and control groups

"Bioethics continues to be a cultural flashpoint where disagreements run deep, the stakes continue to be high, and the voices and opinions of authority diverse."

2009



Early physical and occupational therapy in mechanically ventilated, critically ill patients: a randomised controlled trial

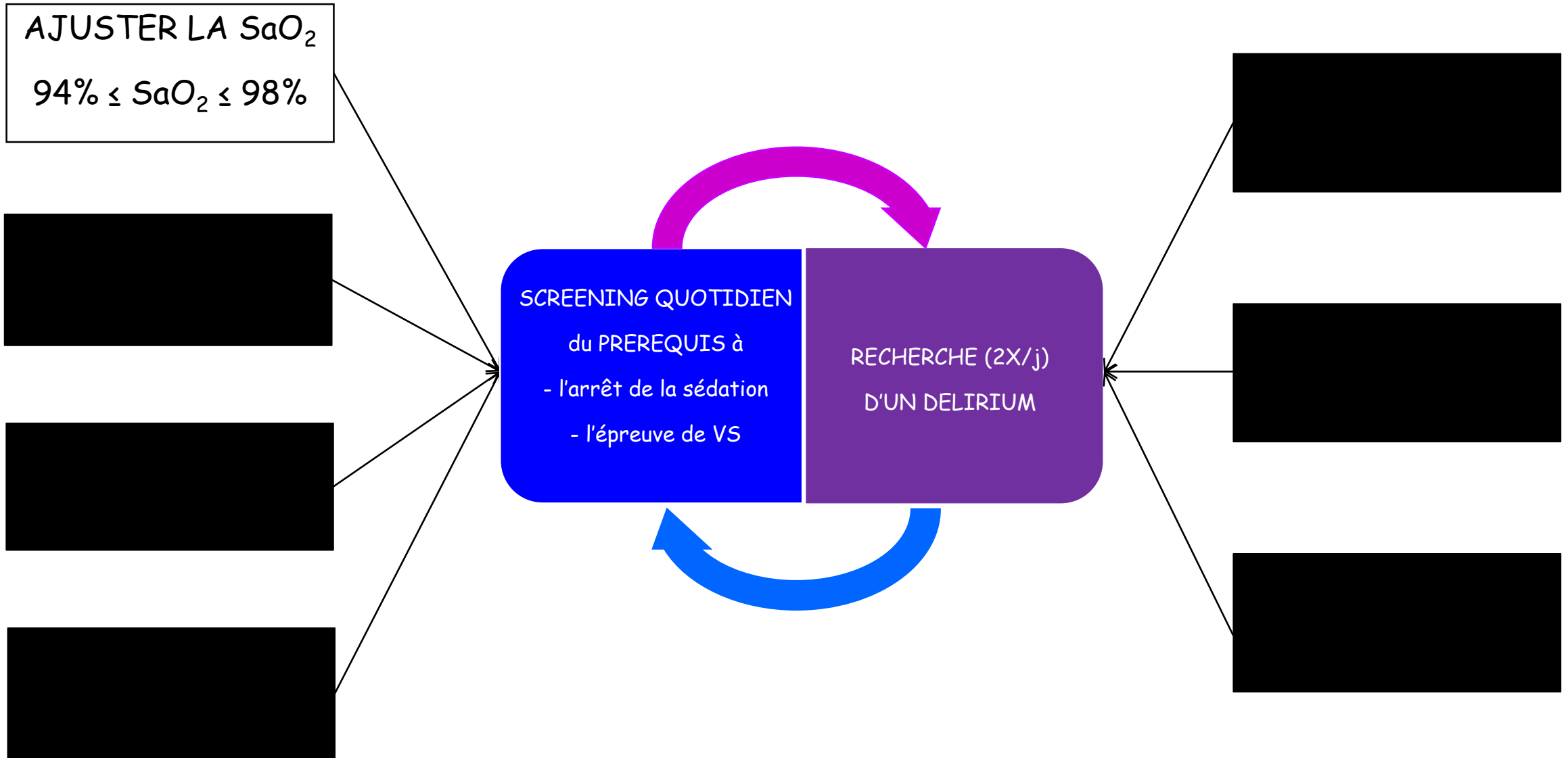
William D Schweickert, Mark C Pohlman, Anne S Pohlman, Celerina Nigos, Amy J Pawlik, Cheryl L Esbrook, Linda Spears, Megan Miller, Mietka Franczyk, Deanna Deprizio, Gregory A Schmidt, Amy Bowman, Rhonda Barr, Kathryn E McCallister, Jesse B Hall, John P Kress

	Intervention (n=49)	Control (n=55)	p value
Return to independent functional status at hospital discharge	29 (59%)	19 (35%)	0.02
ICU delirium (days)	2.0 (0.0–6.0)	4.0 (2.0–7.0)	0.03
Time in ICU with delirium (%)	33% (0–58)	57% (33–69)	0.02
Hospital delirium (days)	2.0 (0.0–6.0)	4.0 (2.0–8.0)	0.02
Hospital days with delirium (%)	28% (26)	41% (27)	0.01
Barthel Index score at hospital discharge	75 (7.5–95)	55 (0–85)	0.05
ICU-acquired paresis at hospital discharge	15 (31%)	27 (49%)	0.09
Ventilator-free days*	23.5 (7.4–25.6)	21.1 (0.0–23.8)	0.05
Duration of mechanical ventilation (days)	3.4 (2.3–7.3)	6.1 (4.0–9.6)	0.02
Duration of mechanical ventilation, survivors (days)	3.7 (2.3–7.7)	5.6 (3.4–8.4)	0.19
Duration of mechanical ventilation, non-survivors (days)	2.5 (2.4–5.5)	9.5 (5.9–14.1)	0.04
Length of stay in ICU (days)	5.9 (4.5–13.2)	7.9 (6.1–12.9)	0.08
Length of stay in hospital (days)	13.5 (8.0–23.1)	12.9 (8.9–19.8)	0.93
Hospital mortality	9 (18%)	14 (25%)	0.53

Data are n (%), median (IQR), or mean (SD). ICU=intensive care unit. *Ventilator-free days from study day 1 to day 28. Barthel Index scale 0–100, APACHE II scale 0–71.

Table 3: Main outcomes according to study group

SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE



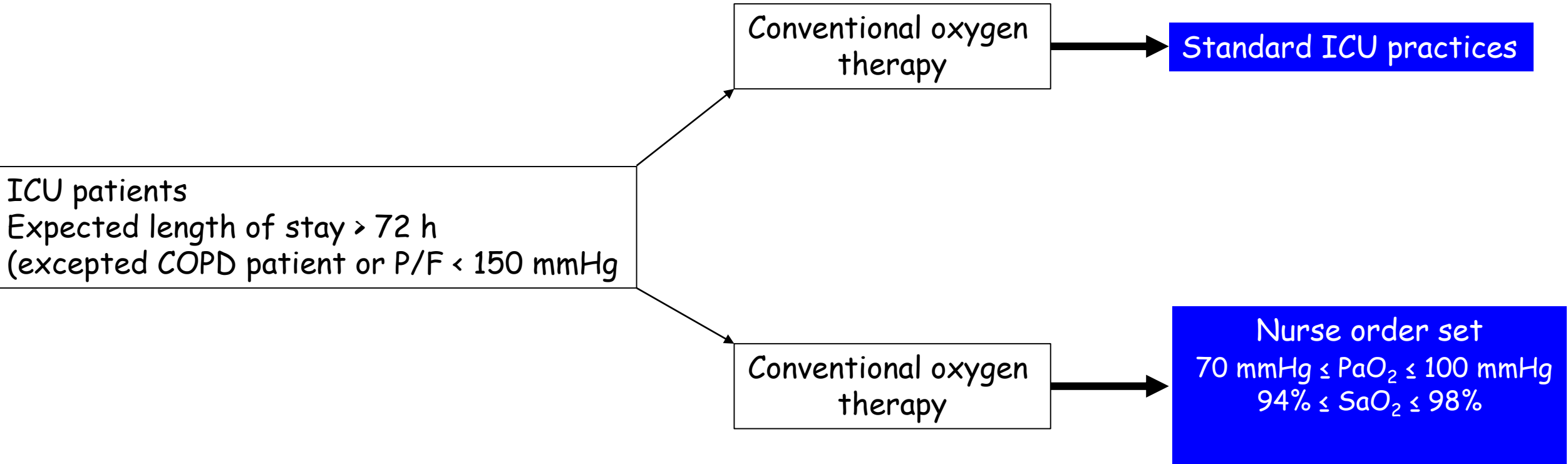
Effect of Conservative vs Conventional Oxygen Therapy on Mortality Among Patients in an Intensive Care Unit

