Il modello FORCE: L'approccio Integrato al Paziente Oncologico

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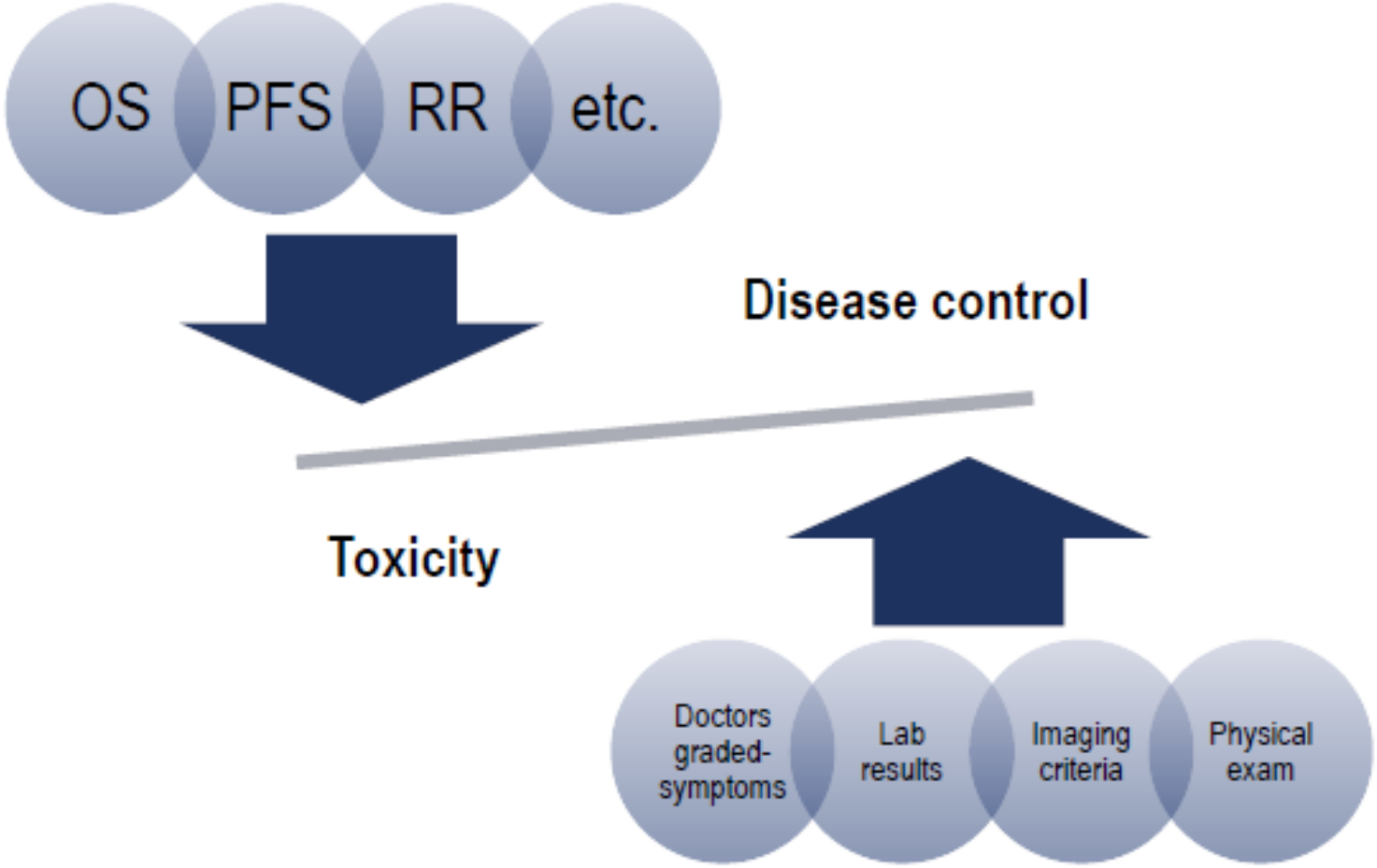
What’s New???


– SI DA' UN SACCO DI ARIE PERCHE' E' STATO IL PRIMO A SCOPRIRE L'ACQUA CALDA.

Treatment-related Decision-making process in cancer



Treatment Goals in Advanced Disease

When patients are **still fit** for active treatment

- Symptom control
- Disease control
- Prolonged survival

When patients are **no longer fit** for active treatment

- Best supportive and palliative care
- Treatment goals → Goals of care

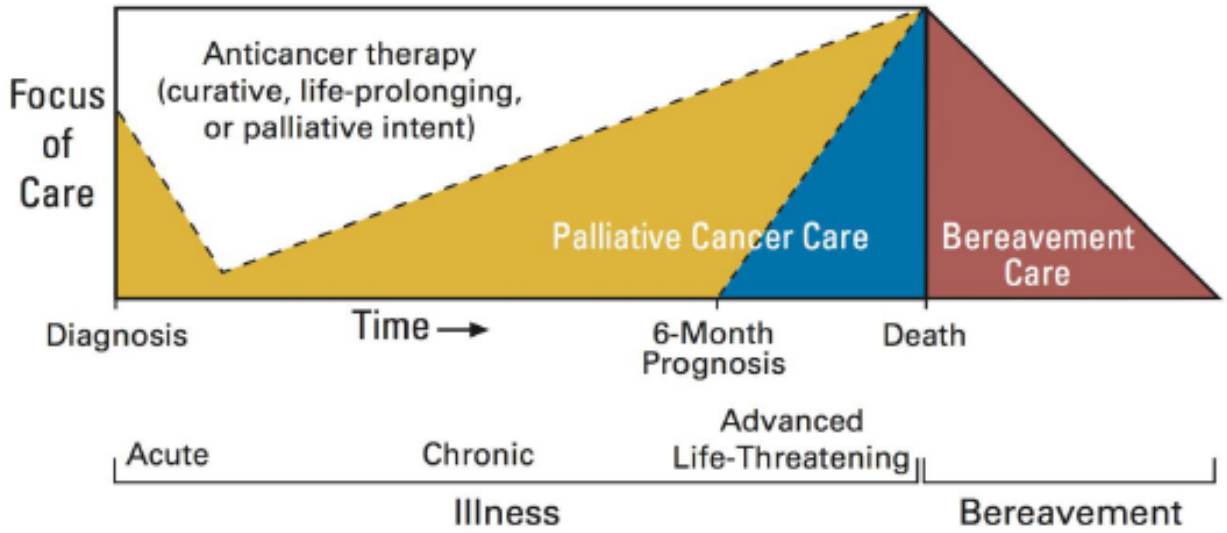
OVERALL GOAL

Best possible Quality of Life

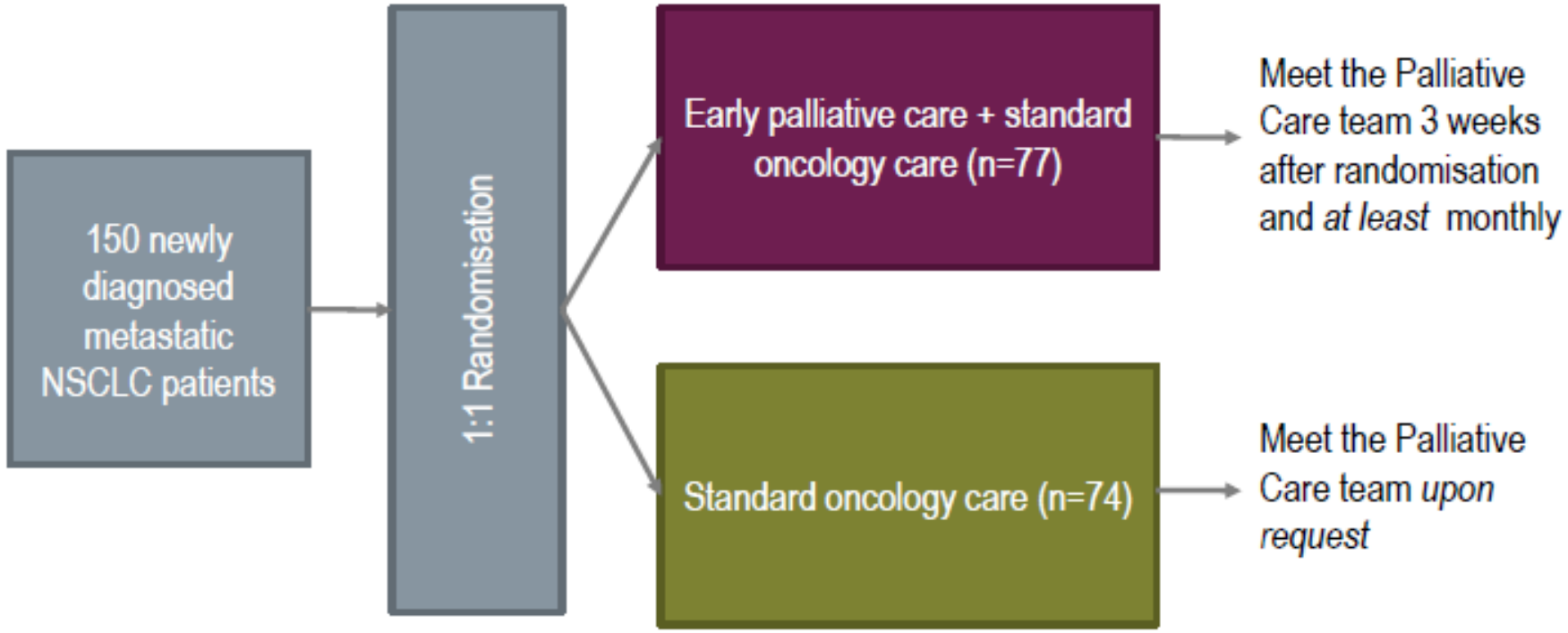
An integrate approach

ASCO statement (2009) and provisional opinion (2012)

" (...) combined standard oncology care and palliative care should be considered early in the course of illness for any patient with metastatic cancer and/or high symptom burden."



Benefit of early palliative care is REAL!



Primary endpoint: QoL

Secondary endpoint: overall survival, mood, use of healthcare services, aggressiveness in the EoL

Temel JS, NEJM 2010

Benefit of early palliative care is REAL!

