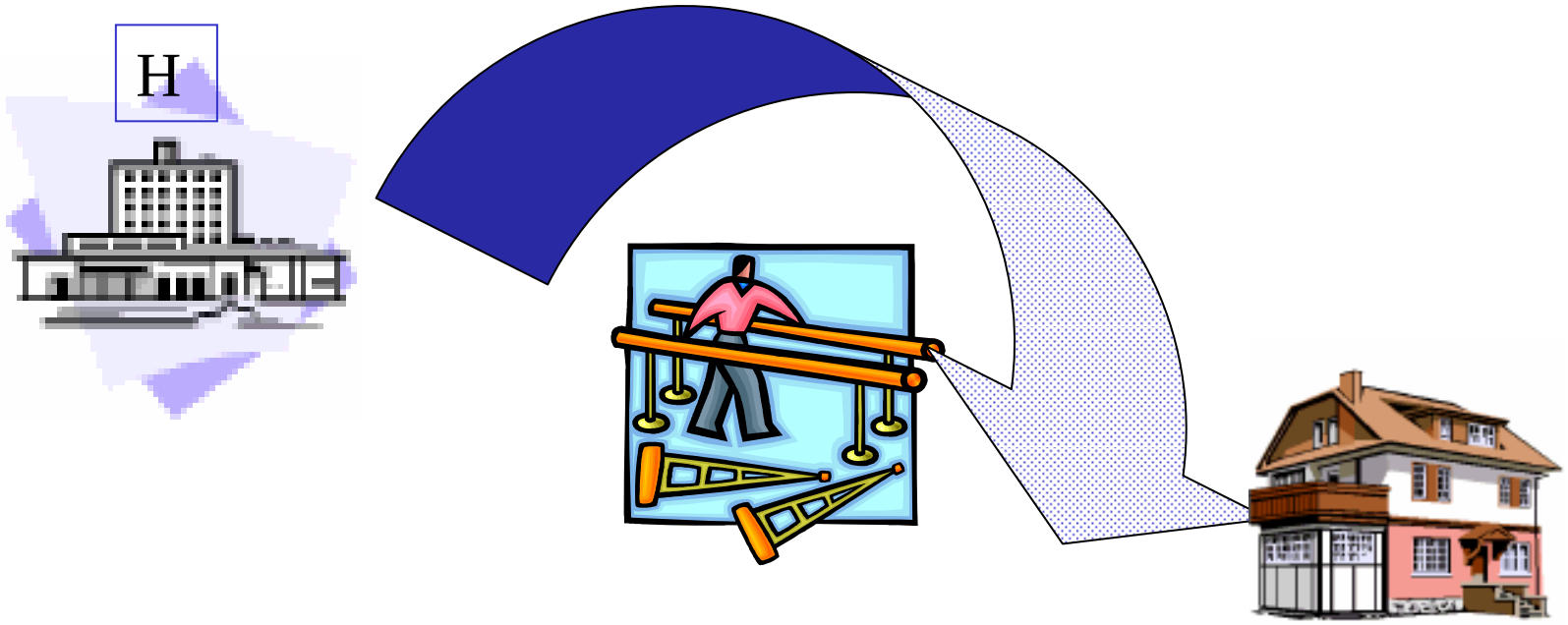
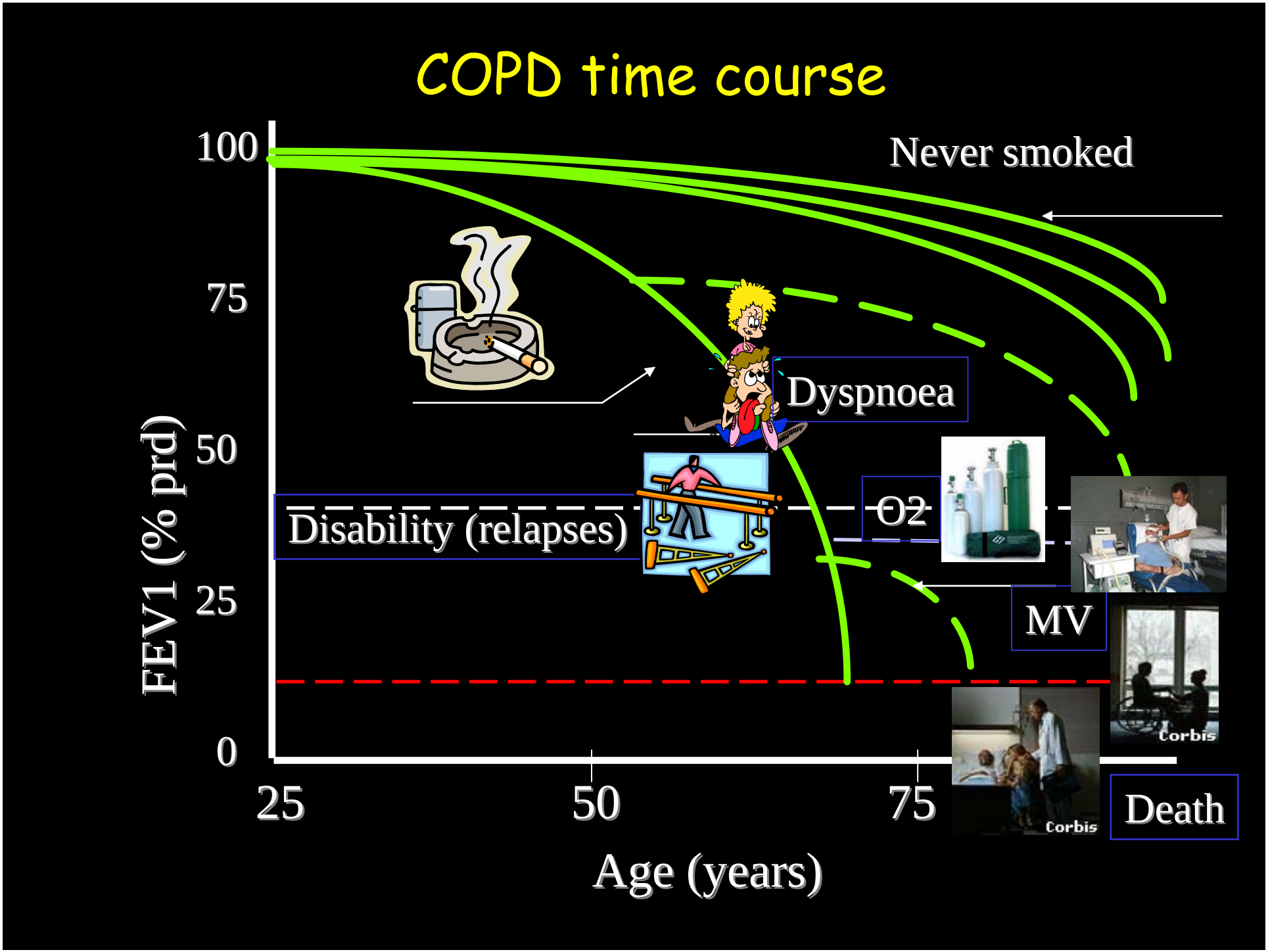


Storia naturale delle scelte terapeutiche della BPCO

www.fisiokinesiterapia.biz

Definition of COPD

Chronic obstructive pulmonary disease (COPD) is a disease state characterized by airflow limitation that is not fully reversible. The airflow limitation is usually both progressive and associated with an abnormal inflammatory response of the lungs to noxious particles or gases.


COPD time course
100
75
50
25
0
FEV1 (% prd)
25
50
75
Age (years)
Never smoked
Dyspnoea
Disability (relapses)
O2
MV
Death
Corbis
Corbis

The vicious circle of COPD

COPD

Dyspnea

↓ Social activity

↑ Social isolation

↓ Physical activity

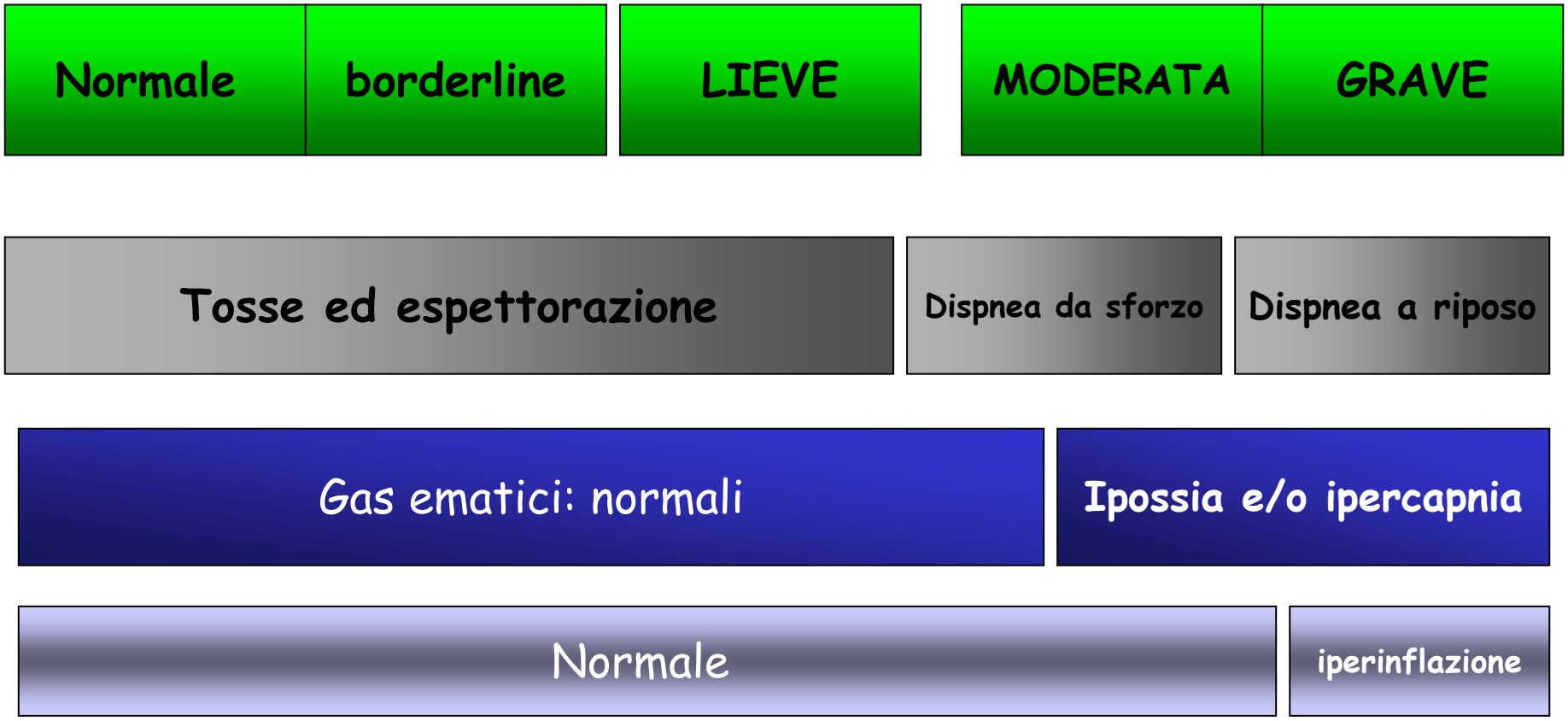
Pre-agonic symptoms

Depression

↑ Shortness of breath

Depressing levels of fitness

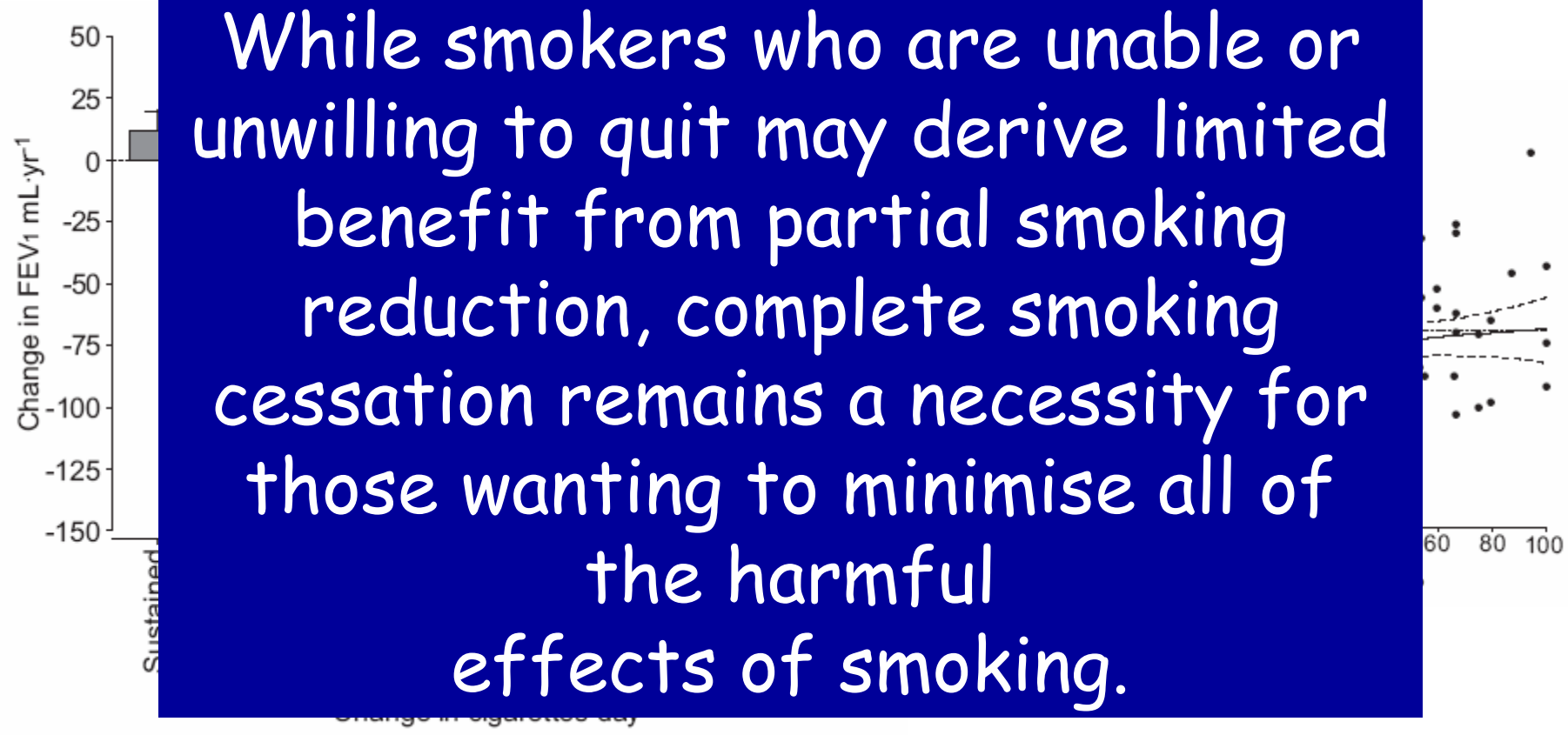
PROGRESSIONE BPCO



Eur Respir J 2005; 25: 1011–1017
DOI: 10.1183/09031936.05.00086804

Smoking reduction and the rate of decline in FEV1: results from the Lung Health Study

M.S. Simmons*, J.E. Connett#, M.A. Nides¶, P.G. Lindgren#, E.C. Kleerup*, R.P. Murray+, W.M. Bjornson§ and D.P. Tashkin*



While smokers who are unable or unwilling to quit may derive limited benefit from partial smoking reduction, complete smoking cessation remains a necessity for those wanting to minimise all of the harmful effects of smoking.

Therapy at each stage of COPD

Figure 6 - Therapy at Each Stage of COPD

Old	0: At Risk	I: Mild	II: Moderate IIA	IIB	III: Severe
New	**0: At Risk**	**I: Mild**	**II: Moderate**	**III: Severe**	**IV: Very Severe**
Characteristics	• Chronic symptoms • Exposure to risk factors • Normal spirametry	• $FEV_1/FVC < 70\%$ • $FEV_1 \geq 80\%$ • With or without symptoms	• $FEV_1/FVC < 70\%$ • $50\% > FEV_1 < 80\%$ • With or without symptoms	• $FEV_1/FVC < 70\%$ • $30\% > FEV_1 < 50\%$ • With or without symptoms	• $FEV_1/FVC < 70\%$ • $FEV_1 < 30\%$ or presence of chronic respiratory failure or right heart failure
	Avoidance of risk factor(s); influenza vaccination				
		Add short-acting bronchodilator when needed			
			Add regular treatment with one or more long-acting bronchodilators *Add* rehabilitation		
				Add inhaled glucocorticosteroids if repeated exacerbations	
					Add long-term oxygen if chronic respiratory failure *Consider* surgical treatments

Fattori correlati alla ridotta sopravvivenza

Dyspnea Is a Better Predictor of 5-Year Survival Than Airway Obstruction in Patients With COPD*

Koichi Nishimura, MD; Takateru Izumi, MD, FCCP; Mitsuhiro Tsukino, MD; and Toru Oga, MD; on Behalf of the Kansai COPD Registry and Research Group in Japan

dyspnea

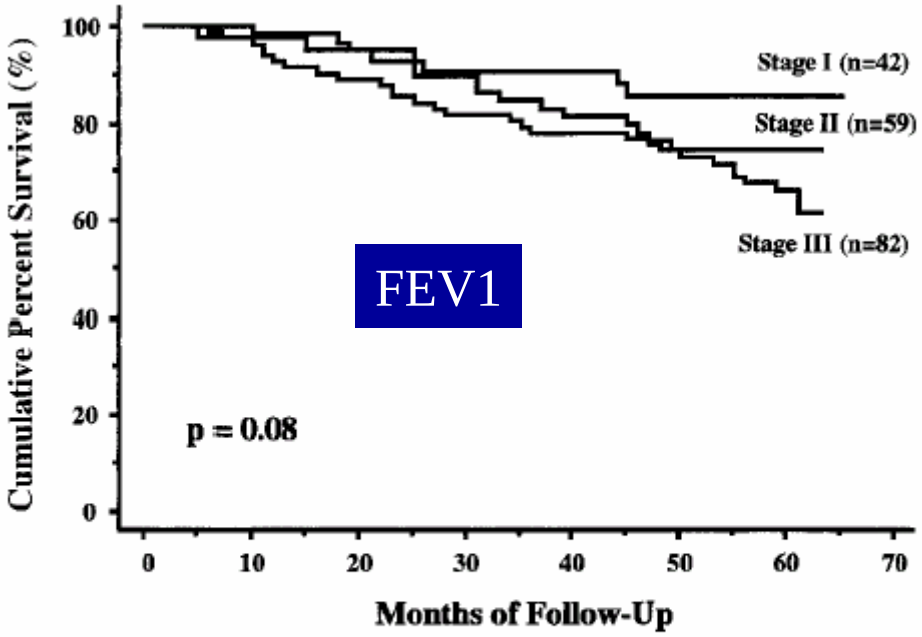


FIGURE 1. Five-year survival according to the staging of disease severity as defined by the ATS guideline evaluated by the percentage of predicted FEV_1.

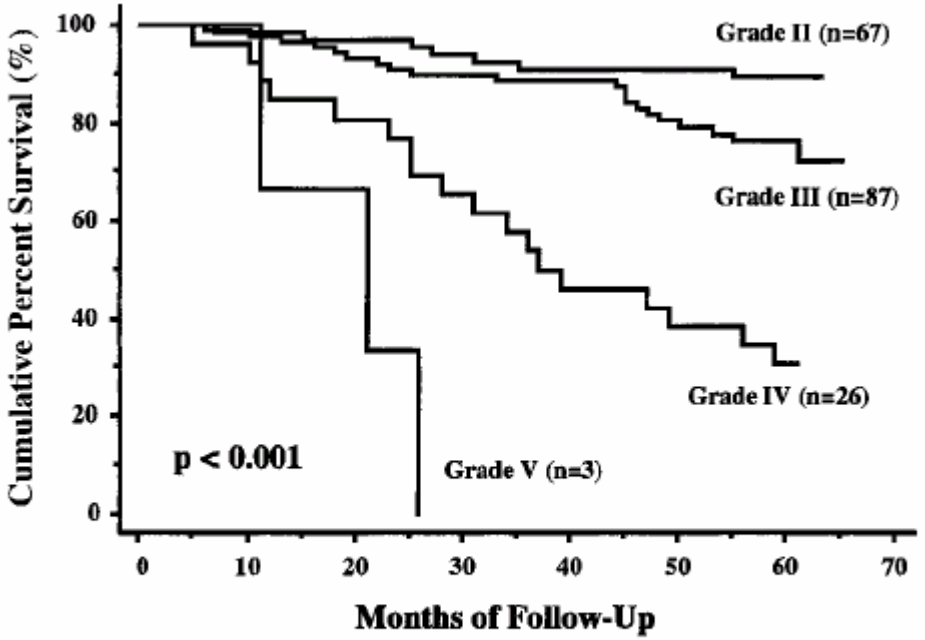
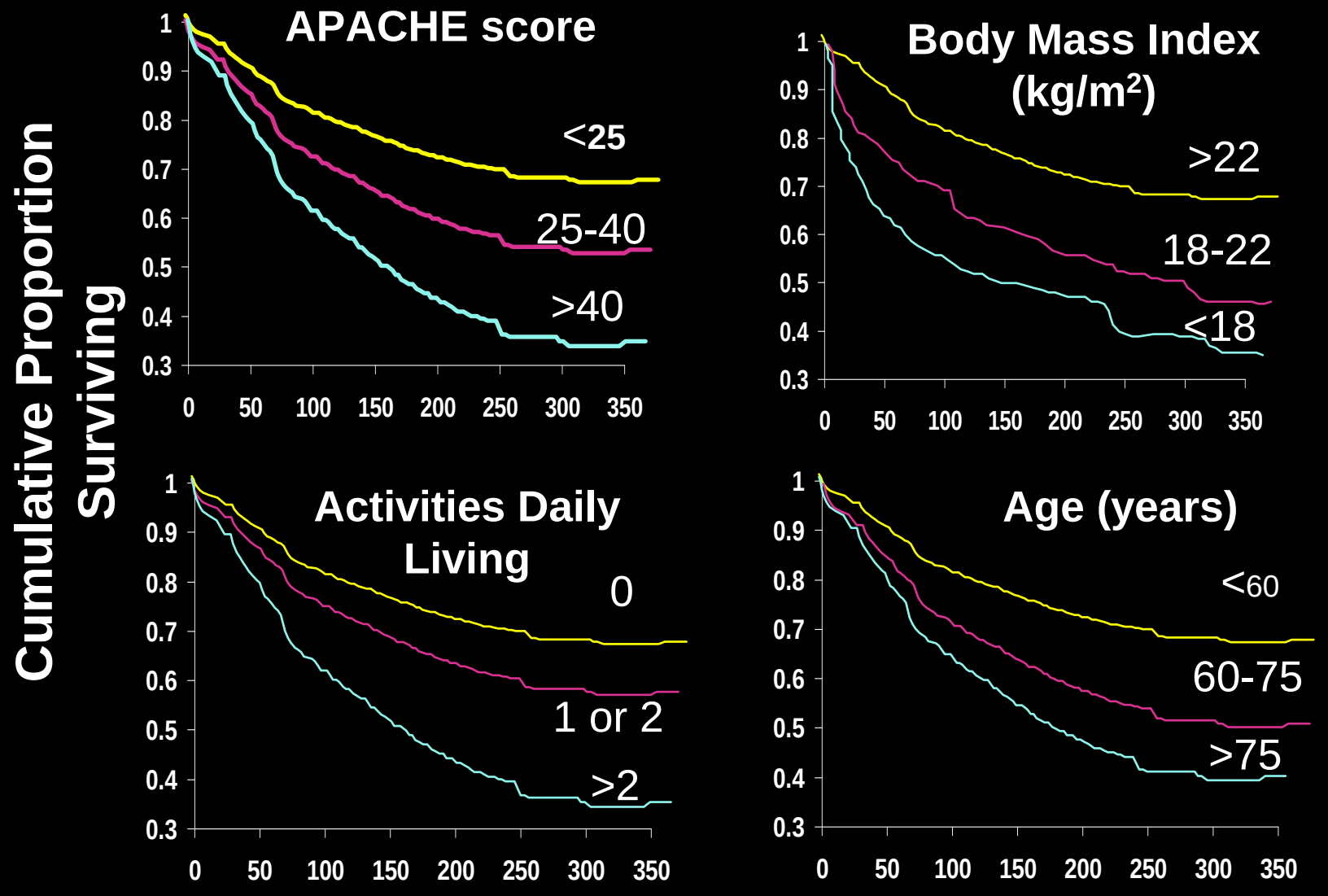


FIGURE 2. Five-year survival according to the level of dyspnea as evaluated by the modified 5-point grading system of Fletcher et al.[10]

Four predictors of survival in COPD.

