



Functioneel Herstel na Kanker

Ondersteunende zorg bij en na kanker
en het belang van bewegen!

Martijn Stuiver



Hogeschool van Amsterdam

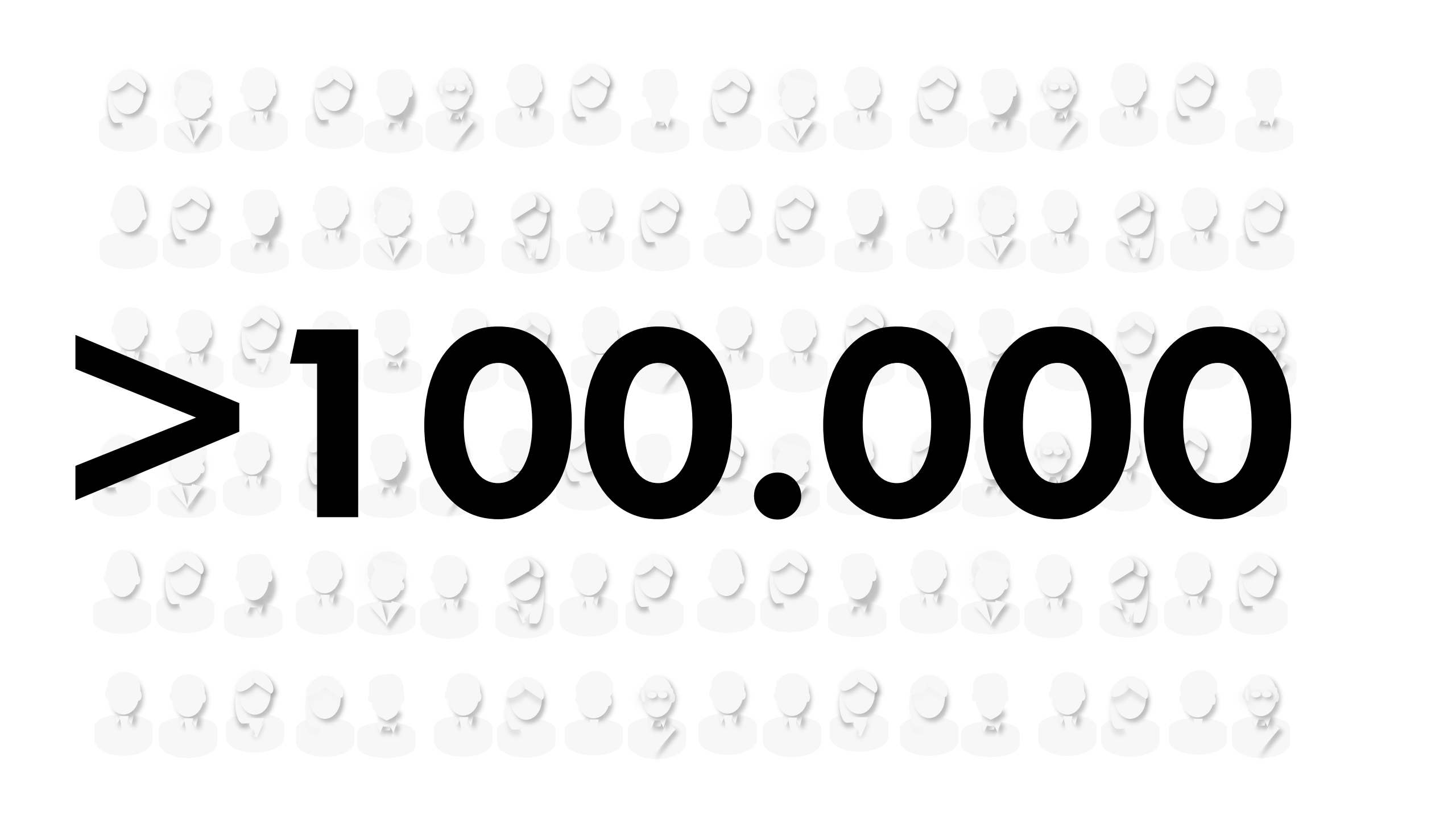


Amsterdam UMC
Universitair Medische Centra



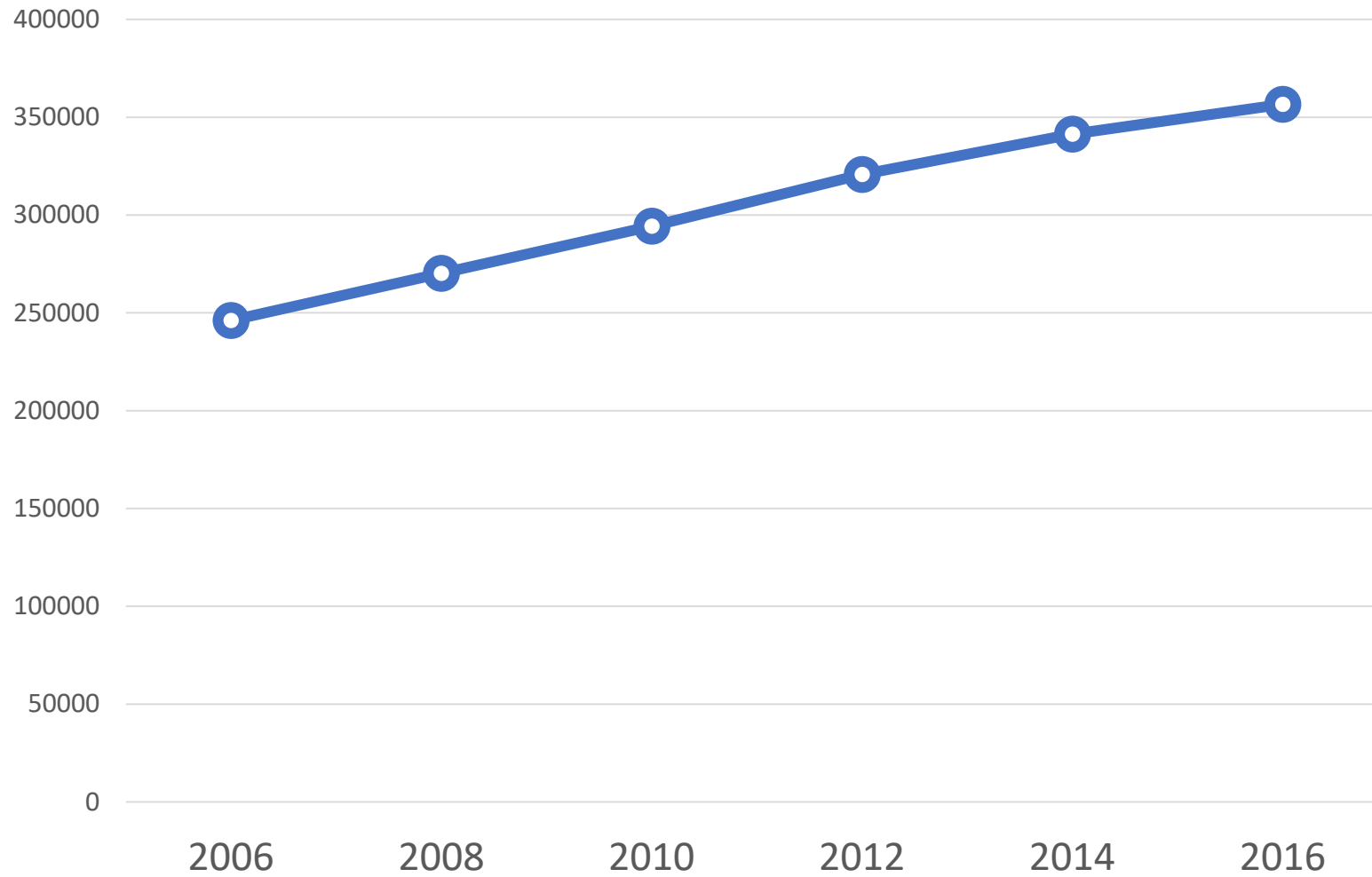






≥ 100.0000

5-jaars prevalentie



Melanoom

Larynxcarcinoom

Groot-cellig longcarcinoom

Basaalcel carcinoom

Kleincellig long carcinoom

Astrocytoom

Chronische myeloïde leukemie

Hypofarynx carcinoom

Coloncarcinoom

Pseudomyxoma peritonei

Laaggradig glioom

Sinus piriformis carcinoom

Vulvacarcinoom

Grawitz tumor

Acute myeloïde leukemie

Testis carcinoom

Osteosarcoom

Cervixcarcinoom

Tongcarcinoom

Non-hodgkin lymfoom

Ziekte van Hodgkin

Ovariumcarcinoom

Leiomyosarcoom

Rhabdomyosarcoom

Mammacarcinoom triple negatief

Neuro-endocriene tumor

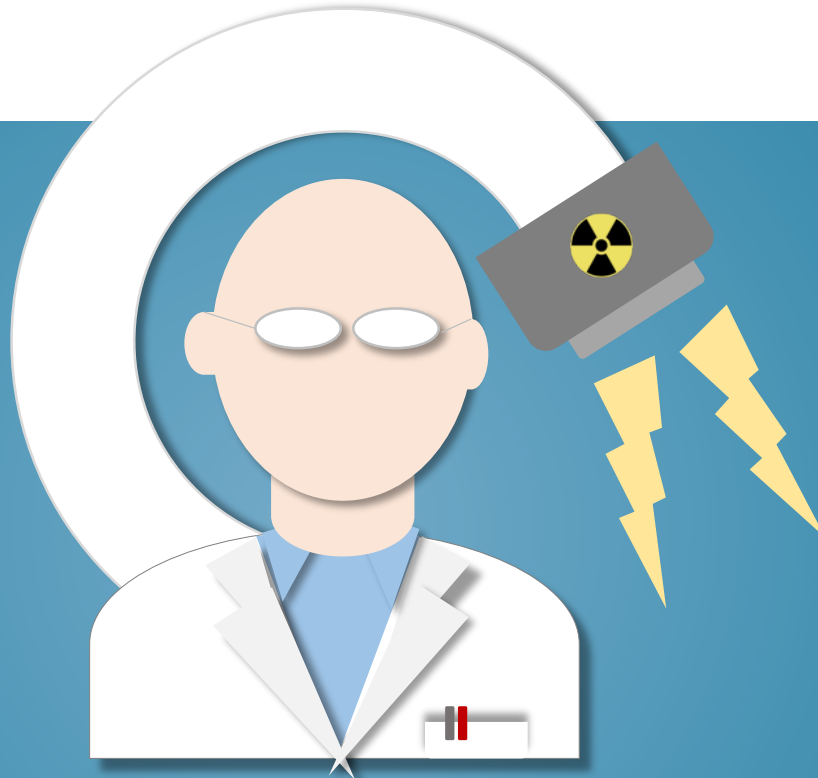
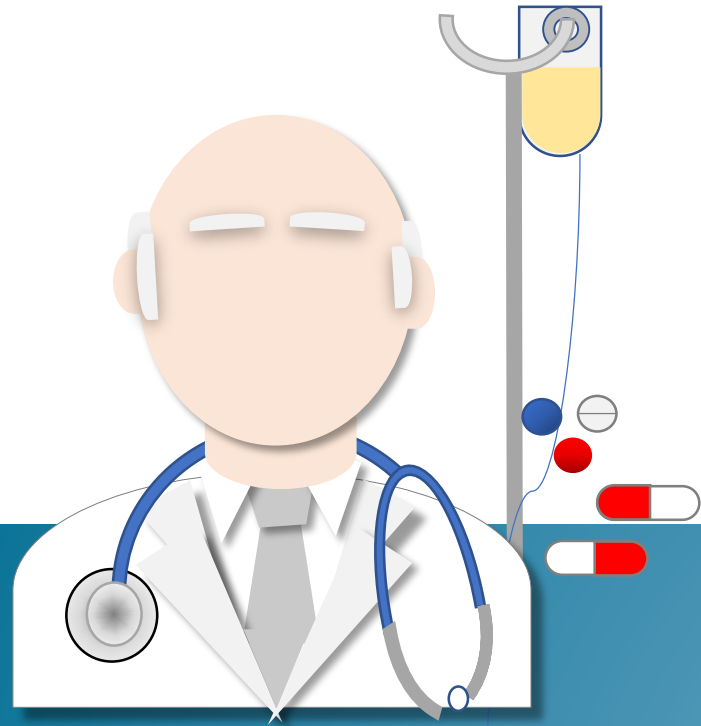