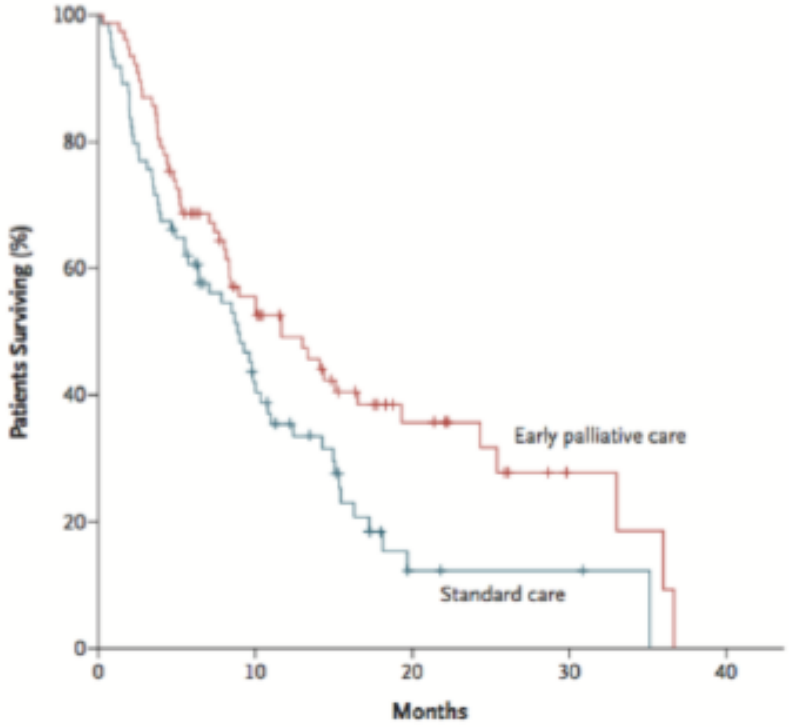
Study results:

Improved QoL in the intervention group for the total FACT-L scale, the LCS, and the Trial Outcome Index

Lower depression scores in the intervention group measured by HADS and PHQ-9

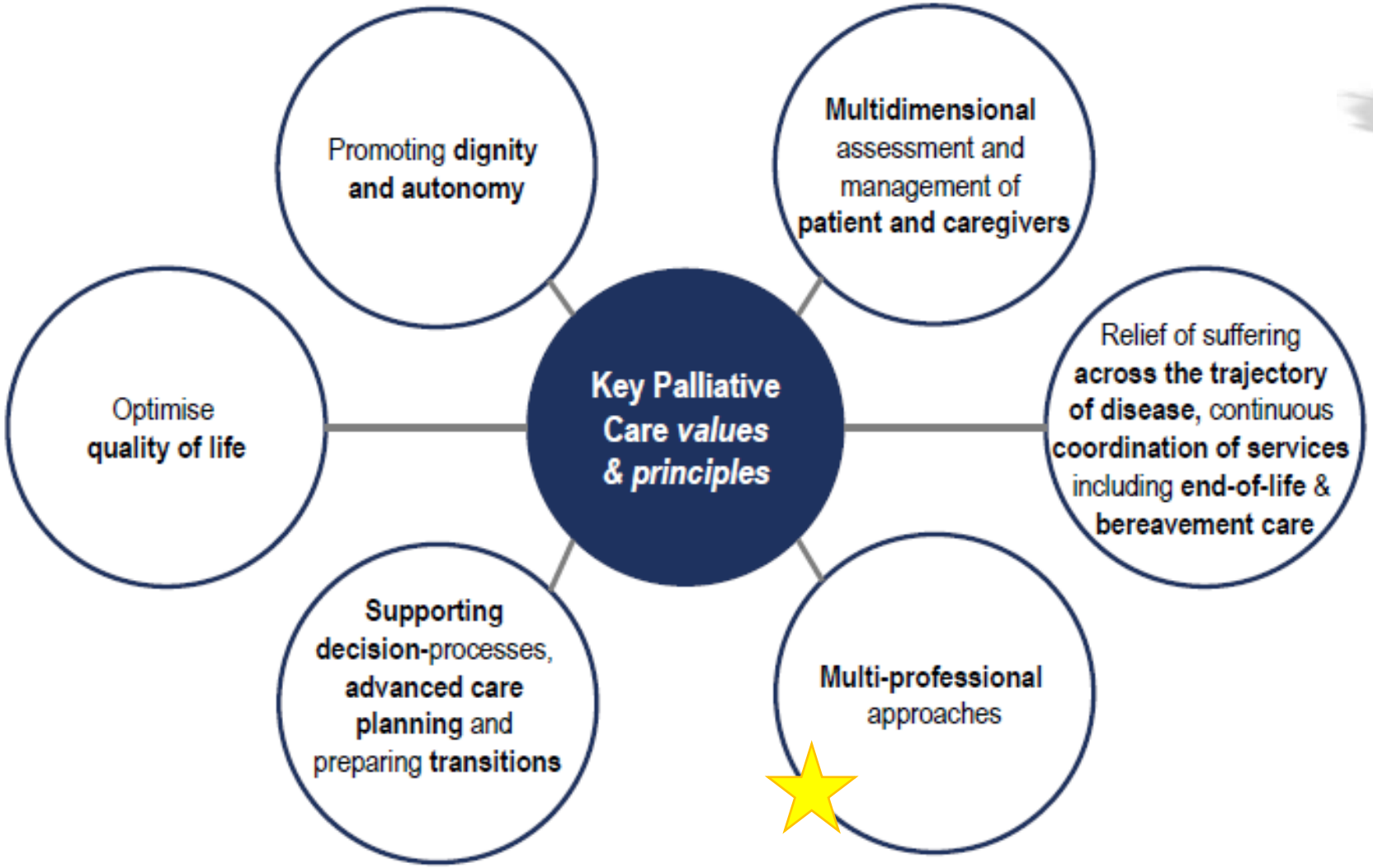
More aggressive end-of-life care in the control group (54% *vs.* 33%, p = 0.05)

Less advanced care planning documentation in the control group (28% *vs.* 53%, p = 0.05)



Temel JS, NEJM 2010

Palliative Care: values & principles



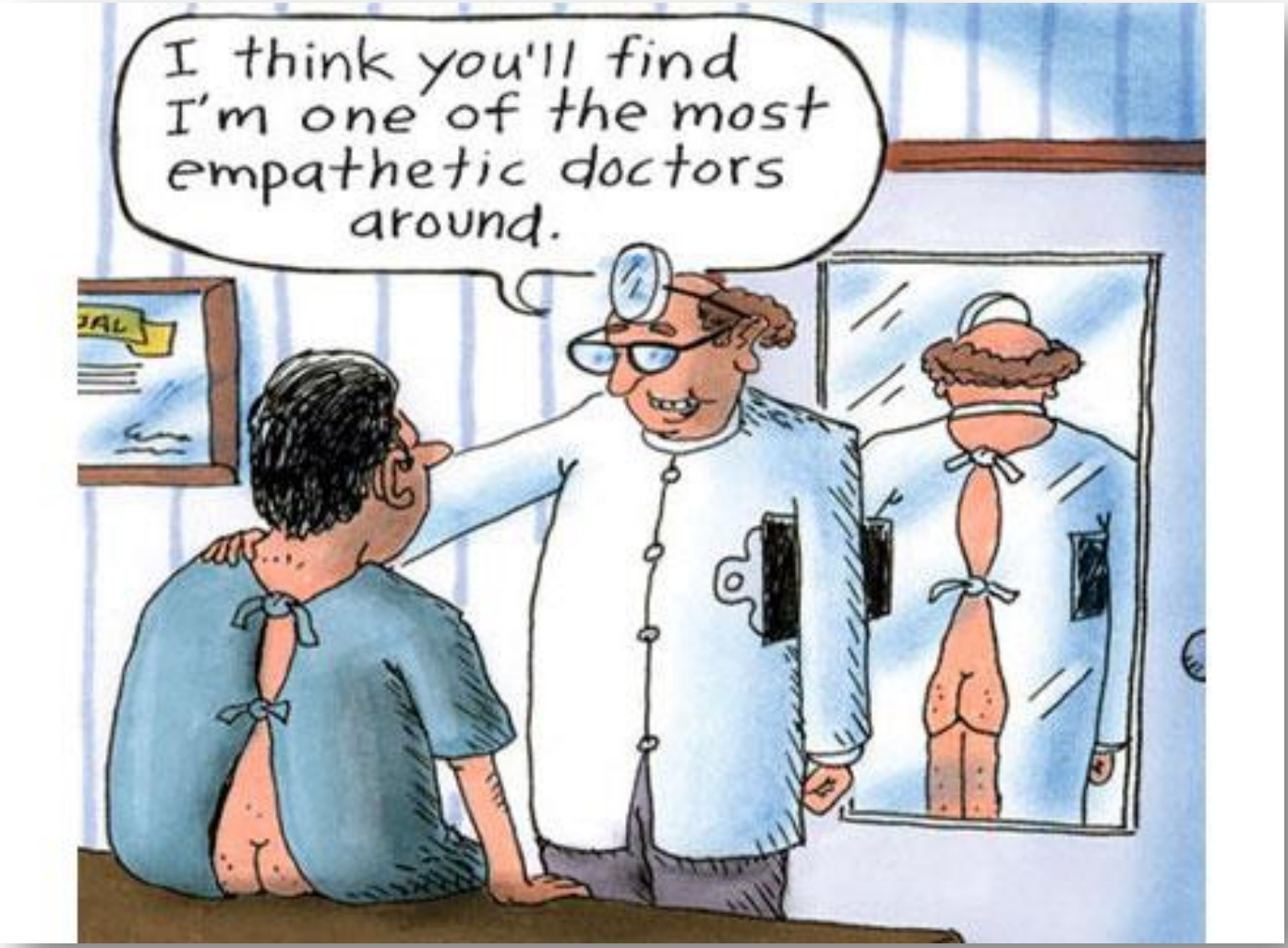
Lorenz KA, *et al.*, Ann Int Med 2008;148:147–59; Tieman J, *et al.*, J Clin Oncol 2008;26:56-79

Focus On Research and CarE (FORCE)

Approccio di Presa in Carico Globale Integrata Evidence-based nel Paziente Oncologico

Oncologia Medica, Dipartimento di Medicina, Università di Verona, Azienda Ospedaliera Universitaria Integrata, Verona

Filling the gap … with our patients



Filling the gap … with our colleagues

A Team taking care of the Person

Oncologist

(dr. Sara Pilotto)

- Coordinator

Dietitian

(dr. Ilaria Trestini)

- Screening e nutritional assessment
- Nutritional Counseling

Psycho-oncologist

(dr. Daniela Tregnago)

- Psychological individual support

Kinesiologist

(dr. Alice Avancini)