Connors et al., AJRCCM 1996; 154: 959-967



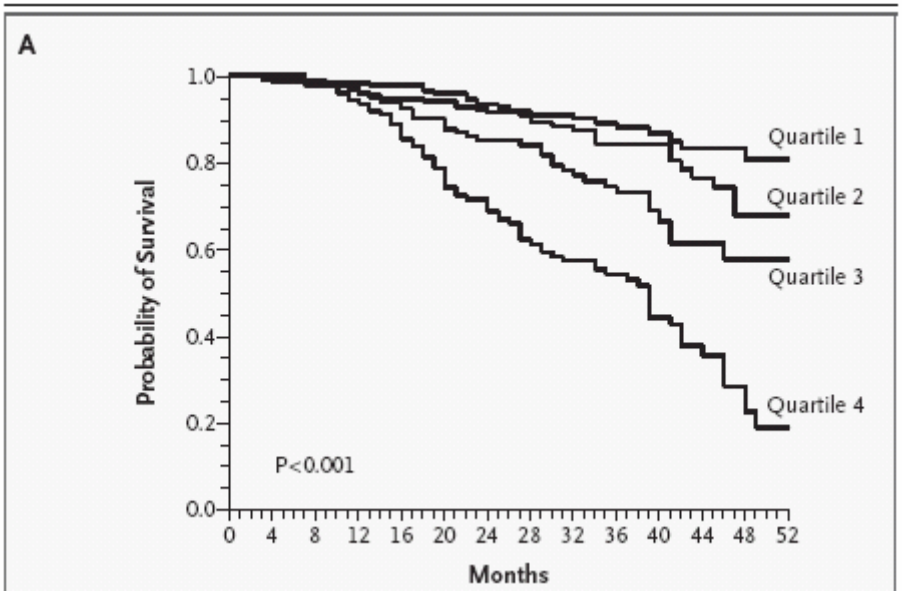
The NEW ENGLAND JOURNAL of MEDICINE

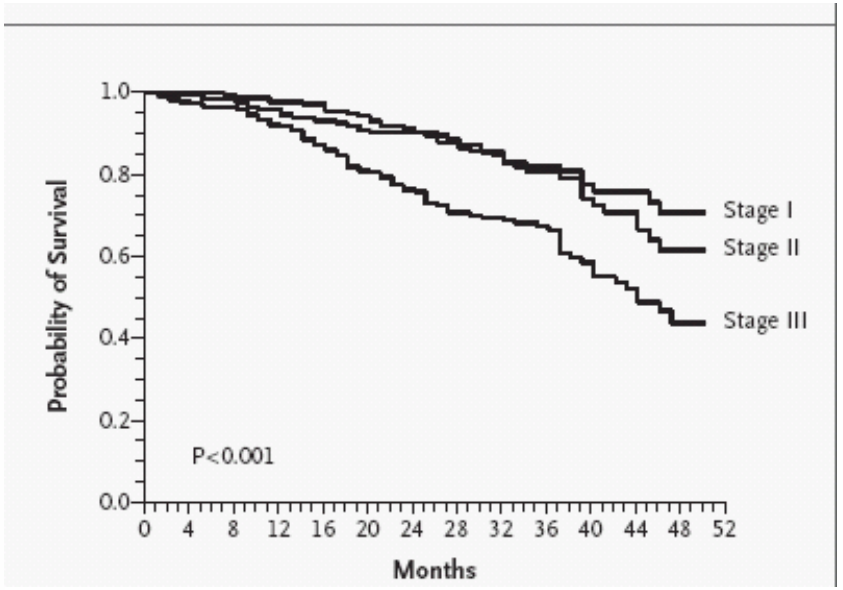
ORIGINAL ARTICLE

The Body-Mass Index, Airflow Obstruction, Dyspnea, and Exercise Capacity Index in Chronic Obstructive Pulmonary Disease

Bartolome R. Celli, M.D., Claudia G. Cote, M.D., Jose M. Marin, M.D., Ciro Casanova, M.D., Maria Montes de Oca, M.D., Reina A. Mendez, M.D., Victor Pinto Plata, M.D., and Howard J. Cabral, Ph.D.

N Engl J Med 2004;350:1005-12.





Kaplan–Meier Survival Curves for BODE and according to ATS

.

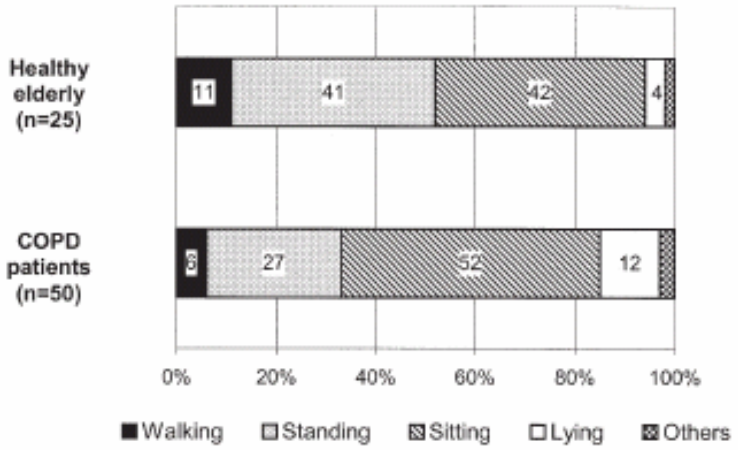
Characteristics of Physical Activities in Daily Life in Chronic Obstructive Pulmonary Disease

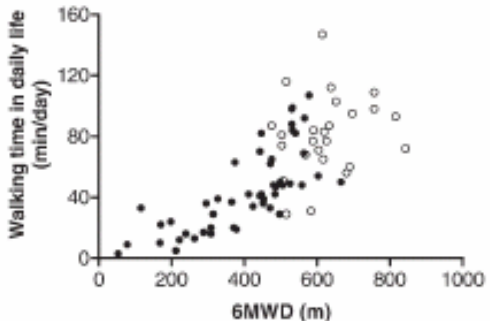
Fabio Pitta, Thierry Troosters, Martijn A. Spruit, Vanessa S. Probst, Marc Decramer, and Rik Gosselink

Am J Respir Crit Care Med Vol 171. pp 972–977, 2005

TABLE 3. CHARACTERISTICS OF PHYSICAL ACTIVITIES IN DAILY LIFE IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND HEALTHY ELDERLY SUBJECTS

	Patients with COPD (*n* = 50)	Healthy Elderly Subjects (*n* = 25)	p Value
Walking time, min	44 ± 26	81 ± 26	< 0.0001
Cycling time, min	4 ± 8	5 ± 14	0.52
Standing time, min	191 ± 99	295 ± 109	< 0.0001
Sitting time, min	374 ± 139	306 ± 108	0.04
Lying time, min	87 ± 97	29 ± 33	0.004
Movement intensity during walking, m/s²	1.8 ± 0.3	2.4 ± 0.5	< 0.0001





Objectives of COPD Management

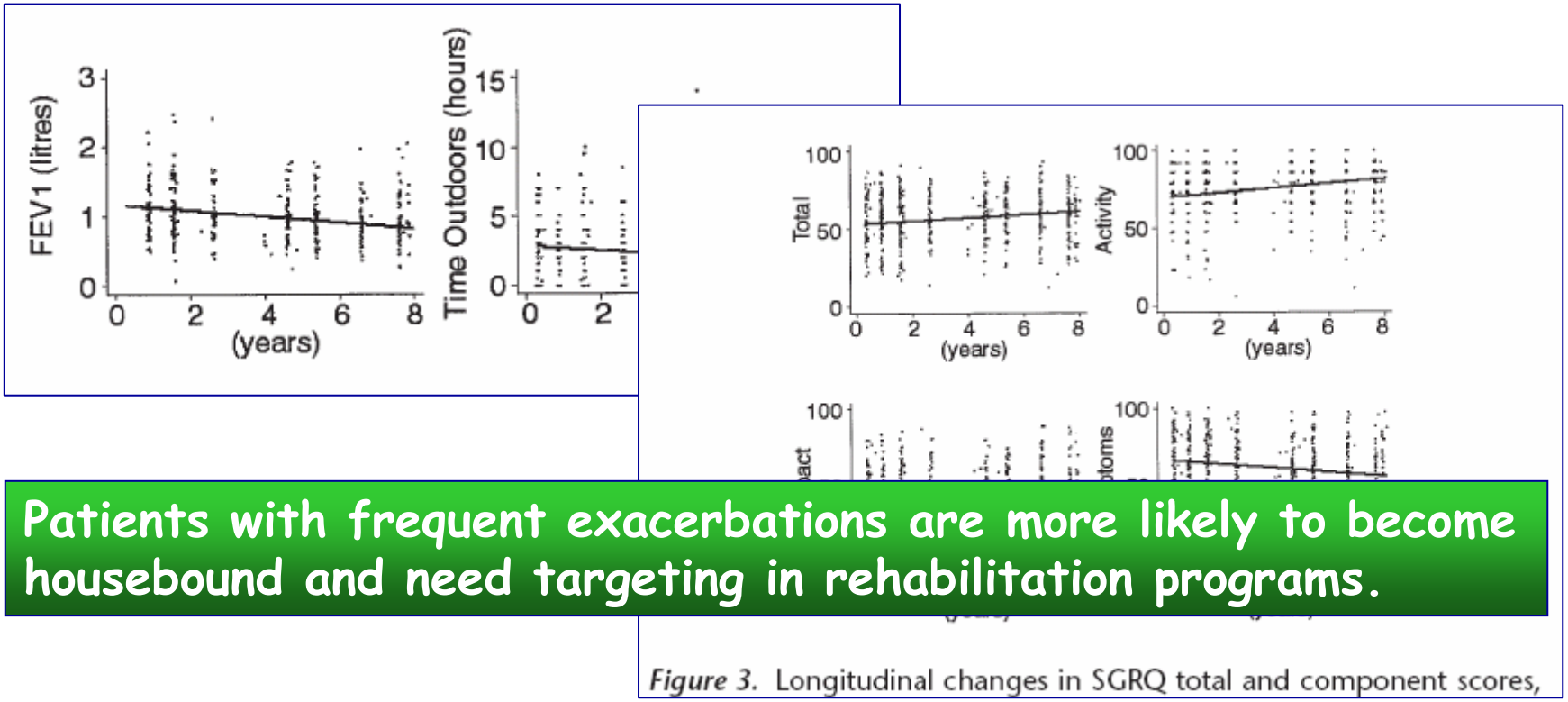
- Prevent disease progression
- Relieve symptoms
- Improve exercise tolerance
- Improve health status
- Prevent and treat exacerbations
- Prevent and treat complications
- Reduce mortality
- Minimize side effects from treatment

Exacerbations and Time Spent Outdoors in Chronic Obstructive Pulmonary Disease

Gavin C. Donaldson, Tom M. A. Wilkinson, John R. Hurst, Wayomi R. Perera, and Jadwiga A. Wedzicha

Academic Unit of Respiratory Medicine, St. Bartholomew's and Royal London School of Medicine and Dentistry, London, United Kingdom

Am J Respir Crit Care Med Vol 171. pp 446–452, 2005

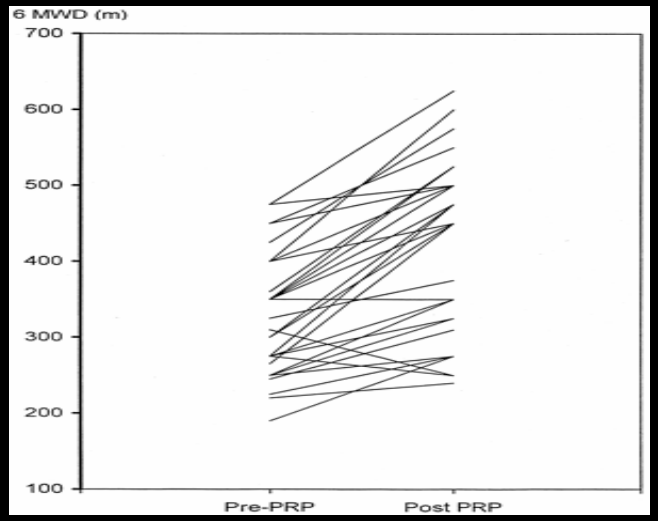


Patients with frequent exacerbations are more likely to become housebound and need targeting in rehabilitation programs.

Figure 3. Longitudinal changes in SGRQ total and component scores,

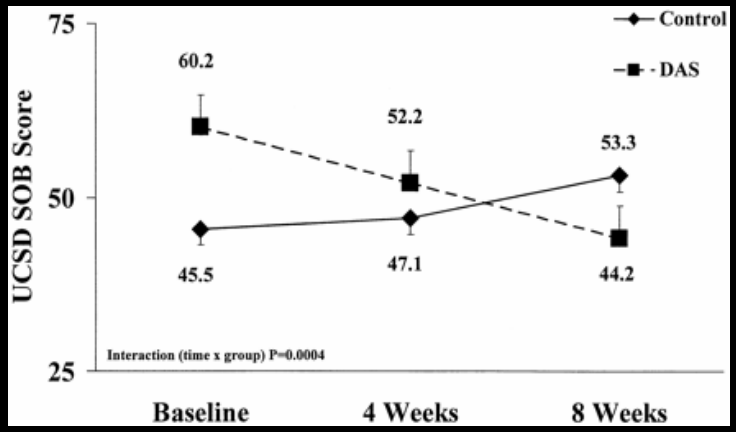
Tolleranza allo sforzo

Distanza percorsa nel 6MWD
Hui KP, Hewitt AB (Chest 2003; 124: 94-7)

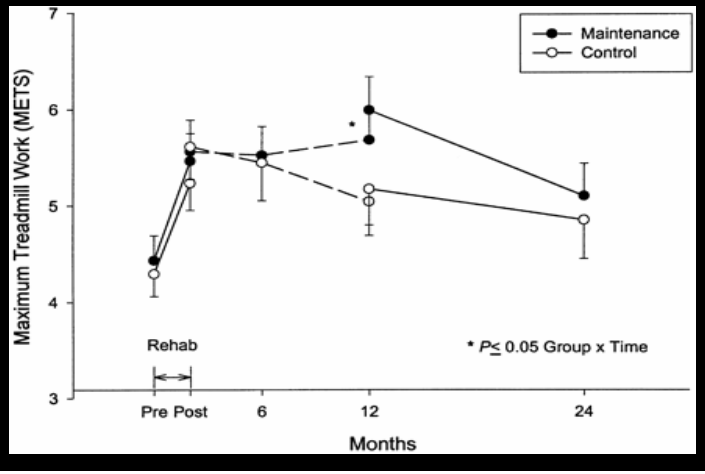


Dispnea

Bauldoff GF et Al.
(Chest 2002; 122: 948-54)

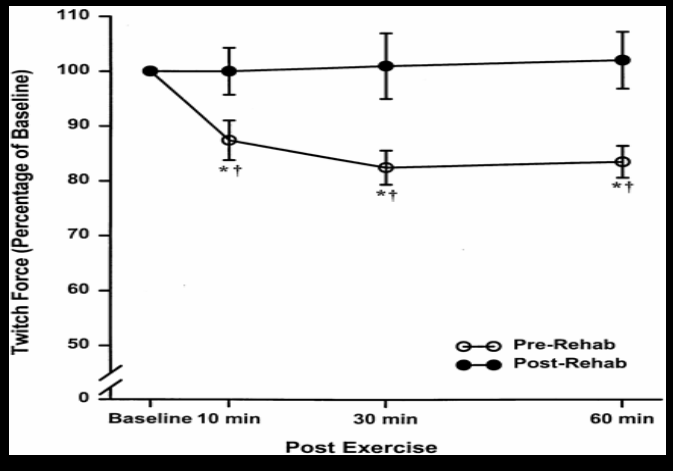


Carico massimo raggiunto su treadmill
Ries Al et Al. (AJCCM 2003; 167: 880-8)



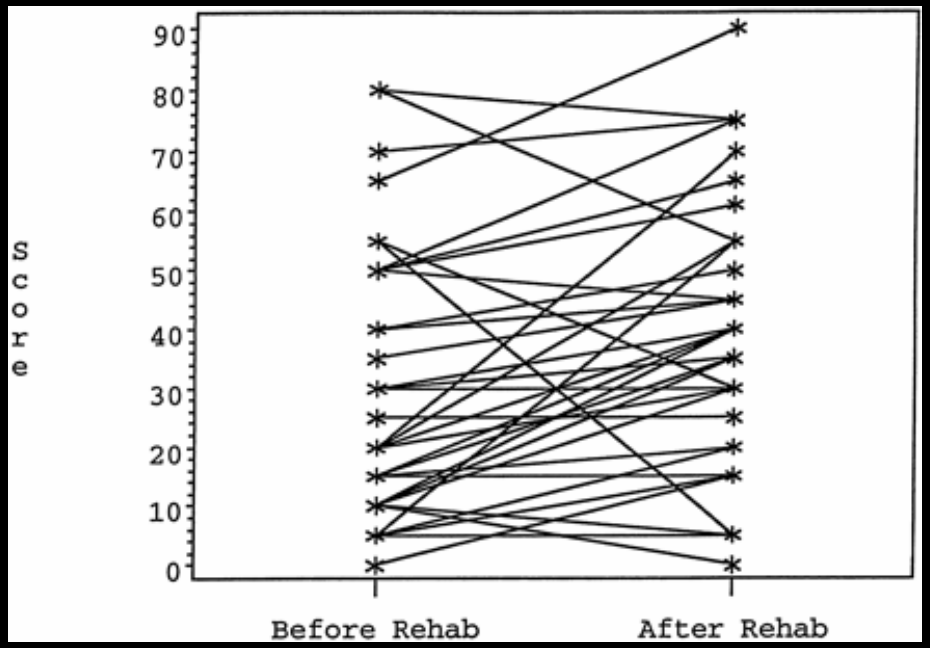
Affaticabilità dei muscoli scheletrici

M.J.Mador AJRCCM 2001; 163: 930-5)



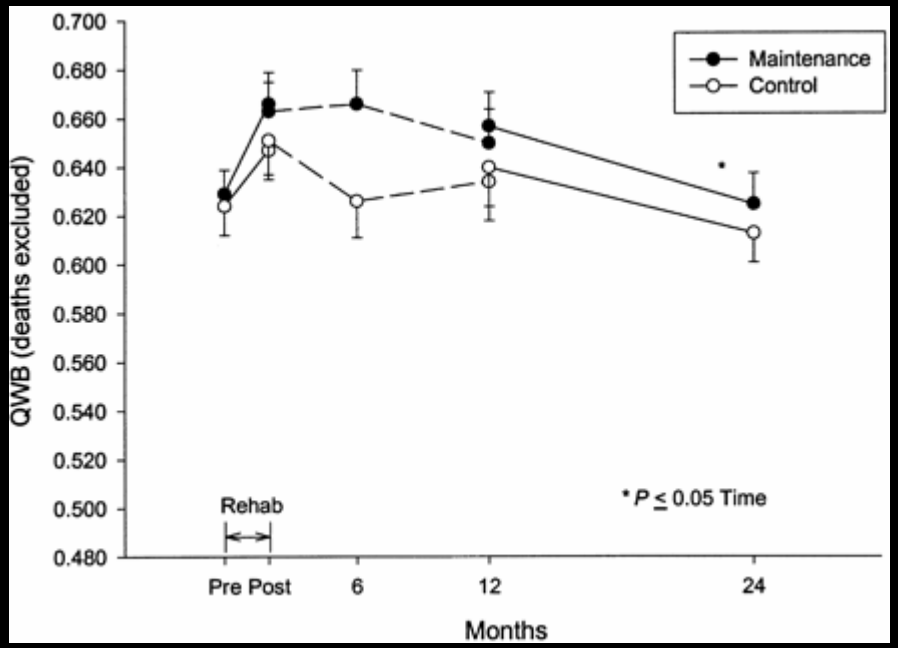
Quality of Life (Short-Form 36)

Williams JEA et Al. (Thorax 2003; 58: 515-8)



Qualità di Benessere

Ries Al et Al. (Am.J.Crit.Care Med. 2003)



REVIEW ARTICLE

CURRENT CONCEPTS

LONG-TERM OXYGEN THERAPY

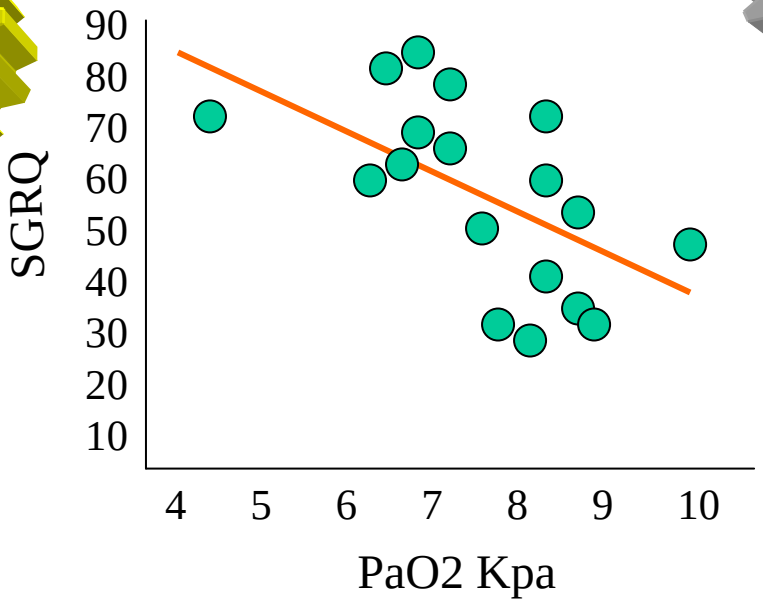
STEPHEN P. TARPY, M.D.,
AND BARTOLOME R. CELLI, M.D.

contribute to chronic malnutrition in patients with severe obstructive pulmonary disease.[10]

EFFECTS OF LONG-TERM OXYGEN THERAPY

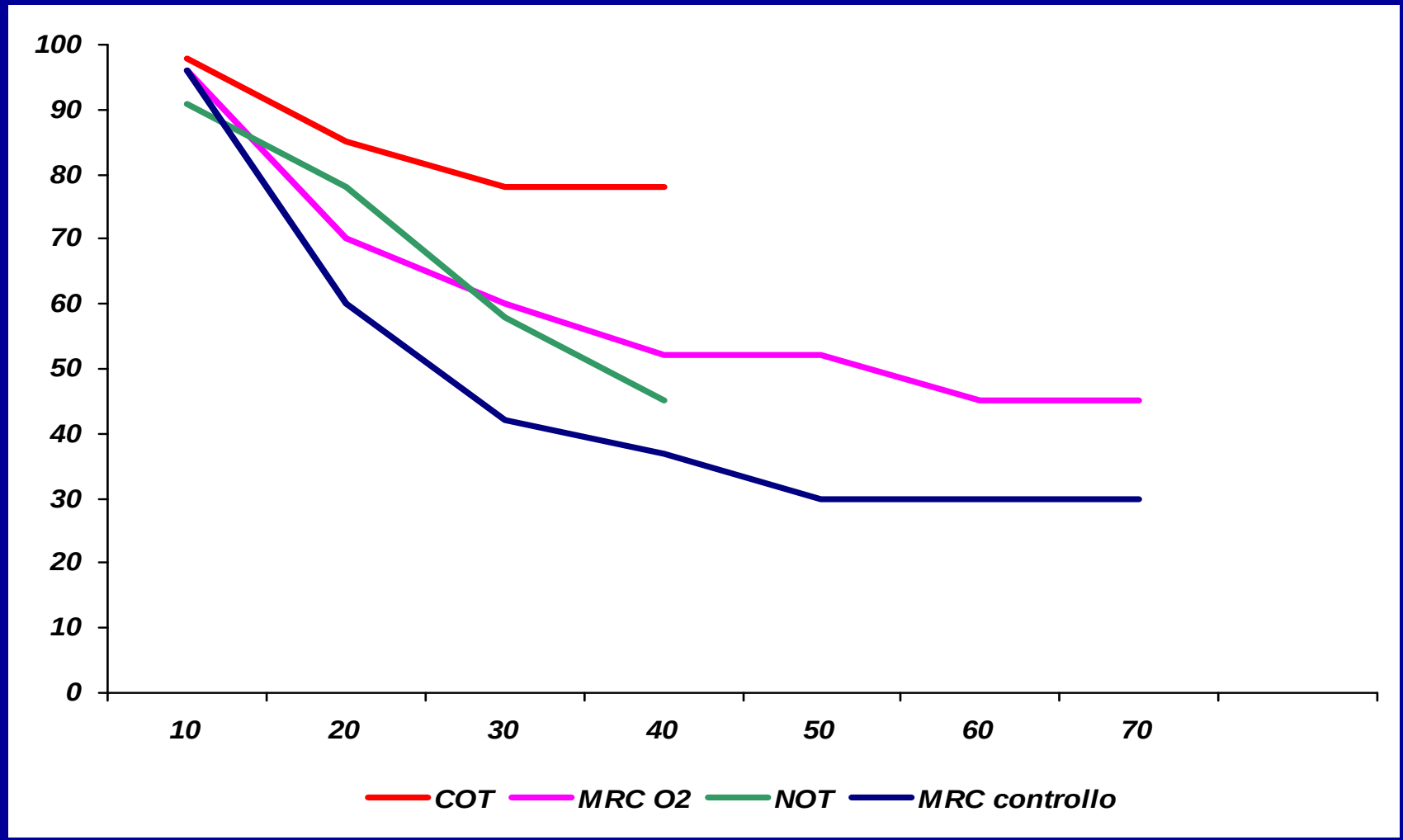
In patients with hypoxemia, oxygen supplementation improves survival, pulmonary hemodynamics, exercise capacity, and neuropsychological performance. It may also decrease the oxygen cost of breathing and improve the quality of sleep.