The Oxygen-ICU Randomized Clinical Trial

Massimo Girardis, MD; Stefano Busani, MD; Elisa Damiani, MD; Abele Donati, MD; Laura Rinaldi, MD; Andrea Marudi, MD; Andrea Morelli, MD; Massimo Antonelli, MD; Mervyn Singer, MD, FRCA



2016





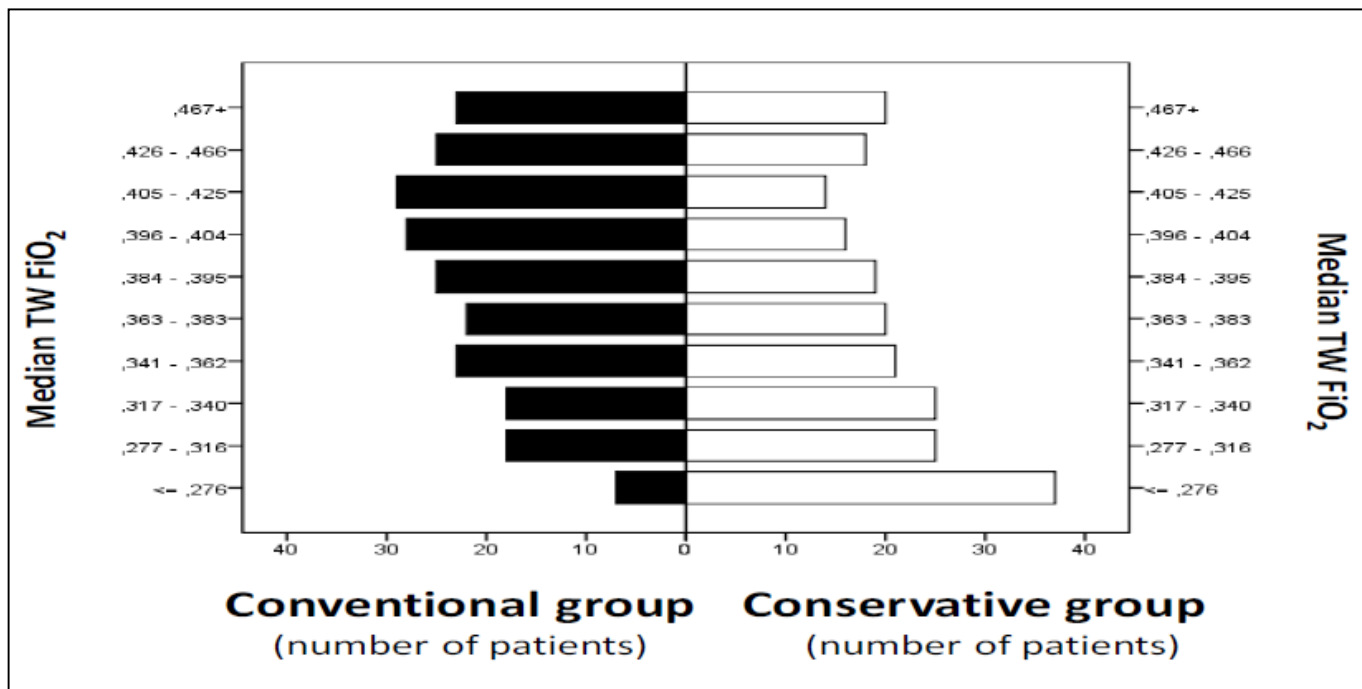
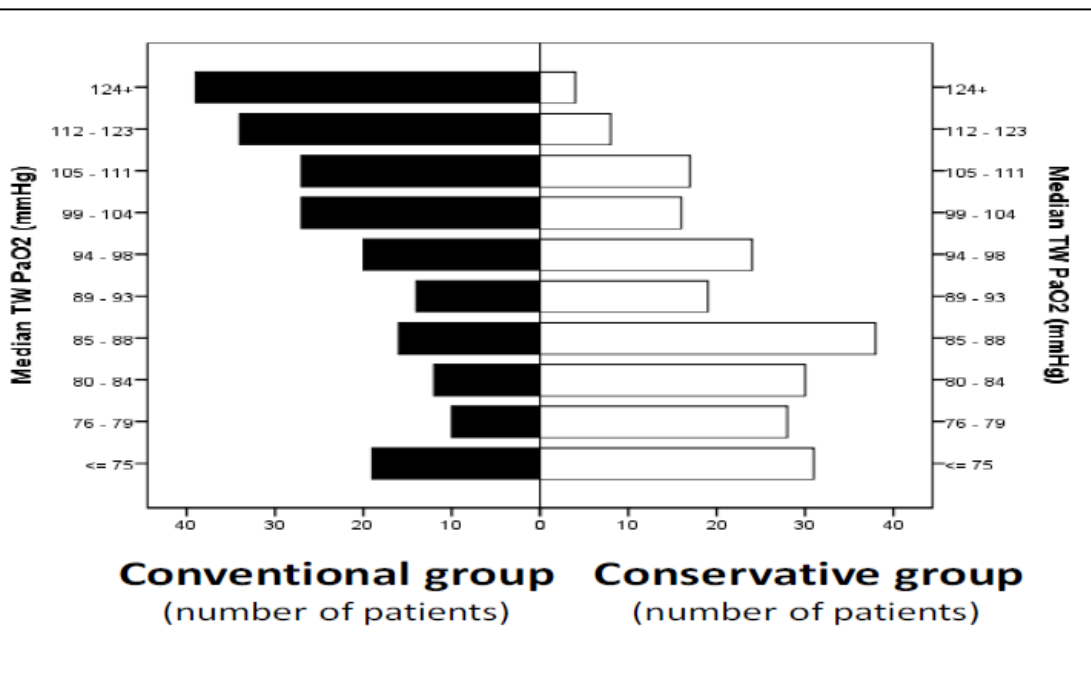
2016

JAMA | Preliminary Communication | CARING FOR THE CRITICALLY ILL PATIENT

Effect of Conservative vs Conventional Oxygen Therapy on Mortality Among Patients in an Intensive Care Unit

The Oxygen-ICU Randomized Clinical Trial

Massimo Girardis, MD; Stefano Busani, MD; Elisa Damiani, MD; Abele Donati, MD; Laura Rinaldi, MD; Andrea Marudi, MD; Andrea Morelli, MD; Massimo Antonelli, MD; Mervyn Singer, MD, FRCA