- Adapted physical activity

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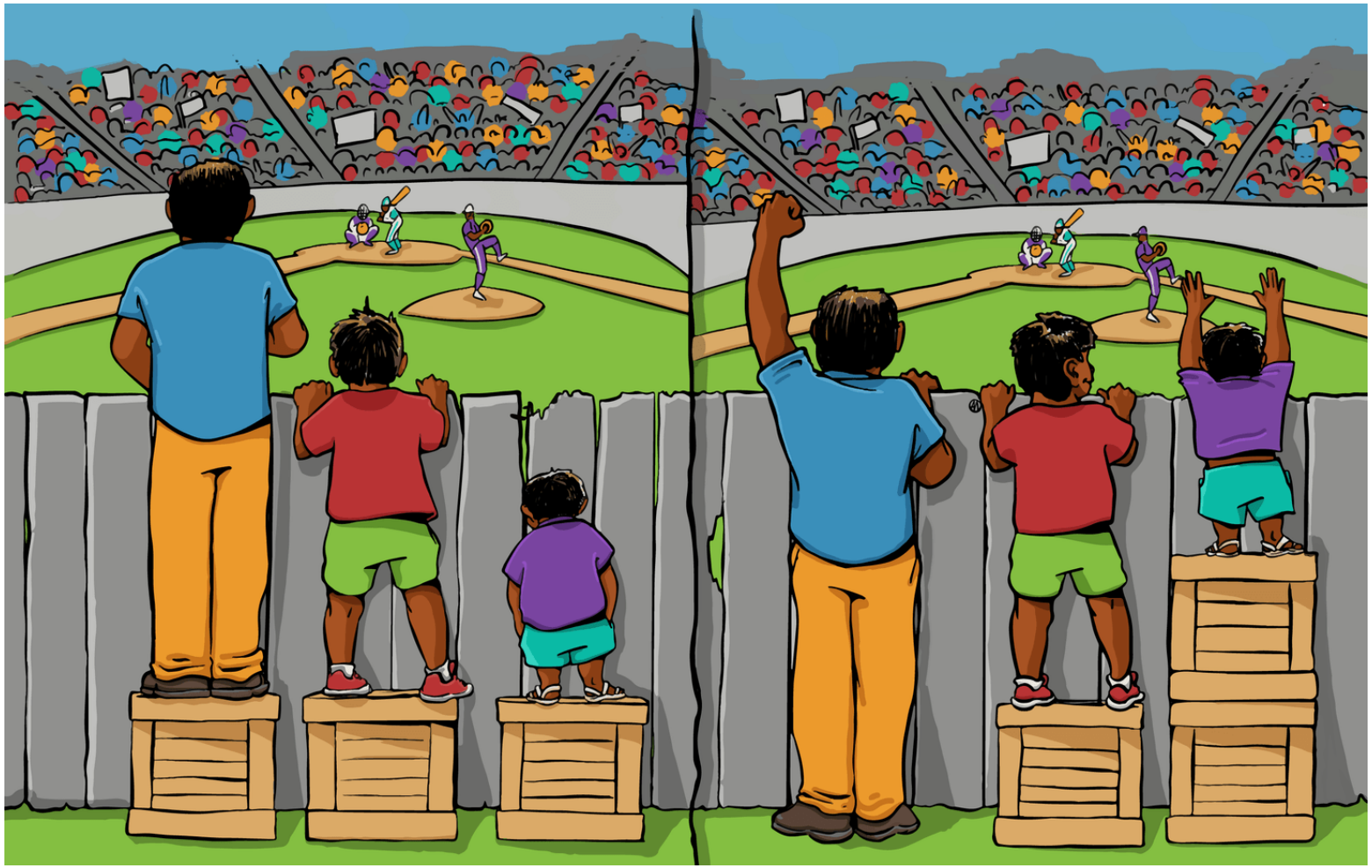
Focus On Research & CarE

… with a Personalized Approach



… with a Scientific Evidence-Based Approach

Give to our Patients the best therapeutical approach

Create a model to be universally implemented into the oncological setting, but also for other chronic complex disease

Provide new reliable scientific evidences to increase the currently available knowledge

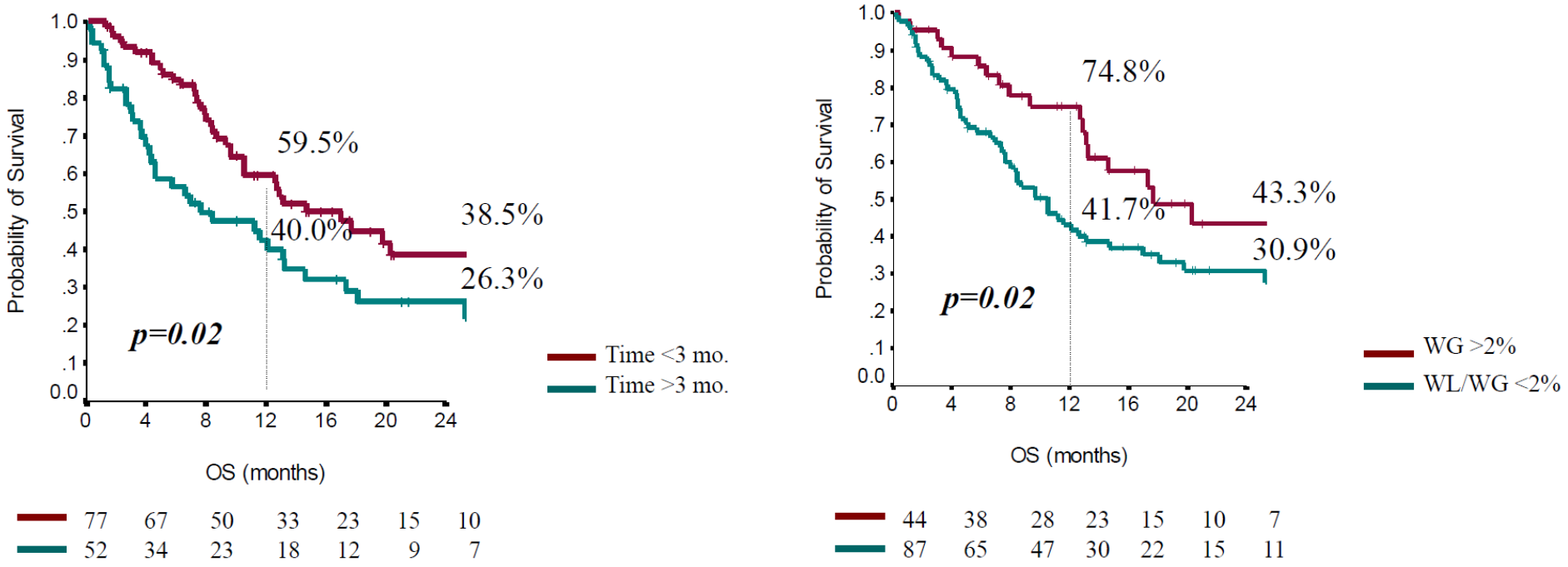
A lot of hard work ..

CLINICAL REPORT VOLUME 72 • NUMBER 5 • MAY 2018

Protein, malnutrition and wasting disorders

Prognostic impact of early nutritional support in patients affected by locally advanced and metastatic pancreatic ductal adenocarcinoma undergoing chemotherapy.

Trestini I, Carbognin L, Sperduti I, Bonaiuto C, Auriemma A, Melisi D, Salvatore L, Bria E, Tortora G.



The time between the diagnosis of PDAC and the nutritional support was an independent predictor of OS

Trestini I, et al. Eur J Clin Nutr. 2018

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Focus On Research & CarE

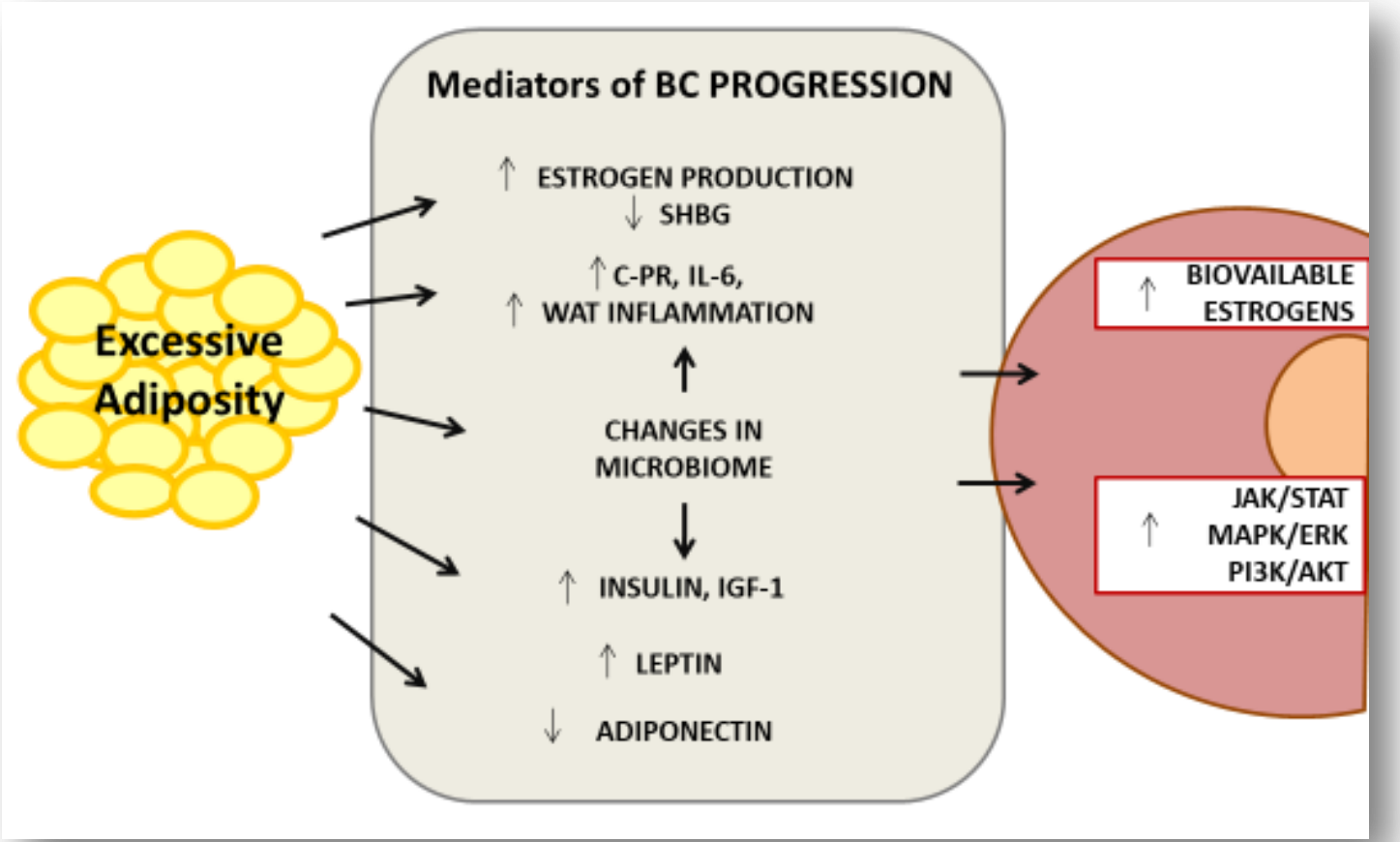
Critical Reviews in Oncology / Hematology

Critical Reviews in Oncology / Hematology 129 (2018) 54–66

Clinical implication of changes in body composition and weight in patients with early-stage and metastatic breast cancer.