Survival



Thorax 1996; 51:44

Sopravvivenza dei pazienti con BPCO



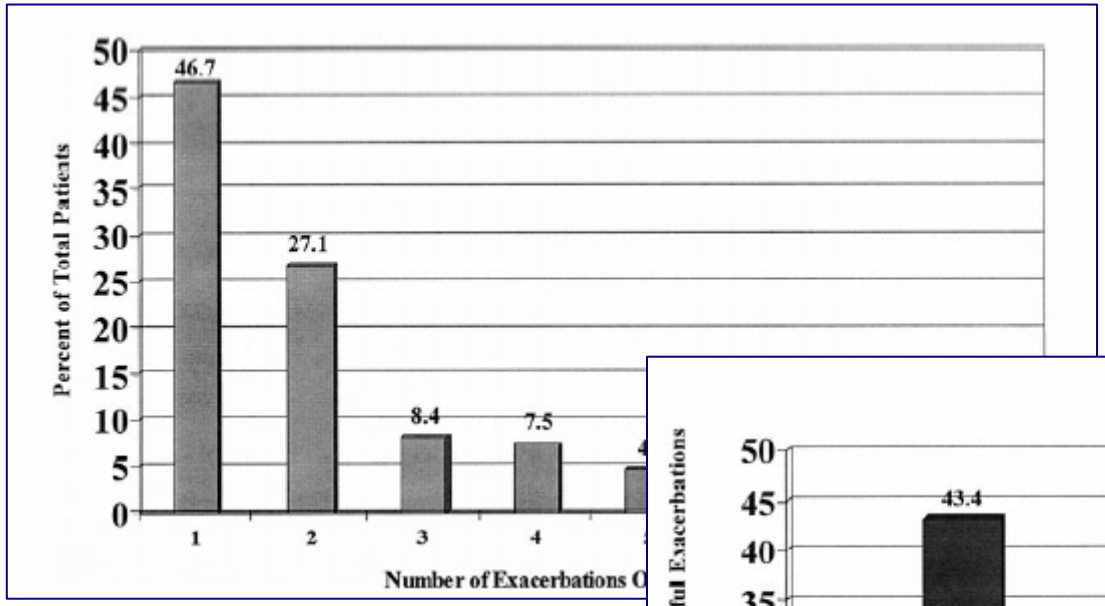
La piaga delle riacutizzazioni

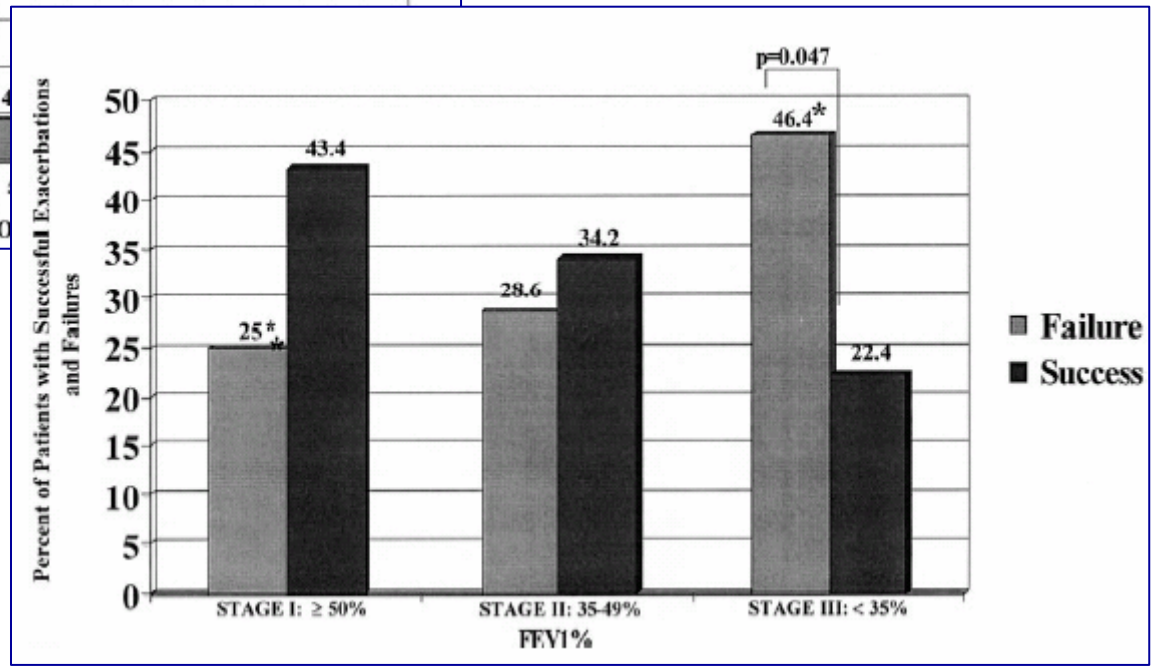
Acute Exacerbation of COPD*

Factors Associated With Poor Treatment Outcome

Naresh A. Dewan, MBBS, FCCP; Salem Rafique, MD; Badar Kanwar, MD; Hemant Satpathy, MD; Kay Ryschon, MS; Glenn S. Tillotson, MS; and Michael S. Niederman, MD, FCCP

(CHEST 2000; 117:662–671)





Acute Exacerbation of COPD*

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(CHEST 2000; 117:662–671)

Host factors that associated with treatment failure:

- FEV1 < 35% (46.4% vs 22.4%; p < 0.047),
- home oxygen (60.7% vs 15.6%; p < 0.0001),
- Frequency of exacerbation (3.6+/-2.0 vs 1.6 +/- 0.91; p < 0.001),
- history of previous pneumonia (64.3% vs 35.1 p < 0.007),
- history of sinusitis (28.6% vs 8.8%; p < 0.009) and
- use of maintenance steroids (32.1% vs 15.2% p < 0.052).

Table 4—*Odds of Failure in Relation to Home Oxygen Therapy and Number of Exacerbations Over 24 Months

Variables	Odds of Failure
Home oxygen and one exacerbation	0.311
Home oxygen and two exacerbations	1.008
Home oxygen and three exacerbations	3.274
Home oxygen and four exacerbations	10.627
Home oxygen and five exacerbations	34.707

Risk Factors for Hospitalization for a Chronic Obstructive Pulmonary Disease Exacerbation

EFRAM STUDY

JUDITH GARCIA-AYMERICH, EDUARD MONSÓ, RAMON M. MARRADES, JOAN ESCARRABILL, MIQUEL A. FÉLEZ, JORDI SUNYER, JOSEP M. ANTÓ, and the EFRAM Investigators

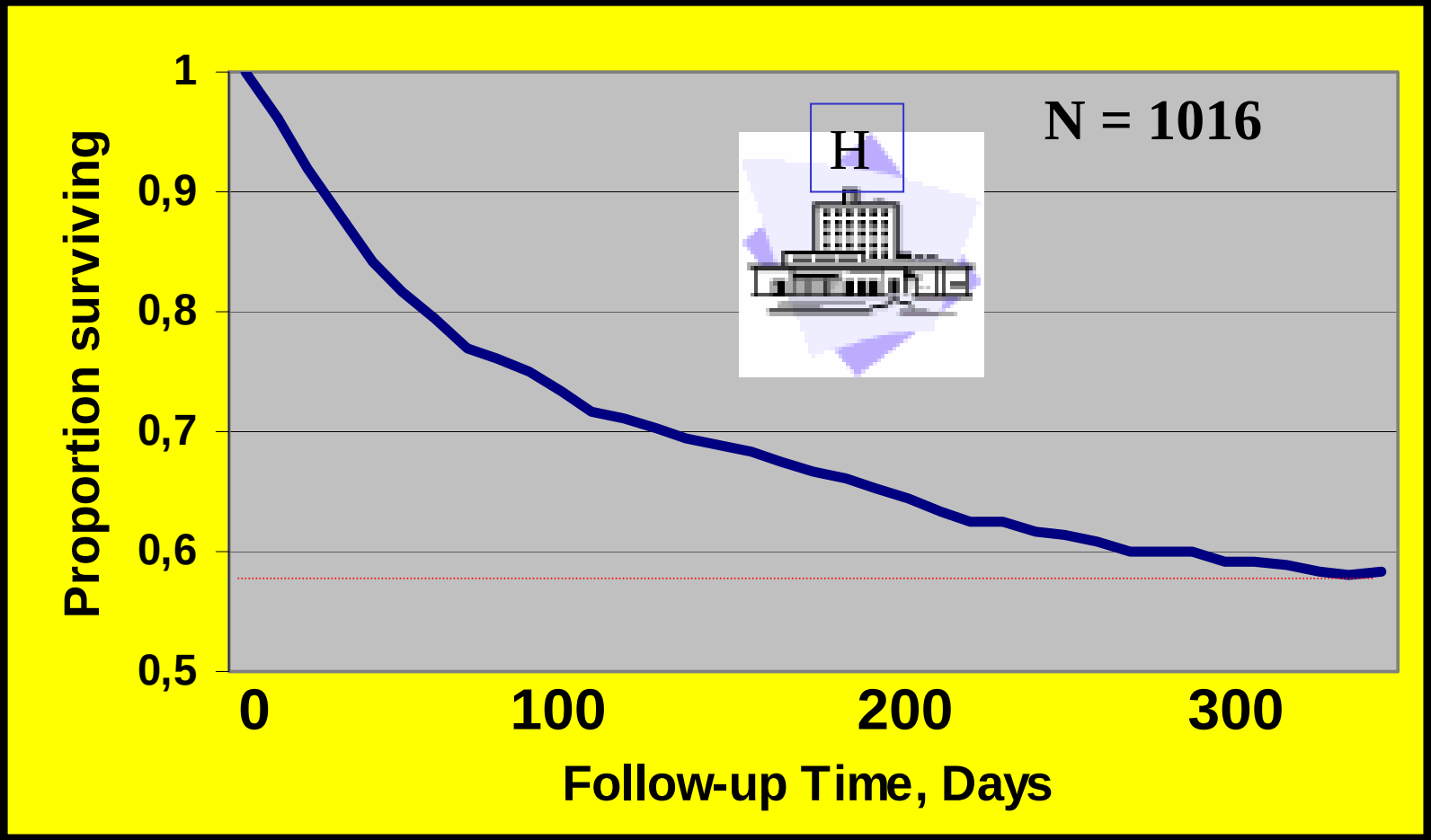
Am J Respir Crit Care Med Vol 164. pp 1002–1007, 2001

A total of 86 cases and 86 control subjects were included, (FEV1 39% prd)

Multivariate logistic regression showed the following risk (or protective) factors of COPD hospitalization:

- three or more COPD admissions in the previous year (odds ratio [OR] 6.21, $p<0.008$);
- FEV1 (OR 0.96 per percentual unit, $p<0.0005$);
- underprescription of long-term oxygen therapy (LTOT) (OR 22.64, $p<0.007$);
- and current smoking (OR 0.30, $p<0.022$).

One-year survival for 1016 COPD with acute exacerbation



Connors, AJRCCM 1998

Time Course and Recovery of Exacerbations in Patients with Chronic Obstructive Pulmonary Disease

TERENCE A. R. SEEMUNGAL, GAVIN C. DONALDSON, ANGSHU BHOWMIK, DONALD J. JEFFRIES, and JADWIGA A. WEDZICHA

Am J Respir Crit Care Med Vol 161. pp 1608–1613, 2000

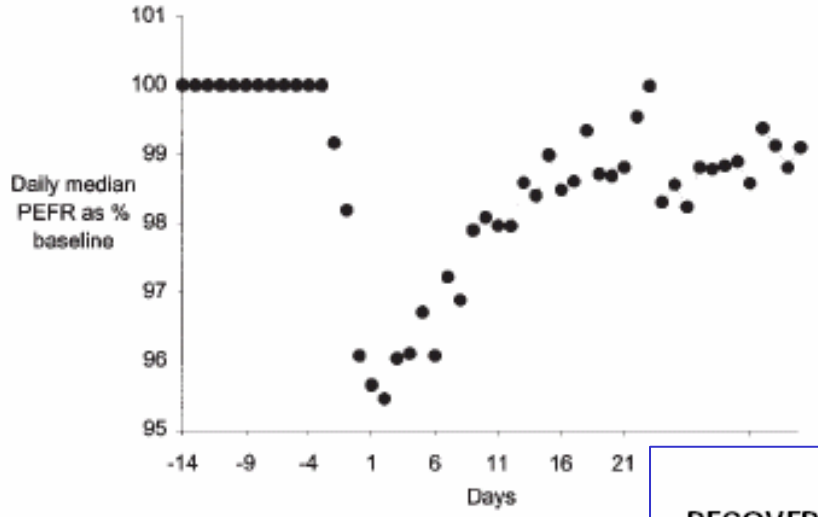


Figure 3. Median peak flow expressed as a percentag peak flow from 14 d before, to 35 d after onset of exacer exacerbations in 91 patients.

TABLE 3

RECOVERY FROM EXACERBATION IN PEFR AND TOTAL SYMPTOM SCORE IN 91 PATIENTS WITH 504 EXACERBATIONS

	PEFR (IQR)	Symptoms (IQR)
Median time to recovery, d*	6 (1 to 14)	7 (4 to 14)
% Exacerbations recovering within 35 d	75.2	86.1
% Exacerbations recovering within 91 d	80.2	90.9
% Exacerbations in which the next exacerbation occurs before complete recovery in PEFR	3.4	1.4
% Exacerbations with indeterminate recovery†	9.3	3.1
% Exacerbations that do not recover at 91 d	7.1	4.6

Time course of pulmonary function before admission into ICU.
A two-year retrospective study of COLD patients with hypercapnia

M Vitacca, K Foglio, S Scalvini, S Marangoni, A Quadri and N Ambrosino

1992

Controlled study:
Time course of 2 years before admission in ICU
for 16 pts vs 15 controls.

The results indicated that:

Basal body weight,
Rate of deterioration over time in:
·FEV1
·VC,
·blood gas values,
·bicarbonates,
·RVD

may be related to the necessity of ICU admission in COLD patients with hypercapnic respiratory insufficiency.

Documento

Raccomandazioni per la ventilazione meccanica Domiciliare. Aggiornamento anno 2003. Parte 1

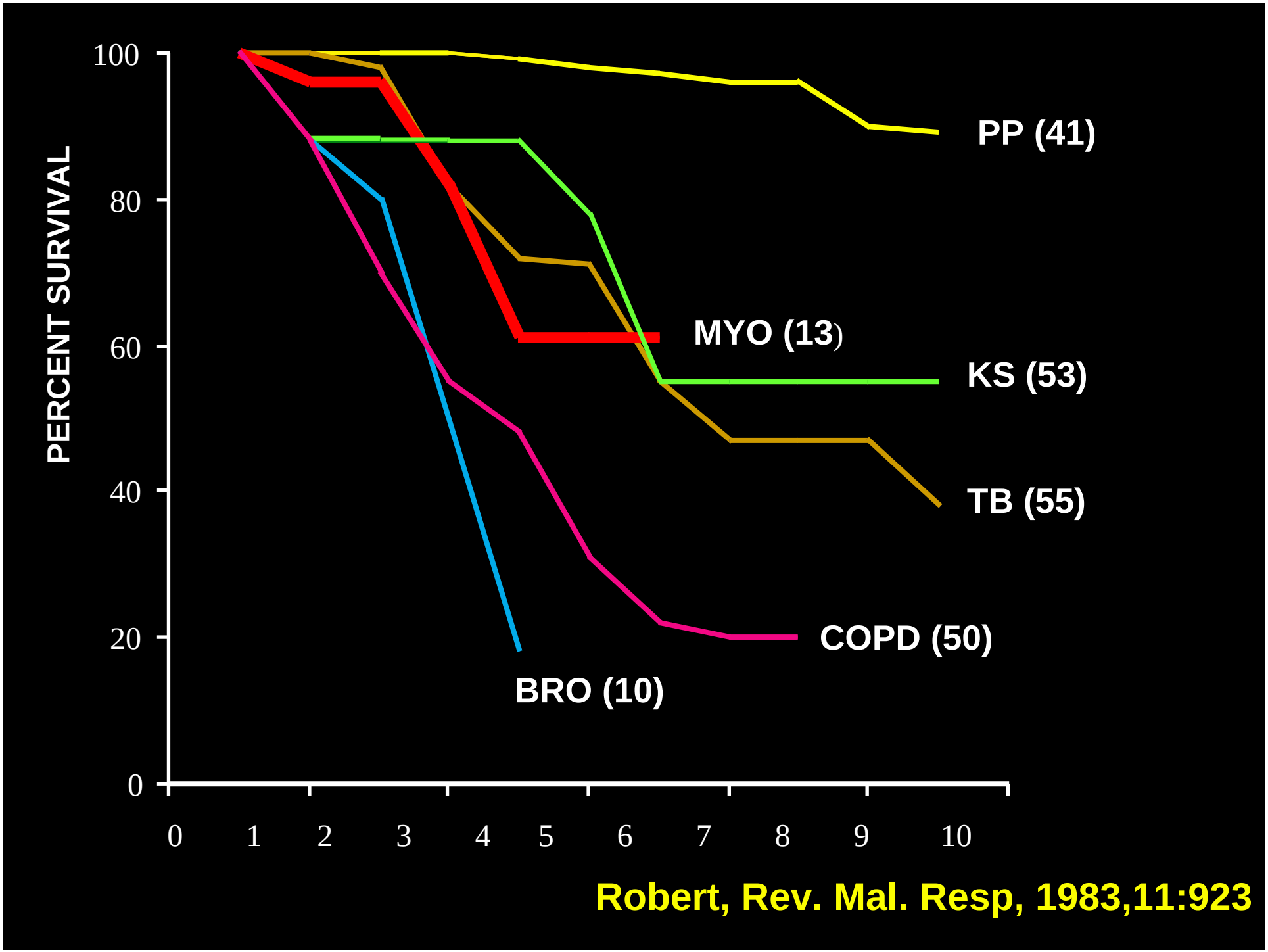
AIPO, GRUPPO DI STUDIO RIABILITAZIONE LUCIANO PESCE

Vol 18/5 2003 368-375

Ventilazione meccanica domiciliare

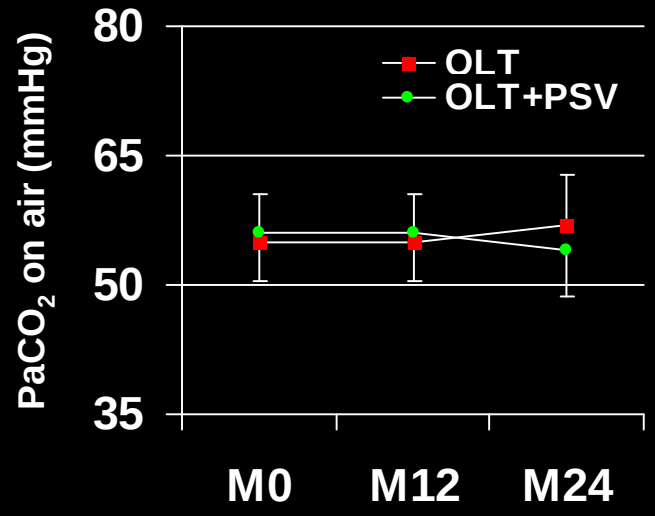
Indicazione di trattamento elettiva:
paz. senza sufficienti garanzie di autonomia ventilatoria

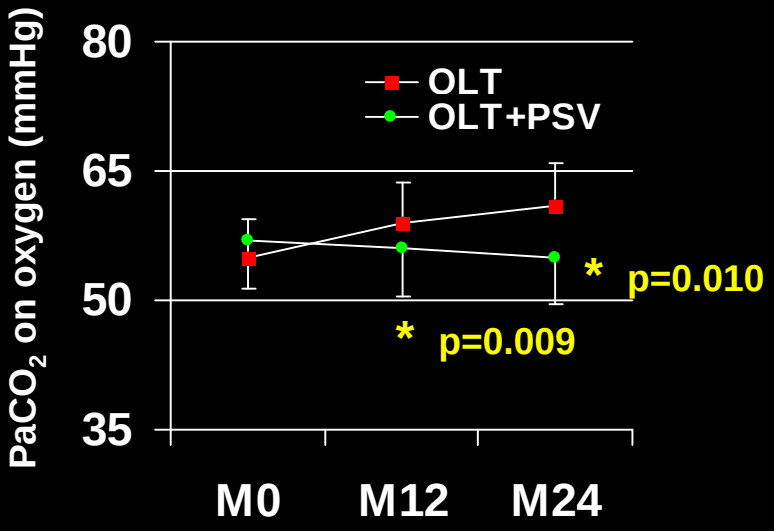
La VMN come strumento
di protezione sulle riacutizzazioni
severe che necessitano di
ospedalizzazione ?

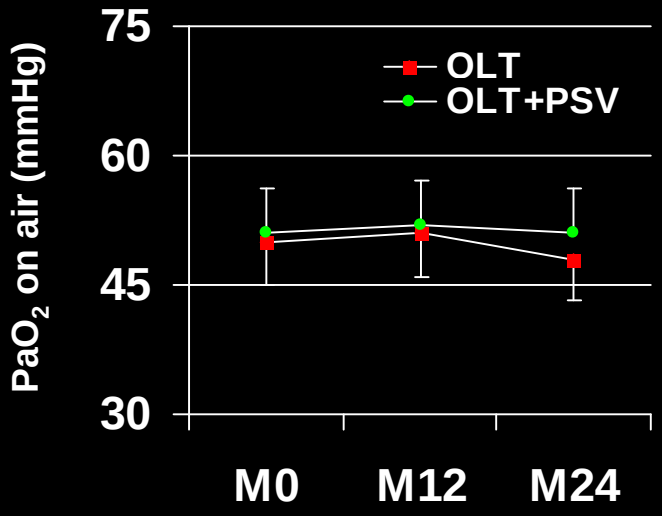

PERCENT SURVIVAL
100
80
60
40
20
0
0
1
2
3
4
5
6
7
8
9
10
PP (41)
MYO (13)
KS (53)
TB (55)
COPD (50)
BRO (10)
Robert, Rev. Mal. Resp, 1983,11:923