Parotiscarcinoom

Blaascarcinoom

Ziekte van Kahler

Pancreaskop carcinoom

Peniscarcinoom



Gezondheid (Huber)

Het vermogen zich aan te passen en eigen regie te voeren in het licht van de fysieke, sociale en emotionele uitdagingen van het leven





lichaamsfuncties



mentaal
welbevinden



zingeving



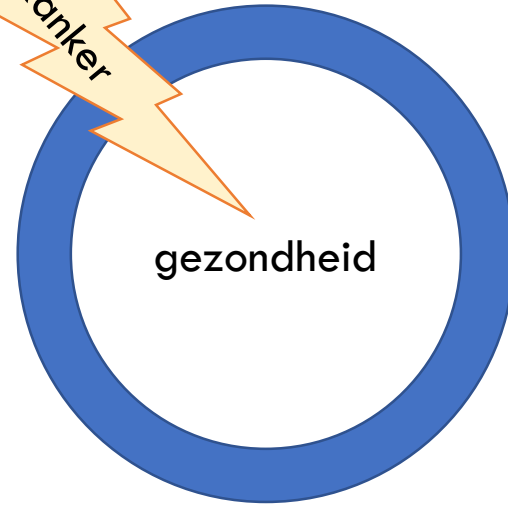
dagelijks functioneren



kwaliteit van leven



maatschappelijke
participatie



gezondheid

kanker

Neuropathie door chemotherapie

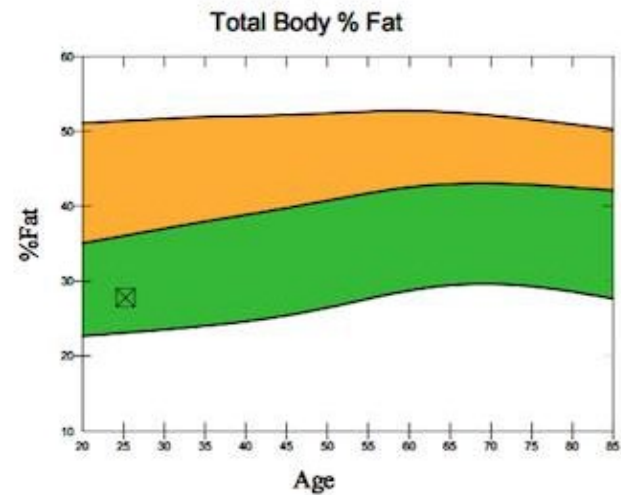




Zenuwletsel na
halsklieroperatie

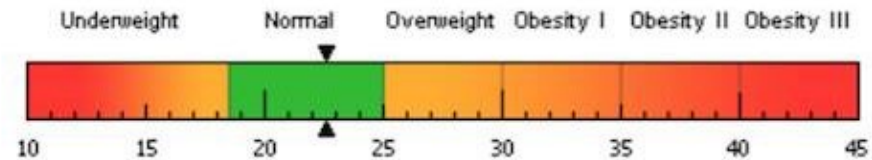
Lymfoedeem na
okselklier
operatie





Source: 2008 NHANES White Female

World Health Organization Body Mass Index Classification
 BMI = 22.6 WHO Classification Normal



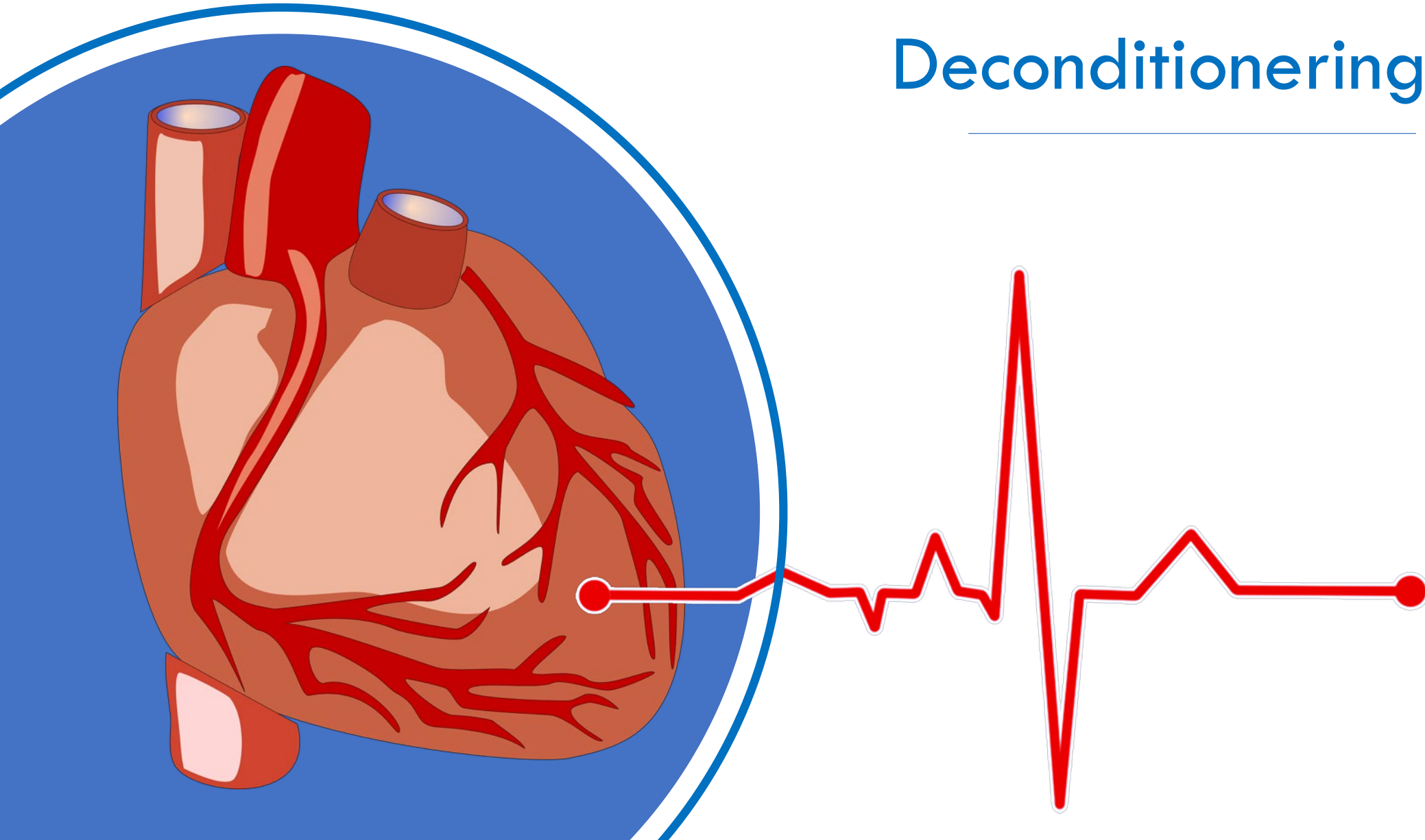
BMI has some limitations and an actual diagnosis of overweight or obesity should be made