JAMA | Preliminary Communication | CARING FOR THE CRITICALLY ILL PATIENT

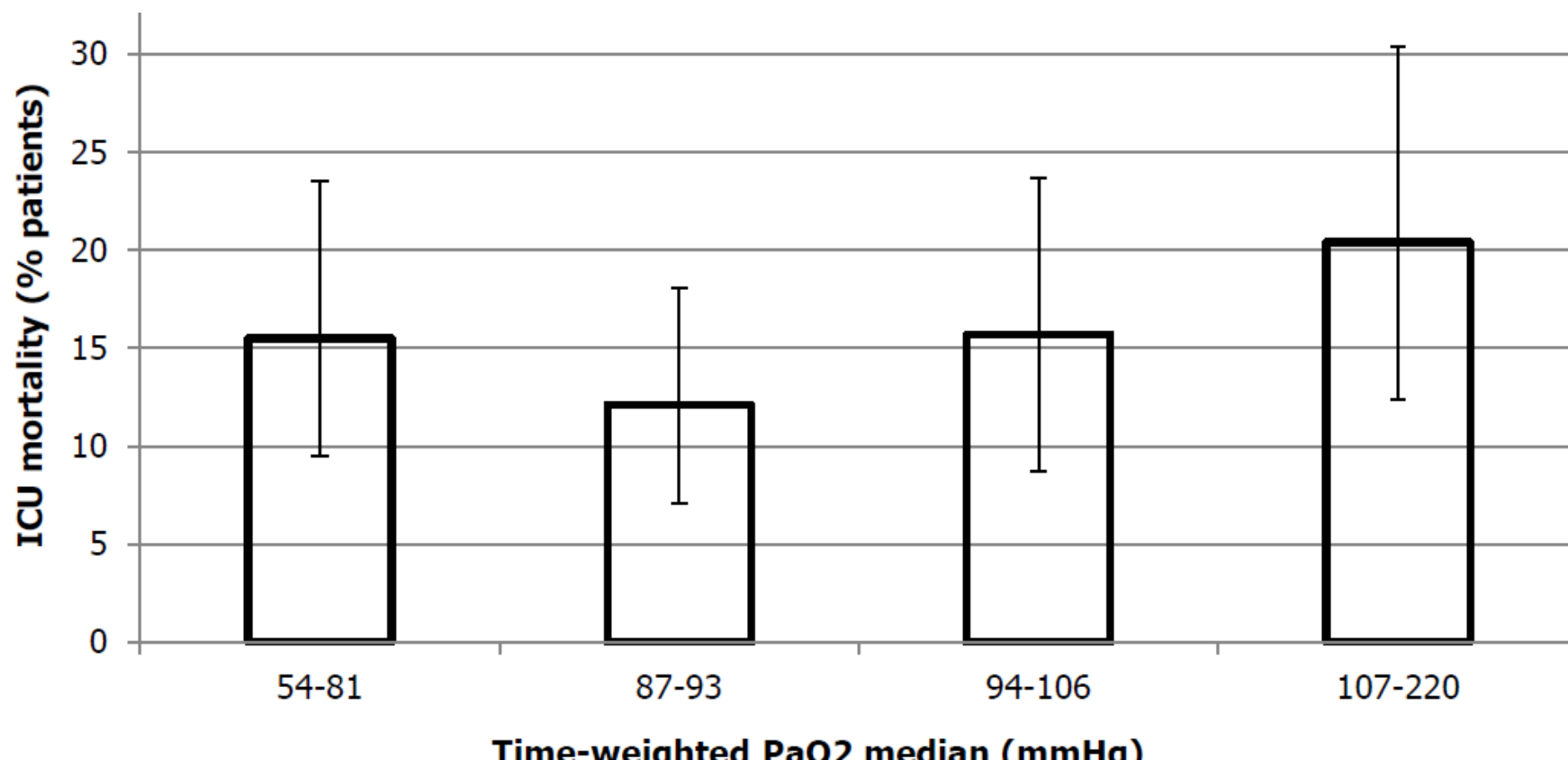
Effect of Conservative vs Conventional Oxygen Therapy on Mortality Among Patients in an Intensive Care Unit

The Oxygen-ICU Randomized Clinical Trial

Massimo Girardis, MD; Stefano Busani, MD; Elisa Damiani, MD; Abele Donati, MD; Laura Rinaldi, MD; Andrea Marudi, MD; Andrea Morelli, MD; Massimo Antonelli, MD; Mervyn Singer, MD, FRCA



2016



JAMA | Preliminary Communication | CARING FOR THE CRITICALLY ILL PATIENT

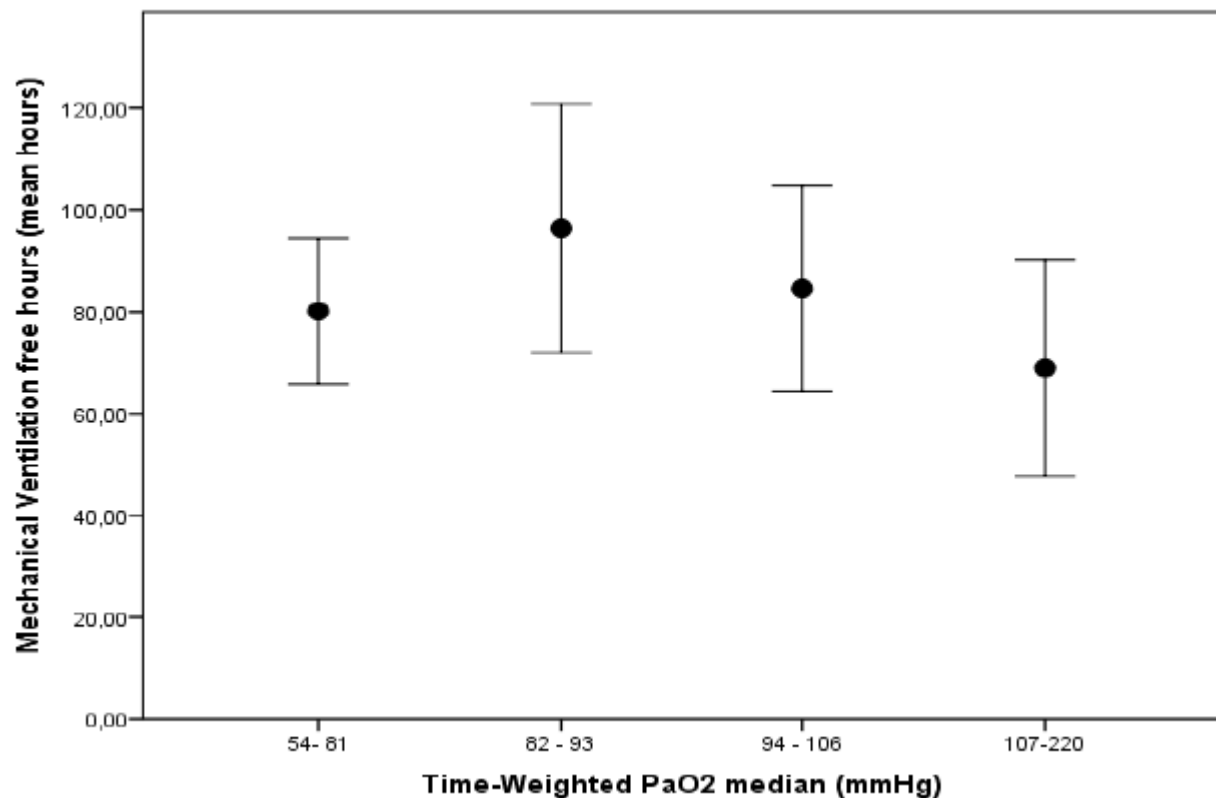
Effect of Conservative vs Conventional Oxygen Therapy on Mortality Among Patients in an Intensive Care Unit