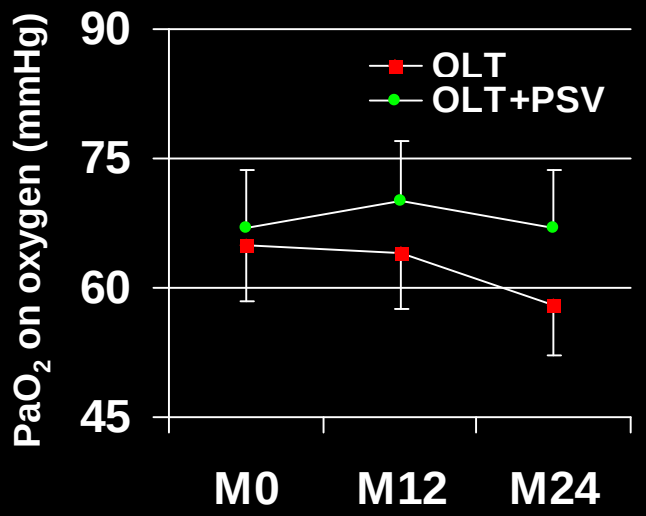
ABGs

Clini E et al 2002

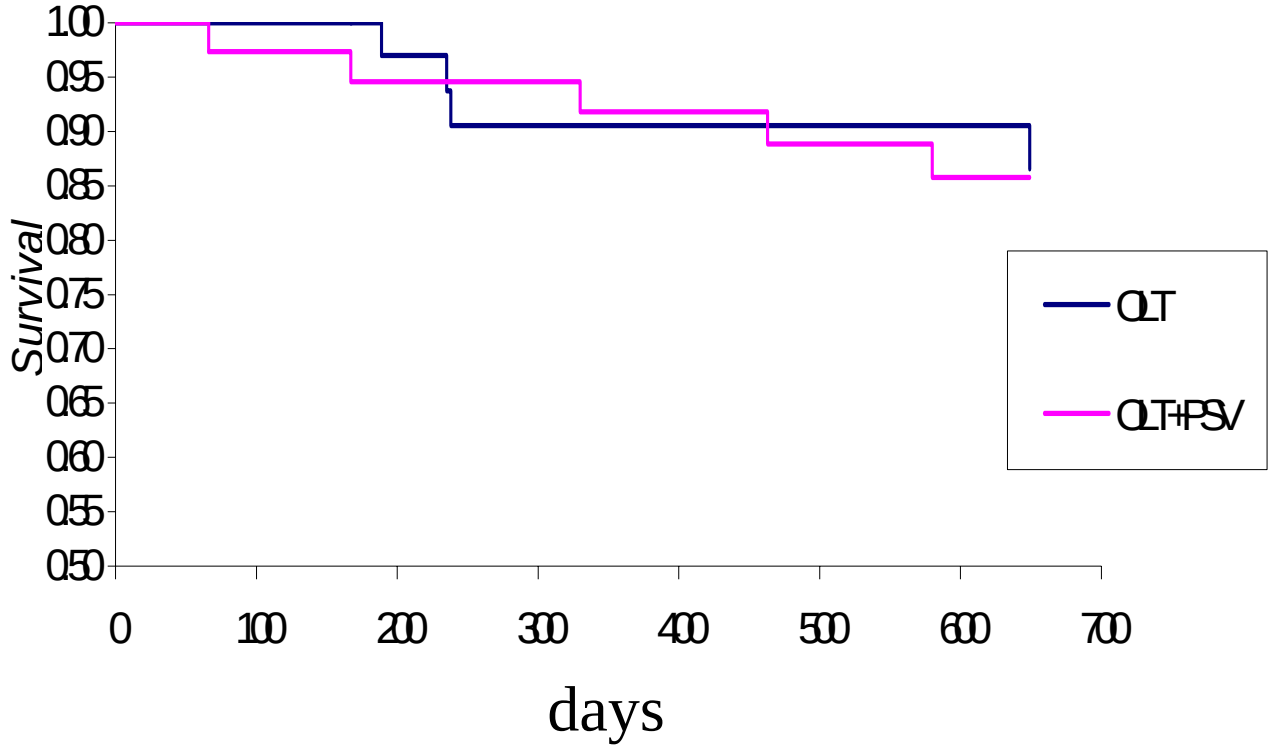






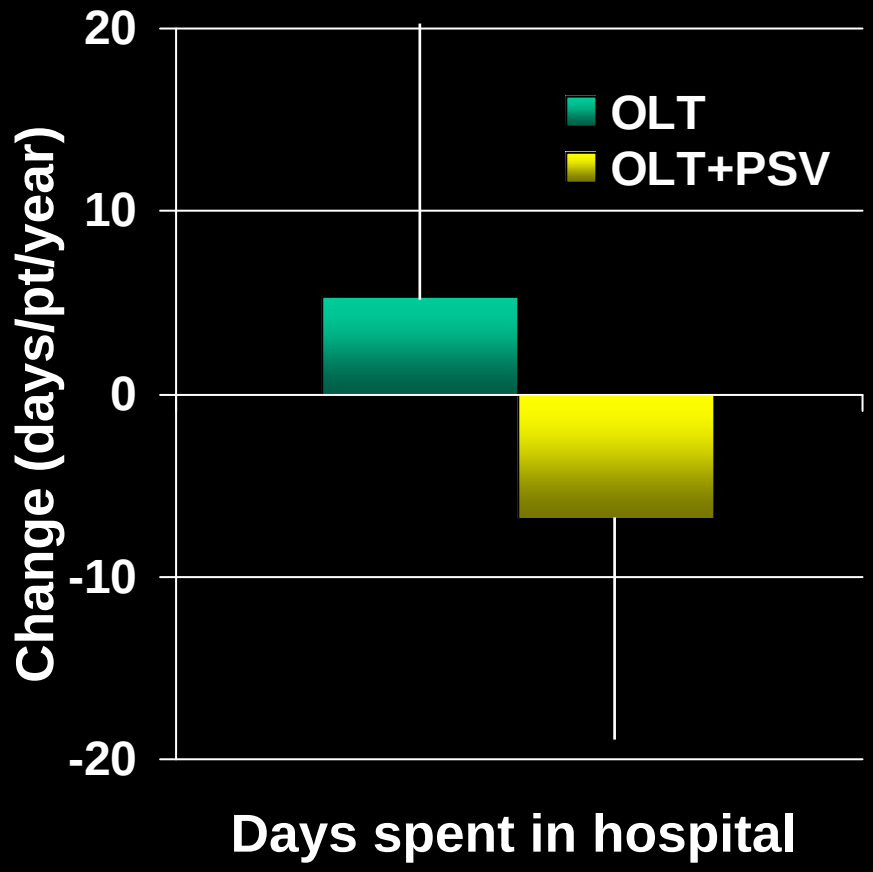


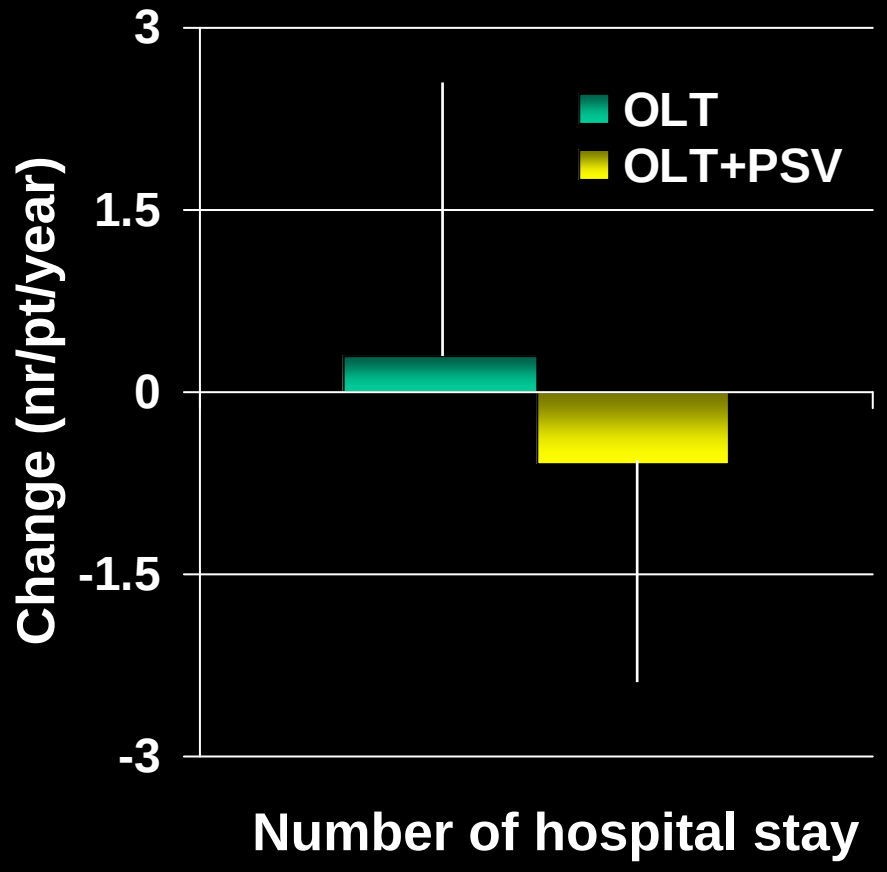
survival



Clini E et al 2002

CLINICAL OUTCOME
Comparison of hospital admissions

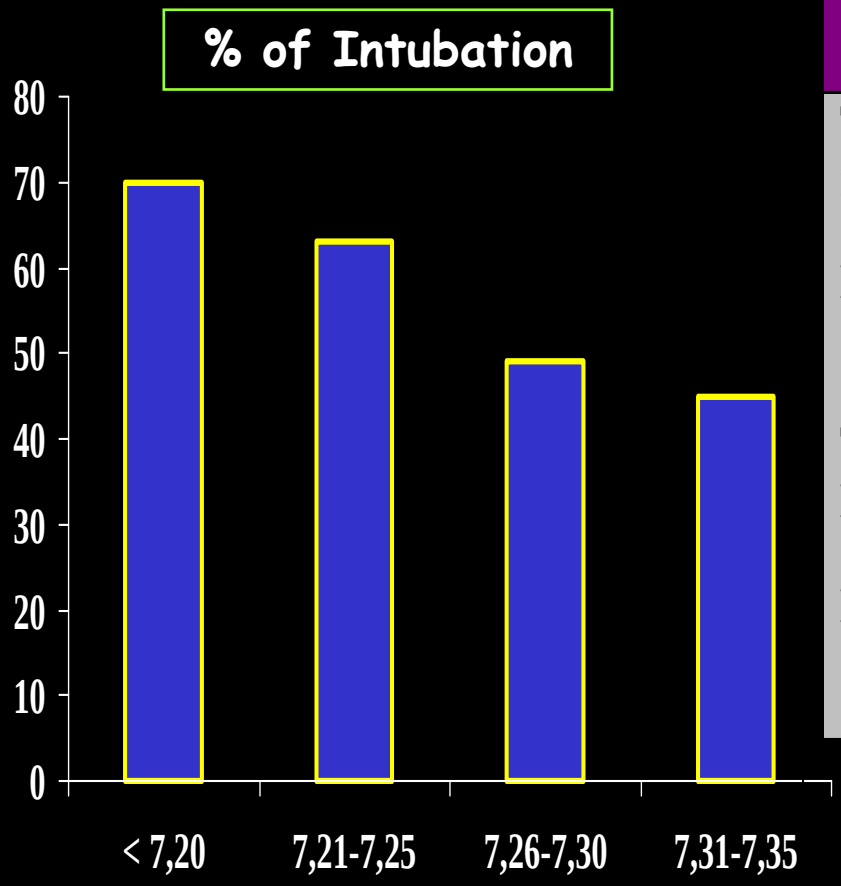




Clini E et al 2002


La ventilazione non invasiva
nel trattamento della IRA su IRC:
una rivoluzione epidemiologica

RESPONSE TO MEDICAL THERAPY in COPD RELAPSE



	< 7.20	7.21-7.25	7.26- 7.30	7.31.7.35
Time to nor.h	69±60	36±29	31±24	30±18
Death, %	50	20	8	0
Time EI	2±2	5±4	8±10	13±18
Death %	21	6	9	5

NMV has a role ?

Soo Hoo, CHEST 2000

Acute exacerbations in patients with COPD: predictors of need for mechanical ventilation

M. Vitacca, E. Clini, R. Porta, K. Foglio, N. Ambrosino

ERJ 1996; 9:1487-1493

Table 3. – Respiratory mechanics at admission

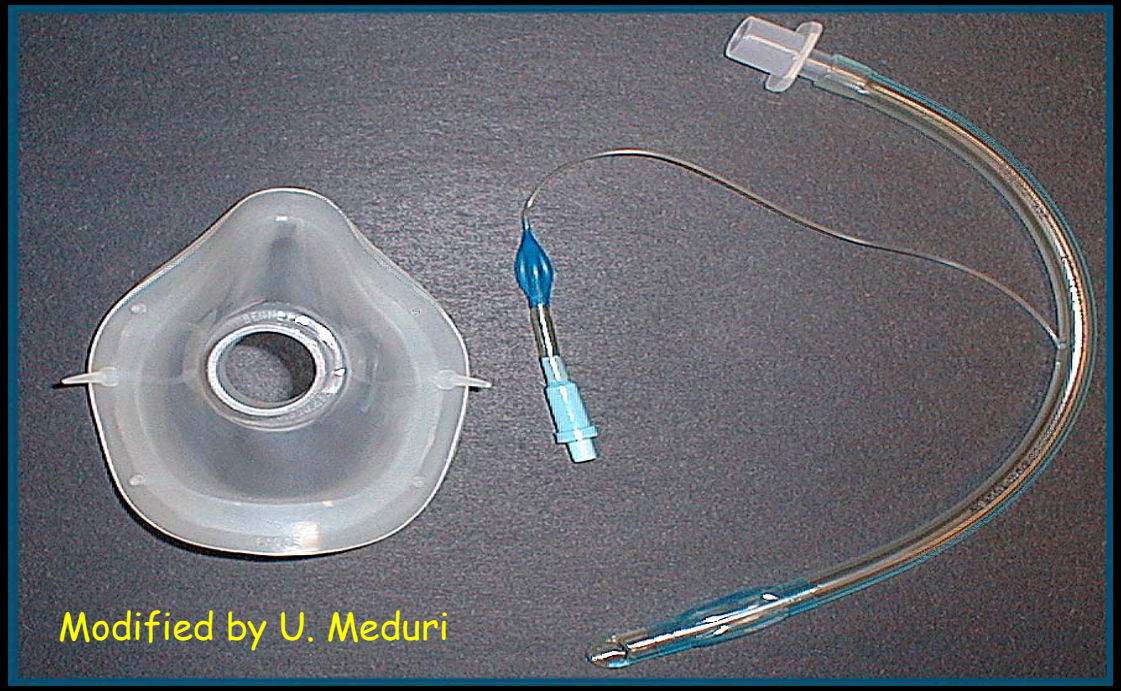
	Failure Group (n=14)	Success Group (n=25)	p-value
V_T mL	401±225 (100–780)	345±146 (130–700)	NS
f_R breath·min^{-1}	25±11 (11–47)	26±7 (12–44)	NS
V'_E L·min^{-1}	9±5 (2–24)	8±4 (3.1–17)	NS
f_R/V_T	116±146 (10–400)	105±74 (30–285)	NS
WOB J·L^{-1}	1.74±0.49 (0.9–2.86)	1.22±0.6 (0.34–2.48)	<0.001
P_{oes} cmH_2O	19±7 (10–44)	14±6 (5.1–27)	<0.005
PEEPi cmH_2O	3.3±2.4 (1.1–11)	1.5±1.9 (0–7)	<0.01
C_{dyn} mL·cmH_2O	63±36 (33–235)	67±53 (15–208)	NS
t_I/t_{tot}	0.36±0.06 (0.22–0.49)	0.41±0.06 (0.27–0.5)	<0.05
MIP cmH_2O·s^{-1}·min^{-1}	40±22 (18–65)	50±19 (13–72)	<0.05
PTP cmH_2O·s^{-1}·min^{-1}	326±101 (157–480)	265±135 (28–510)	<0.005
PTI	0.17±0.09 (0.07–0.45)	0.11±0.06 (0.02–0.30)	<0.01

Failure =(NPI × 0.21)+(FVC% × 0.14) -8.28.

Success =(NPI×0.11) +(FVC% ×0.20) -7.53.

Endotracheal Tube vs Mask

(Complimentary or alternative role ?)

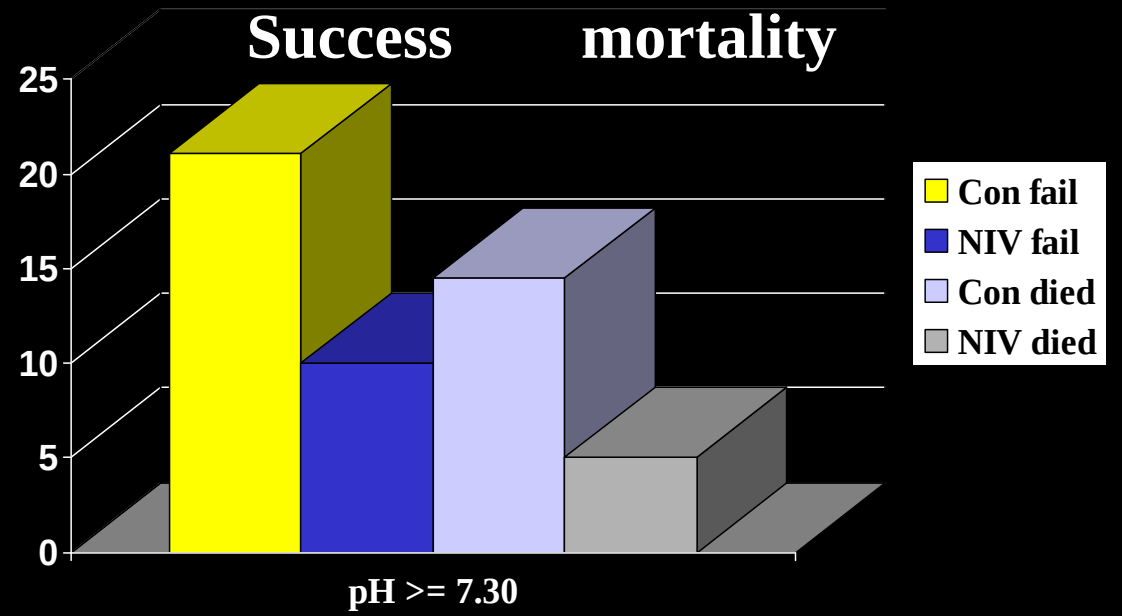


Mask ET Mask ET

Evolving ARF **Respiratory failure** **Resolving ARF**

- Preventive application
- Curative application as EI
- Instead of EI
- Weaning method
- Post extubation failure

The YONIV Trial for COPD



Inclusion criteria

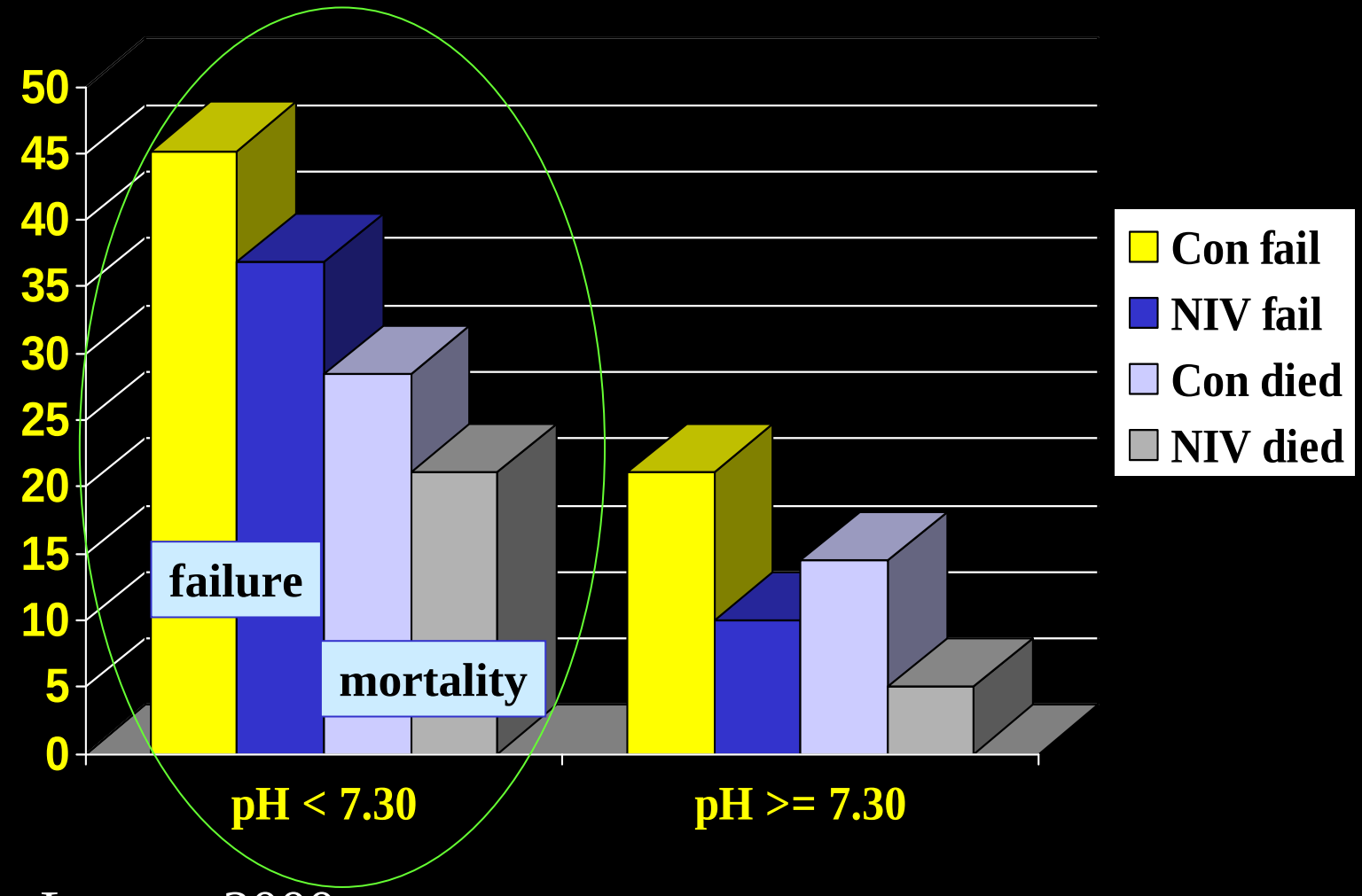
- On arrival on ward
  - RR > 23 bpm
  - pH 7.30-7.35
  - $PaCO_2$ > 6 kPa

Exclusion criteria

Patients requiring immediate ETI
pH < 7.20
7.2 < pH < 7.25 on two occasions (1 hour)
GCS < 8 and $PaCO_2$ > 8 kPa
PaO_2 < 6 kPa despite max tolerated FiO_2
Cardiorespiratory arrest

Plant Lancet 2000

YONIV Study in GW
outcome by enrollment pH



Plant Lancet 2000

NIV for acute exacerbations of COPD in ICU

OUTCOMES		NIV (43)	M.T.(42)
Endotr. intubation, *n (%)*	*	11 (26)	31 (74)
Hospital stay, *days*	*	23±17	35±33
In-hospital mortality, *n (%)*	*	4 (9)	12 (29)
Complications, *%*	*	16	48

**** = NIV significantly different from M.T.***

(from Brochard L. et al. NEJM 1995;333:817-822)

Outcome for COPD and CAP in GW

	NMV	MT
No ET	100 %	45%
MV, h	69±36	220±281
H mortality	8%	18%
2-mo mortality	11%	62%

Confalonieri Am J Respir. Crit. Care Med 1999

BMJ VOLUME 326 25 JANUARY 2003

Non-invasive positive pressure ventilation to treat respiratory failure resulting from exacerbations of chronic obstructive pulmonary disease: Cochrane systematic review and meta-analysis

Josephine V Lightowler, Jadwiga A Wedzicha, Mark W Elliott, Felix S F Ram

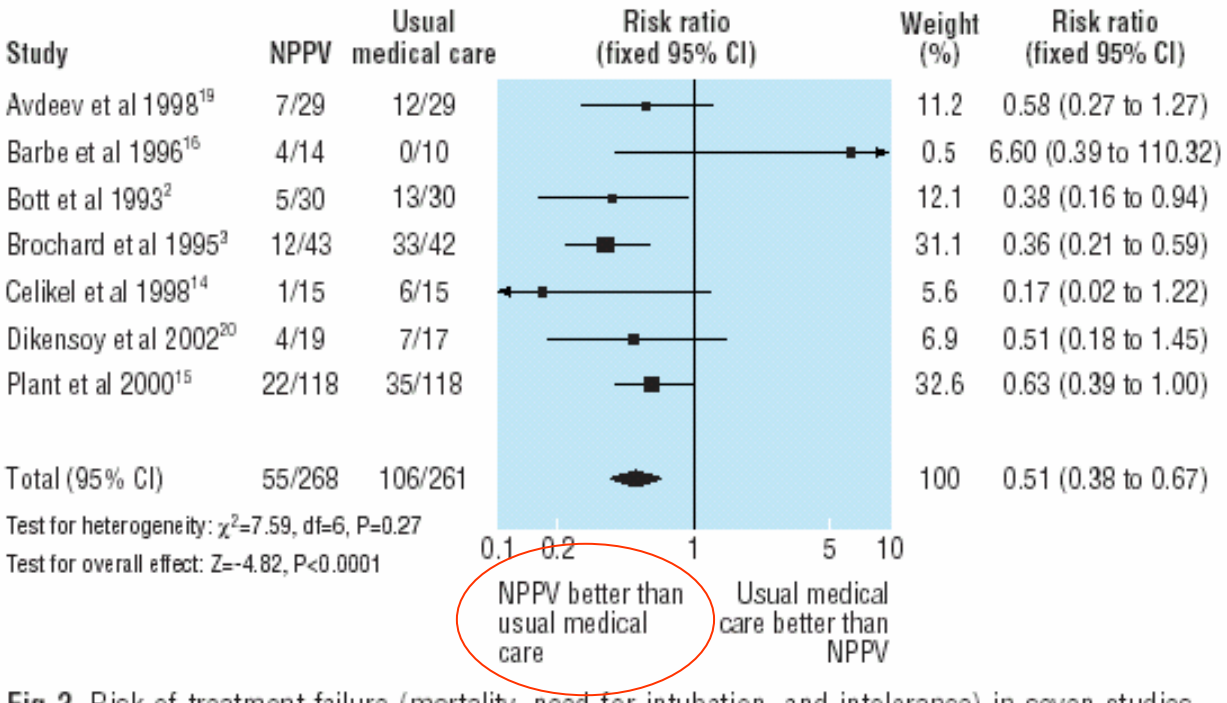
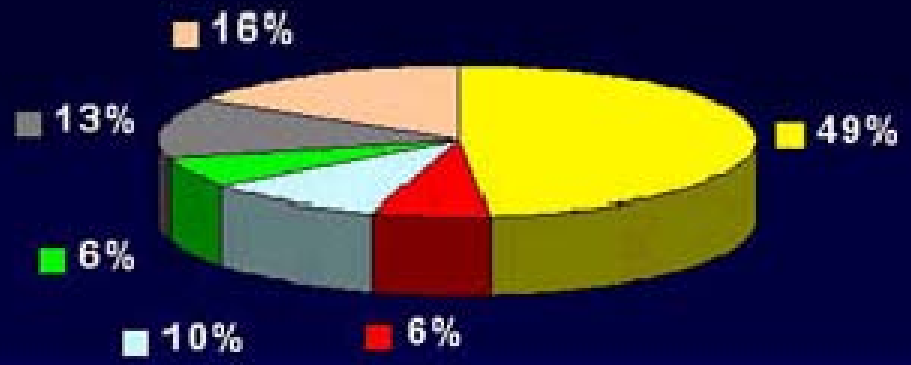


Fig 2 Risk of treatment failure (mortality, need for intubation, and intolerance) in seven studies of non-invasive positive pressure ventilation (NPPV) as an adjunct to usual medical care