Trestini I, Carbognin L, Monteverdi S, Zanelli S, De Toma A, Bonaiuto C, Nortilli R, Fiorio E, Pilotto S, Di Maio M, Gasbarrini A, Scambia G, Tortora G, Bria E

Body composition as a tool to predict individualize chemotherapy dosing, toxicity and efficacy in breast cancer



Trestini I, et al. Critical Reviews in Oncology / Hematology 2018

2020 ASCO ANNUAL MEETING
#ASCO20
May 29–June 2, 2020
McCormick Place | Chicago, IL

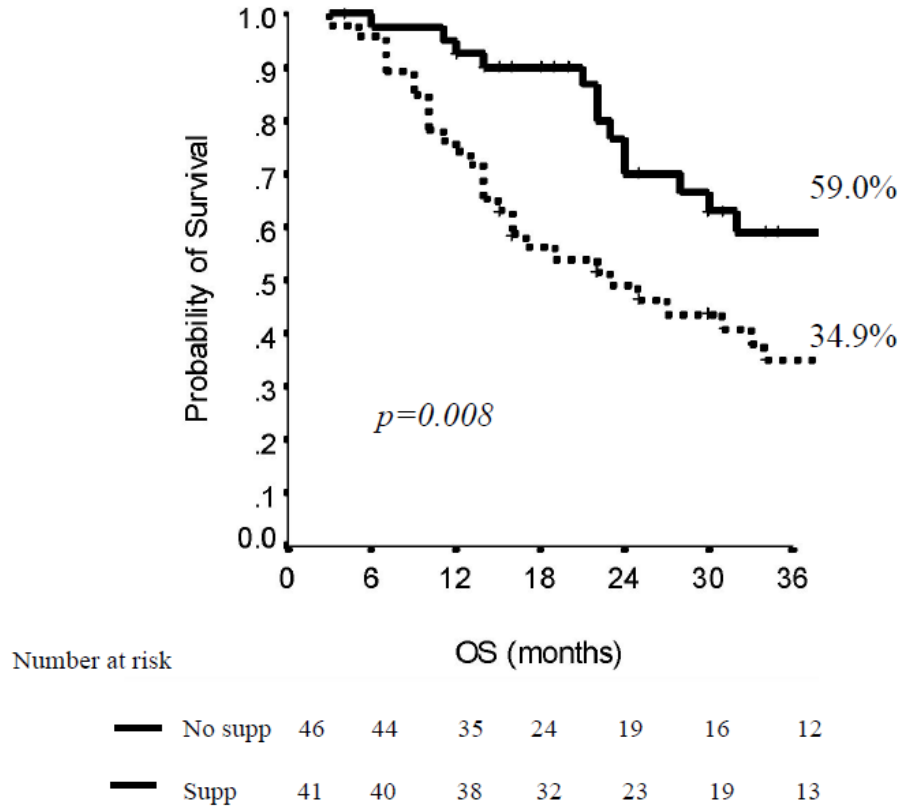
Evidence-based nutrition educational intervention improves adherence to a dietary guidelines (ADG) and weight management among early-stage breast cancer (EBC) patients (pts): a prospective trial.

Variables	At baseline	After 12-months intervention	*p-value*
BMI (kg/m^2)			
underweight, N (%)	5 (3.3)	0 (0)	
normal weight, N (%)	73 (48.0)	126 (82.9)	*p=0.003*
overweight, N (%)	60 (39.5)	21 (13.8)	
obesity, N (%)	14 (9.2)	5 (3.3)	
WC (cm)			
central obesity	58 (38.2)	11 (7.2)	*p=0.01*
not central obesity	94 (61.8)	141 (92.8)	

Trestini I, et al. Abstract Submitted ASCO 2020

Tailored nutritional intervention in patients affected by Head and Neck Cancer undergoing chemotherapy and/or radiotherapy: a 'Real-World' study.

Trestini I, Carbognin L, Sperduti I, Bonaiuto C, Tondulli L, Avancini A, Tregnago D, Pilotto S, Tortora G, Milella M, Bria E.



The nutritional intervention was an independent predictor for better OS.

FORCE
Focus On Research & CarE

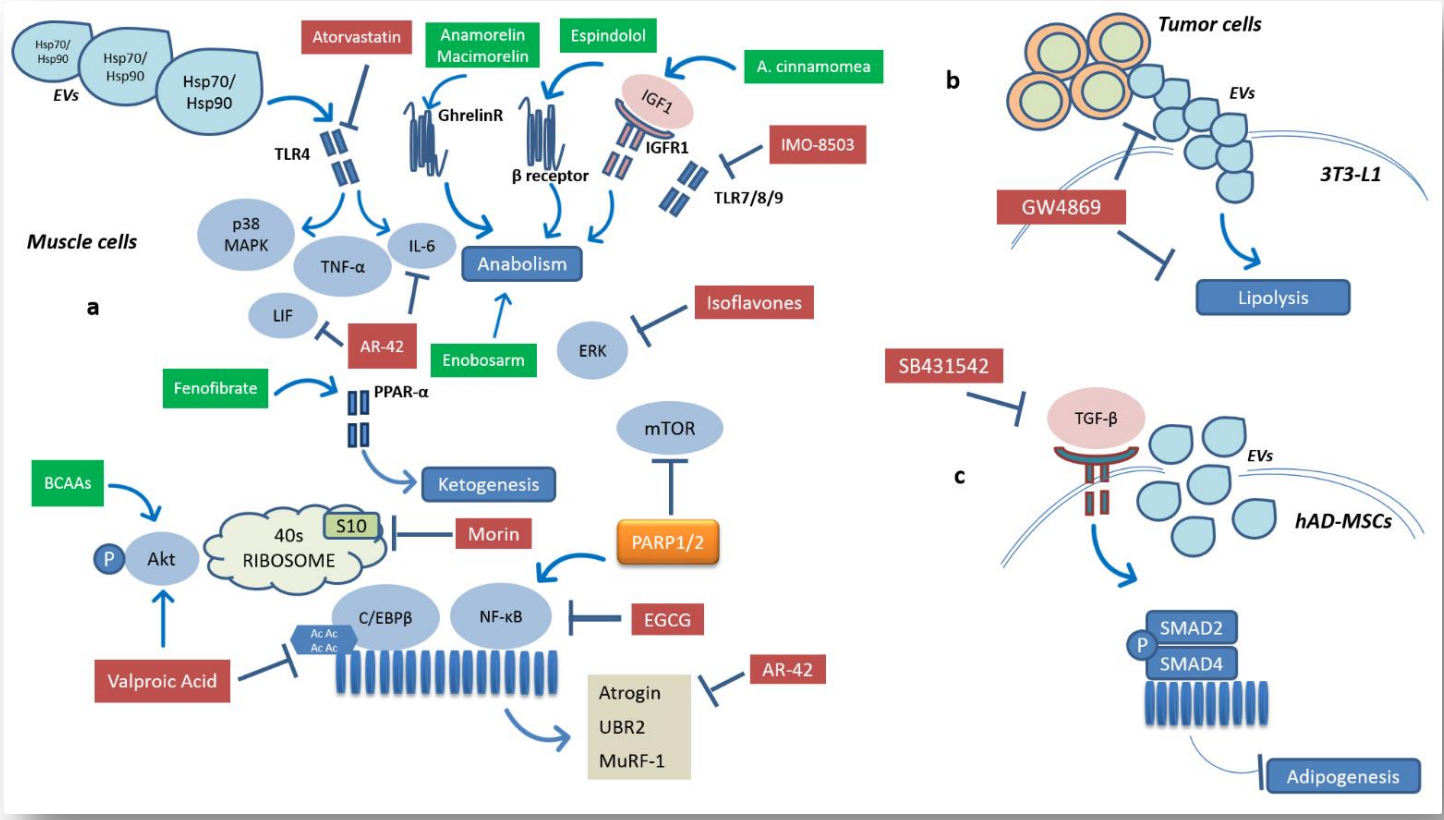
Trestini I. et al. Under revisions Supportive Care in Cancer

Critical Reviews in Oncology / Hematology

Critical Reviews in Oncology / Hematology 141 (2019) 43–53

Muscle derangement and alteration of the nutritional machinery in NSCLC.

Trestini I, Gkountakos A, Carbognin L, Avancini A, Lanza M, Molfino A, Friso S, Corbo V, Tortora G, Scarpa A, Milella M, Bria E, Pilotto S.



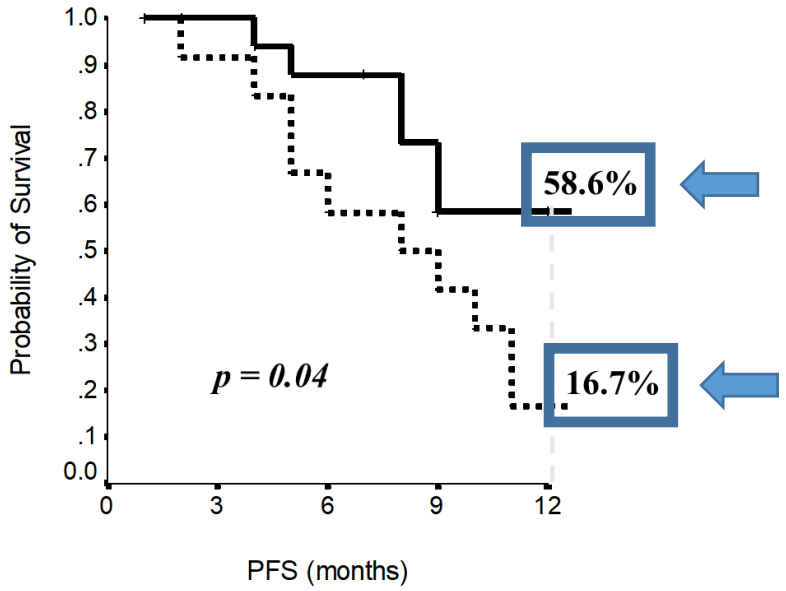
Incorporating a specialized and accurate body composition assessment into a comprehensive, patient-centered and tailored intervention will facilitate the achievement of nutritional goals and optimal care for lung cancer patients