The Oxygen-ICU Randomized Clinical Trial

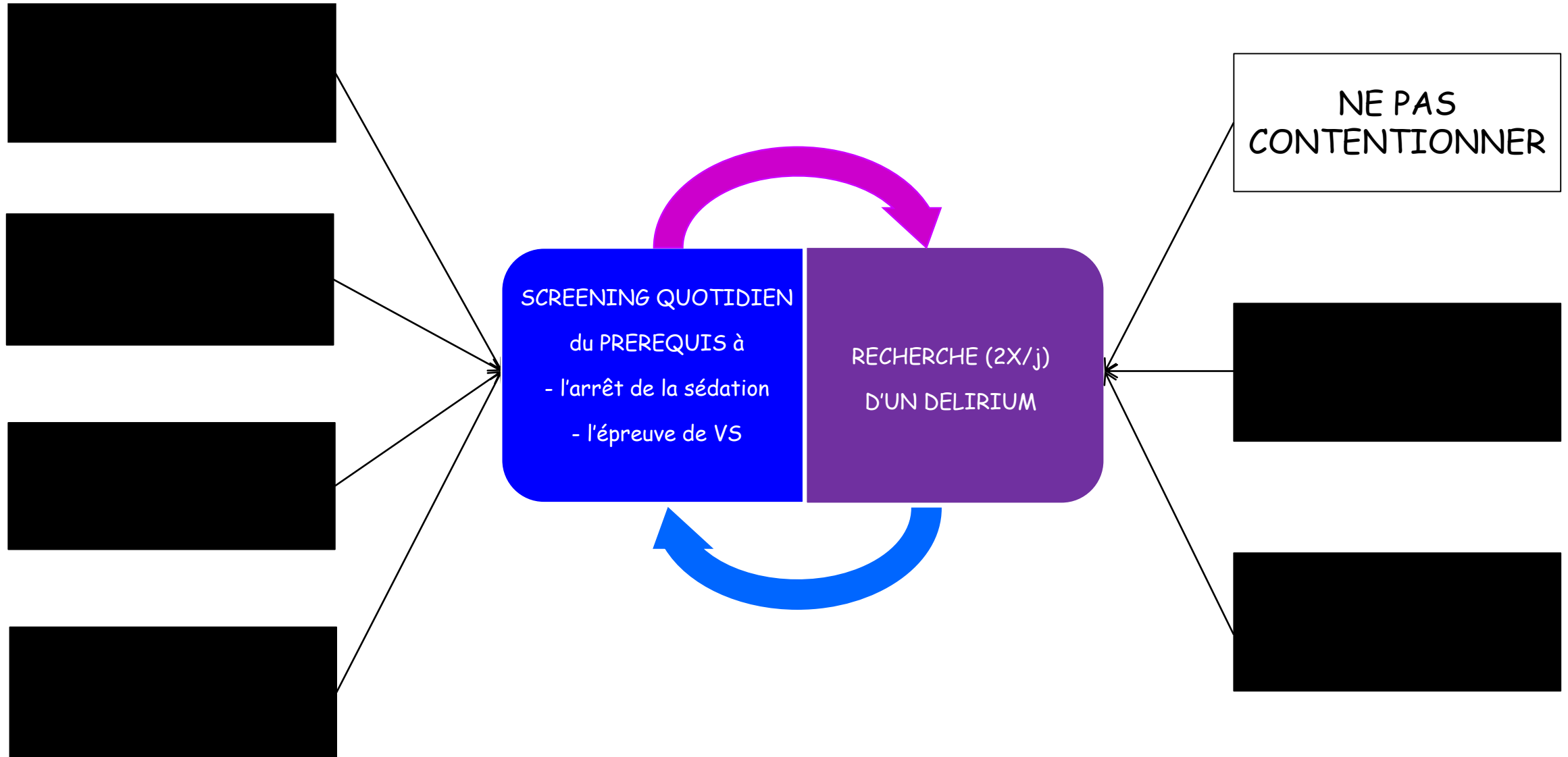
Massimo Girardis, MD; Stefano Busani, MD; Elisa Damiani, MD; Abele Donati, MD; Laura Rinaldi, MD; Andrea Marudi, MD; Andrea Morelli, MD; Massimo Antonelli, MD; Mervyn Singer, MD, FRCA



2016

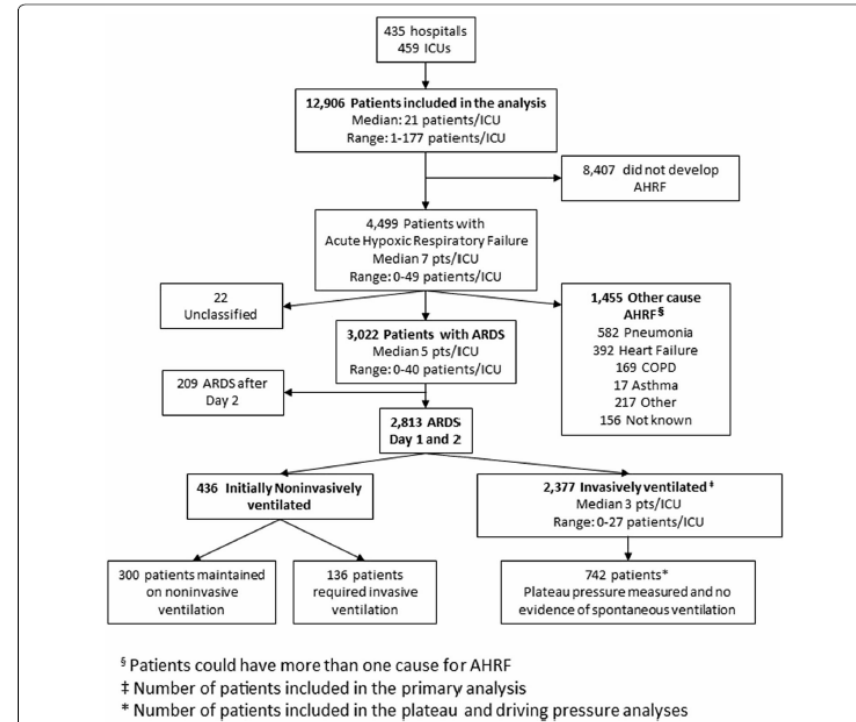


SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE



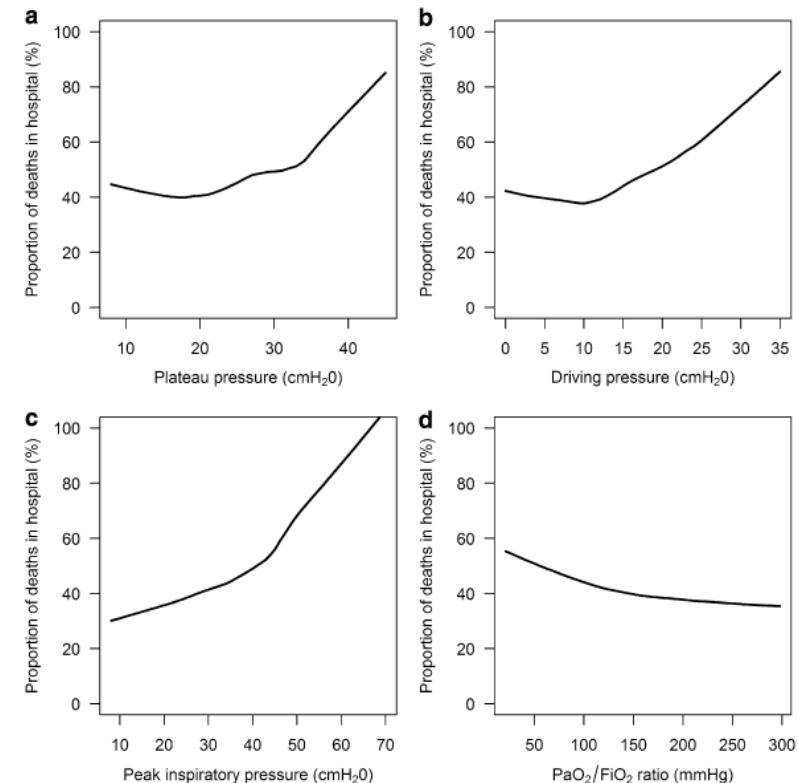
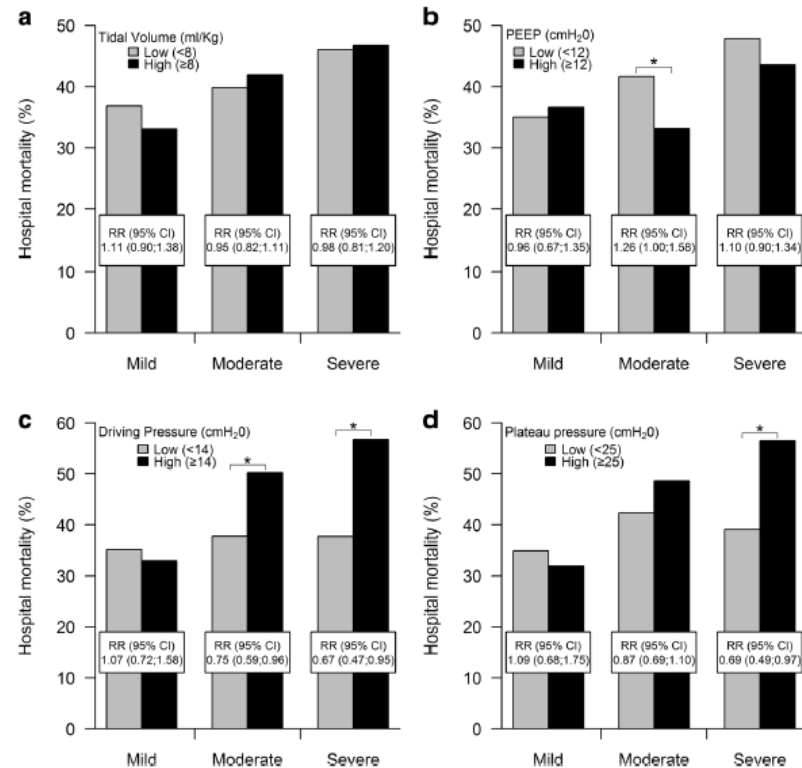
Potentially modifiable factors contributing to outcome from acute respiratory distress syndrome: the LUNG SAFE study