Predictors of failure in hypercapnic pts

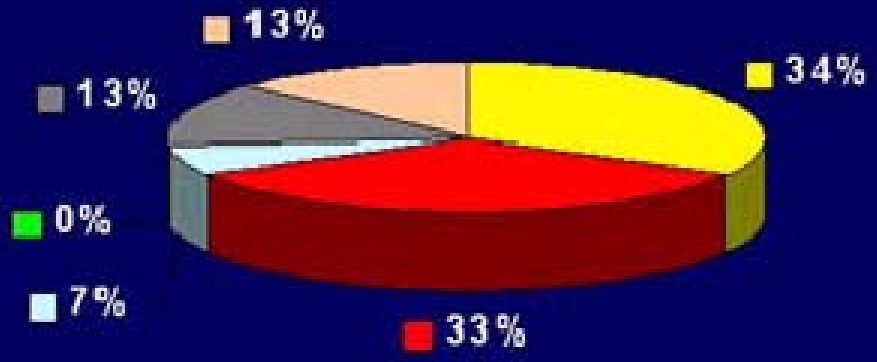
Early failures



- Gas exchange
- Dyspnea
- Secretions
- Intolerance
- Hemodynamic
- Others

65%

Late failures



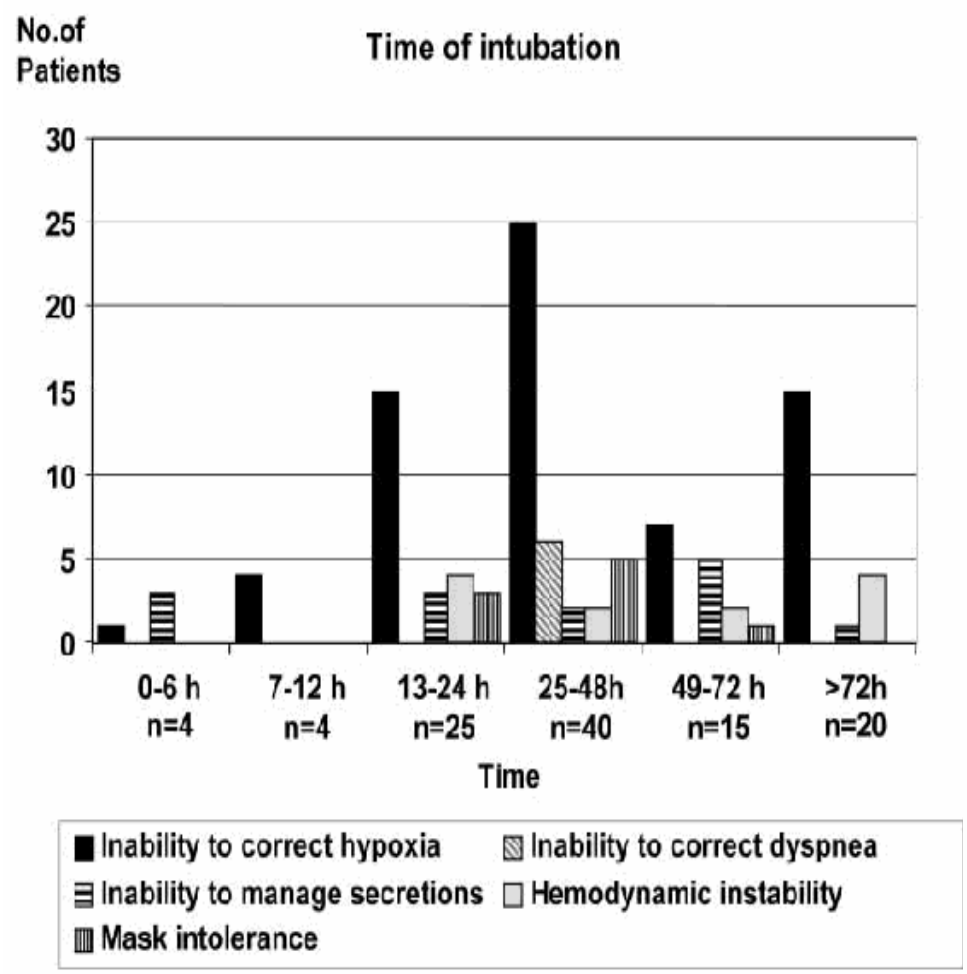
- Gas exchange
- Dyspnea
- Secretions
- Intolerance
- Hemodynamic
- Others

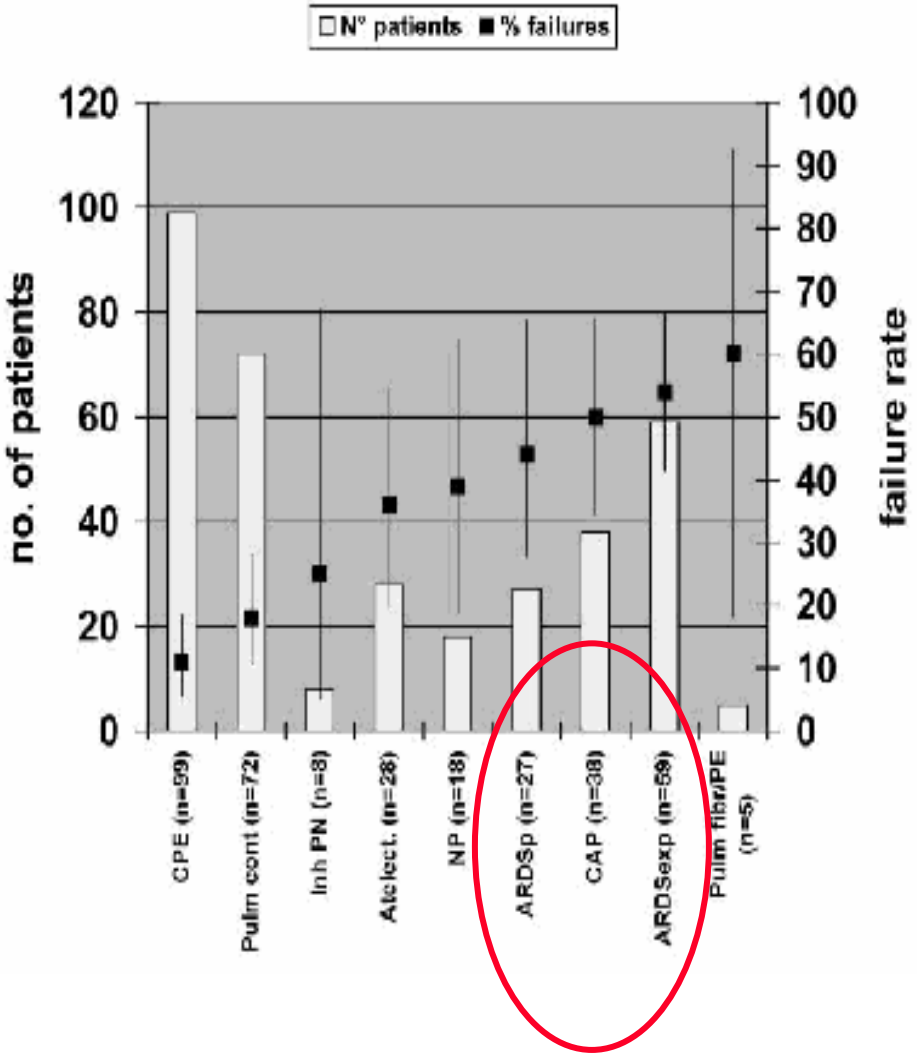
74%

from Meduri et al.

CHEST / 109 / 1 / JANUARY, 1996

Predictors of failure in hypoxemic ARF





from Antonelli M. et al. ICM 2001;27: 1718-1728)

Eur Respir J 2005; 25: 348–355
DOI: 10.1183/09031936.05.00085304

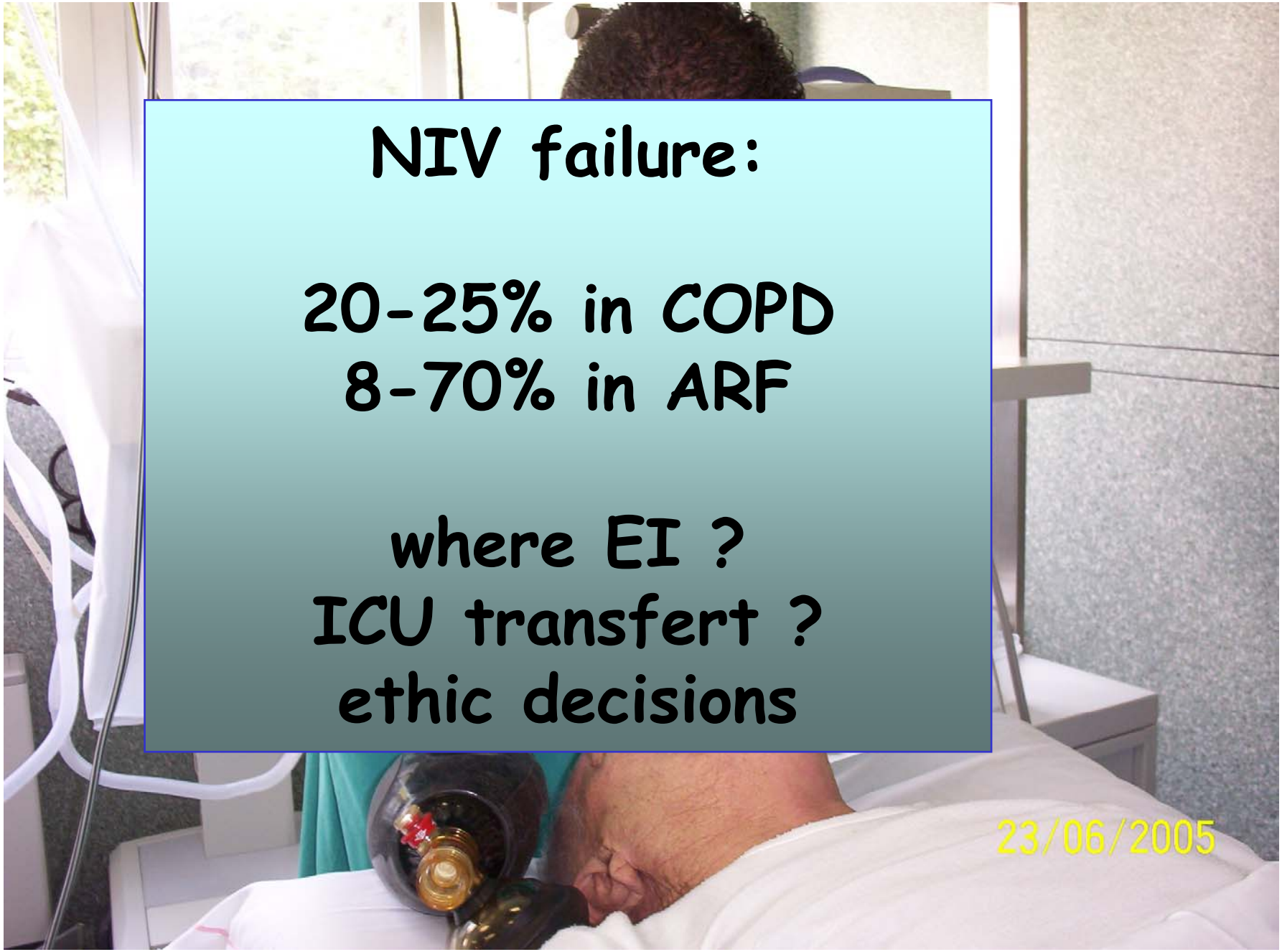
A chart of failure risk for noninvasive ventilation in patients with COPD exacerbation

M. Confalonieri*, G. Garuti#, M.S. Cattaruzza¶, J.F. Osborn¶, M. Antonelli+, G. Conti+, M. Kodric*, O. Resta§, S. Marchese/, C. Gregoretti** and A. Rossi, on behalf of the Italian noninvasive positive pressure ventilation (NPPV) study group##

Risk stratification of NPPV failure was assessed in 1,033 consecutive patients admitted to experienced hospital units, including two intensive care units, six respiratory intermediate care units, and five general wards. NPPV was successful in 797 patients.

		pH admission <7.25		pH admission 7.25–7.29		pH admission >7.30	
	RR	APACHE ≥29	APACHE <29	APACHE ≥29	APACHE <29	APACHE ≥29	APACHE <29
GCS 15	<30	29	11	18	6	17	6
	30–34	42	18	29	11	27	10
	≥35	52	24	37	15	35	14
GCS 12–14	<30	48	22	33	13	32	12
	30–34	63	34	48	22	46	21
	≥35	71	42	57	29	55	27
GCS ≤11	<30	64	35	49	23	47	21
	30–34	76	49	64	35	62	33
	≥35	82	59	72	44	70	42

		pH after 2 h <7.25		pH after 2 h 7.25–7.29		pH after 2 h ≥7.30	
	RR	APACHE ≥29	APACHE <29	APACHE ≥29	APACHE <29	APACHE ≥29	APACHE <29
GCS 15	<30	72	35	27	7	11	3
	30–34	88	59	49	17	25	7
	≥35	93	73	64	27	38	11
GCS 12–14	<30	84	51	41	13	19	5
	30–34	93	74	65	28	39	12
	≥35	96	84	78	42	54	20
GCS ≤11	<30	93	74	65	28	39	12
	30–34	97	88	83	51	63	26
	≥35	99	93	90	66	76	40



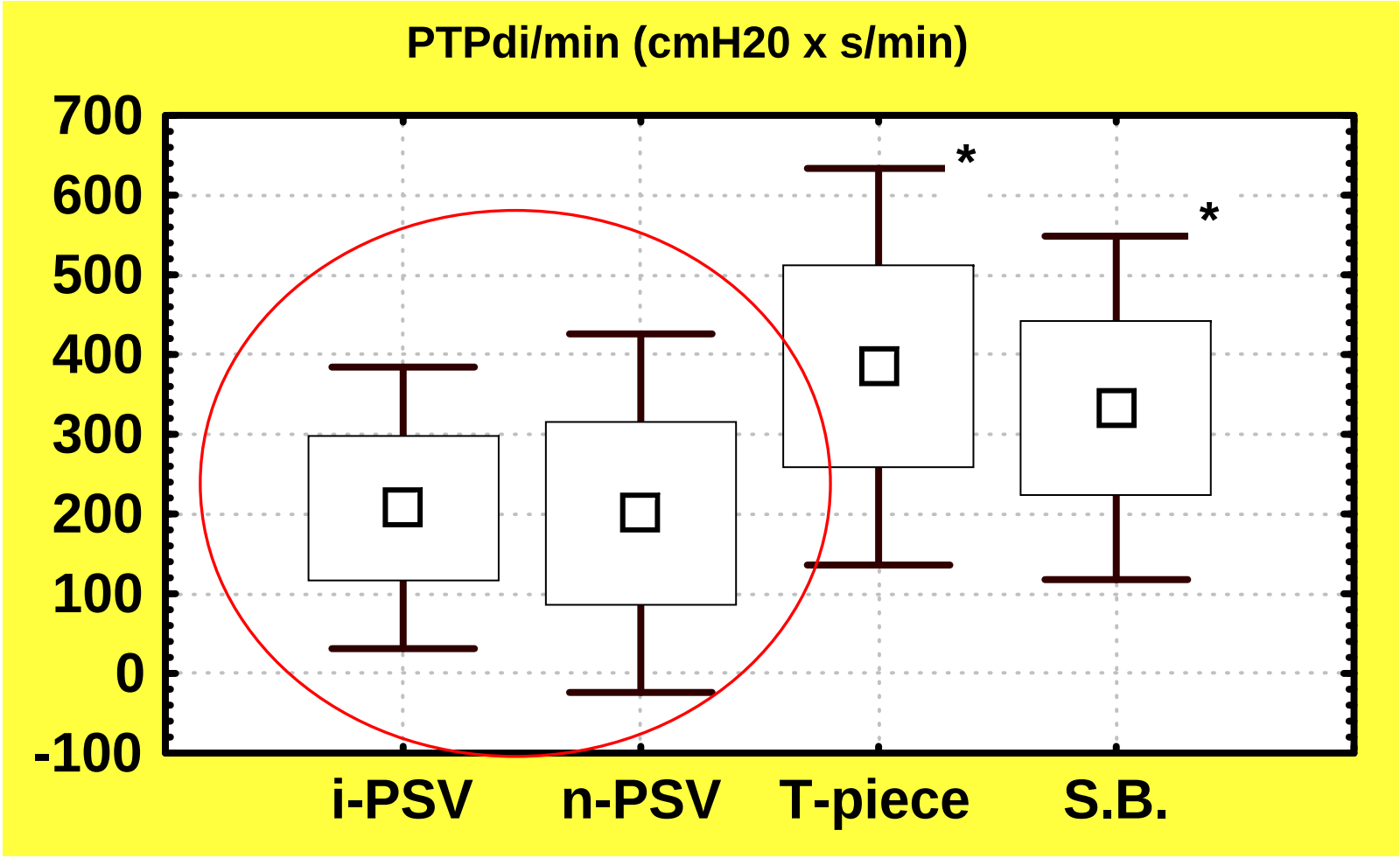
NIV failure:

20-25% in COPD
8-70% in ARF

where EI ?
ICU transfert ?
ethic decisions

Physiological Response to Pressure Support Ventilation Delivered before and after Extubation in Patients Not Capable of Totally Spontaneous Autonomous Breathing

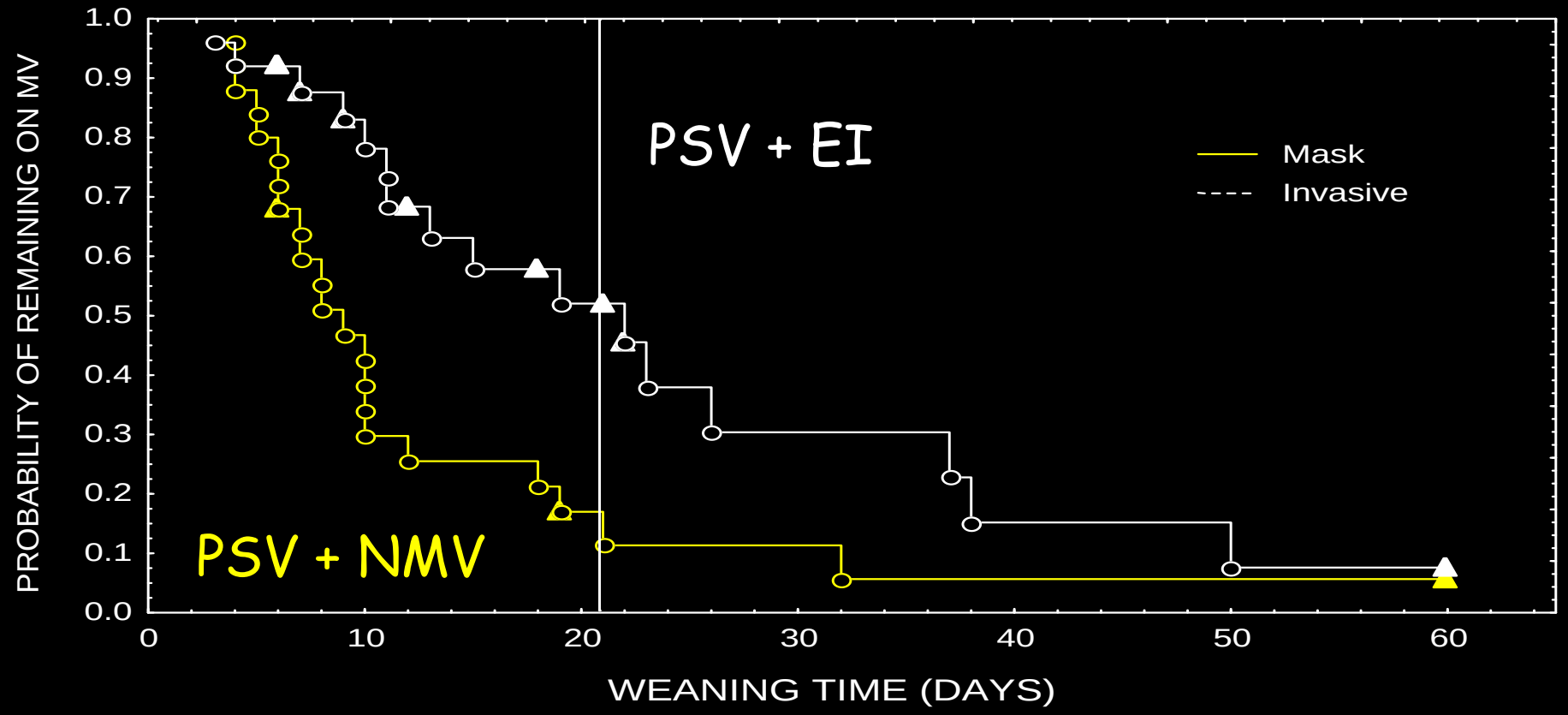
MICHELE VITACCA, NICOLINO AMBROSINO, ENRICO CLINI, ROBERTO PORTA, CIRO RAMPULLA, BARBARA LANINI, and STEFANO NAVA



AJRCCM 164:638-42,2001

COPD

OUTCOMES	N-PSV	I-PSV
Duration of MV, *days* @	10.2 (6.8)	6 (11.8)
Time in ICU, *days* @	15.1 (5.4)	24.0 (13.7)
Nosocomial pneumonia, *n* @	0	7

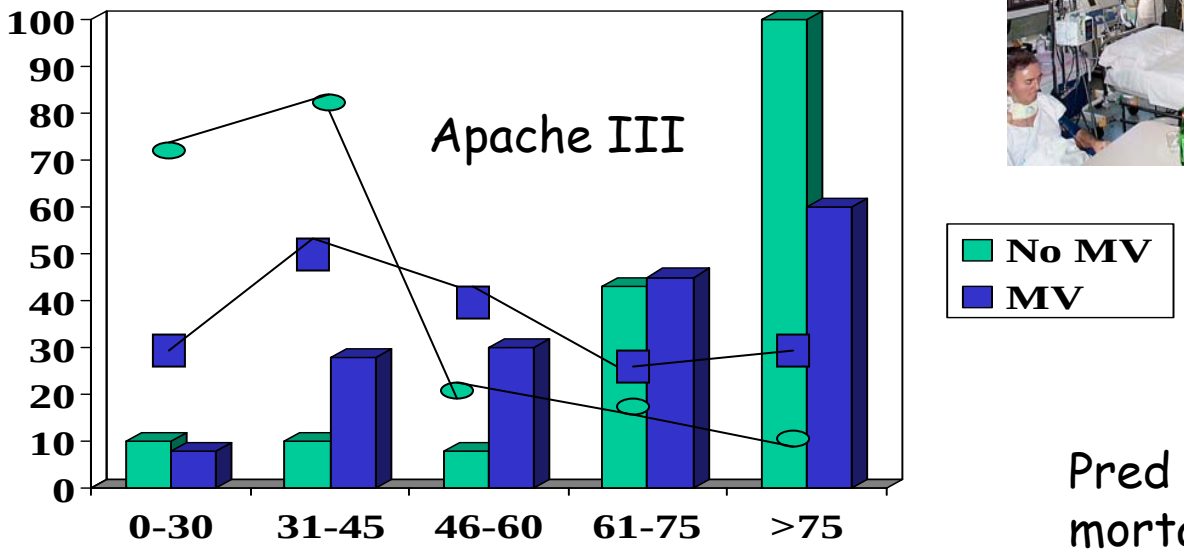


(Nava et al. Ann Intern Med 1998;128:721-728)

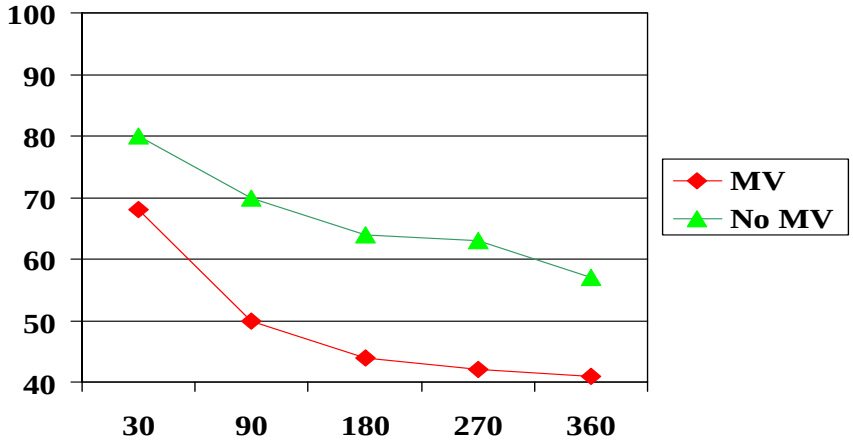
Hospital and 1 year survival of pts admitted to ICU with acute exacerbation of COPD.