Trestini I, et al. Critical Reviews in Oncology / Hematology 2019

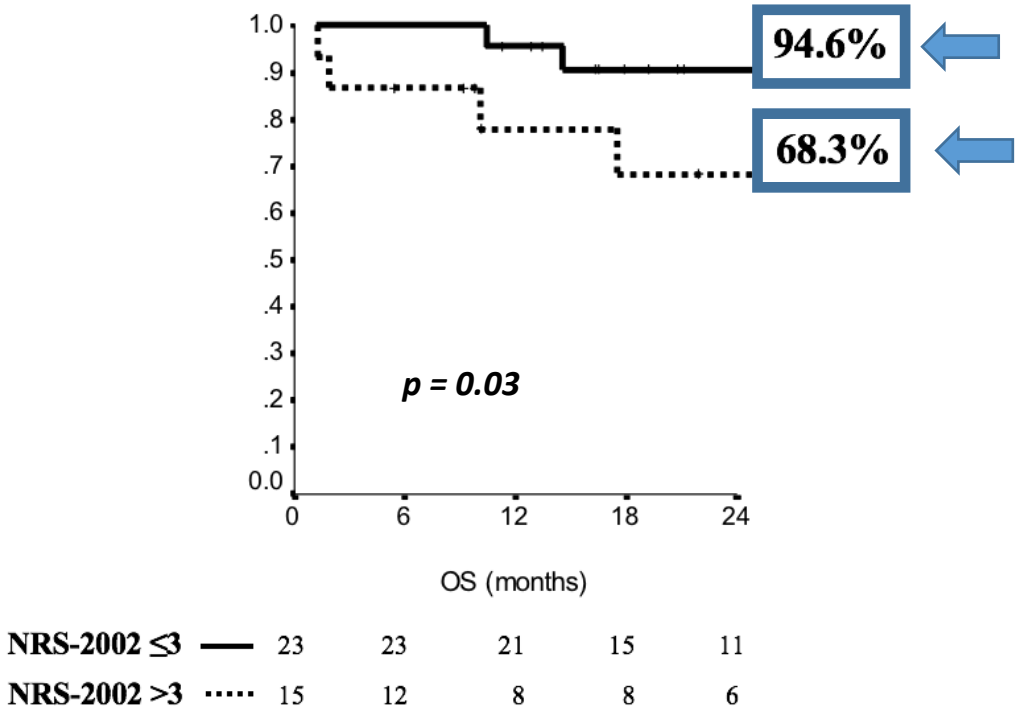
IMPACT OF NUTRITIONAL DERANGEMENT ON TREATMENT OUTCOME IN ADVANCED NON-SMALL-CELL LUNG CANCER (A-NSCLC) PATIENTS (PTS).

I. Trestini, I. Sperduti, M. Sposito, D. Kadrija, A. Drudi, D. Tregnago, A. Avancini, L. Carbognin, A. Santo, M. D'Onofrio, M. Lanza, G. Tortora, E. Bria, M. Milella, S. Pilotto

PFS in relazione all'NRS-2002



OS in relazione all'NRS-2002



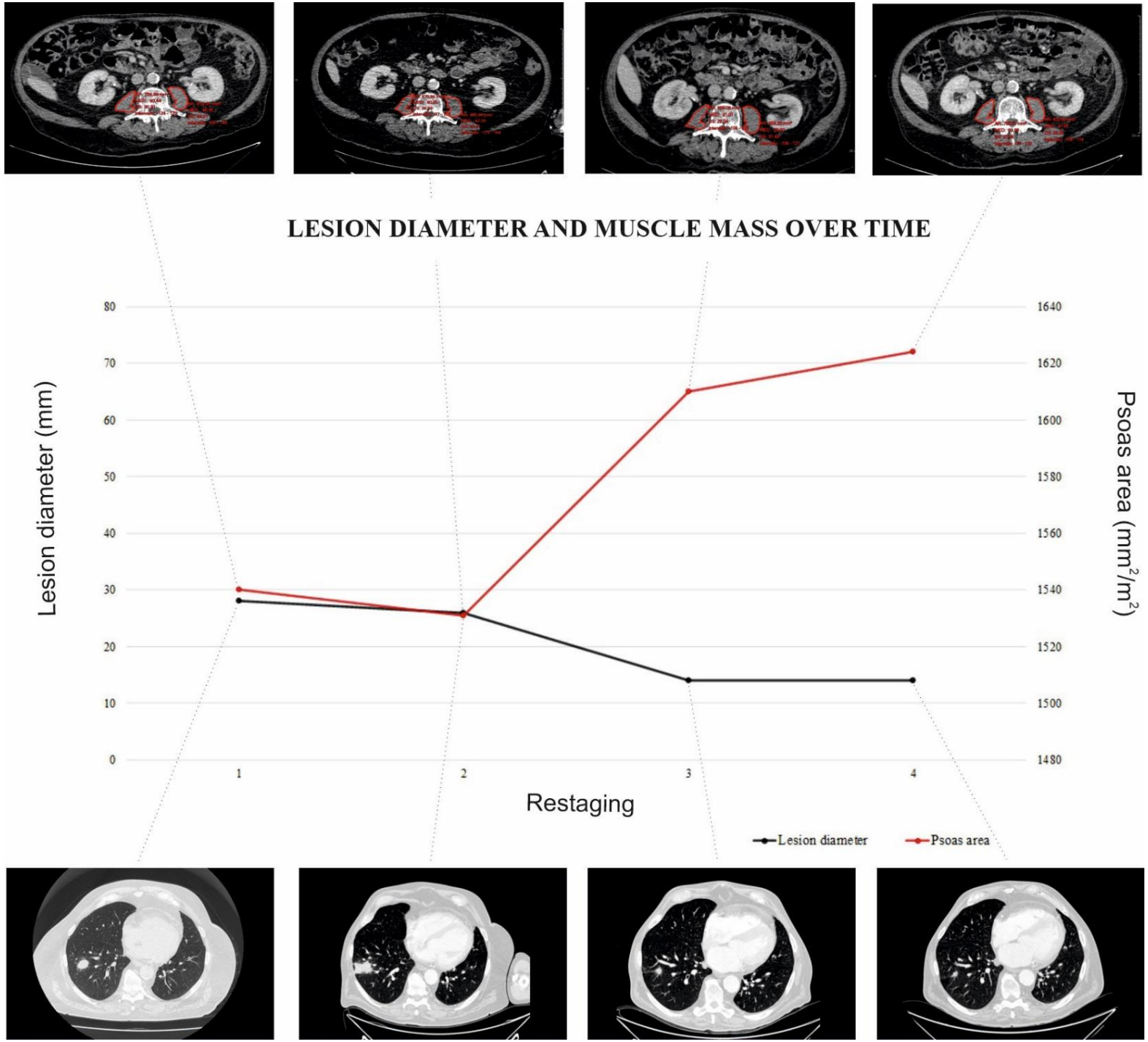
I pazienti con NRS-2002 ≤ 3 beneficiano anche di una migliore ORR (66.7% vs 21.4%, *p=0.016*) rispetto a coloro con NRS-2002 > 3

L'indice di massa corporea (IMC) non influenza PFS e OS

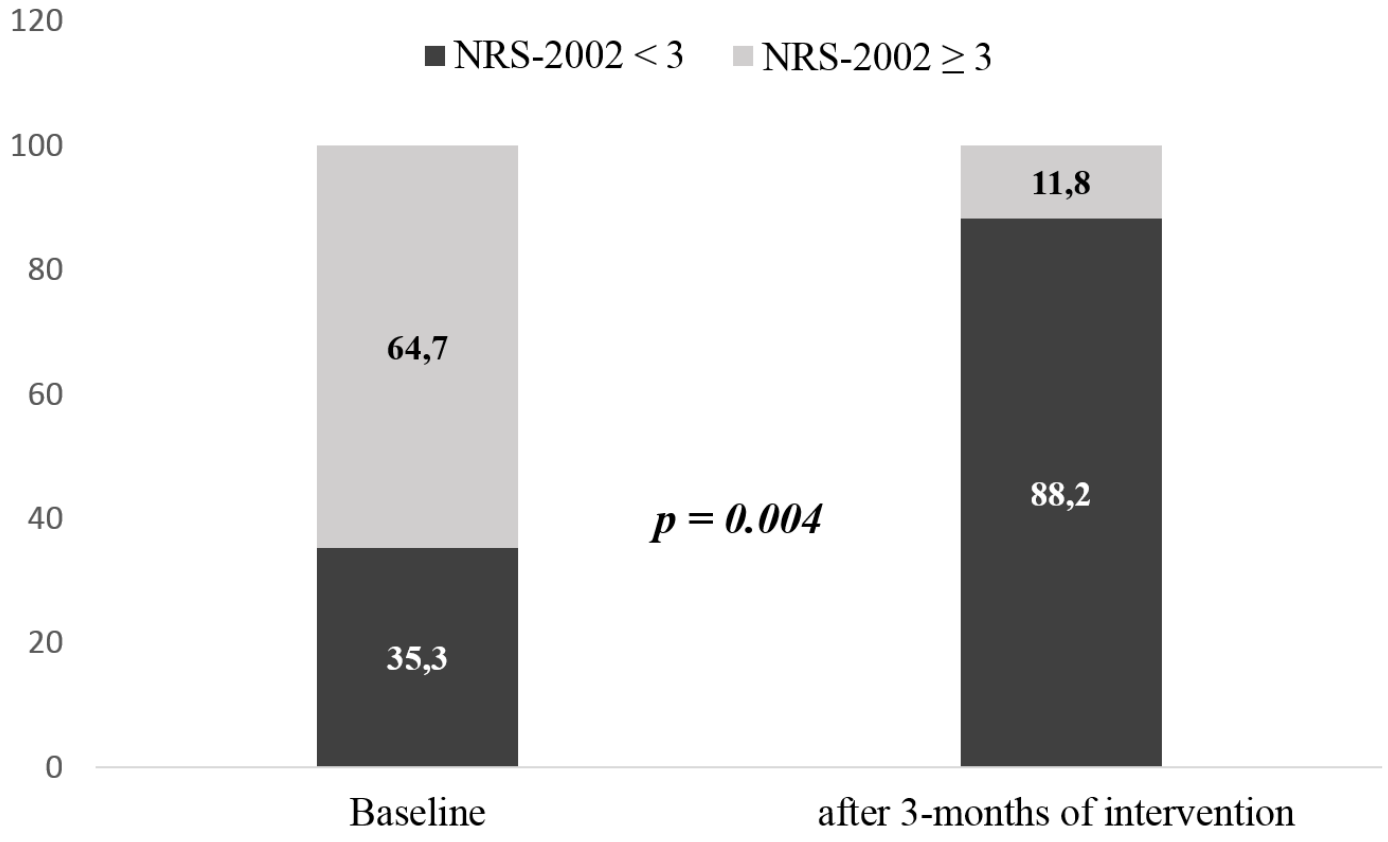
Trestini I et al., ESMO Open - revisions ongoing

Risultati – Deplezione muscolare e immunoterapia

Nei pazienti trattati con **immunoterapia** (n=16, 42.1%) la riduzione della massa magra correla con un peggior *outcome* (PFS, OS e ORR).