Veranderde lichaamssamenstelling door hormoontherapie

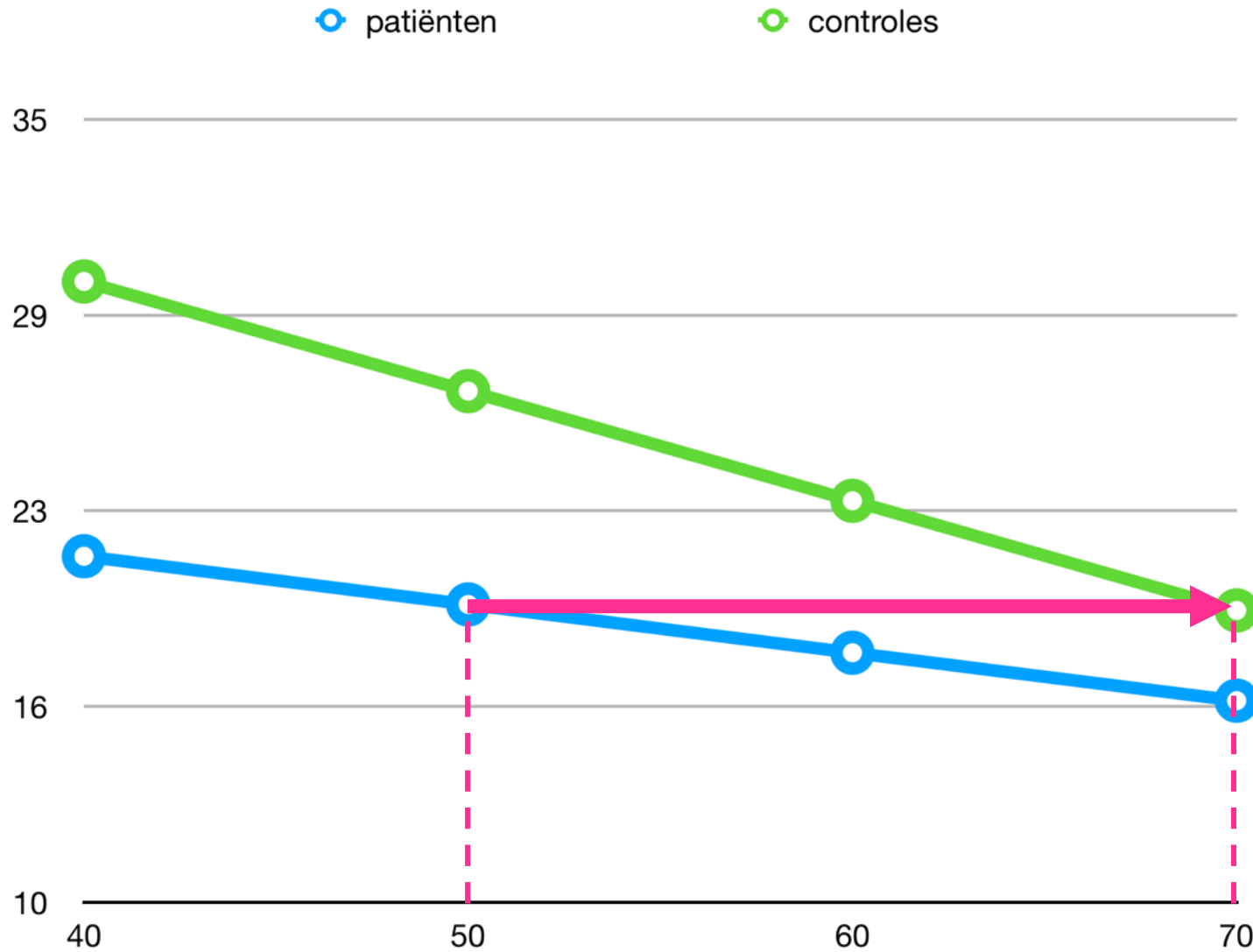


Vermoeidheid

Deconditioning



Afgenomen VO_2 piek (borstkanker)