John G. Laffey^{1,2*} , Giacomo Bellani^{3,4}, Tài Pham^{5,6,7}, Eddy Fan^{8,9}, Fabiana Madotto¹⁰, Ednan K. Bajwa¹¹, Laurent Brochard^{12,13}, Kevin Clarkson¹⁴, Andres Esteban¹⁵, Luciano Gattinoni¹⁶, Frank van Haren¹⁷, Leo M. Heunks¹⁸, Kiyoyasu Kurahashi¹⁹, Jon Henrik Laake²⁰, Anders Larsson²¹, Daniel F. McAuley²², Lia McNamee²², Nicolas Nin¹⁵, Haibo Qiu²³, Marco Ranieri²⁴, Gordon D. Rubenfeld²⁵, B. Taylor Thompson¹¹, Hermann Wrigge²⁶, Arthur S. Slutsky^{12,13,27}, Antonio Pesenti^{28,29} and The LUNG SAFE Investigators and the ESICM Trials Group

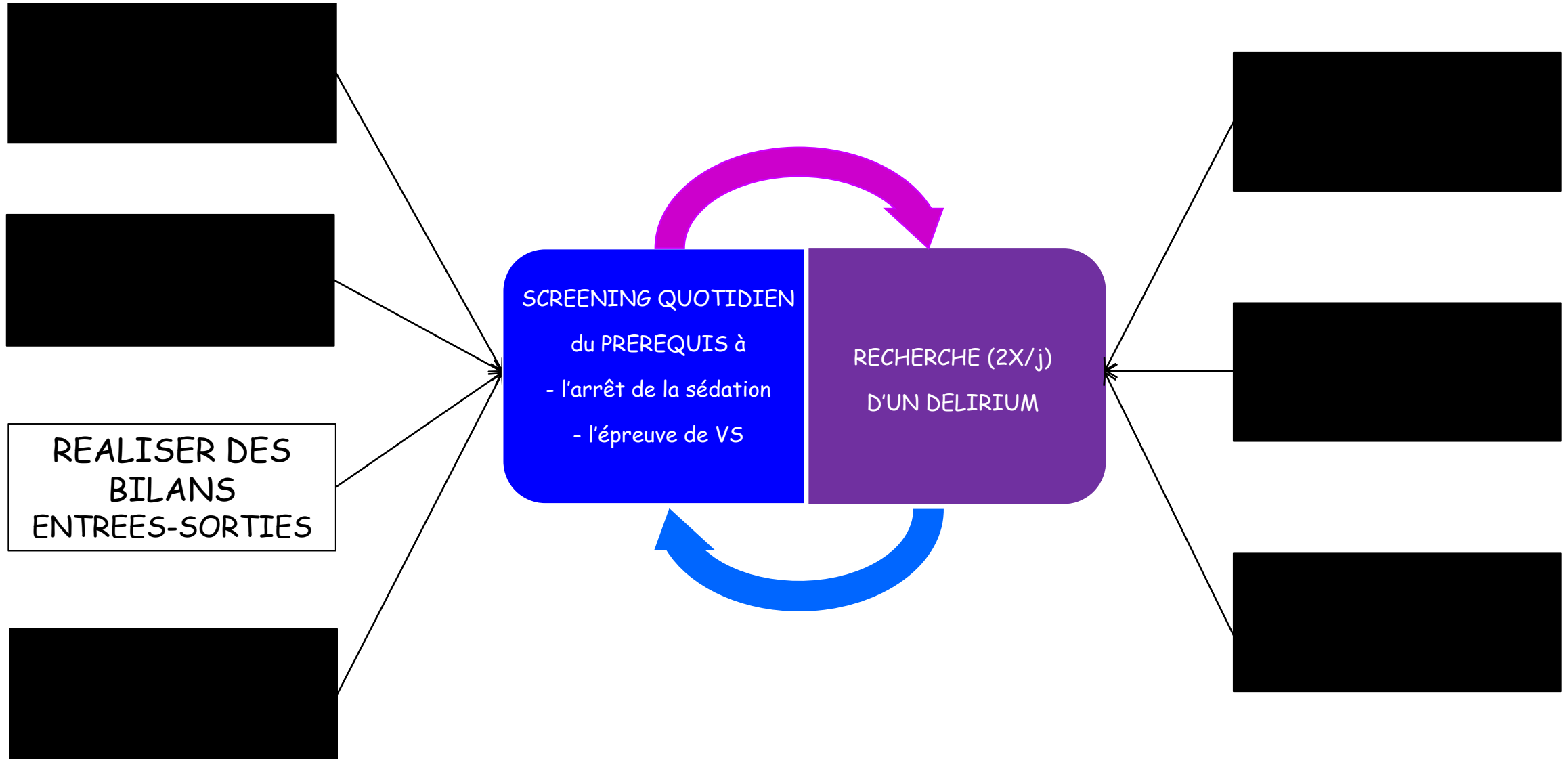


Potentially modifiable factors contributing to outcome from acute respiratory distress syndrome: the LUNG SAFE study

John G. Laffey^{1,2*} , Giacomo Bellani^{3,4}, Tài Pham^{5,6,7}, Eddy Fan^{8,9}, Fabiana Madotto¹⁰, Ednan K. Bajwa¹¹, Laurent Brochard^{12,13}, Kevin Clarkson¹⁴, Andres Esteban¹⁵, Luciano Gattinoni¹⁶, Frank van Haren¹⁷, Leo M. Heunks¹⁸, Kiyoyasu Kurahashi¹⁹, Jon Henrik Laake²⁰, Anders Larsson²¹, Daniel F. McAuley²², Lia McNamee²², Nicolas Nin¹⁵, Haibo Qiu²³, Marco Ranieri²⁴, Gordon D. Rubenfeld²⁵, B. Taylor Thompson¹¹, Hermann Wrigge²⁶, Arthur S. Slutsky^{12,13,27}, Antonio Pesenti^{28,29} and The LUNG SAFE Investigators and the ESICM Trials Group



SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE

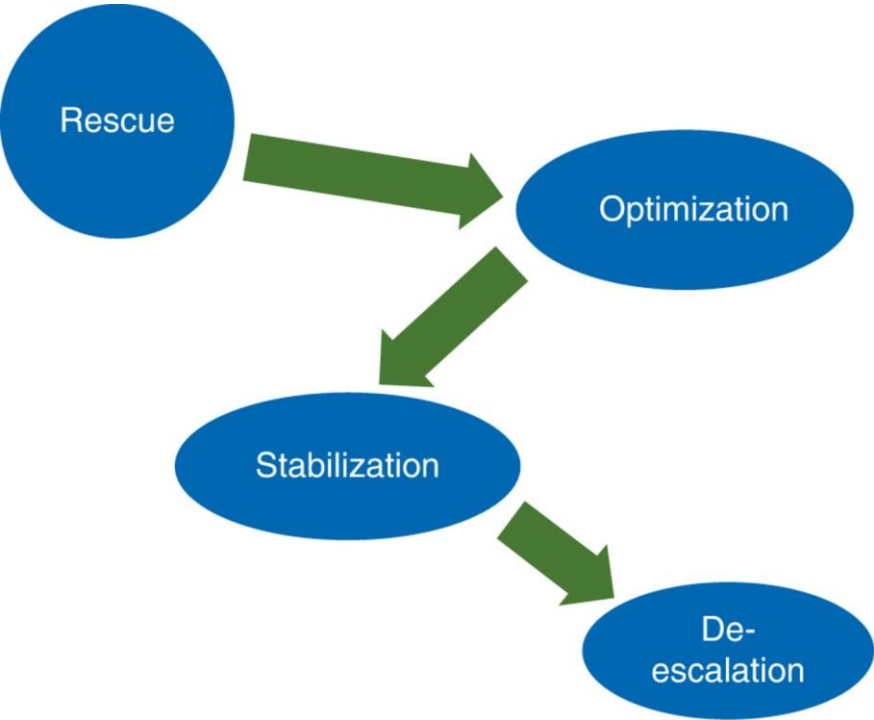


SPECIAL ARTICLES

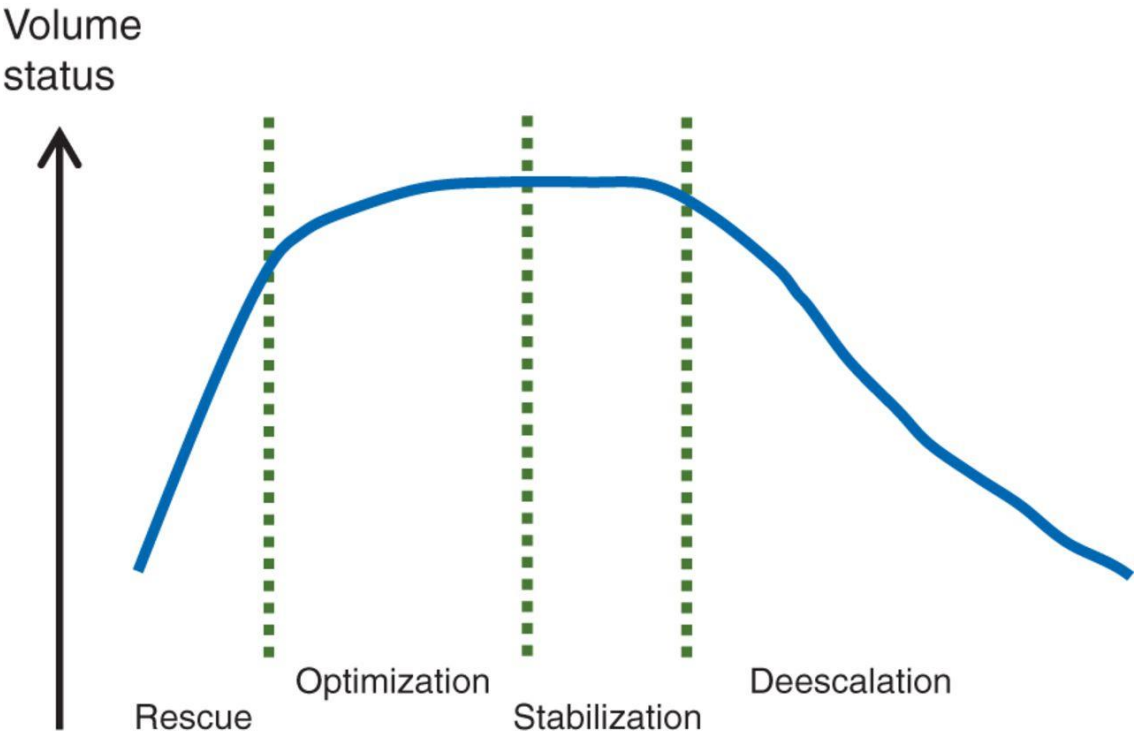
Four phases of intravenous fluid therapy: a conceptual model†

E. A. Hoste^{1,2}, K. Maitland^{3,4}, C. S. Brudney⁵, R. Mehta⁶, J.-L. Vincent⁷, D. Yates⁸, J. A. Kellum⁹, M. G. Mythen¹⁰
and A. D. Shaw¹¹ for the ADQI XII Investigators Group

Relationship between the different stages of fluid resuscitation.

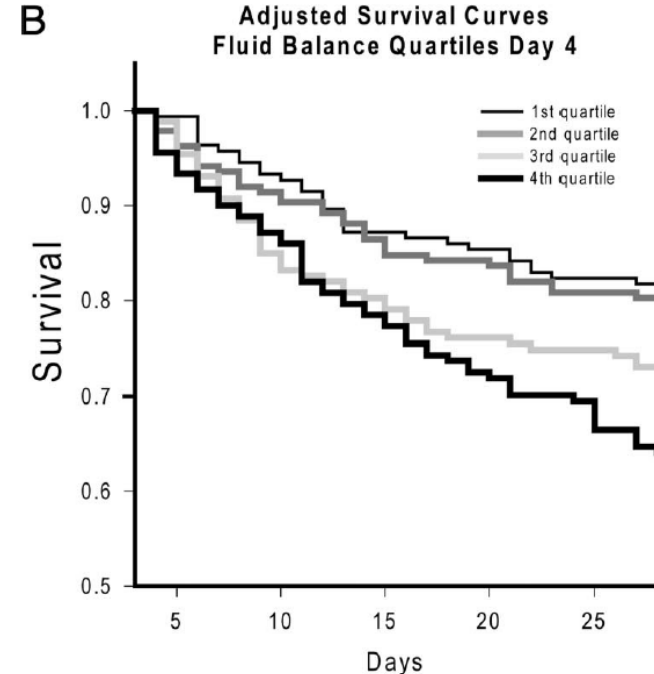
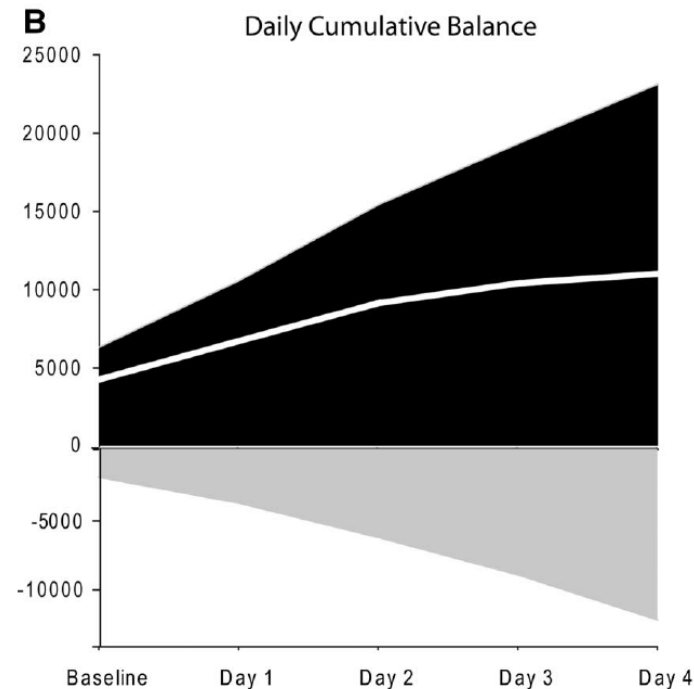


Patients' volume status at different stages of resuscitation.



Fluid resuscitation in septic shock: A positive fluid balance and elevated central venous pressure are associated with increased mortality*

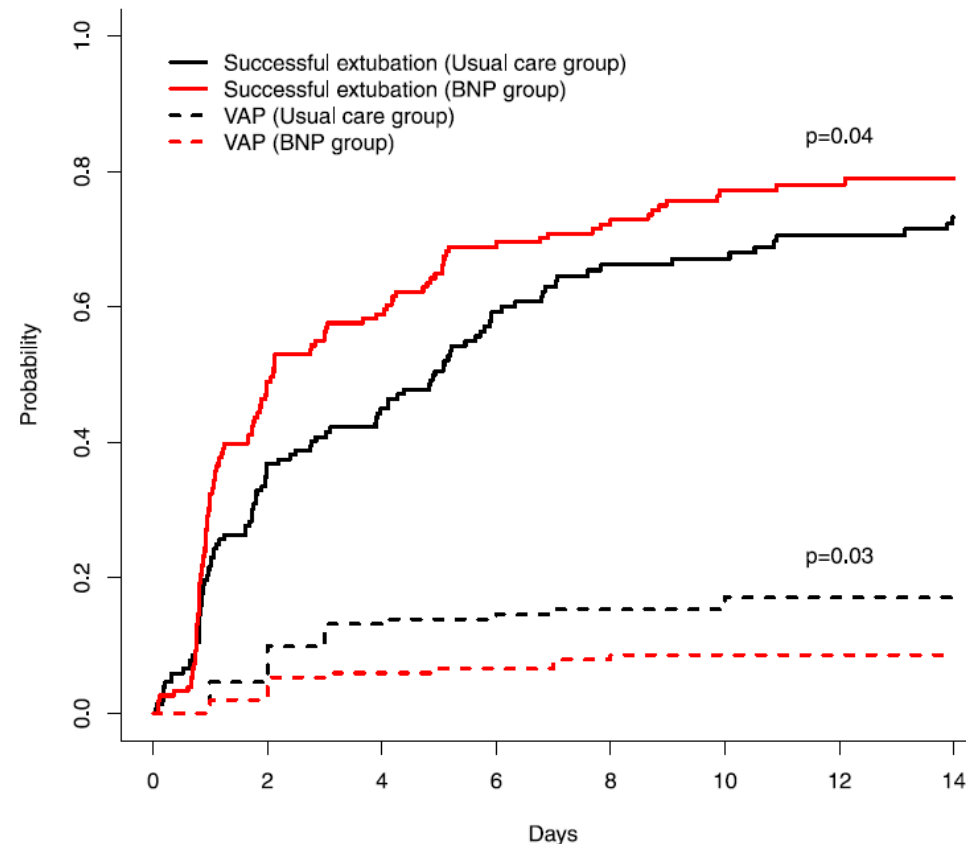
John H. Boyd, MD, FRCP(C); Jason Forbes, MD; Taka-aki Nakada, MD, PhD; Keith R. Walley, MD, FRCP(C); James A. Russell, MD, FRCP(C)