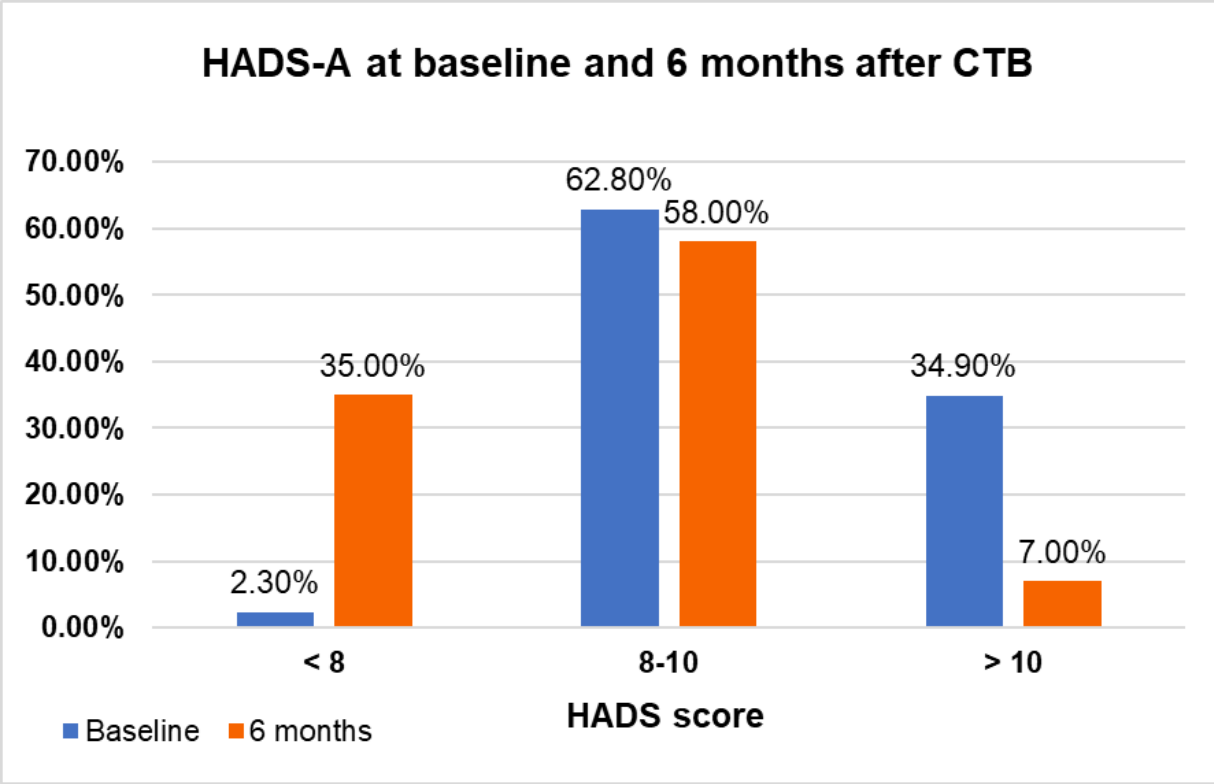
Malnutrition significantly improved after nutritional intervention

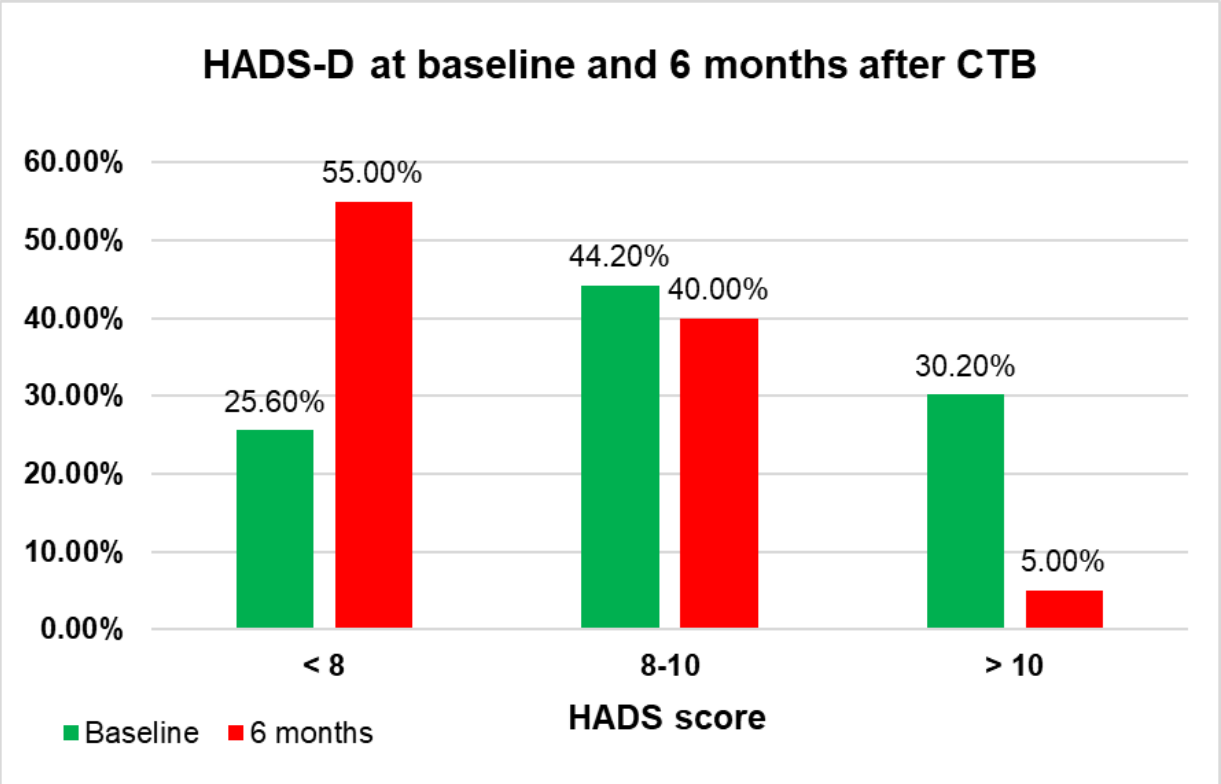


Trestini I et al., ESMO Open - revisions ongoing

Impact of Cognitive-Behavioral-Therapy (CBT) on levels of anxiety, depression and distress in cancer patients (pts)

D. Tregnago, L. Carbognin, I. Trestini, A. Avancini, G. Sartori, E. Fiorio, V. Parolin, M. Lanza, M. Rimondini, L. Del Piccolo, E. Bria, M. Milella, S. Pilotto.





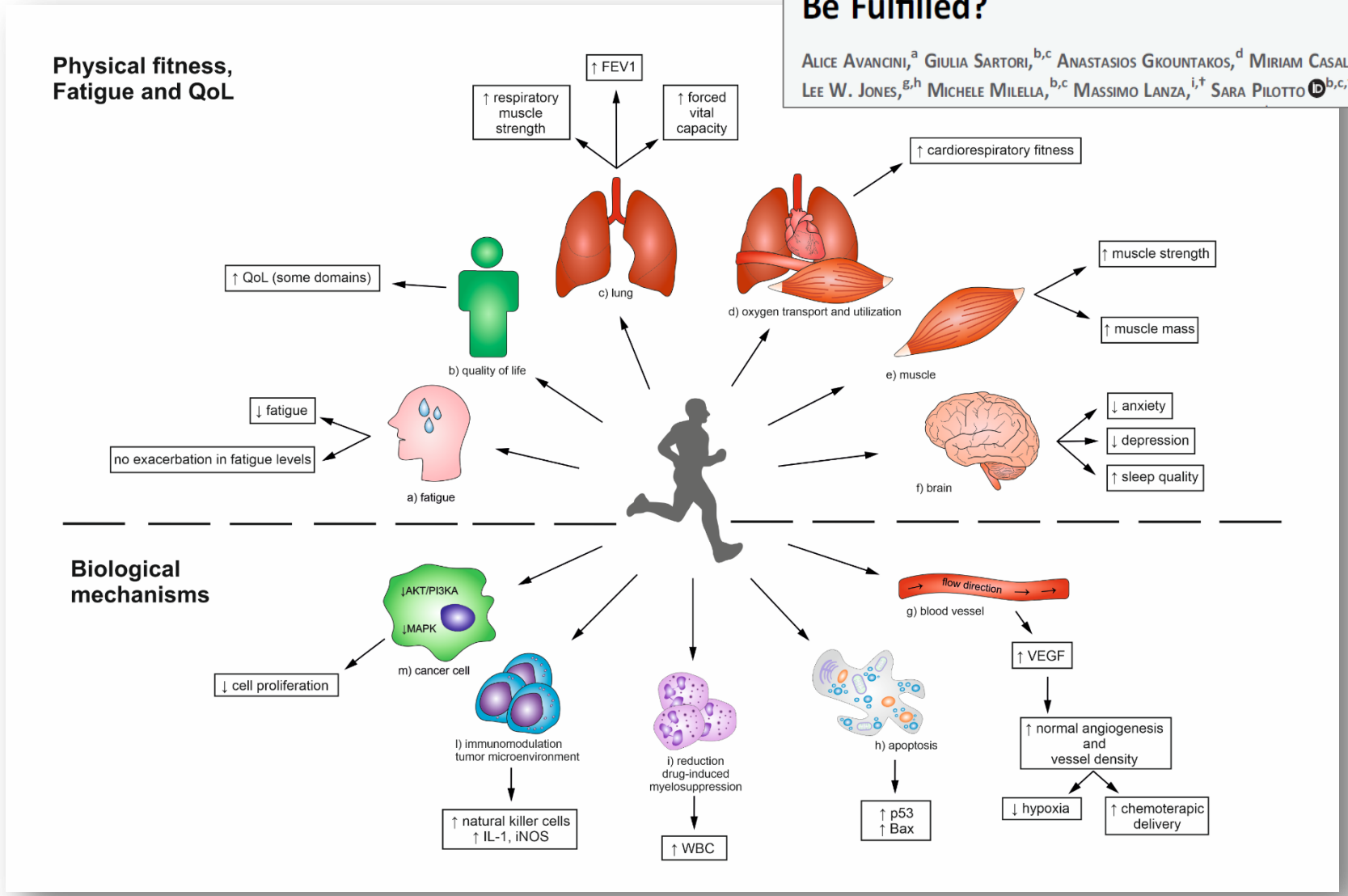
BARCELONA 2019 ESMO congress

The Oncologist®

Lung Cancer

Physical Activity and Exercise in Lung Cancer Care: Will Promises Be Fulfilled?