MG Seneff. JAMA 1995; 274

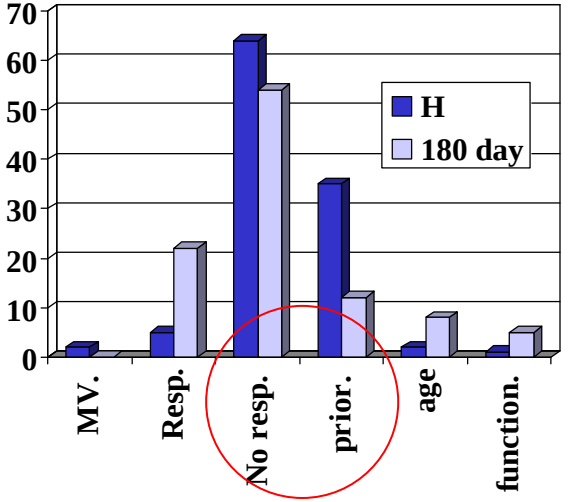
Mortality %

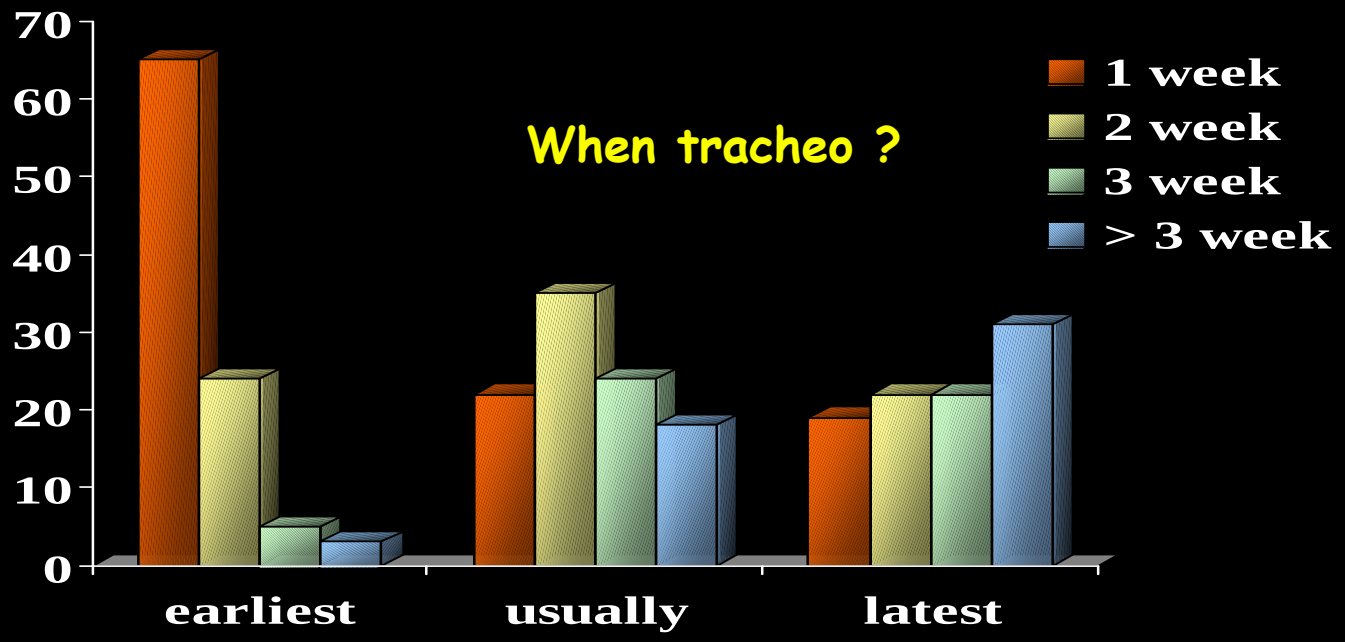


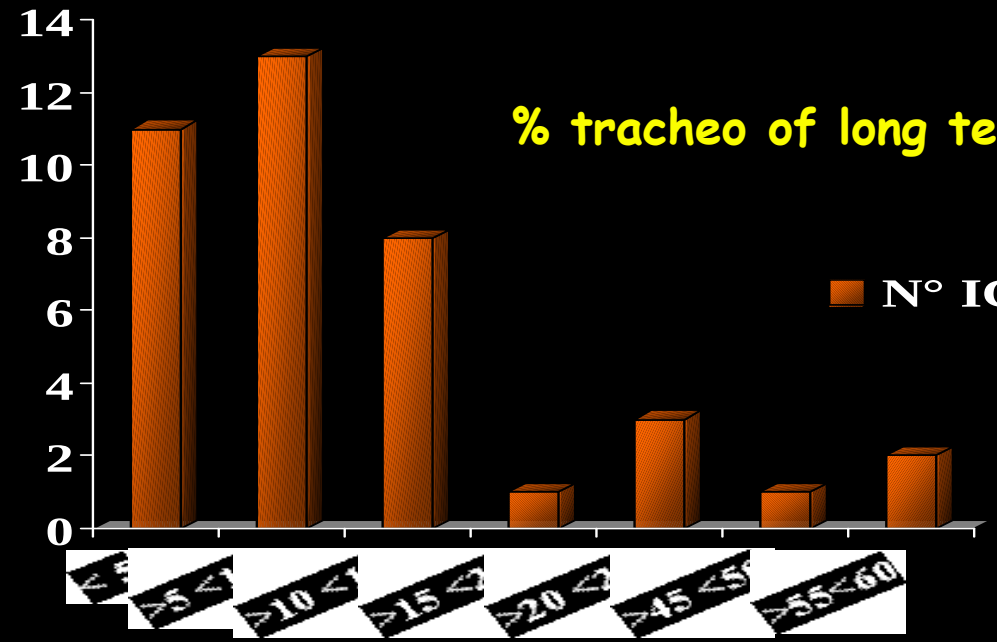
Alive %



Pred mortality %







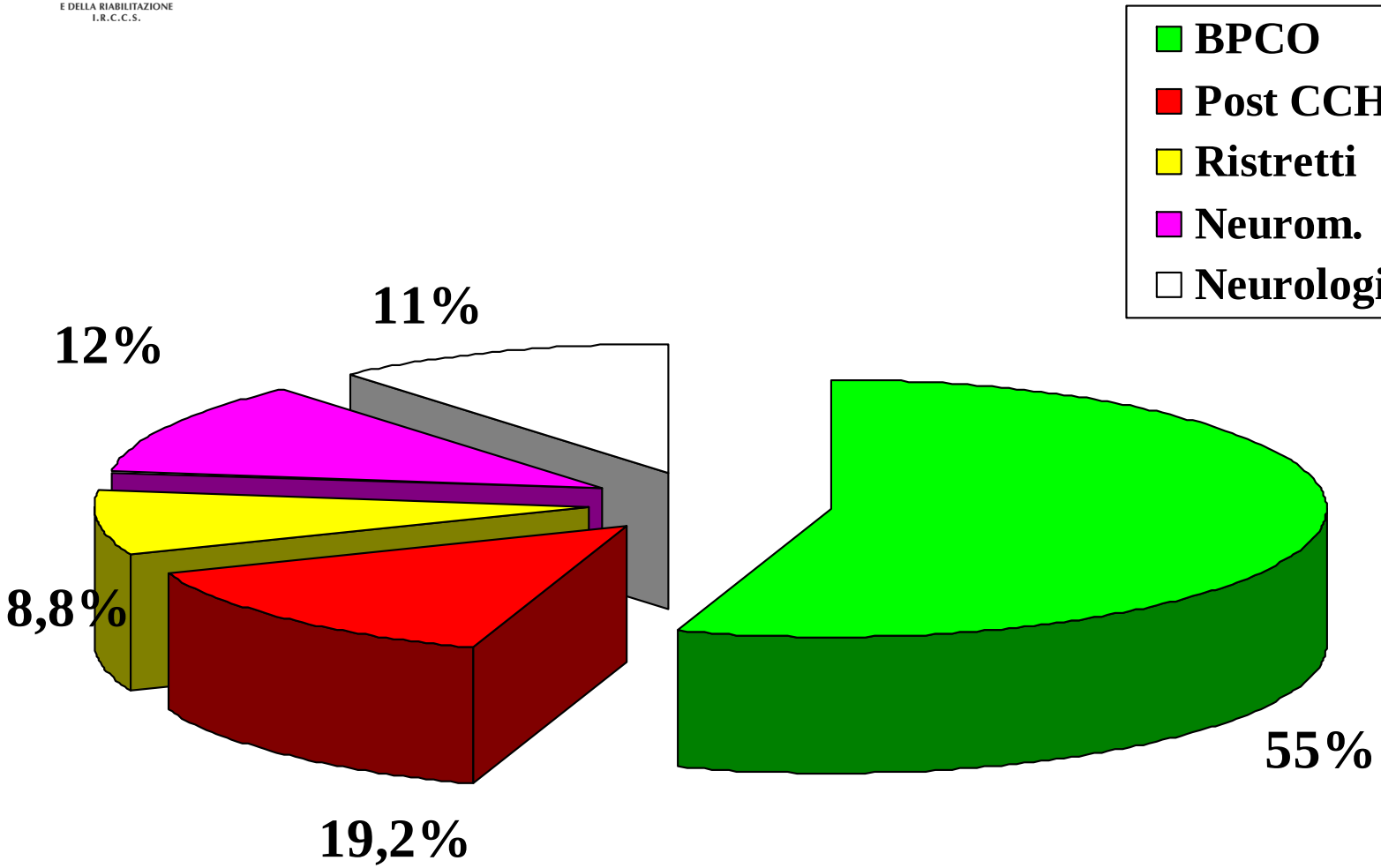
Fischer L Intensive Care Med 2000

The long term weaning center

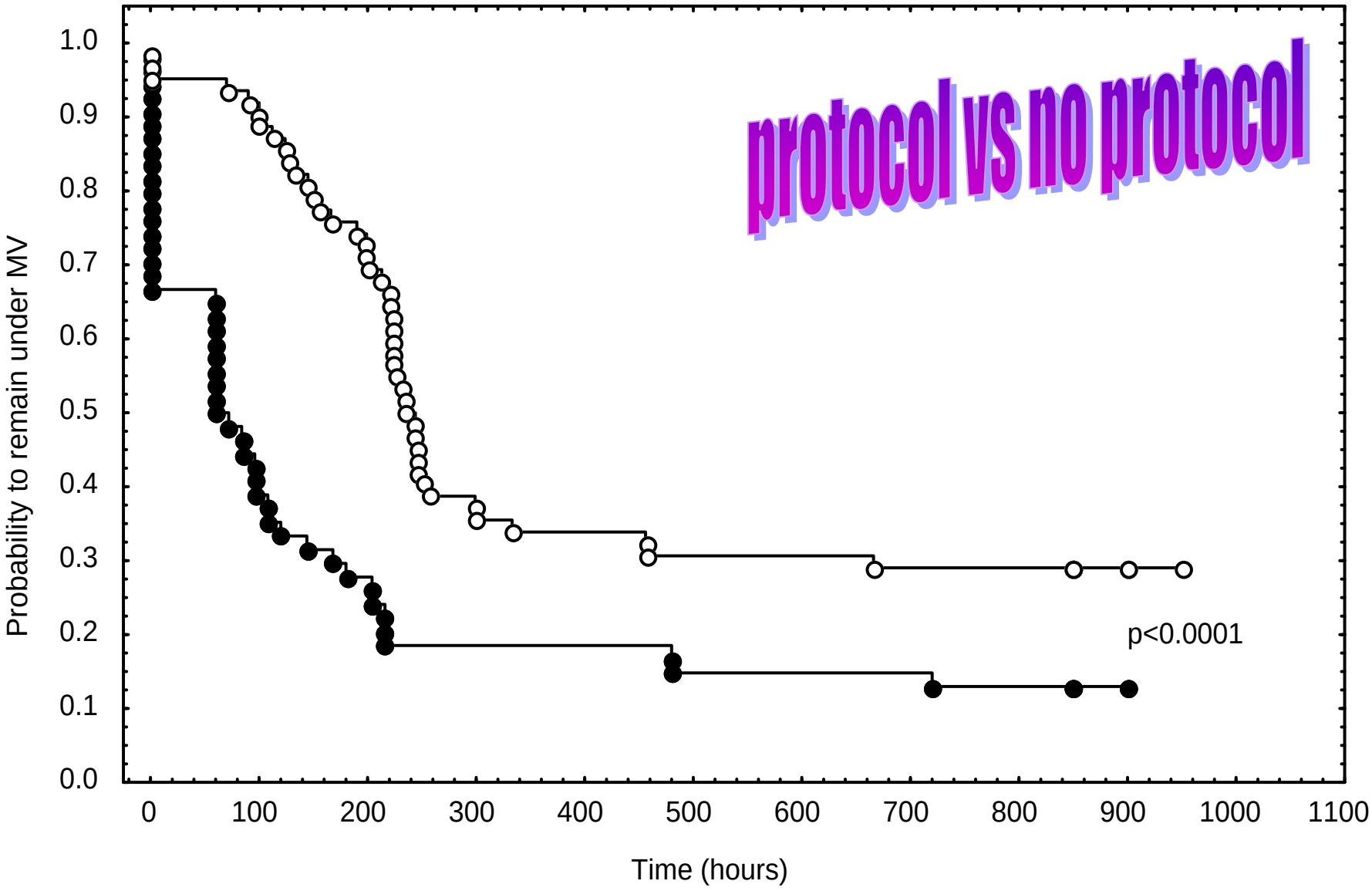
FONDAZIONE SALVATORE MAUGERI
CLINICA DEL LAVORO
E DELLA RIABILITAZIONE
I.R.C.C.S.

FONDAZIONE SALVATORE MAUGERI
CLINICA DEL LAVORO E DELLA RIABILITAZIONE I.R.C.C.S.

RICOVERI UTIR Gussago

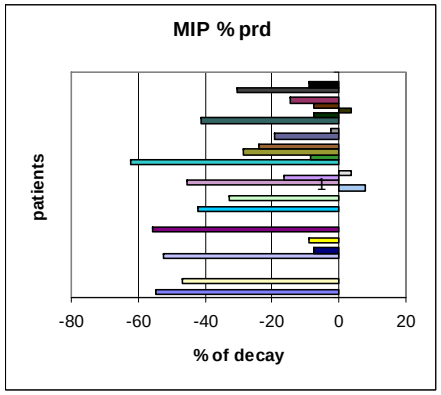


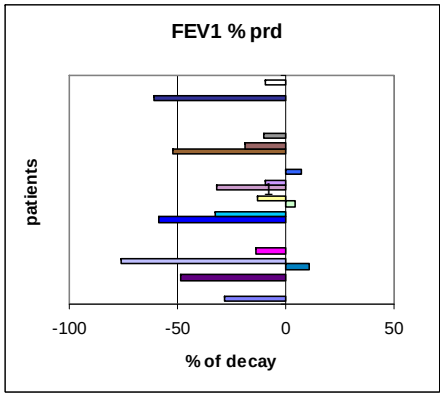
Anni 1992-2004= 960 pazienti

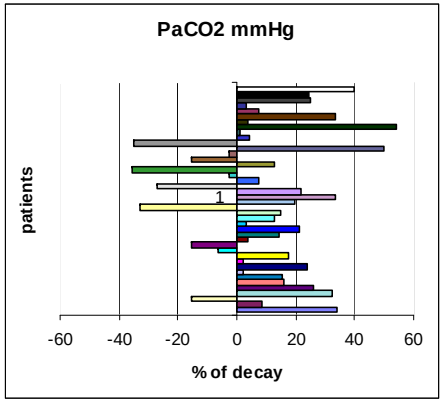


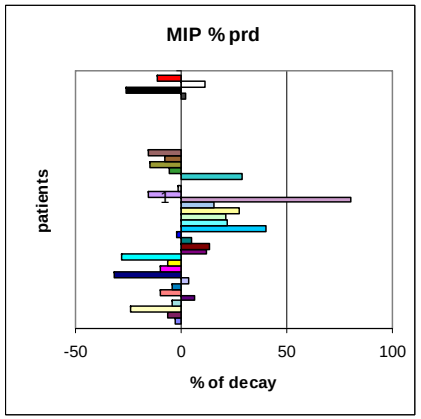
Vitacca M. Am J Respir Crit Care Med 2001; 164: 225-230

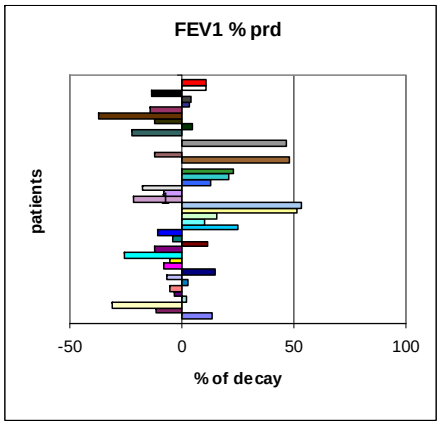
Decay in respiratory function after ICU admission

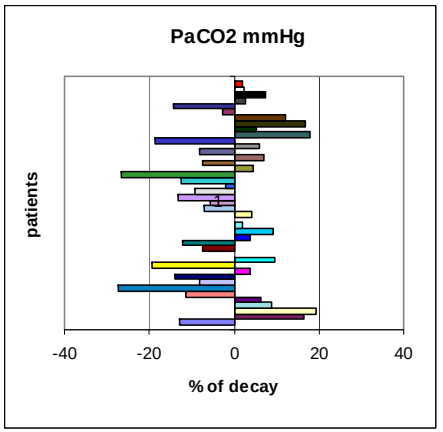












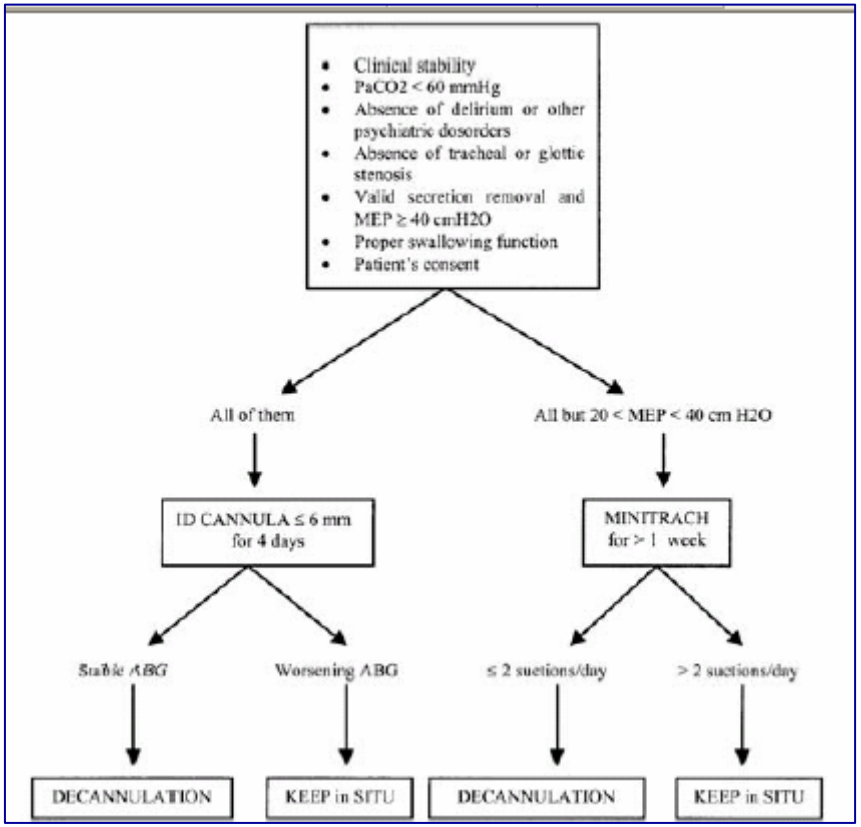
Vitacca et al Monaldi 2005

Intensive Care Med (2003) 29:845–848
DOI 10.1007/s00134-003-1689-z

BRIEF REPORT

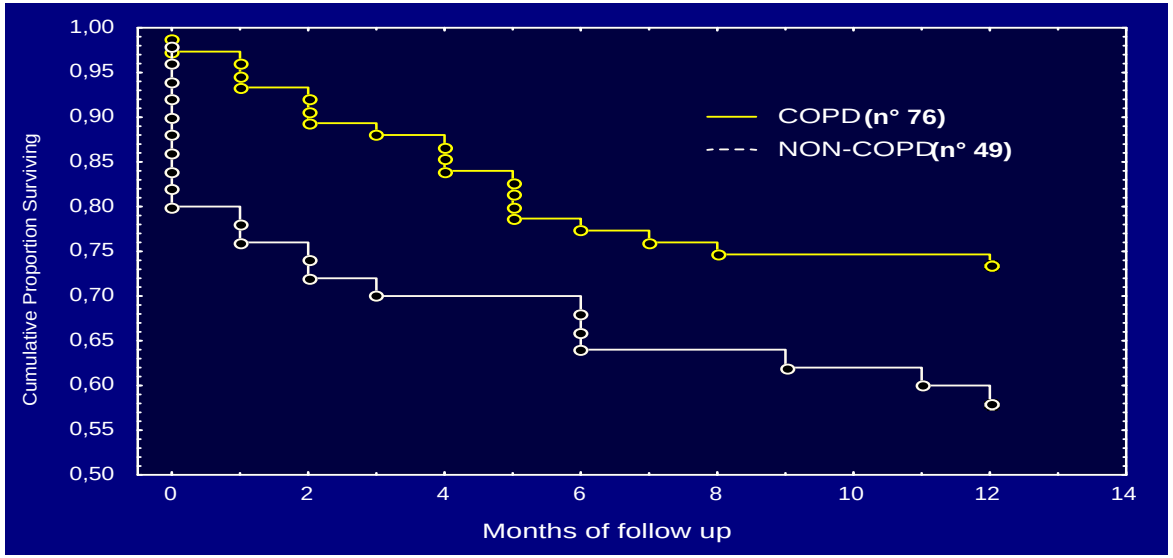
Piero Ceriana
Annalisa Carlucci
Paolo Navalesi
Ciro Rampulla
Monica Delmastro
GianCarlo Piaggi
Elisa De Mattia
Stefano Nava

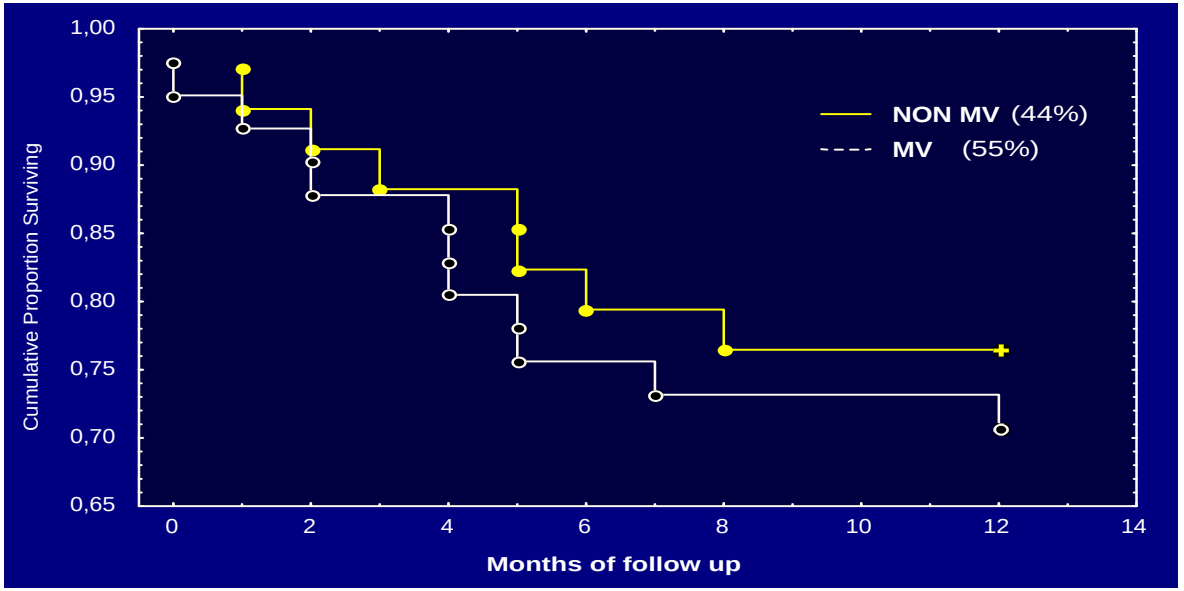
Weaning from tracheotomy in long-term mechanically ventilated patients: feasibility of a decisional flowchart and clinical outcome



FONDAZIONE SALVATORE MAUGERI
CLINICA DEL LAVORO E DELLA RIABILITAZIONE I.R.C.C.S.

1-YEAR SURVIVAL CURVES IN 125 PATIENTS





EFFECTS OF ACUTE ON CHRONIC RESPIRATORY FAILURE ON LONG-TERM HYPERCAPNIA AND THREE-MONTH SURVIVAL.

Michele Vitacca MD, Luca Bianchi MD, Luca Barbano MD, Mara Ziliani MD,
Nicolino Ambrosino FCCP §.

2005

Patients and interventions:

Seventy-three COPD patients recovering from a recent severe exacerbation underwent evaluation of:
Antropometric
Breathing pattern,
Mechanics,
Lung function
and arterial blood gases

at discharge from a Respiratory Intensive Care Unit.

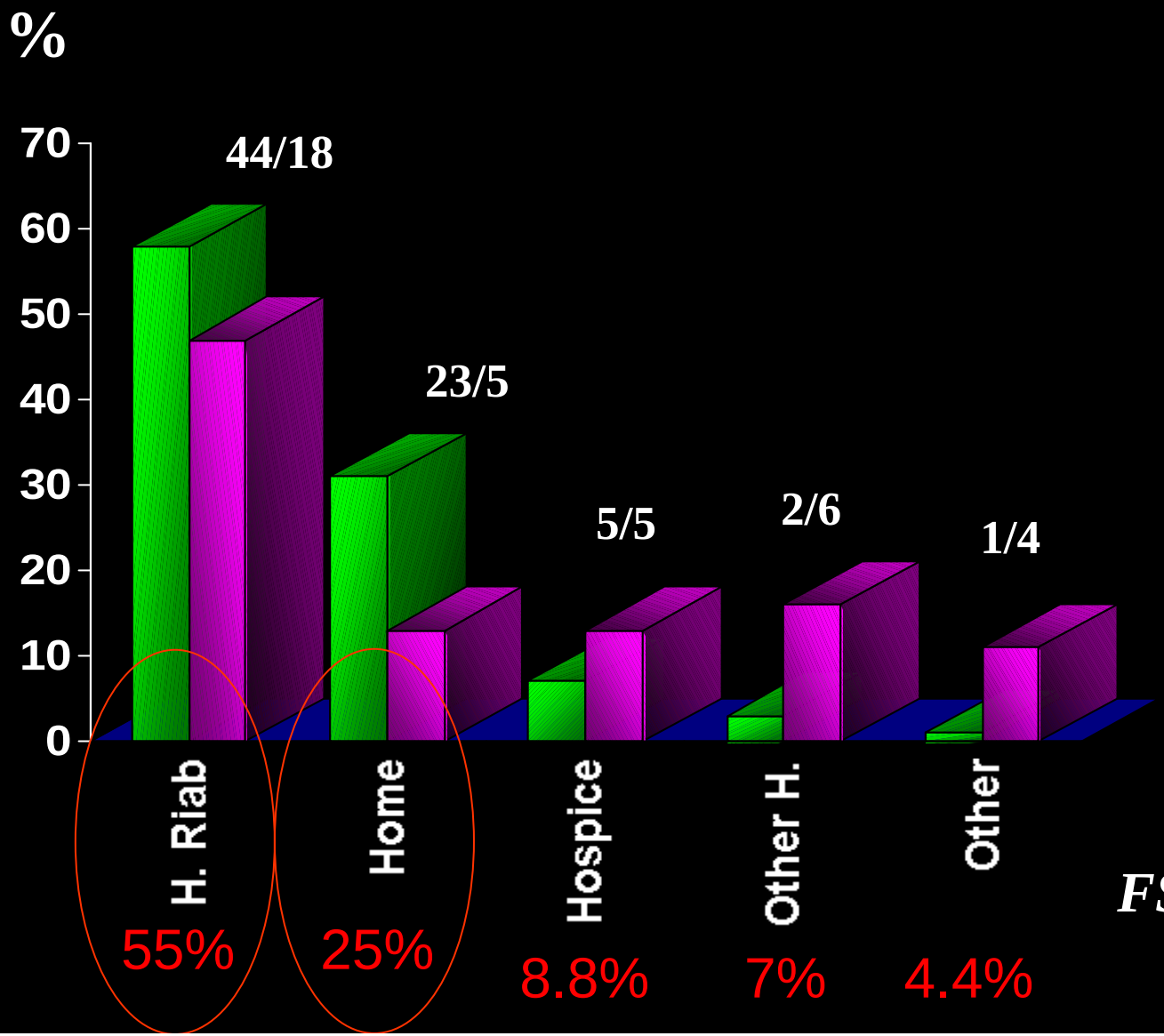
Accuracy of prediction and Equations of accuracy for survival and hypercapnia.