lichaamsfuncties



mentaal
welbevinden



zingeving



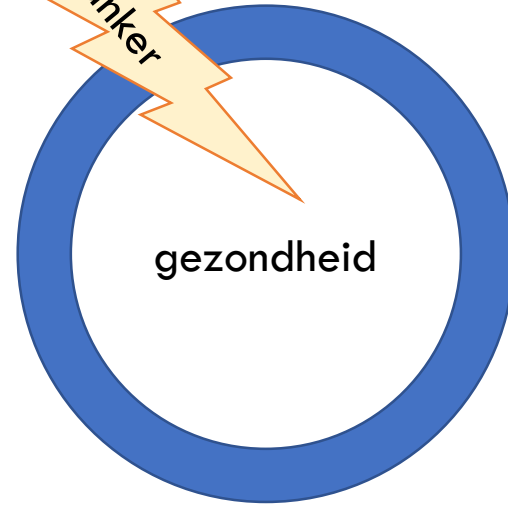
dagelijks functioneren



kwaliteit van leven



maatschappelijke
participatie



gezondheid

kanker



lichaamsfuncties



kwaliteit van leven



maatschappelijke
participatie



dagelijks functioneren

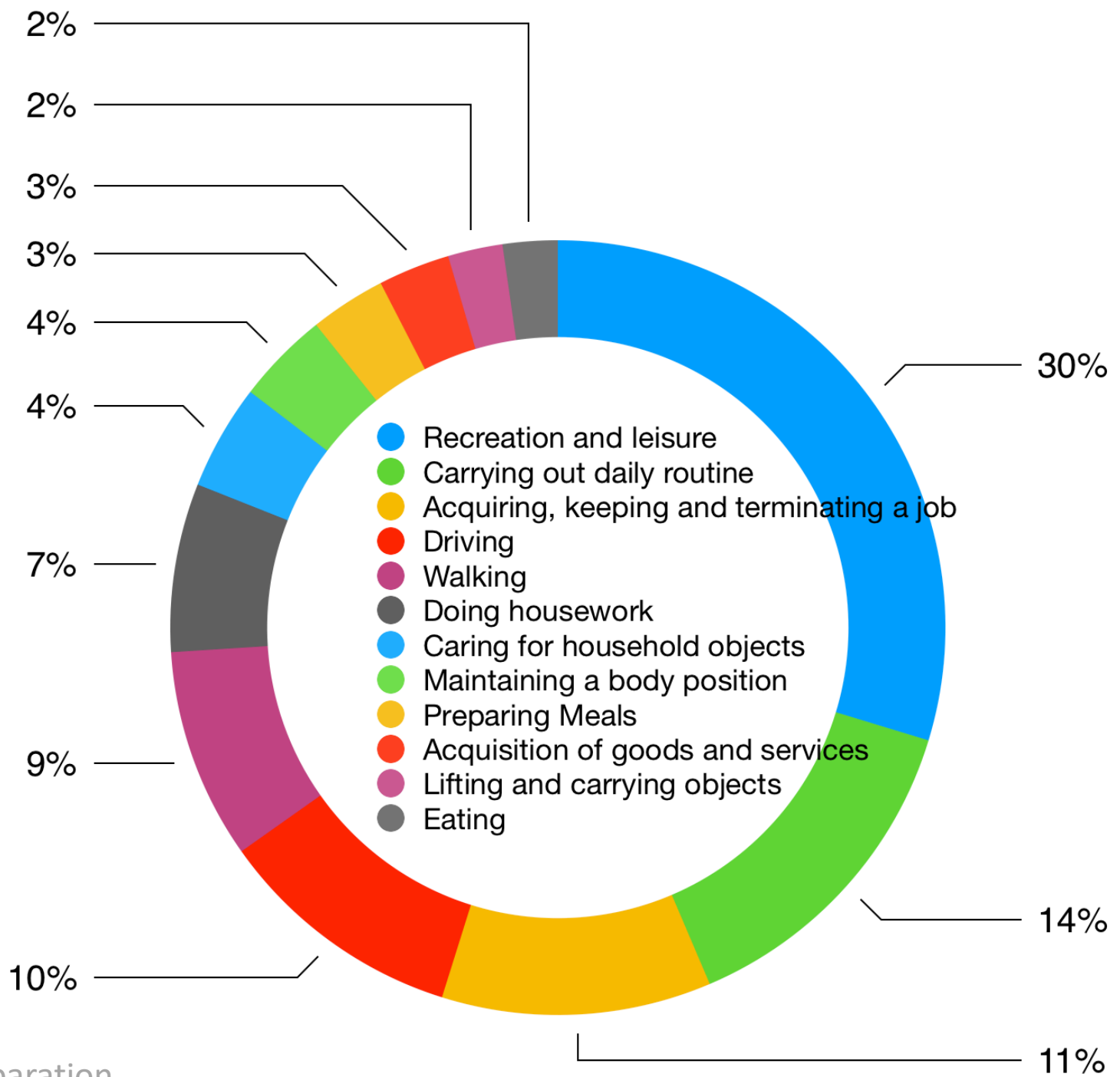


mentaal
welbevinden
SUPPORT



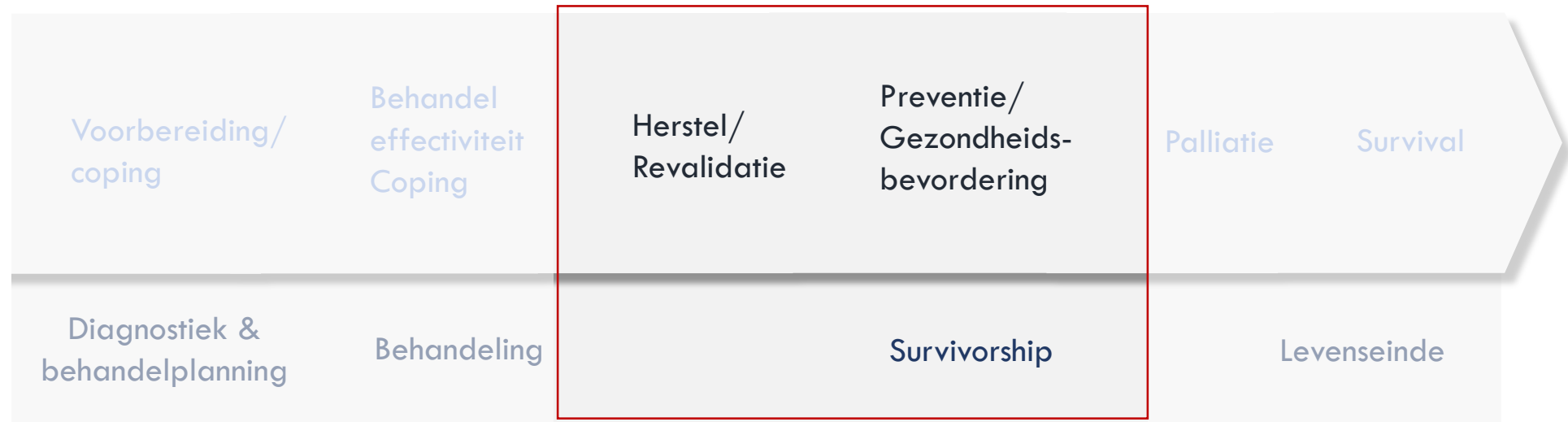
zingeving





Traditioneel model van revalidatie

reactief



Prospectief model van oncologische revalidatie proactief

Supportive care

Vorbereiding/
coping

Behandel
effectiviteit
Coping

Herstel/
Revalidatie

Preventie/
Gezondheids-
bevordering

Palliatie

Survival

Behandelfase

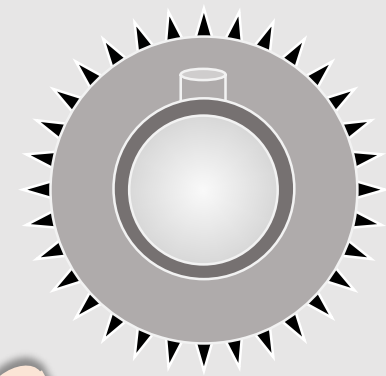
Diagnostiek &
behandelplanning

Behandeling

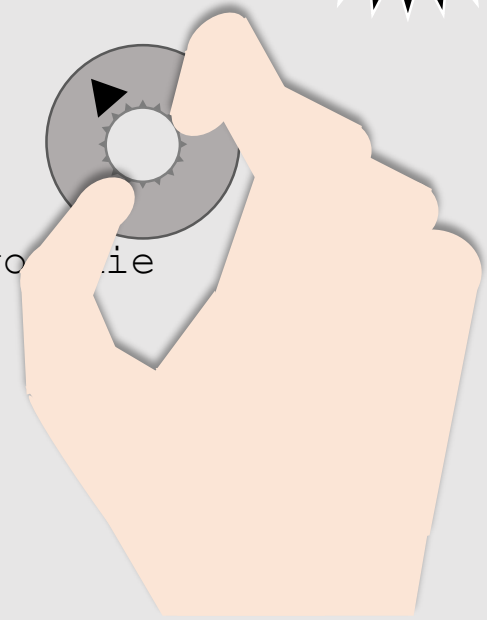
Survivorship

Levensende

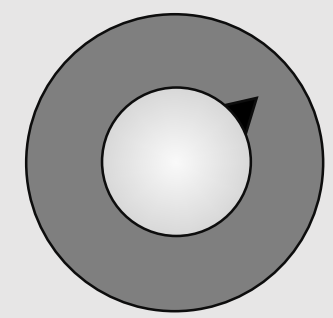
voeding



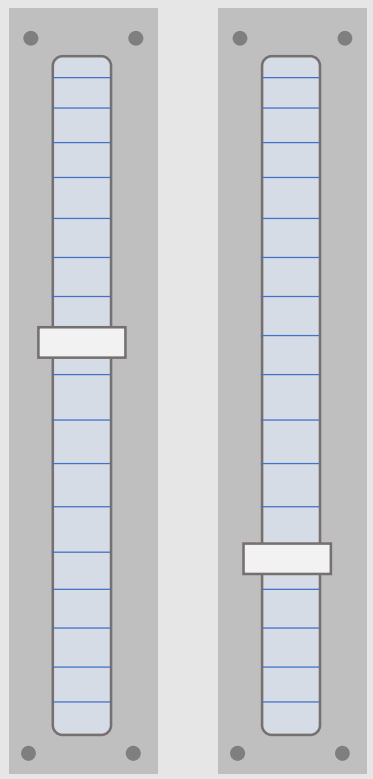
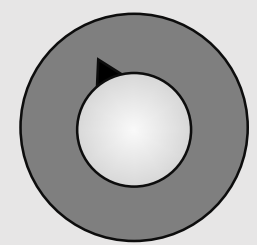
ergonomie



beweging



slikken



psychosociale
zorg



Bewegen en Training:
belangrijke ondersteunende
componenten in de zorg



**COSA
POSITION
STATEMENT
ON EXERCISE
IN CANCER
CARE**

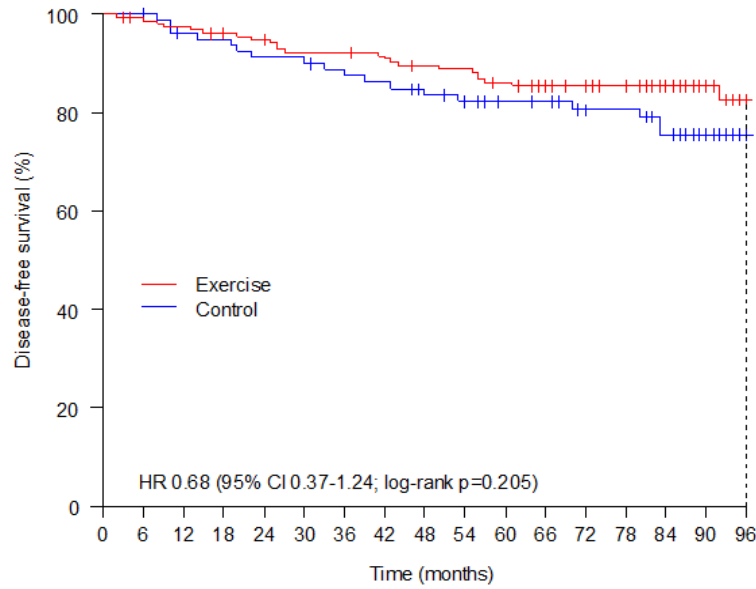


EXERCISE IN CANCER CARE

COSA encourages all health professionals involved in the care of people with cancer to:

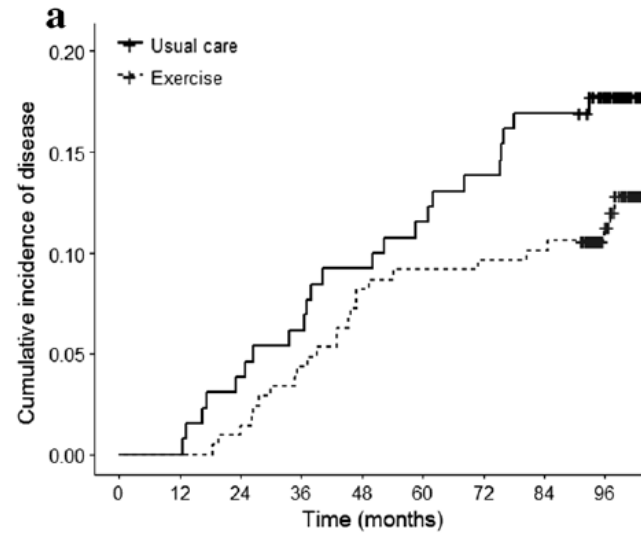
- 1** Discuss the role of exercise in cancer recovery
- 2** Recommend their patients adhere to the exercise guidelines
- 3** Refer their patients to a health professional who specialises in the prescription and delivery of exercise (i.e. accredited exercise physiologist or physiotherapist with experience in cancer care)

EXERCISE EN SURVIVAL



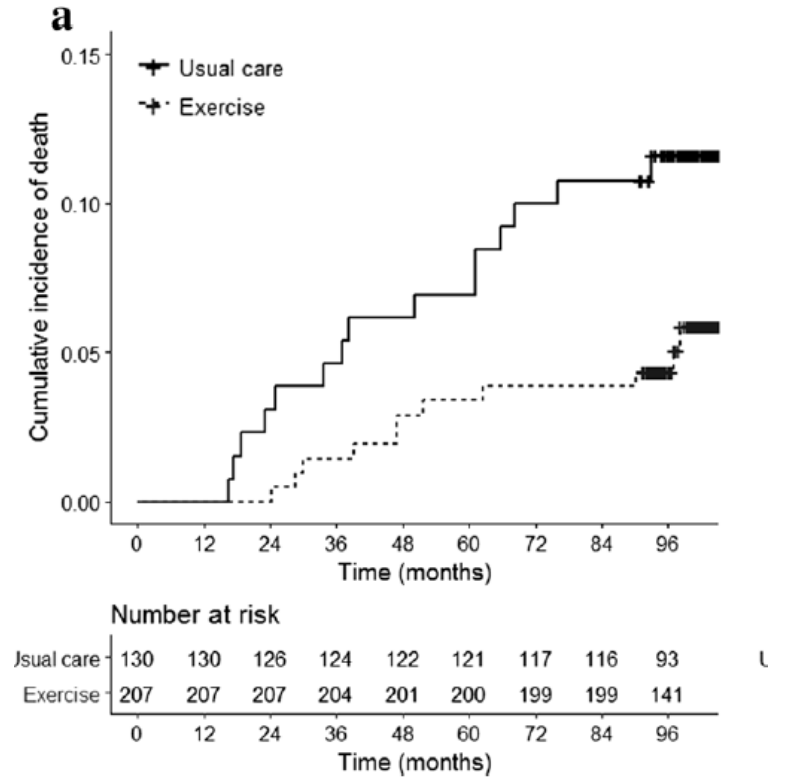
Number at risk

Time (months)	0	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
Exercise	160	156	153	150	146	140	140	138	133	131	124	120	116	111	99	67	39
Control	82	82	77	76	73	73	70	67	64	61	57	56	51	50	42	25	13