Alice Avancini,[a] Giulia Sartori,[b,c] Anastasios Gkountakos,[d] Miriam Casali,[b,c] Ilaria Trestini,[b,c] Daniela Tregnago,[b,c] Emilio Bria,[e,f] Lee W. Jones,[g,h] Michele Milella,[b,c] Massimo Lanza,[i,†] Sara Pilotto[b,c,†]



Avancini A., et al. The Oncologist 2019

PROGETTI IN CORSO…

C.H.O.iC.E. (Choose Health: Oncological patients Centered Exercise)

- Trial randomizzato multicentrico, che valuti l'efficacia preliminare, di un programma di esercizio fisico, ba attuali linee guida, ma tenga in considerazione le preferenze delle persone.

M.O.T.O (Motives, Obstacles Towards run in Oncology)

- Analisi qualitativa delle motivazioni e delle barriere nell'attività podistica, nel contesto dell'iniziativa «Run for Science».

E.D.u.C.A. (Educational materials Development for physical activity in CAncer patients)

- Validazione di una guida informativa e pratica sull'attività fisica nei pazienti con diagnosi oncologica.

E.C.H.O. (Exercise in Cancer: the Healthcare professionals Opinion)

- Identificare l'opinione degli operatori sanitari verso la raccomandazione della pratica di esercizio fisico nel contesto oncologico;
- Identificare le conoscenze, le barriere e le motivazioni riguardo la promozione dell'esercizio fisico.

EORTC
The future of cancer therapy

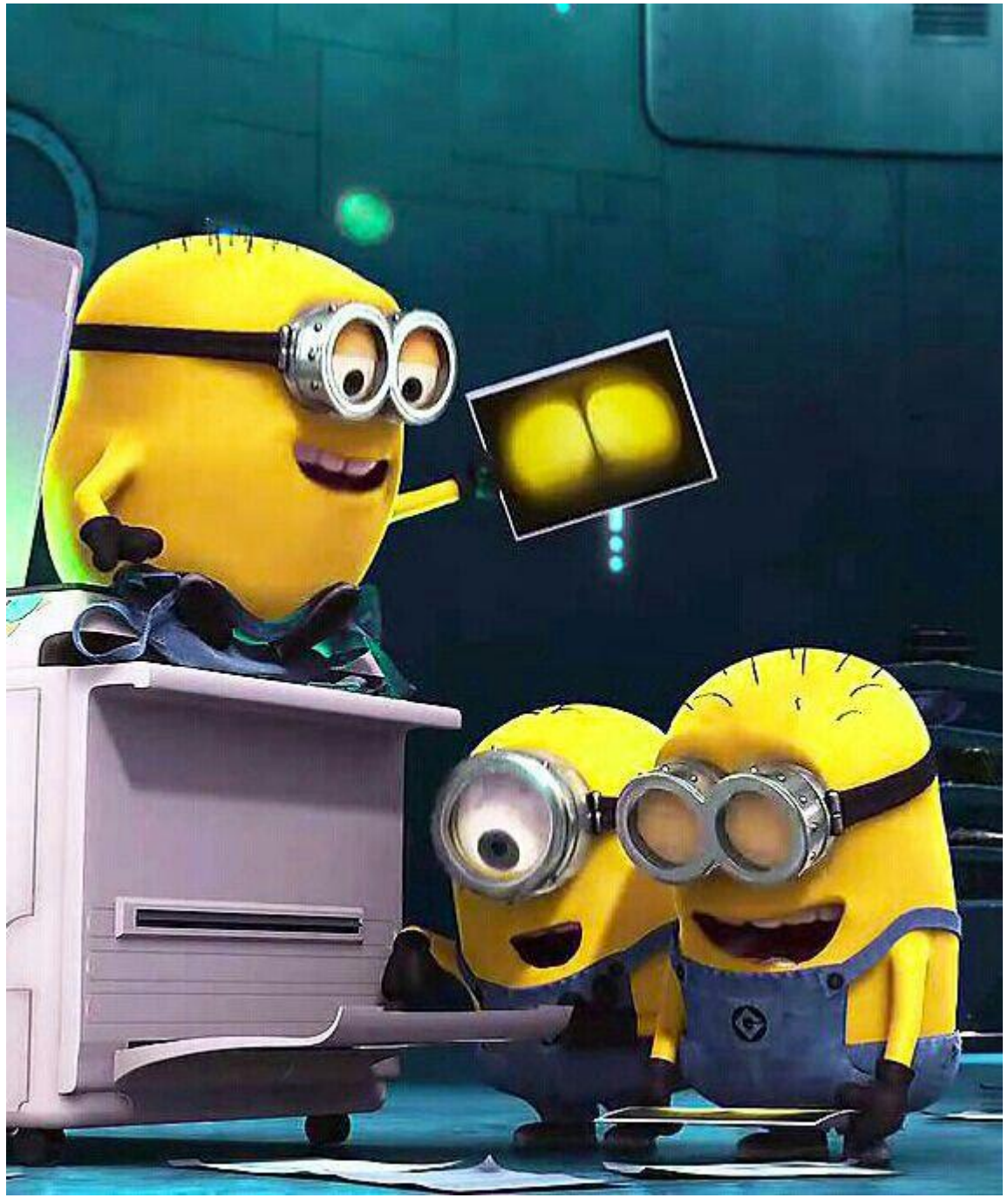
S.P.R.I.N.T. (Short Preoperative tRaining In luNg patienTs)

- Trial randomizzato, che valuta l'efficacia, di un programma di esercizio fisico in fase preoperatoria, sulle complicanze postoperatorie;

P.E.P.SY (Preoperative Exercise in Pancreatic SurgerY)

- Studio prospettico osservazionale per valutare il ruolo della fitness fisica nell'outcome chirurgico (complicanze e mortalità).

..e molti altri in arrivo..



Team Work
makes
Dream Work!

E.D.u.C.A. (Educational materials Development for physical activity in CAncer patients)

FASE 1

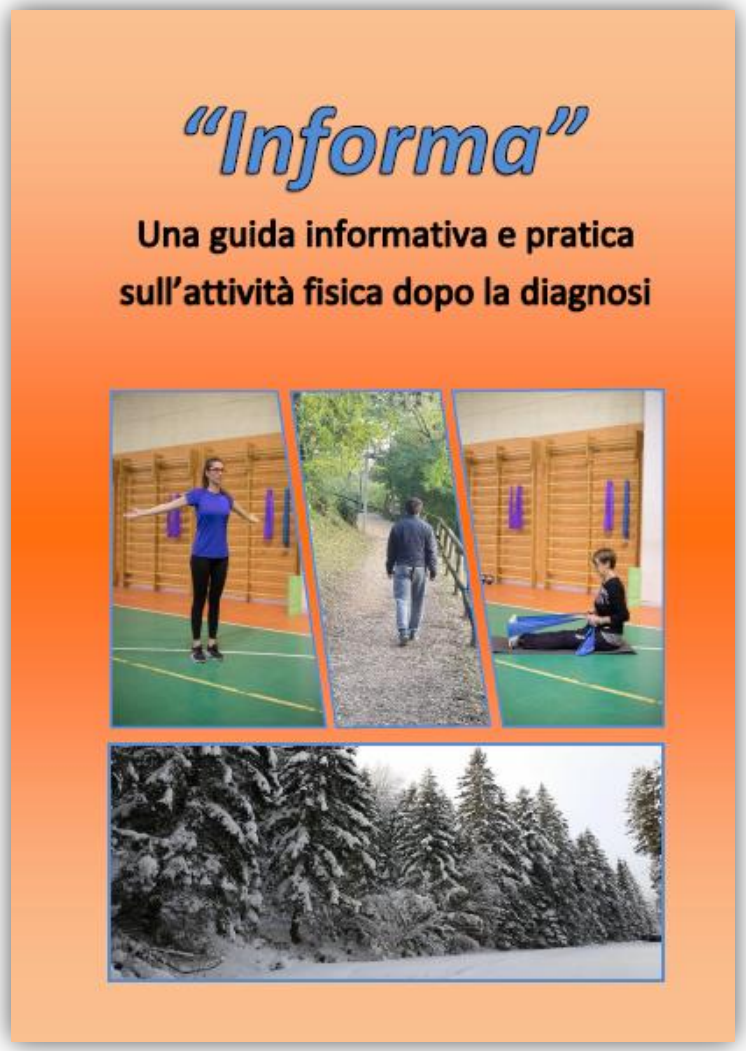
- Obiettivo: esplorare le attitudini le conoscenze, le barriere e le motivazioni verso la pratica dell'attività fisica
- Metodologia: indagine qualitativa (focus group)

FASE 2

- Obiettivo: validazione dell'adeguatezza della guida informativa e pratica sull'attività fisica dopo una diagnosi oncologica, da parte di un gruppo di pazienti (n=10) e di esperti (n=20)
- Metodologia: indagine quantitativa (cross-sectional)

FASE 3

- Obiettivo: verifica della preliminare efficacia della guida;
- Metodologia: interventistico (prospettico longitudinale)



Courtesy of Avancini A

Run with cancer at *"Run for Science"*: a qualitative study to evaluate the barriers and the motivations in running