	% of Accuracy (%) in prediction	Dead (n)	Alive (n)
Dead	3877.8	37	52
Alive	9765.2	24	4635
Total	9066.7	531	6847
Equations		**Dead** = -8.1086.46+(0.136 * **% IBW)**	**Alive** = - 9.60010.09+(0.1734* **% IBW)**

	% of Accuracy (%)in distinction	PaCO2 <48 mmHg	PaCO2 ≥48 mmHg
PaCO2 <48 mmHg	67.944	1119	49
PaCO2 ≥48 mmHg	8091	140	440
Total	75.676	259	4948
Equations		**PaCO2 <48mmHg** = •--22.86 + (102.87 26.71+(0.0992* **TI/Tot) Poesmax)** + (13.1 * **PTI** 0.0194***PTPmin**)+(105.71 *TI/TTOT))	**PaCO2≥48mmHg** = •- 23.28+(0.0583***Poesmax**) +(0.0271***PTPmin**)+(96.5 4***TI/TTOT**)-18.42 + (90.38 * TI/tot) + (21.12 ***PTI)**

M. Vitacca et al Chest 2005

POST - RIICU Location 113 pts



FSM-Gussago

Documento

Raccomandazioni per la ventilazione meccanica Domiciliare. Aggiornamento anno 2003. Parte 1

AIPO, GRUPPO DI STUDIO RIABILITAZIONE LUCIANO PESCE

Vol 18/5 2003 368-375

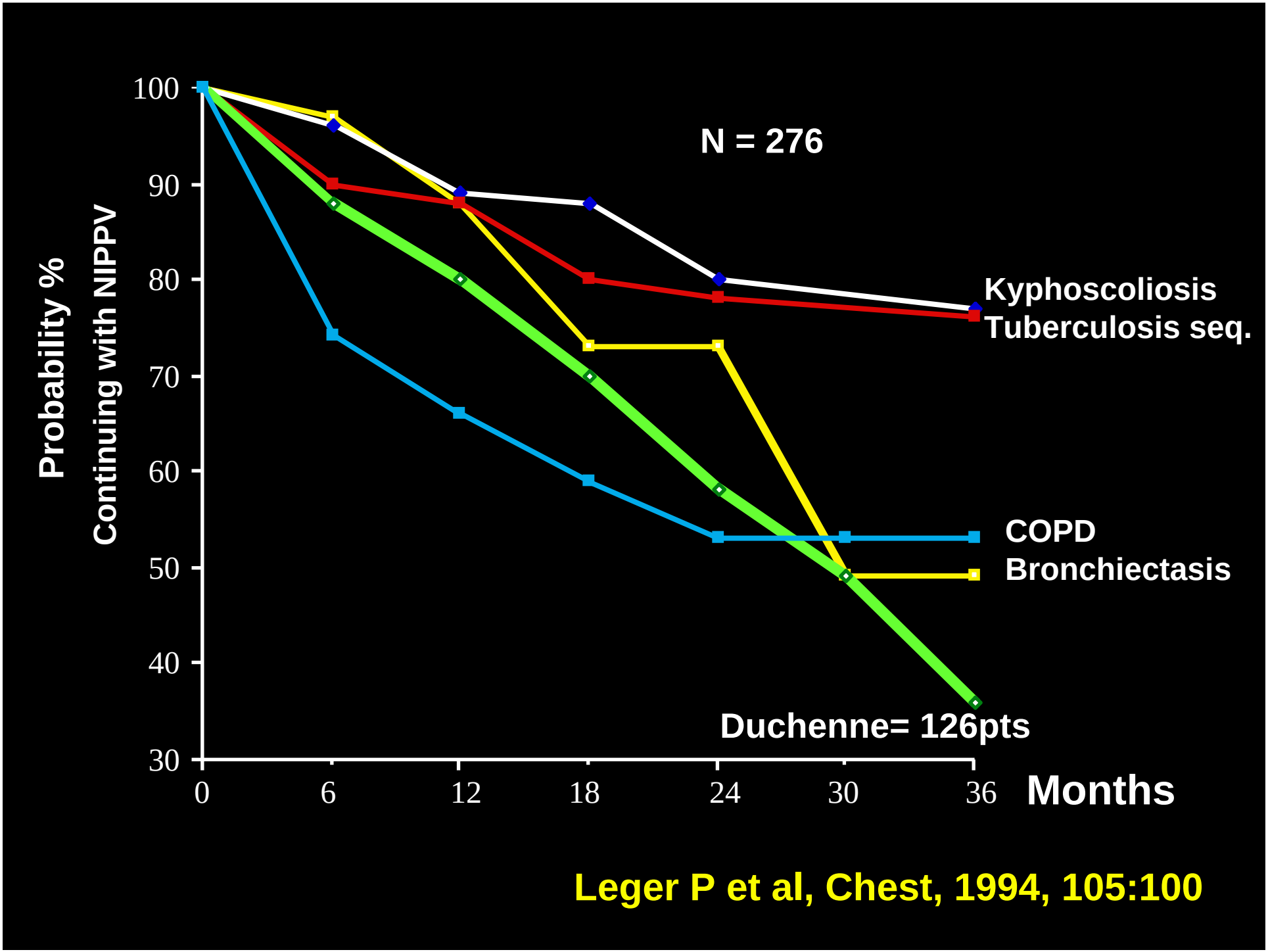
Ventilazione meccanica domiciliare

Indicazione di trattamento obbligatoria

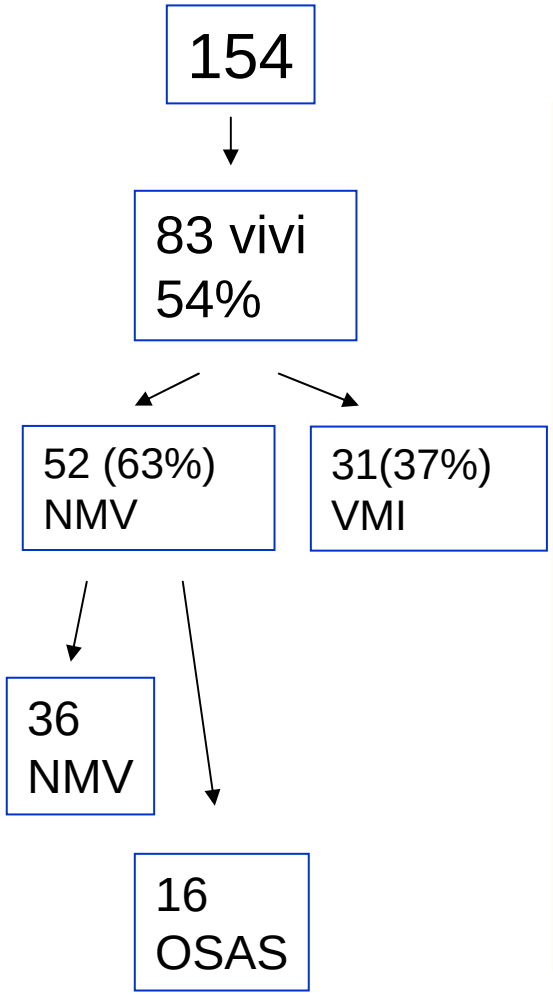
paz. senza autonomia ventilatoria

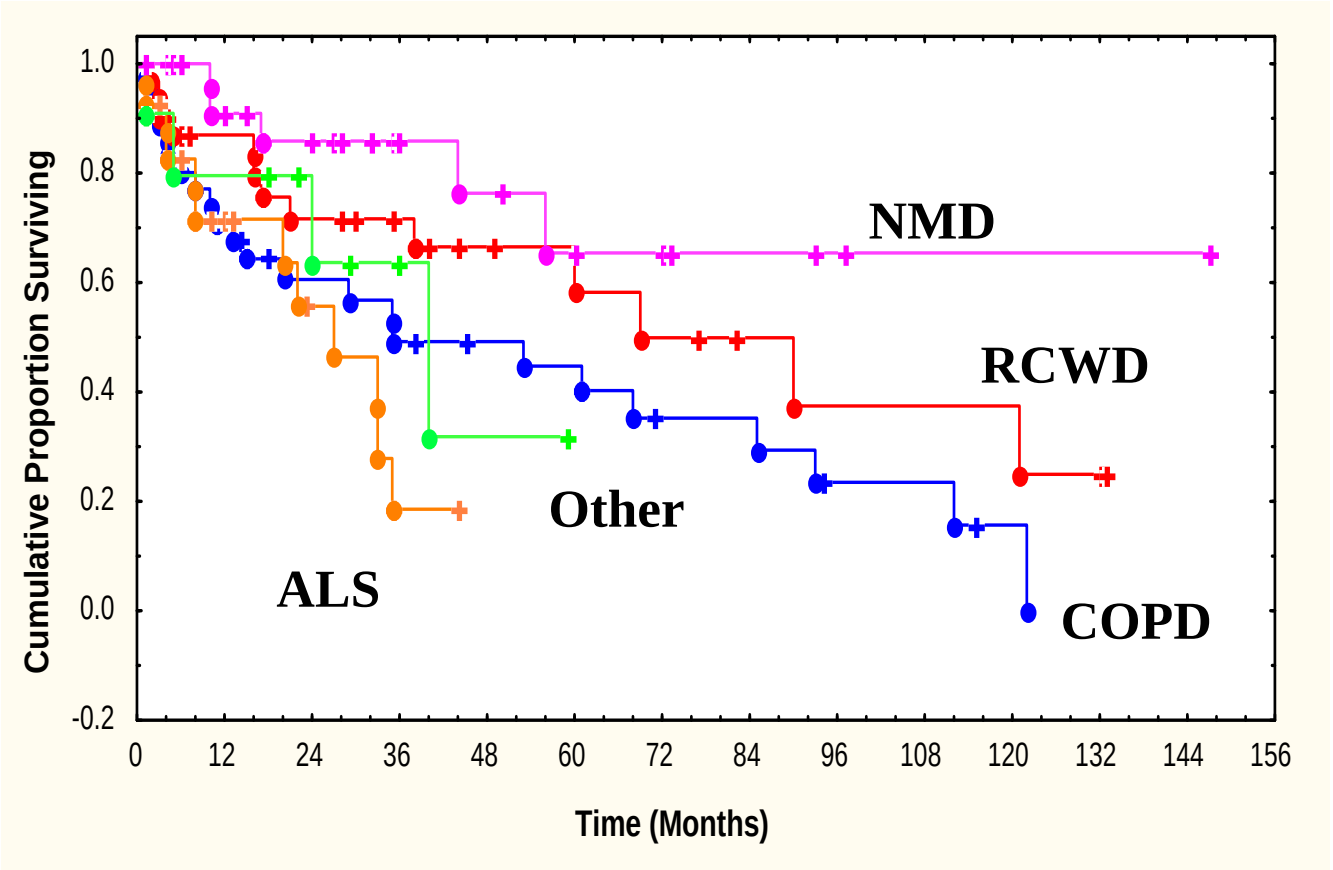
↓

VMD per **via tracheostomica**


Probability %
Continuing with NIPPV
100
90
80
70
60
50
40
30
0
6
12
18
24
30
36
Months
N = 276
Kyphoscoliosis
Tuberculosis seq.
COPD
Bronchiectasis
Duchenne= 126pts
Leger P et al, Chest, 1994, 105:100

Survival of 12 years HMV in Gussago Hospital





Eur Respir J 2005; 25: 1025–1031
DOI: 10.1183/09031936.05.00066704

Patterns of home mechanical ventilation use in Europe: results from the Eurovent survey

S.J. Lloyd-Owen*, G.C. Donaldson*, N. Ambrosino[#], J. Escarabill[¶], R. Farre[+], B. Fauroux[§], D. Robert[ƒ], B. Schoenhofer, A.K. Simonds[##] and J.A. Wedzicha***

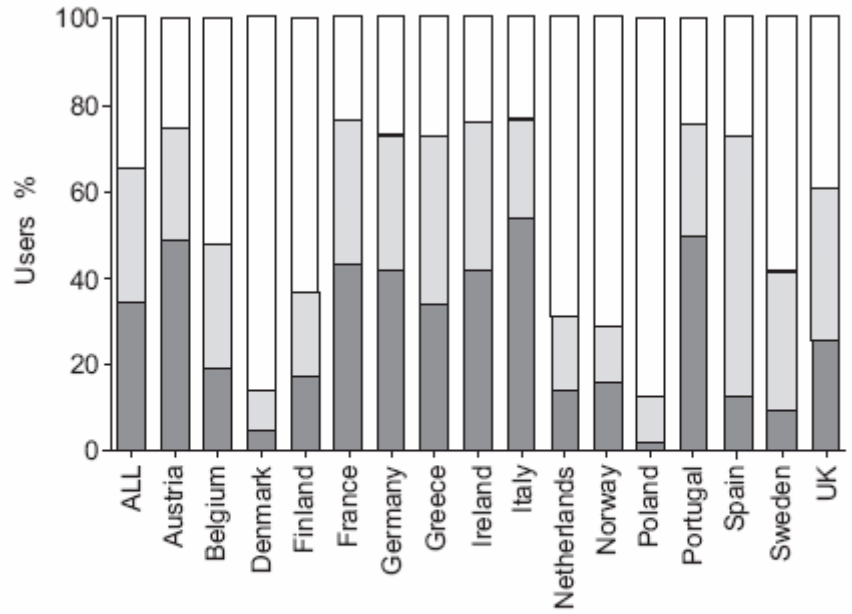


FIGURE 4. Percentage of users in each disease category by country (see *Methods* section for an explanation of disease categories). ■: lung/airways; ■: thoracic cage; □: neuromuscular.

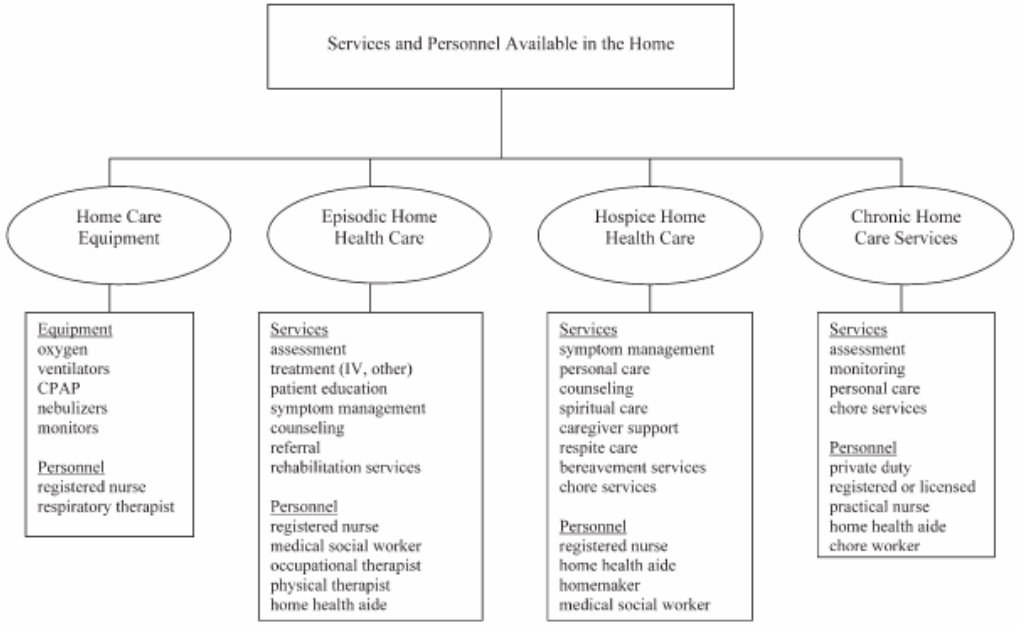
American Thoracic Society Documents

Statement on Home Care for Patients with Respiratory Disorders

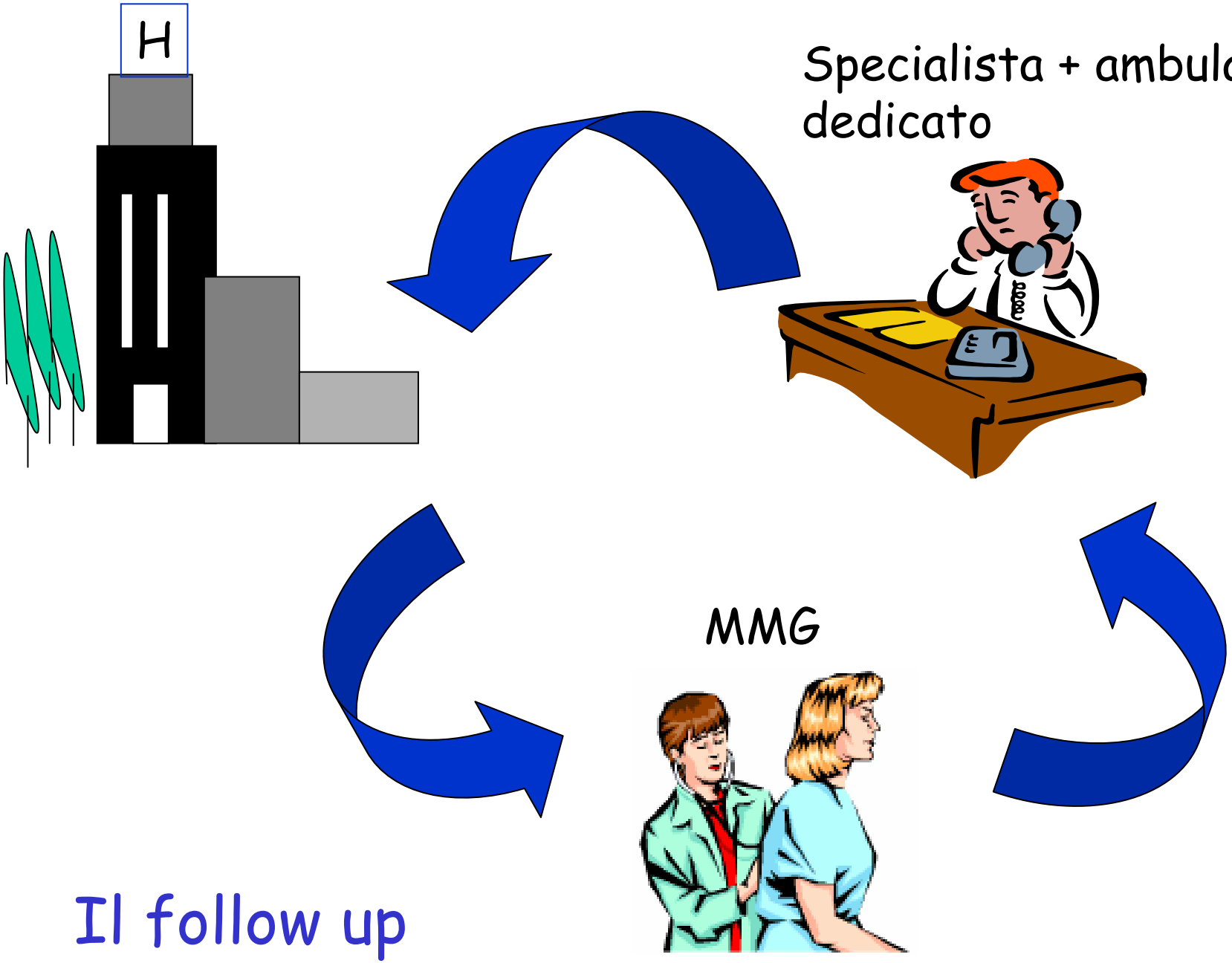
THIS OFFICIAL STATEMENT OF THE AMERICAN THORACIC SOCIETY WAS APPROVED BY THE ATS BOARD OF DIRECTORS DECEMBER 2005.

Am J Respir Crit Care Med Vol 171. pp 1443–1464, 2005

CONTENTS



Il follow up



Nurse Home program

Assesment in ER

Treatment at discharge
- pharmacological
- non pharmacological

8 week of follow up
- nurse visit at 24 h (1 h)
- free nurse visits
- free phone
- nurse phone calls to pat.

Failure of programme
- more of 5 visits, ER admission

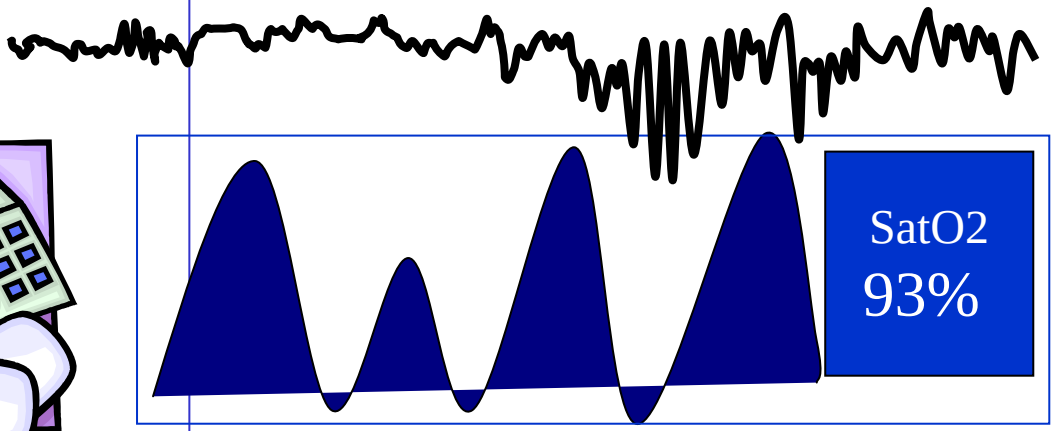
Hernandez ERJ 2003

TELEASSISTENZA PNEUMOLOGICA

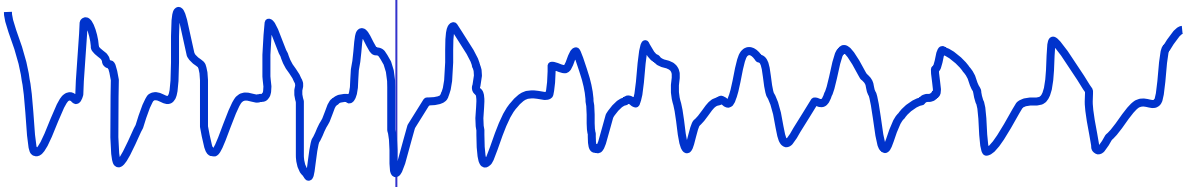
Strumenti disponibili

Telefono
e-mail

ECG
SatO2



tracciato di flusso



diario clinico
cartella infermieristica

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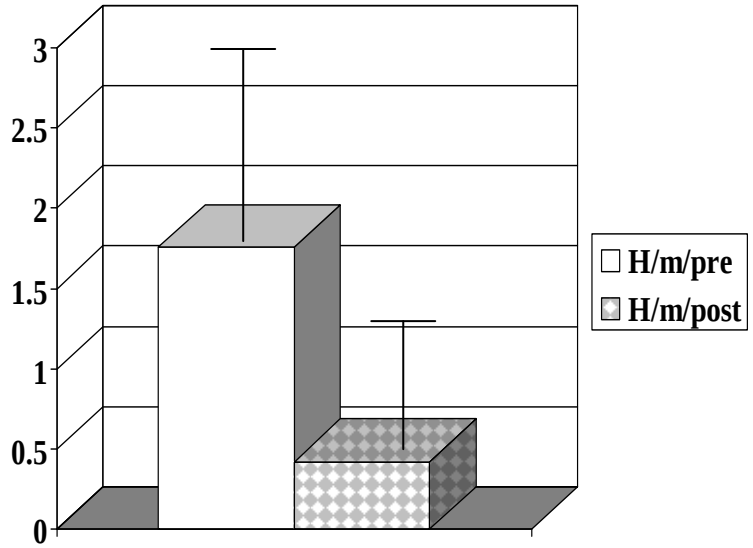

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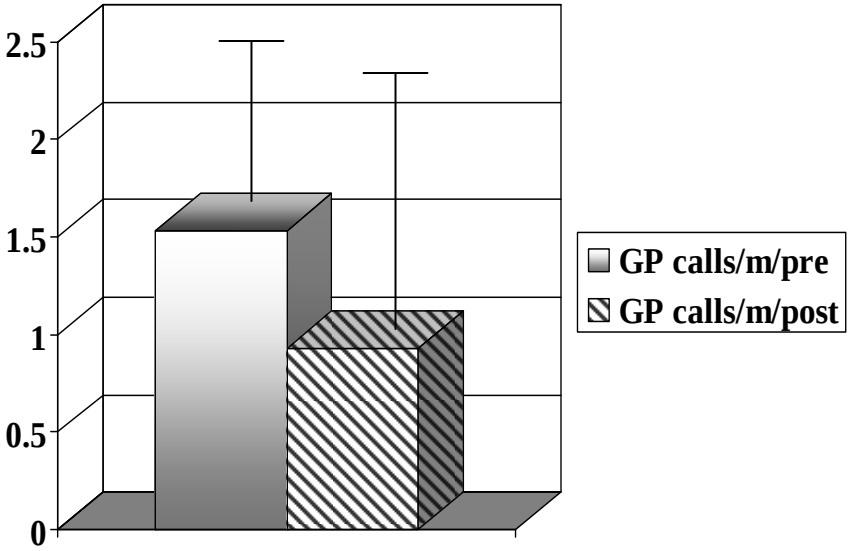