Number at risk

Time (months)	0	12	24	36	48	60	72	84	96
Usual care	130	130	125	122	118	115	112	108	86
Exercise	207	207	204	198	190	188	187	186	128





Lichamelijke
activiteit

Fysieke training

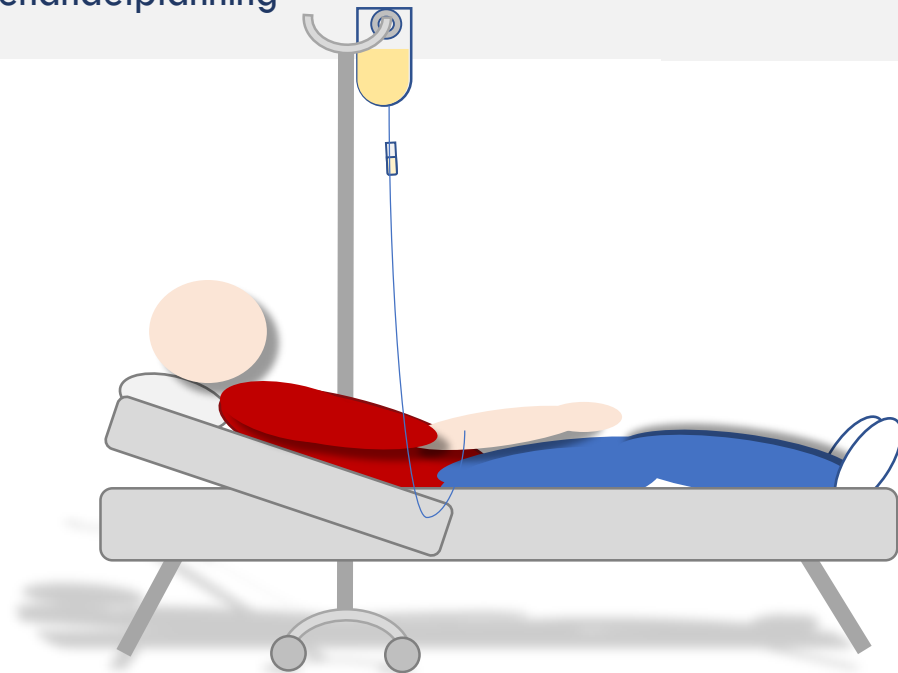


Therapeutische
beweeg-interventies



Supportive care

Behandelfase



Effect of Low-Intensity Physical Activity and Moderate- to High-Intensity Physical Exercise During Adjuvant Chemotherapy on Physical Fitness, Fatigue, and Chemotherapy Completion Rates: Results of the PACES Randomized Clinical Trial

Hanna van Waart, Martijn M. Stuiver, Wim H. van Harten, Edwin Geleijn, Jacobien M. Kieffer, Laurien M. Buffart, Marianne de Maaker-Berkhof, Epie Boven, Jolanda Schrama, Maud M. Geenen, Jetske M. Meerum Terwogt, Aart van Bochove, Vera Lustig, Simone M. van den Heiligenberg, Carolien H. Smorenburg, Jeannette A.J.H. Hellendoorn-van Vreeswijk, Gabe S. Sonke, and Neil K. Aaronson

A B S T R A C T

Purpose

We evaluated the effectiveness of a low-intensity, home-based physical activity program (Onco-Move) and a moderate- to high-intensity, combined supervised resistance and aerobic exercise program (OnTrack) versus usual care (UC) in maintaining or enhancing physical fitness, minimizing fatigue, enhancing health-related quality of life, and optimizing chemotherapy completion rates in patients undergoing adjuvant chemotherapy for breast cancer.

Patients and Methods

We randomly assigned patients who were scheduled to undergo adjuvant chemotherapy (N = 230) to Onco-Move, OnTrack, or UC. Performance-based and self-reported outcomes were assessed before random assignment, at the end of chemotherapy, and at the 6-month follow-up. We used generalized estimating equations to compare the groups over time.

Results

Onco-Move and OnTrack resulted in less decline in cardiorespiratory fitness ($P < .001$), better physical functioning ($P \leq .001$), less nausea and vomiting ($P = .029$ and $.031$, respectively) and less pain ($P = .003$ and $.011$, respectively) compared with UC. OnTrack also resulted in better outcomes for muscle strength ($P = .002$) and physical fatigue ($P < .001$). At the 6-month follow-up, most outcomes returned to baseline levels for all three groups. A smaller percentage of participants in OnTrack required chemotherapy dose adjustments than those in the UC or Onco-Move groups ($P = .002$). Both intervention groups returned earlier ($P = .012$), as well as for more hours per week ($P = .014$), to work than the control group.

Conclusion

A supervised, moderate- to high-intensity, combined resistance and aerobic exercise program is most effective for patients with breast cancer undergoing adjuvant chemotherapy. A home-based, low-intensity physical activity program represents a viable alternative for women who are unable or unwilling to follow the higher intensity program.