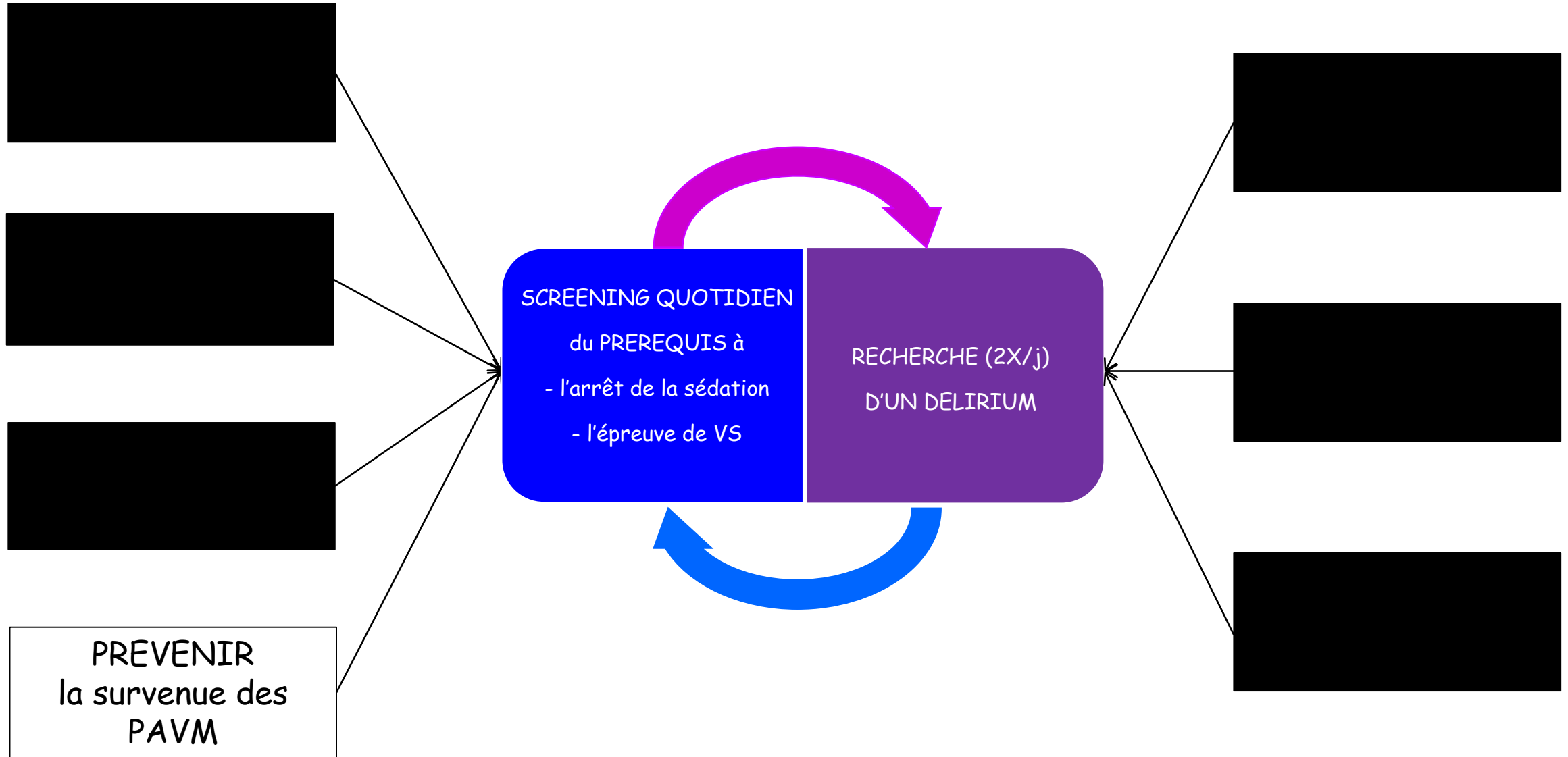
Ventilator-Associated Pneumonia During Weaning From Mechanical Ventilation

Role of Fluid Management

Armand Mekontso Dessap, MD, PhD; Sandrine Katsahian, MD; Ferran Roche-Campo, MD, PhD; Hugo Varet, PhD; Achille Kouatchet, MD; Vinko Tomicic, MD; Gaetan Beduneau, MD; Romain Sonnevile, MD, PhD; Samir Jaber, MD, PhD; Michael Darmon, MD, PhD; Diego Castanares-Zapatero, MD; Laurent Brochard, MD; and Christian Brun-Buisson, MD