"Sfida" legata alla storia passata di malattia

Dare speranza agli altri pazienti

Supporto da parte degli amici e del personale sanitario

Programma organizzato e strutturato

Infortuni ed effetti collaterali legati ai trattamento

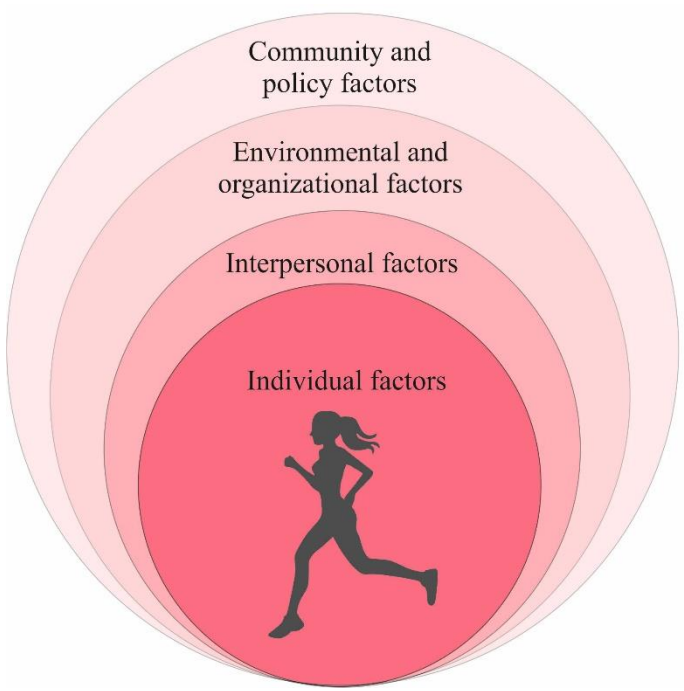
Istruttori poco qualificati

Ambiente inquinato

Cultura tradizionalista

Scorretta informazione

GS



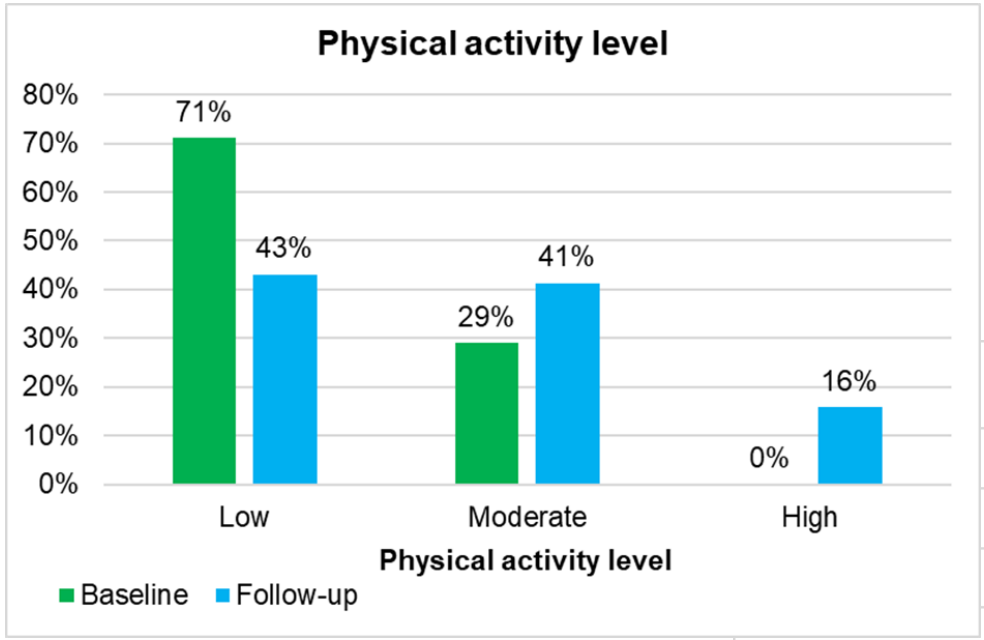
↑ Adeherence to running program

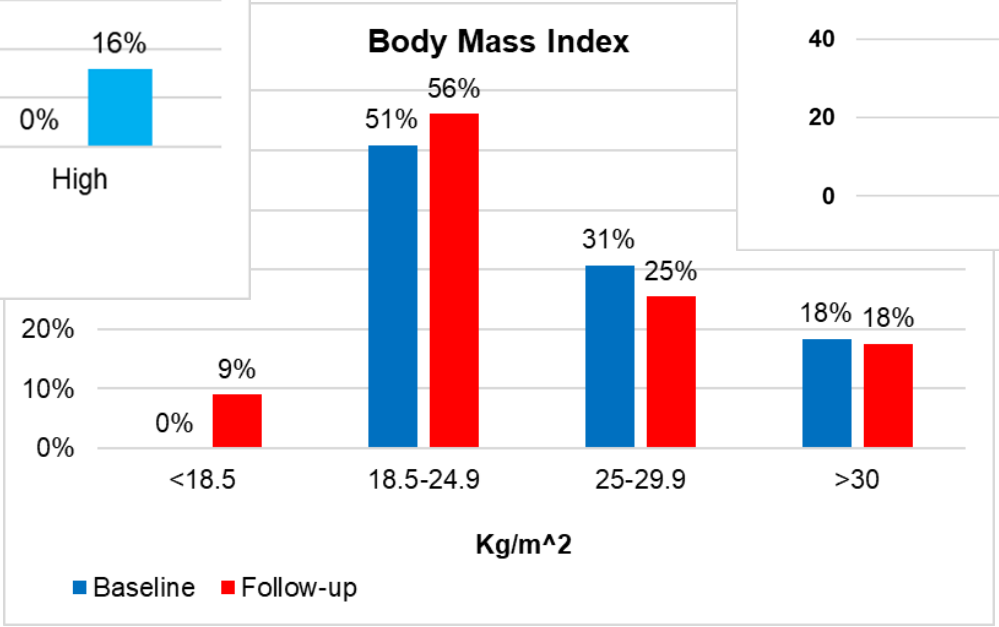
↑ Compliance to running program

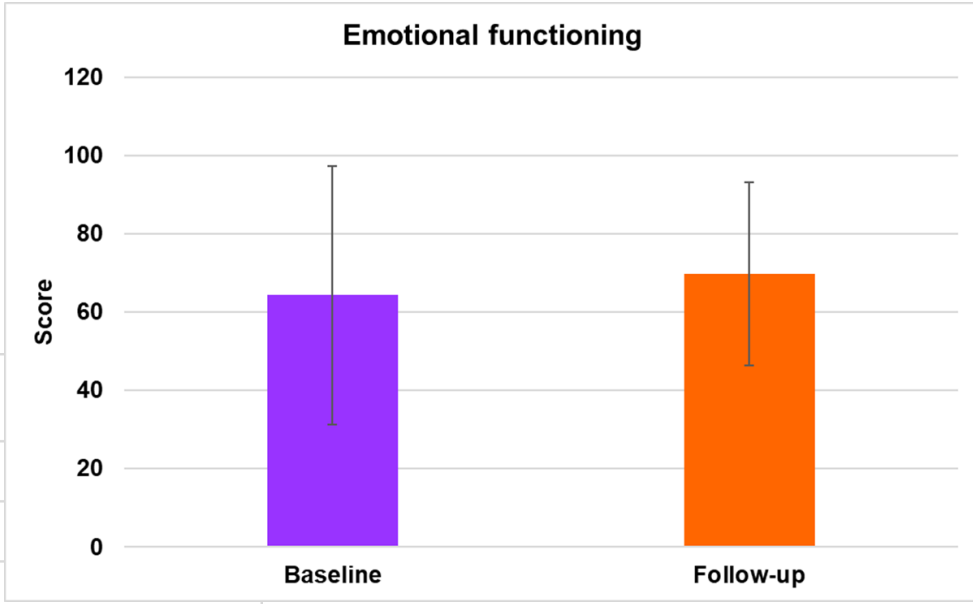
Avancini A, et al. Re-submitted to PLOS One after revisions

PROSPECTIVE LIFESTYLE (PHYSICAL ACTIVITY, NUTRITION AND PSYCHOLOGICAL ASPECT) ASSESSMENT IN EARLY STAGE BREAST CANCER

Aims: Examine the change of physical activity, weight management and emotional functioning during and after adjuvant therapy for early stage breast cancer.







Avancini A, et al. SISMES 2019

PROSPECTIVE LIFESTYLE (PHYSICAL ACTIVITY, NUTRITION AND PSYCHOLOGICAL ASPECT) ASSESSMENT IN EARLY STAGE BREAST CANCER

	Body mass index at baseline	Emotional functioning at baseline	Energy expenditure at follow-up	Emotional functioning at follow-up	Body mass index at follow-up
Energy expenditure at baseline	-0,393 P<0,001	0,195 P=0,0575	0,175 P=0,0625	-0,0109 P=0,908	-0,381 P<0,001
Body mass index at baseline		-0,528 P<0,001	-0,088 0,351	-0,152 P=0,106	0,833 p><0,001
Emotional functioning at baseline			-0,112 P=0,275	0,221 P=0,0308	-0,443 P<0,001
Energy expenditure at follow-up				0,247 P=0,0083	-0,0444 P=0,642
Emotional functioning at follow-up					-0,155 P=0,102

Avancini A, et al. SISMES 2019

A Multidisciplinary Intervention in the Management of Metastatic Pancreatic Cancer: A Case Report

Measure	At baseline	Post-intervention
Resting blood pressure and heart rate		
Resting systolic blood pressure (mmHg)	103	109
Resting diastolic blood pressure (mmHg)	70	61
Resting heart rate (bpm)	68	61
Six minutes walking test (m)	416.0	525.6
Handgrip strength (kg)		
Right arm	22	24
Left arm	22	23
RPE	4.0	5.5
Anthropometric parameters		
Body weight (kg)	49.0	53.2
BMI (kg/m^2)	18.0	19.5
Waist (cm)	67.1	70.5
Hip (cm)	89.3	92.0
NRS-2002 score	3.0	2.0

Measure	At baseline	Post-intervention
Quality of life (score 0-100)		
Physical functioning	73.3	80.0
Emotional functioning	75.0	83.3
Social functioning	33.3	66.7
Fatigue	55.6	66.7
Pain	33.3	50.0
Dyspnea	33.3	66.7
Insomnia	33.3	66.7
Physical activity level (min/week)		
Light	210.0	420.0
Psychological status (score 0-21)		
Hospital Anxiety and Depression Scale – anxiety	16	9
Hospital Anxiety and Depression Scale – depression	18	11
Distress Thermometer	8	4
Nutritional impact symptoms		
Dysphagia	Yes	No
Oral mucositis	Yes	No
Dyspepsia	Yes	No
Nausea or vomiting	Yes	No
Xerostomia	Yes	No
Diarrhea	Yes	No

Avancini A, et al. Paper in preparation

MAY 28, 2001

www.time.com AOL Keyword: TIME

TIME

THERE IS NEW AMMUNITION IN THE WAR AGAINST CANCER. THESE ARE THE BULLETS.

Revolutionary new pills like GLEEVEC combat cancer by targeting only the diseased cells. Is this the breakthrough we've been waiting for?

APRIL 1, 2013

GOP Makeover / Drone Morality / The Marriage Test By Joel Stein

TIME

HOW TO CURE CANCER*

*Yes, it's now possible—thanks to new cancer dream teams that are delivering better results faster

BY BILL SAPORITO

www.time.com

Impact of a comprehensive lifestyle intervention on immunological parameters and outcome in non-small-cell lung cancer

Hypothesis: A comprehensive lifestyle intervention including:

1) nutritional management
2) physical activity and
3) psychological support

may modulate immunological parameters and improve immunotherapy outcome in NSCLC patients.

Impact of a comprehensive lifestyle intervention on immunological parameters and outcome in non-small-cell lung cancer

RETROSPECTIVE & PROSPECTIVE PHASE

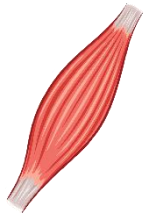
Task: aims to build a signature for predicting the outcome of immunotherapy-treated NSCLC patients

Tissue-based

Blood-based

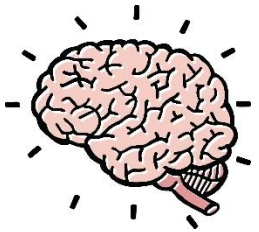
Task: aims to evaluate the effect of our comprehensive lifestyle approach on the outcome of immunotherapy-treated NSCLC patients

FORCE
Focus On Research & CarE



Nutritional status
Muscle wasting

Physical activity level



Psychological state

Impact of a comprehensive lifestyle intervention on immunological parameters and outcome in non-small-cell lung cancer

INTERVENTIONAL PRECONDITIONING TRIAL