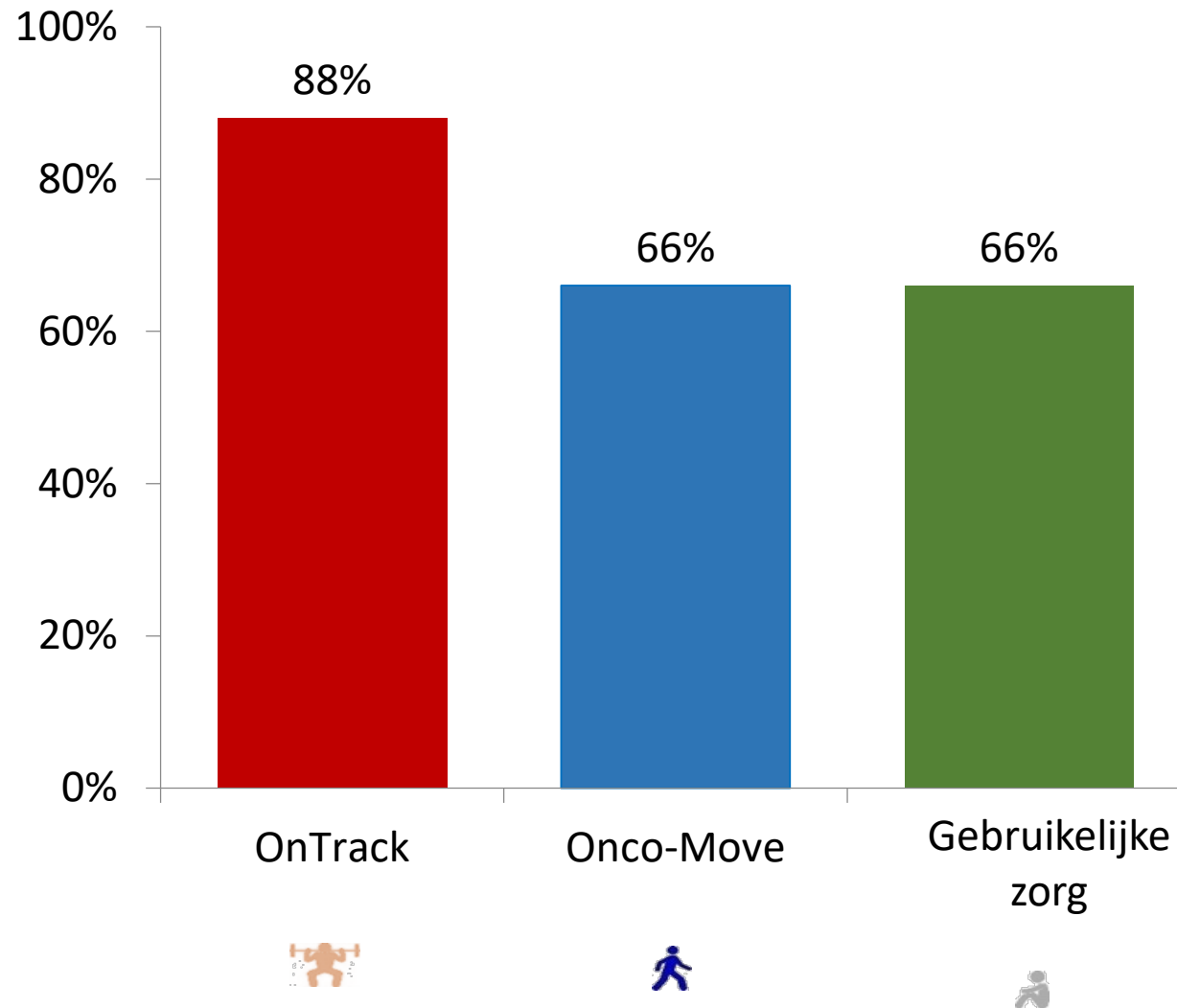
Minder afname van fitheid

Beter fysiek functioneren

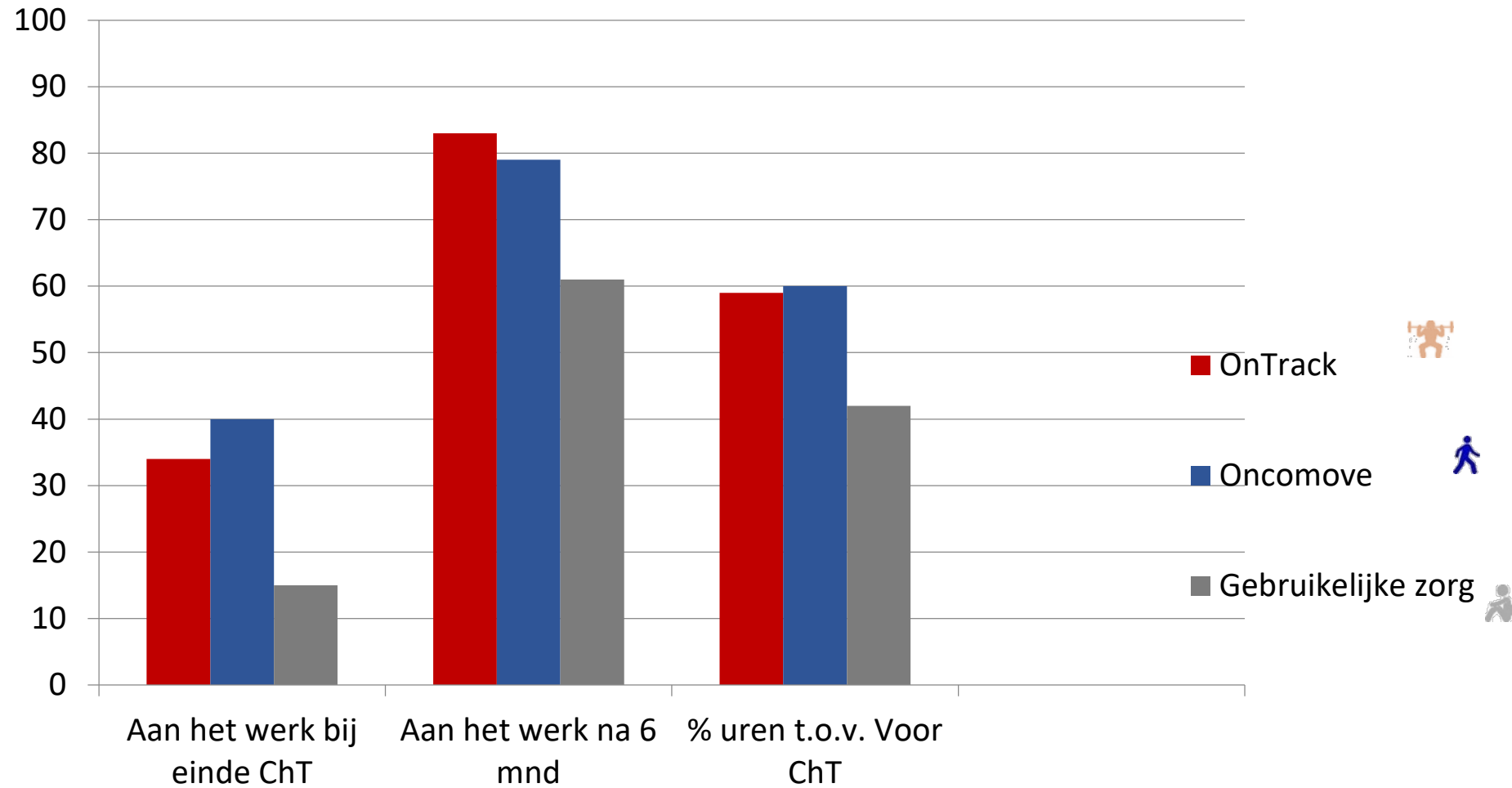
Minder symptoomlast
(vermoeidheid,
misselijkheid, pijn, etc.)