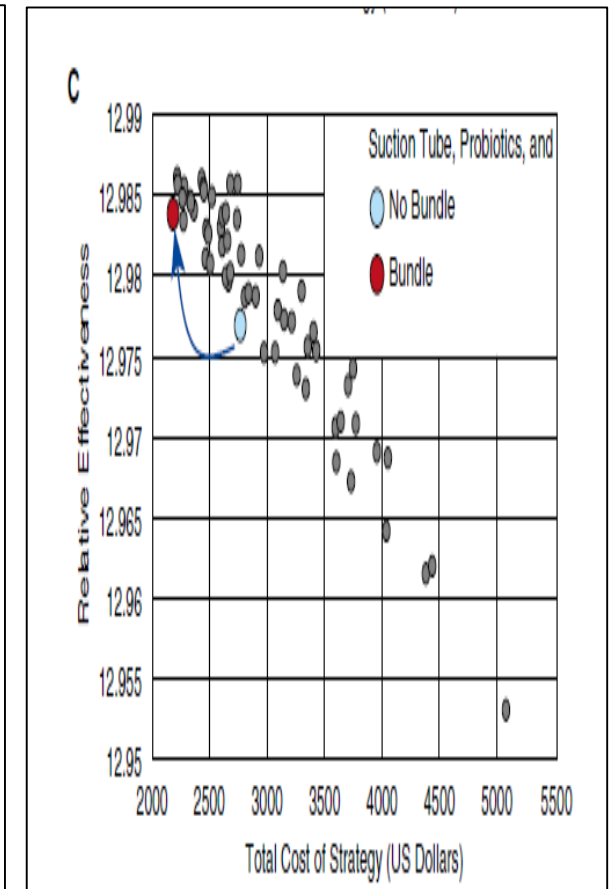
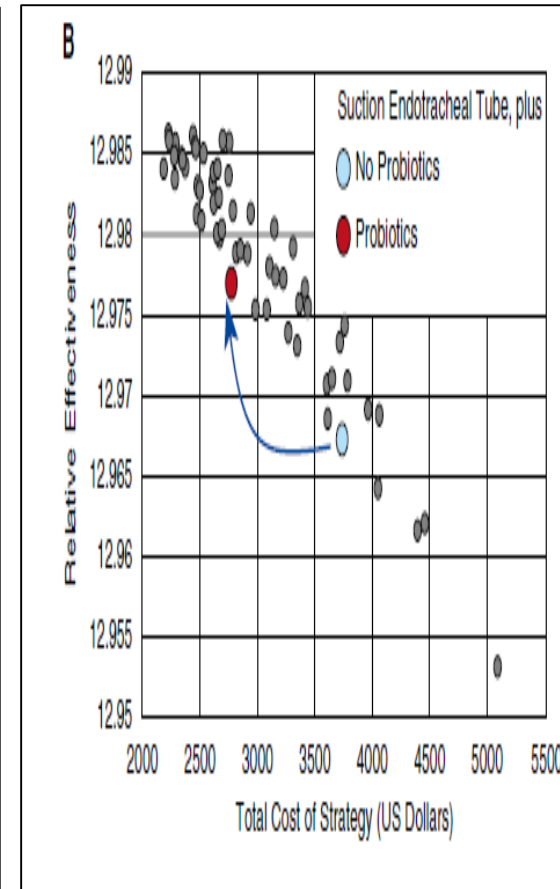
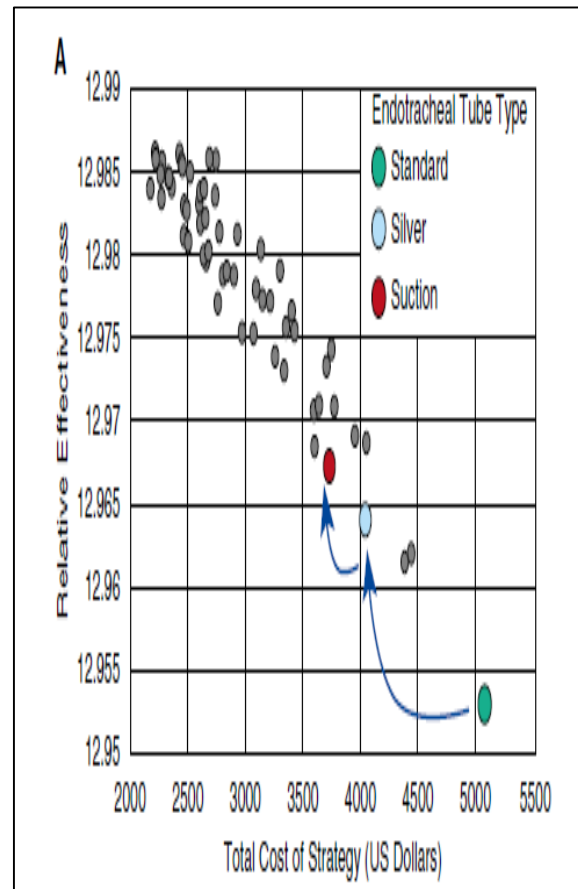
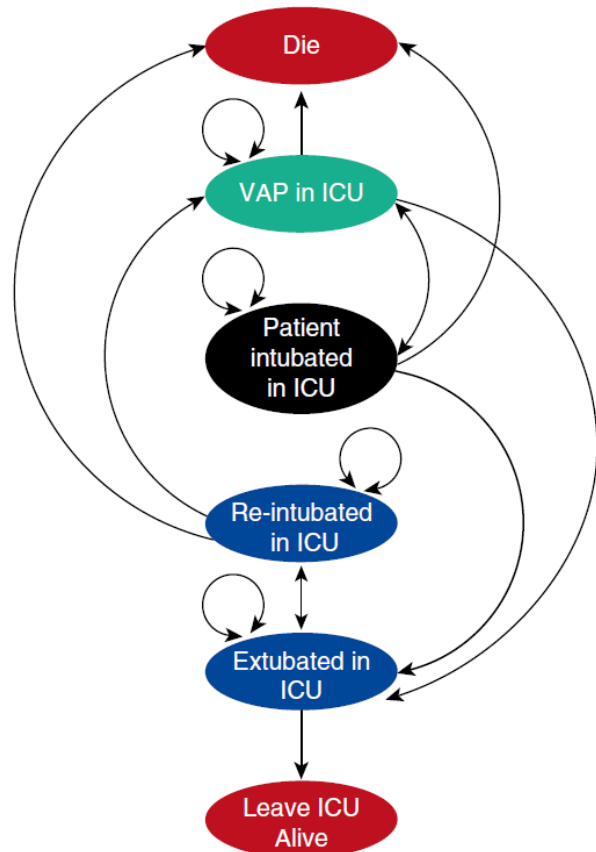


SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE

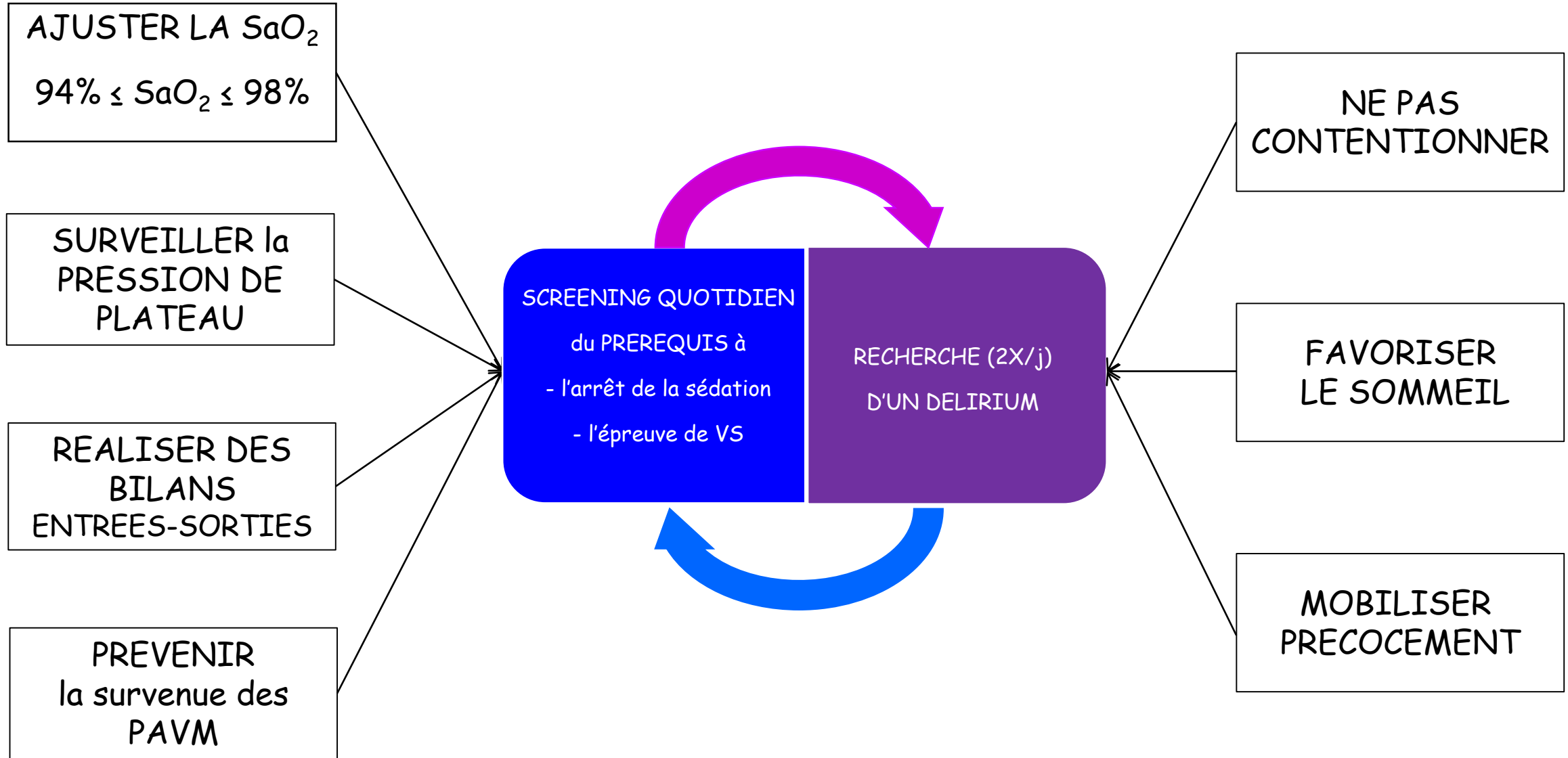


Determining the Ideal Strategy for Ventilator-associated Pneumonia Prevention Cost-Benefit Analysis

Westyn Branch-Elliman¹, Sharon B. Wright^{2,3}, and Michael D. Howell^{4,5}



SOINS PARAMEDICAUX: LES 10 INTERVENTIONS QUI "SAUVENT" LE PATIENT VENTILE



HUMAN FACTORS AND ERGONOMICS