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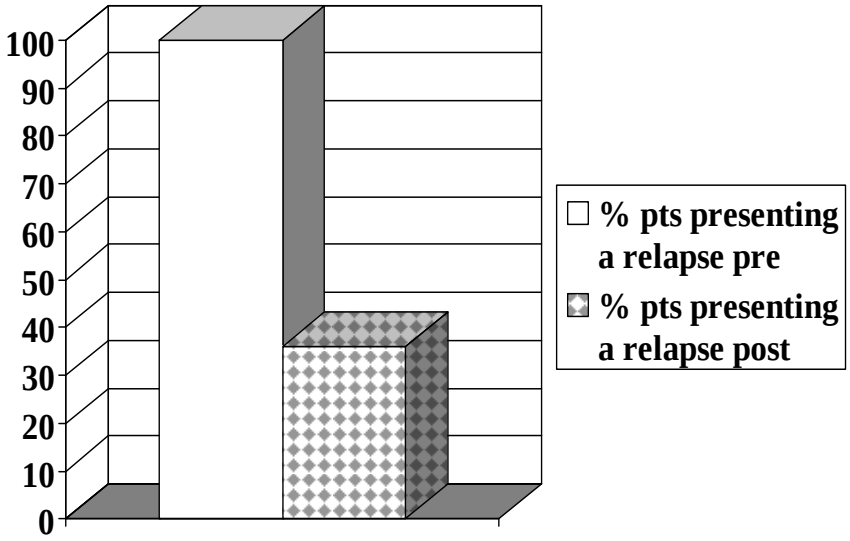

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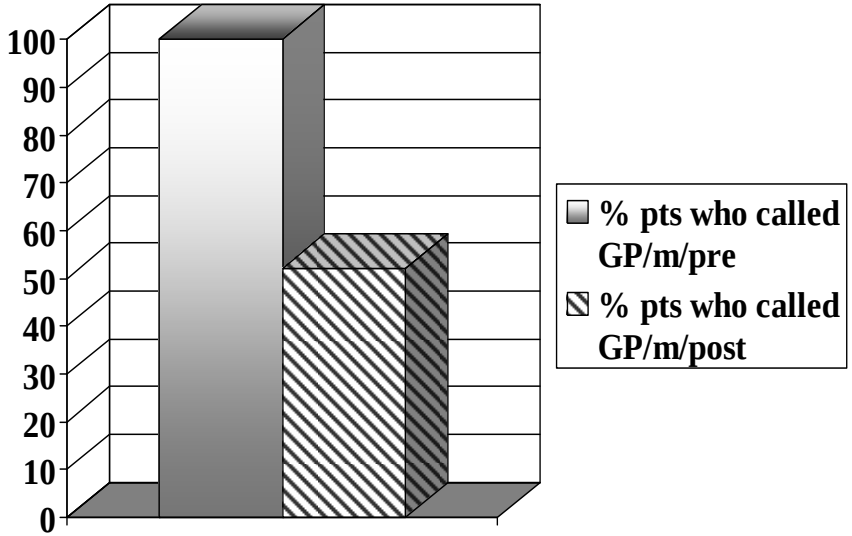
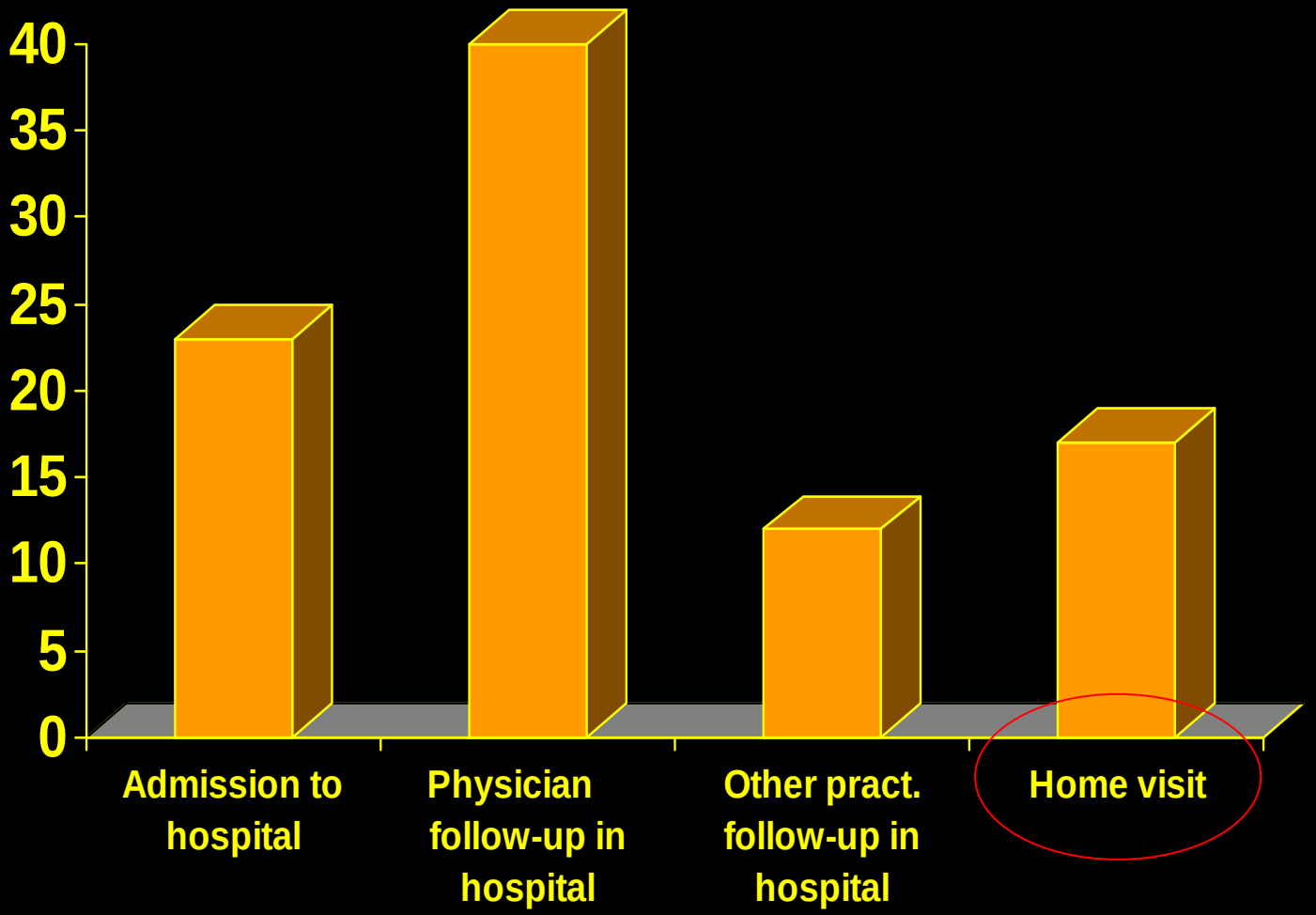
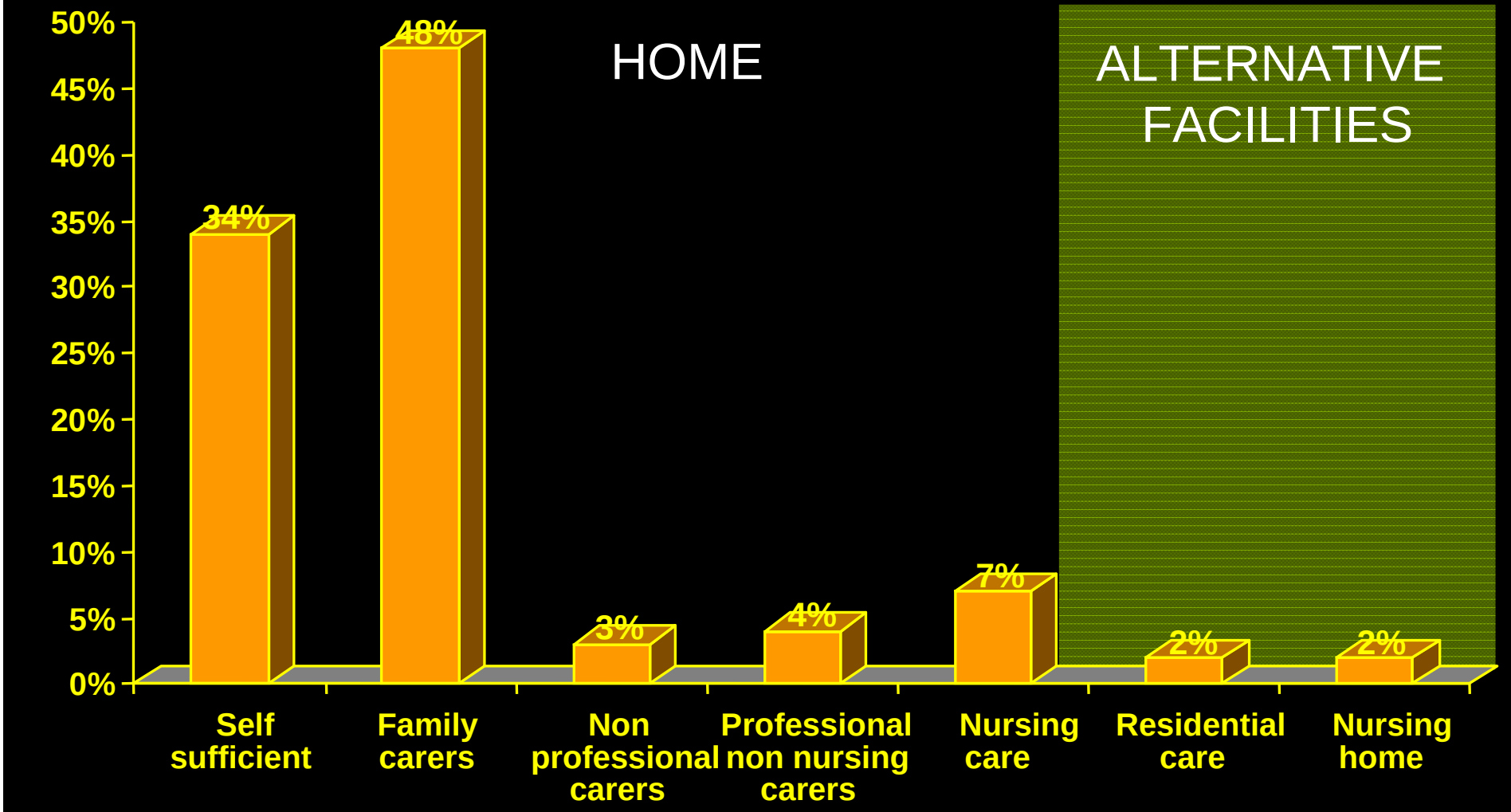


Vitacca et al 2005

Survey on 1928 italian patients with HMV

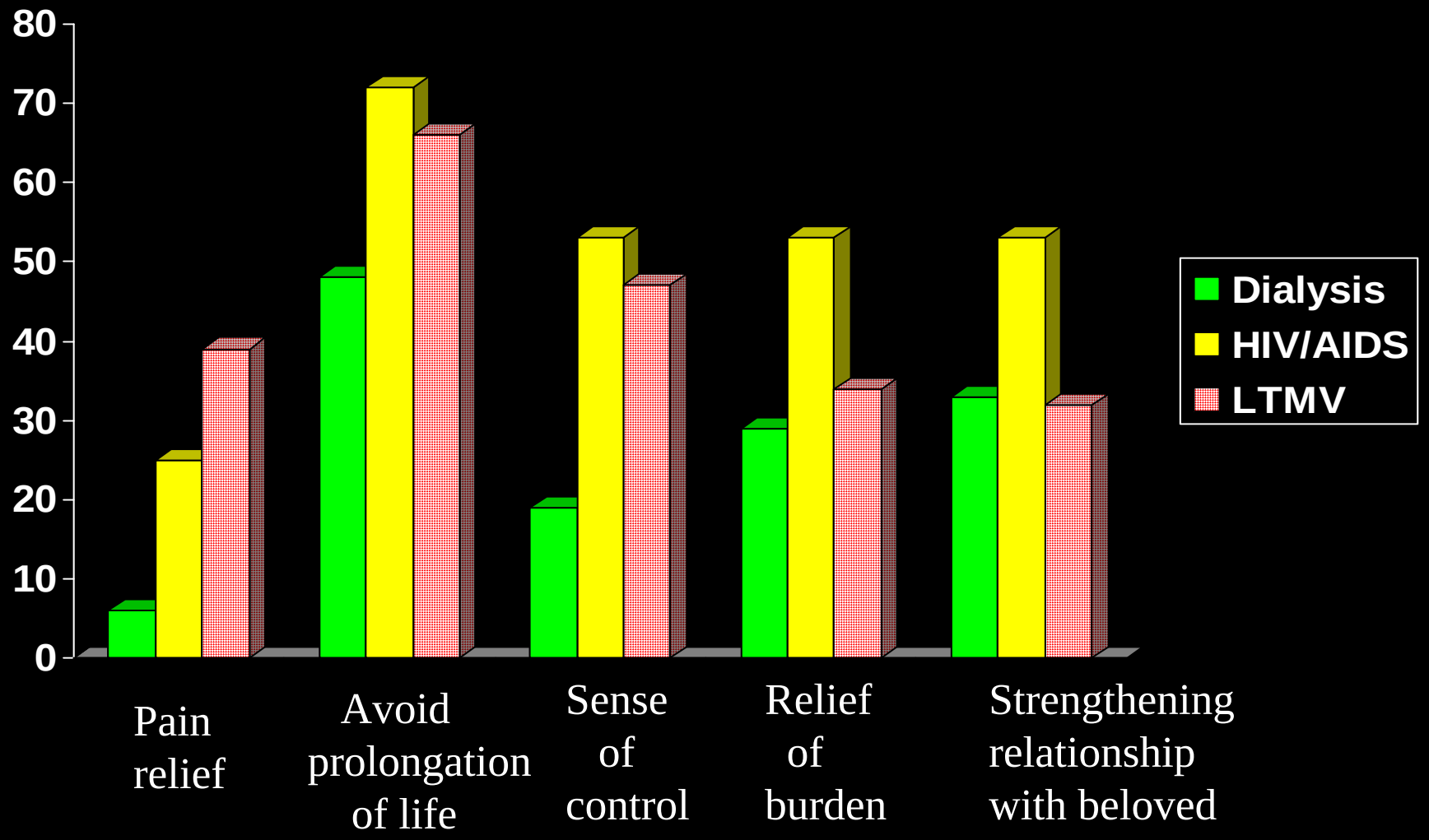


Survey on 1928 italian patients with HMV



Domains of End-of-Life Care from Patients' Perspectives

Singer et al. JAMA 1999; 281:163-8



ethics in cardiopulmonary medicine

Patients' Perspectives on Physician Skill in End-of-Life Care*

Differences Between Patients With COPD, Cancer, and AIDS

J. Randall Curtis, MD, MPH, FCCP; Marjorie D. Wenrich, MPH; Jan D. Carline, PhD; Sarah E. Shannon, PhD, RN; Donna M. Ambrozy, PhD; and Paul G. Ramsey, MD

Domains	Patient Groups		
	AIDS (n = 36)	Cancer (n = 19)	COPD (n = 24)
Emotional support	1 (16.7)†	1 (21.8)†	1 (15.1)†
Communication with patients	2 (12.3)†	2 (14.2)†	3 (13.6)†
Accessibility and continuity	3.5 (12.0)†	4 (12.2)†	2 (14.3)†
Competence	3.5 (12.0)†	3 (12.8)†	5 (9.8)
Personalization‡	5 (9.0)	5 (9.3)	11 (3.8)
Attention to patient values	7 (7.3)	6 (5.8)	8 (5.7)
Patient education	11 (3.3)	7 (5.5)	4 (11.7)†
Respect and humility	6 (8.3)	8 (5.2)	9 (5.3)
Pain and symptom management	9 (5.3)	9 (3.8)	6.5 (6.8)
Support of patient decision making	8 (7.0)	10 (3.5)	10 (4.9)
Team communication and coordination	11 (3.3)	11 (3.2)	6.5 (6.8)
Inclusion and recognition of family	11 (3.3)	12 (2.6)	12 (2.3)
Total counts of codes	300	344	265

CHEST 2002;122

reviews

Hospice Care for Patients With Advanced Lung Disease*

Janet L. Abrahm, MD; and John Hansen-Flaschen, MD

(CHEST 2002; 121:220–229)

These programs are underutilized
lower awareness of Hospice eligibility criteria than oncologists
unpredicatability of death
limitations on insurances

hospice care offers expertize for palliation;
bridge to home
eligibility criteria and services available need to be known

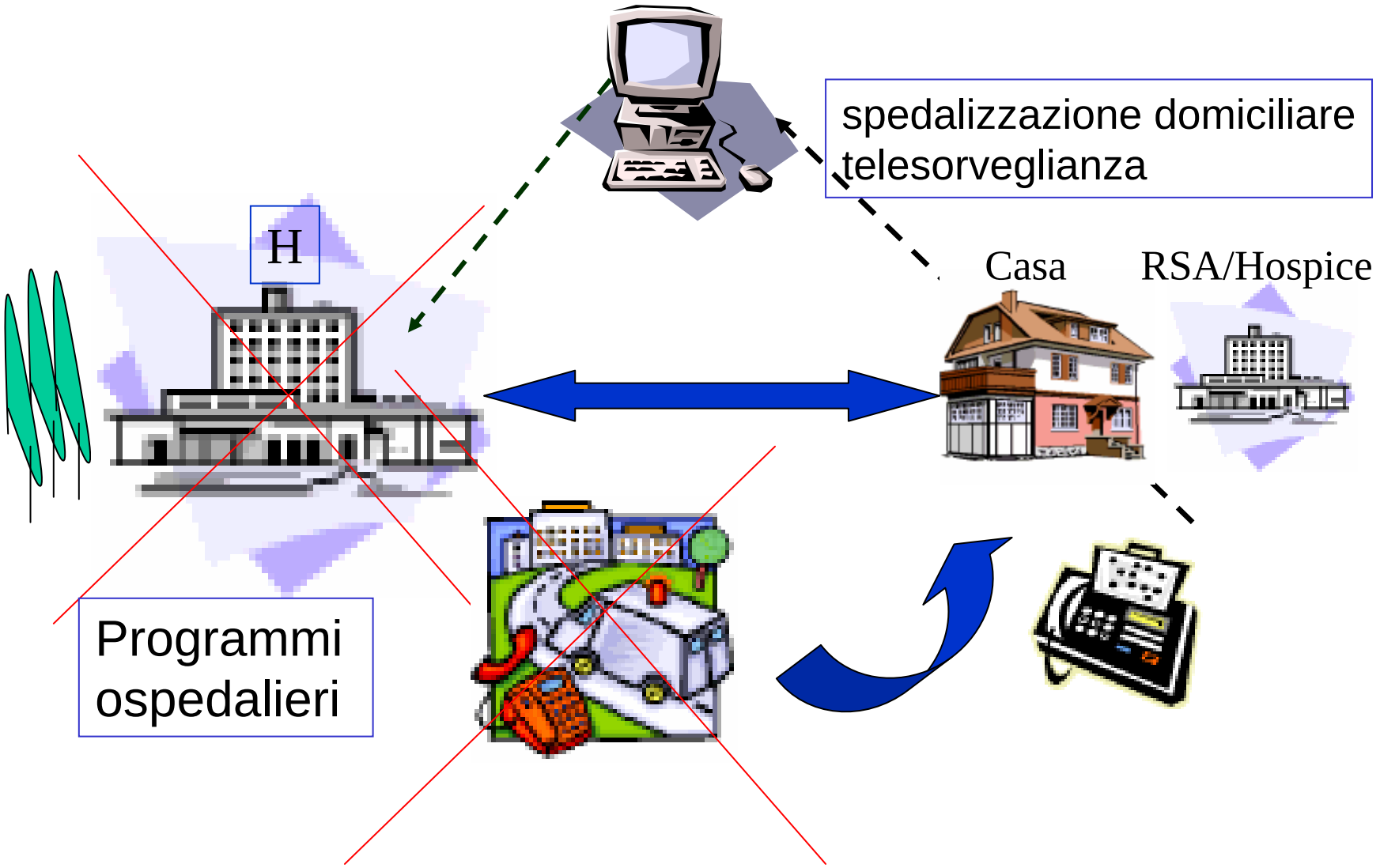
CONCLUSIONI

Grazie al miglioramento delle cure, sempre più pazienti respiratori arrivano a vivere una condizione di prolungata sopravvivenza con problematiche di grave cronicità

La gestione della BPCO è divenuta ormai una complessa presa in carico (di tutte le figure professionali) di sintomi fisici e psicosociali, dipendenze, problematiche multidisciplinari e multifattoriali.

Operatori sanitari e famiglia devono sempre più collaborare per prendere comuni decisioni cliniche ed etiche

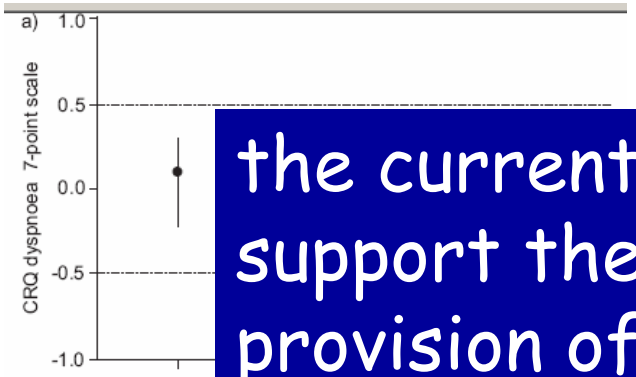
CONCLUSIONI

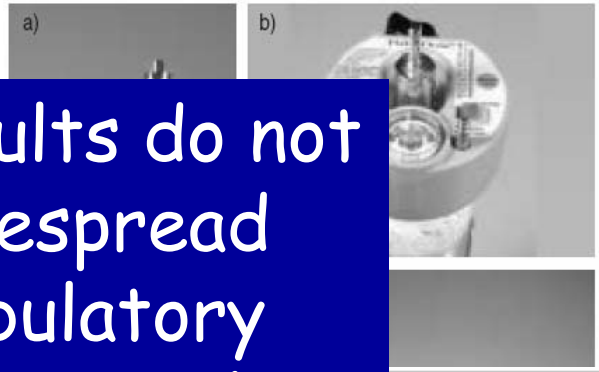


Eur Respir J 2005; 25: 1032–1038
DOI: 10.1183/09031936.05.00113504

Randomised trial of ambulatory oxygen in oxygen-dependent COPD

Y. Lacasse*, R. Lecours#, C. Pelletier#, R. Bégin¶ and F. Maltais*





the current results do not support the widespread provision of ambulatory oxygen to patients with oxygen-dependent chronic obstructive pulmonary disease

TABLE 3 Number of h

Outcome			tor + pressed air	p-value#
Oxygen concentrator use				
From counter clock reading			18.7)	0.32
Self-reported			19.3)	0.95
Time spent out of the home				
Without using ambulatory cylinders	1.7 (1.2–2.1)	1.3 (0.8–1.8)	1.4 (0.9–1.8)	0.46
Using ambulatory cylinders		0.5 (0.3–0.7)	0.5 (0.3–0.7)	0.99¶

ERJ 1996;9:1487-1493

	Failure Group (n=14)	Success Group (n=25)	p-value
Sex M/F	12/2	20/5	
Age yrs	61±9 (38–73)	64±6 (38–82)	NS
Weight kg	53±12 (33–83)	67±16 (39–123)	<0.01
NPI*	46±22 (20–74)	24±8 (13–38)	<0.001
Albumin $g \cdot dL^{-1}$	3.8±0.35 (2.6–4.1)	4.1±0.4 (3.5–4.6)	
TSF mm	9±5 (4–20)	22±11 (13–31)	
Transferrin $mg \cdot dL^{-1}$	168±31 (126–206)	194±29 (153–280)	
Anergy %	95	69	
IBW* %	86±21 (47–110)	109±31 (77–170)	<0.01
APACHE II*	20±7 (15–29)	12±3 (10–22)	<0.001

	Failure Group (n=14)	Success Group (n=25)	p-value
$P_{a,O_2}/F_{I,O_2}$	2.26±0.10 (2.1–2.4)	2.60±0.13 (2.21–2.70)	<0.01
P_{a,CO_2} kPa	7.8±1.3 (4.5–9.1)	6.2±1.0 (4.2–8.2)	<0.001
pH	7.34±0.03 (7.30–7.40)	7.36±0.03 (7.33–7.42)	<0.05
HCO_3^- $mmol \cdot L^{-1}$	35±5 (22–43)	30±6 (21–39)	<0.05
S_{a,O_2}* %	82±9 (62–93)	89±7 (69–94)	<0.01
FEV1* % pred	26±11 (15–44)	41±18 (17–60)	<0.001
FVC* % pred	37±9 (18–49)	53±19 (30–68)	<0.001
VC* % pred	44±10 (29–60)	60±18 (24–70)	<0.005
FEV1/FVC* %	37±11 (22–59)	51±11 (30–64)	<0.05