Volhouden behandeling

% patiënten zonder dosis bijstelling



Terugkeer naar werk



Supportive care

Vorbereitung/
coping

Behandel
effectiviteit
Coping

Herstel/
Revalidatie

Preventie/
Gezondheids-
bevordering

Palliatie

Survival

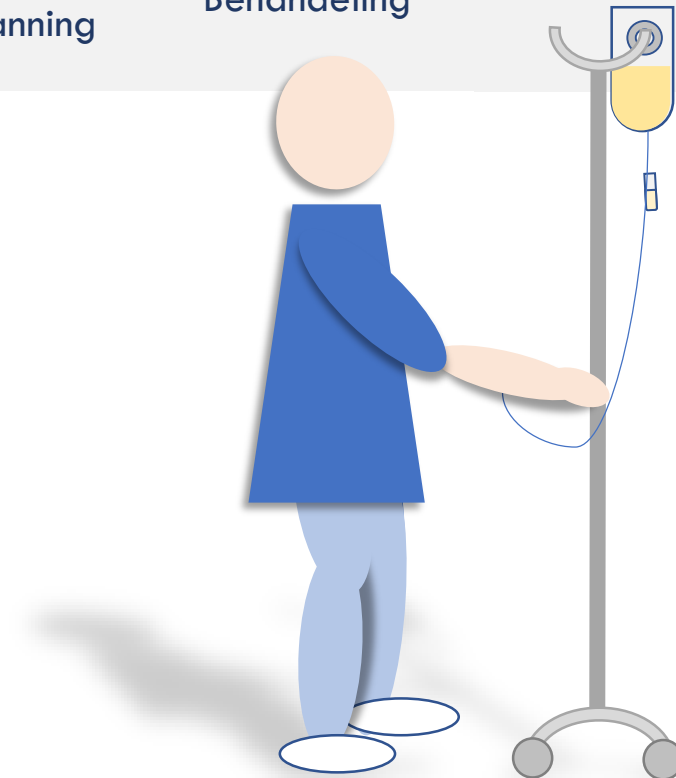
Behandelfase

Diagnostiek &
behandelplanning

Behandeling

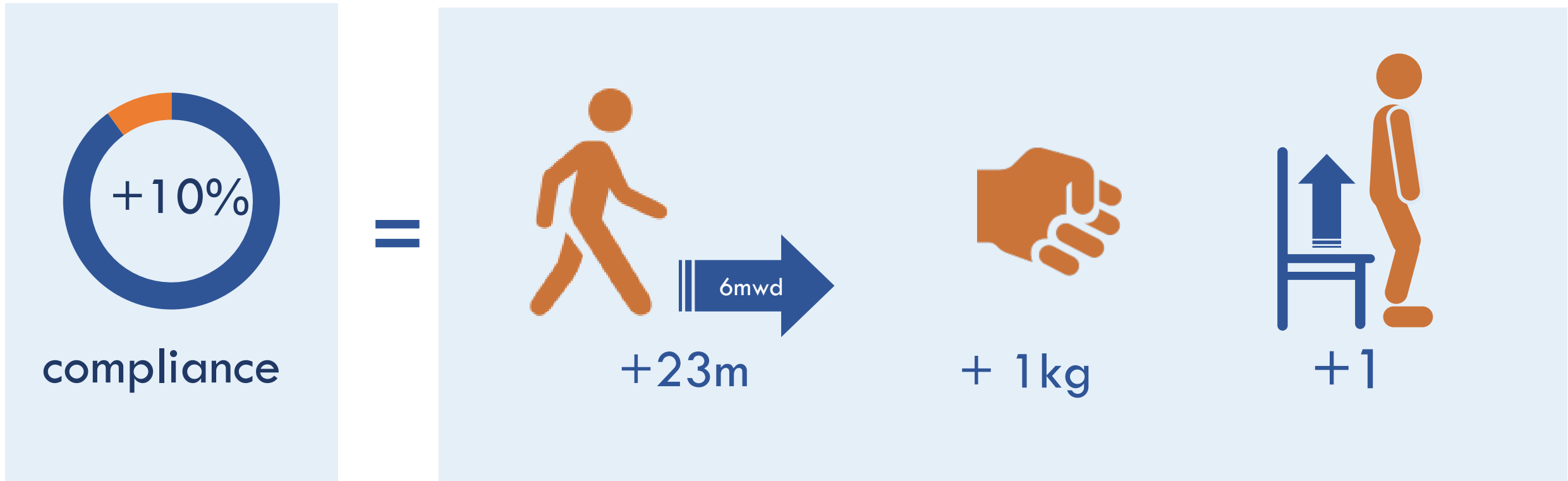
Survivorship

Levensende

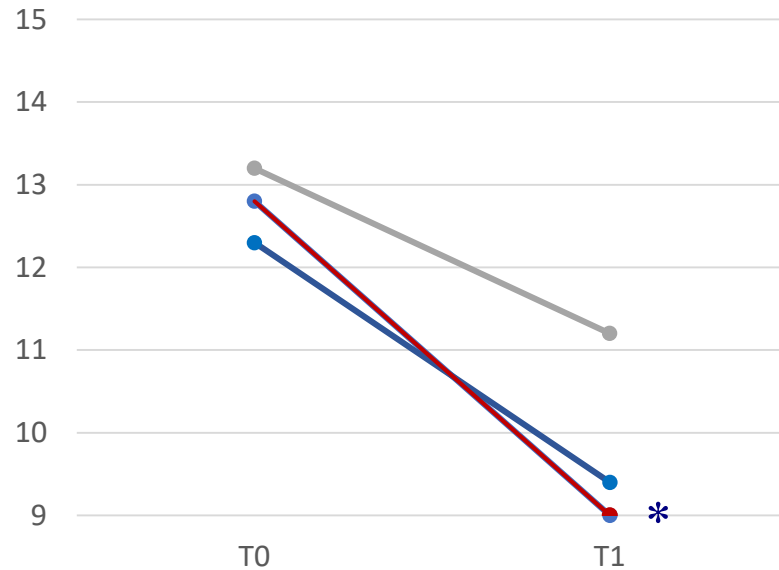


Het belang van vroeg-mobilisatie

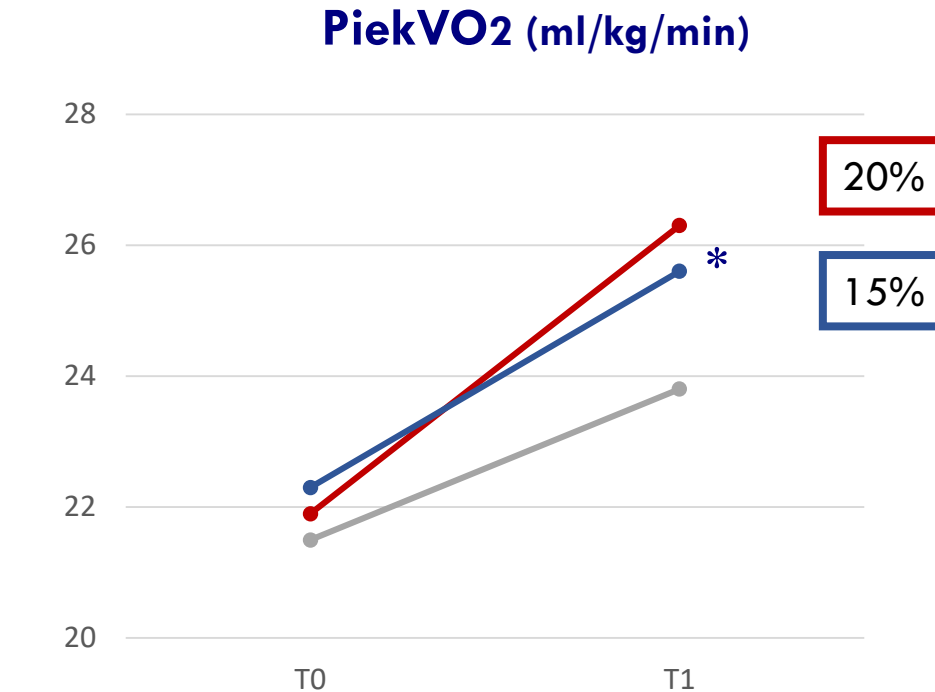
Na thoraxchirurgie voor longkanker



Het nut van lichamelijke revalidatie



Vermoeidheid



Fitheid

- HI
- LMI
- WLC

*p < 0.05

Functioneel herstel in de palliatieve fase?

Supportive care

Vorbereiding/
coping

Behandel
effectiviteit
Coping

Herstel/
Revalidatie

Preventie/
Gezondheids-
bevordering

Palliatie

Survival

Behandelfase

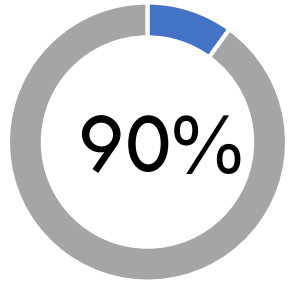
Diagnostiek &
behandelplanning

Behandeling

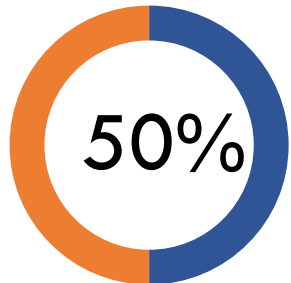
Survivorship

Levensende

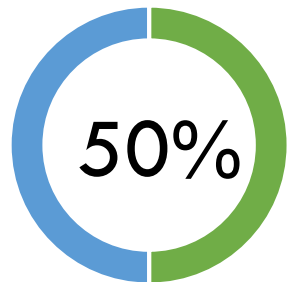
Oncologische patiënten in de palliatieve fase



Ten minste één fysieke beperking



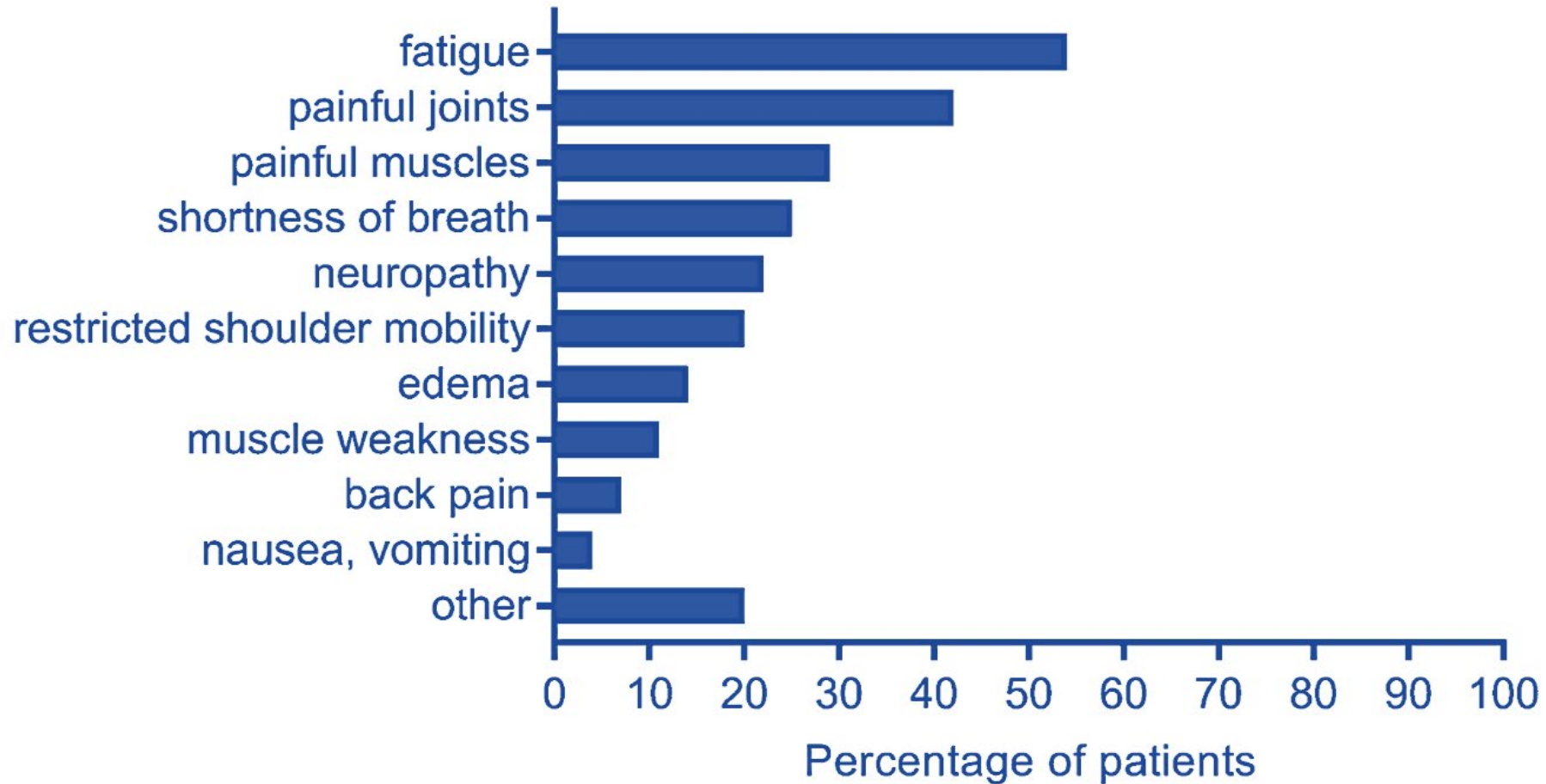
Substantiële klachten die belemmerend zijn voor fysieke activiteit



Problemen met ADL

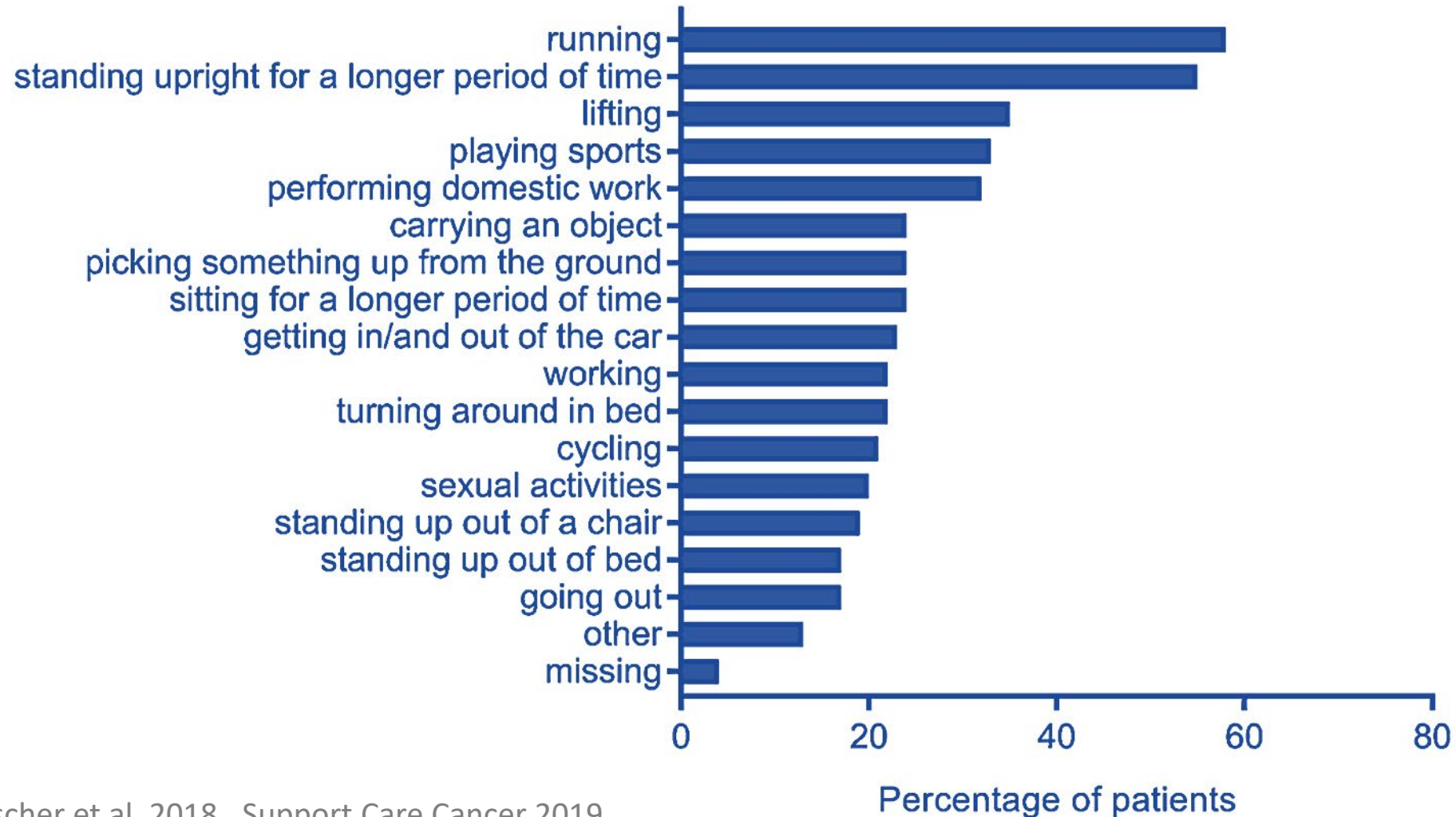
Patiënten met uitgezaaide borstkanker (n=114)

klachten



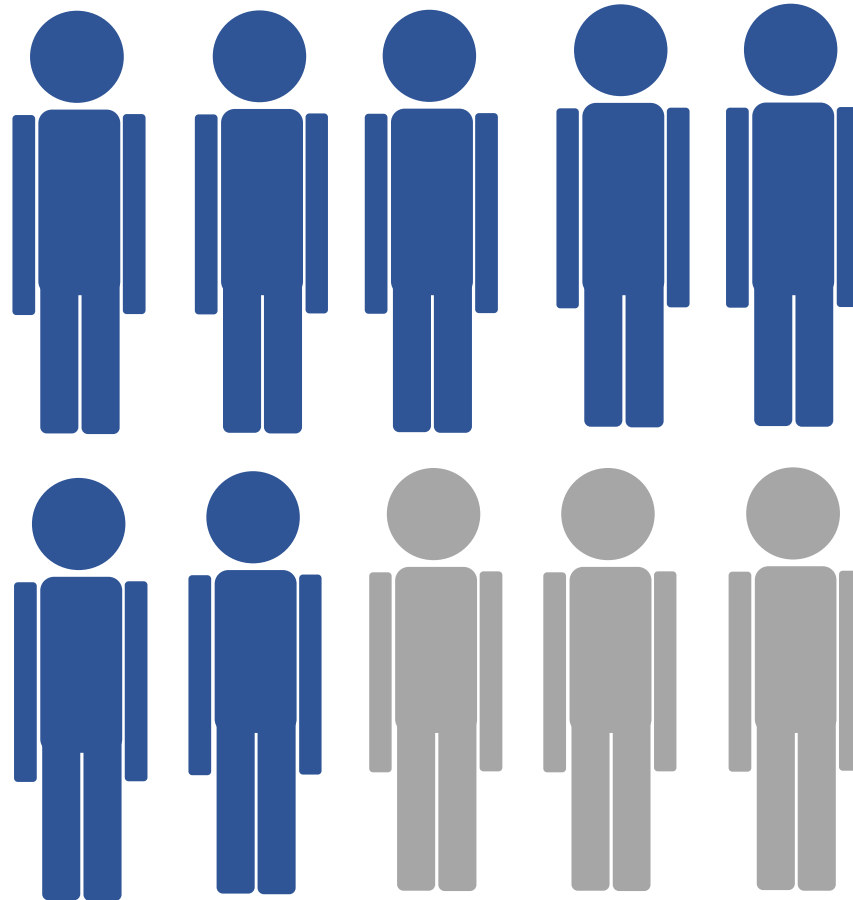
Patiënten met uitgezaaide borstkanker (n=114)

beperkingen



Kanker en comorbiditeit

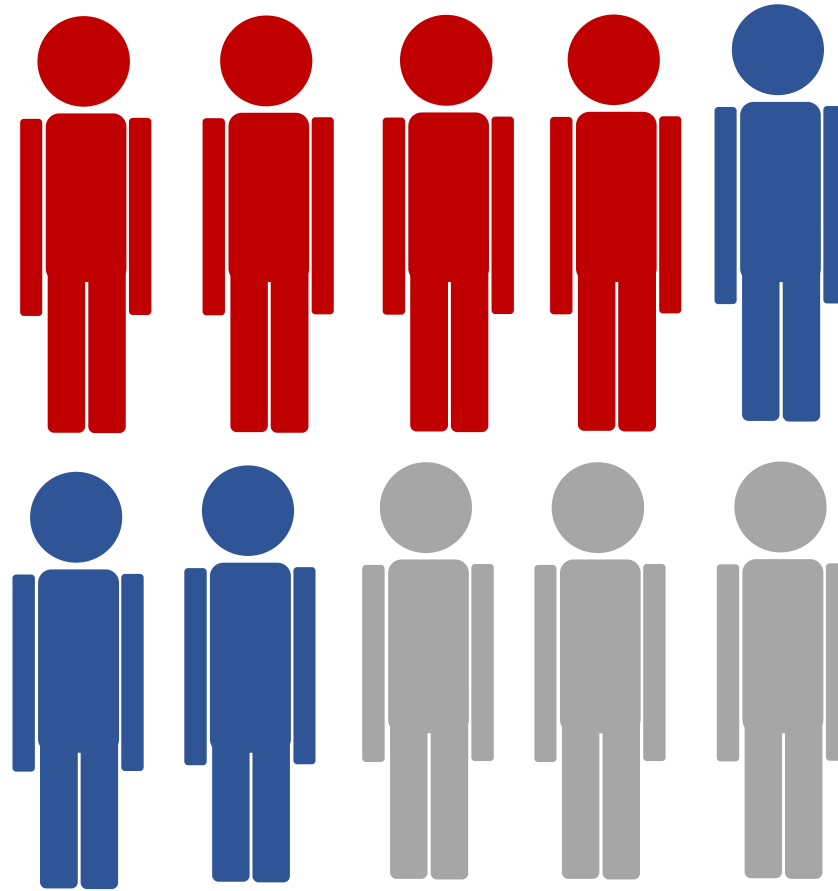
+ 1 aandoening



Kanker en comorbiditeit

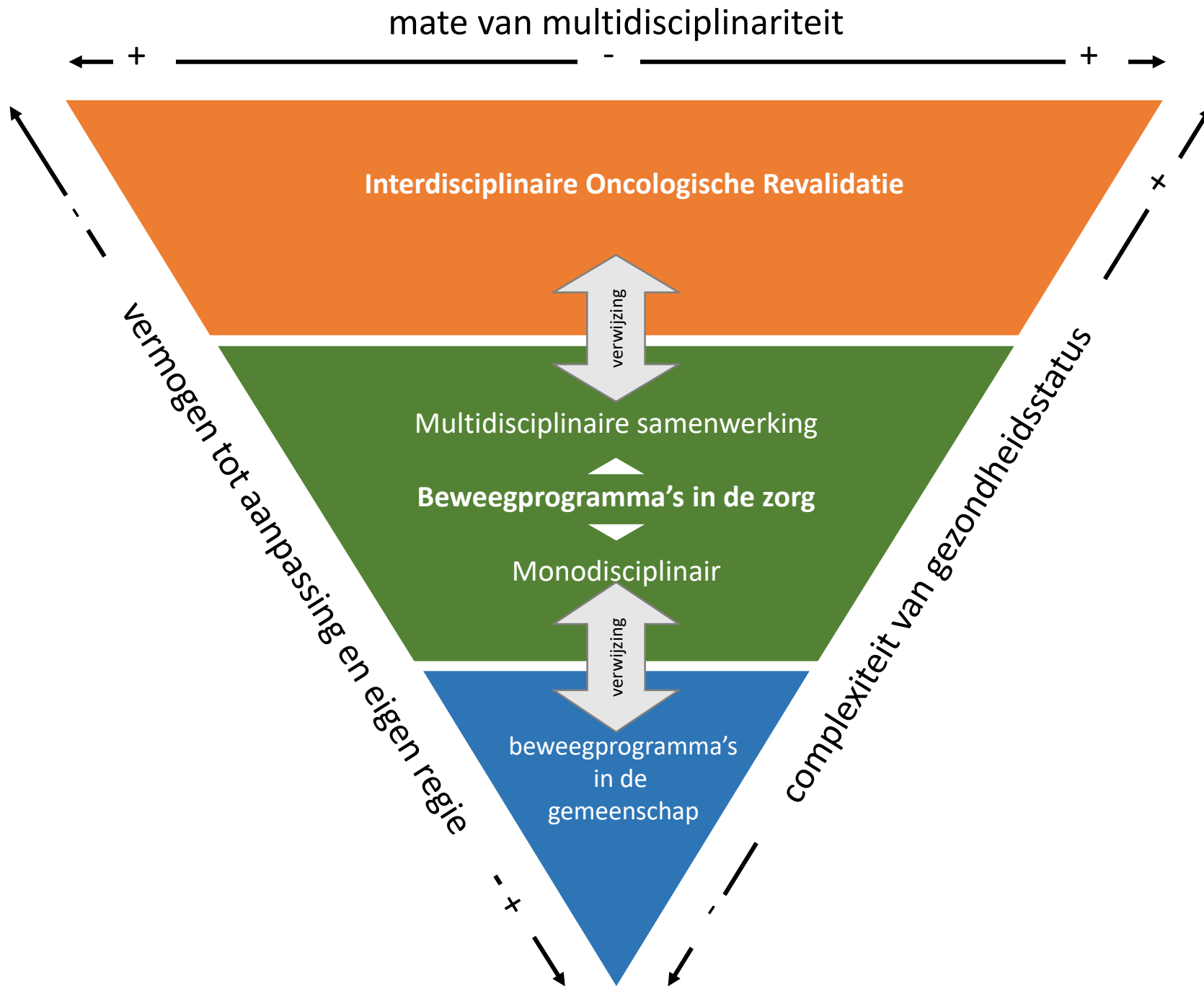
+ 1 aandoening

+ 2 aandoeningen



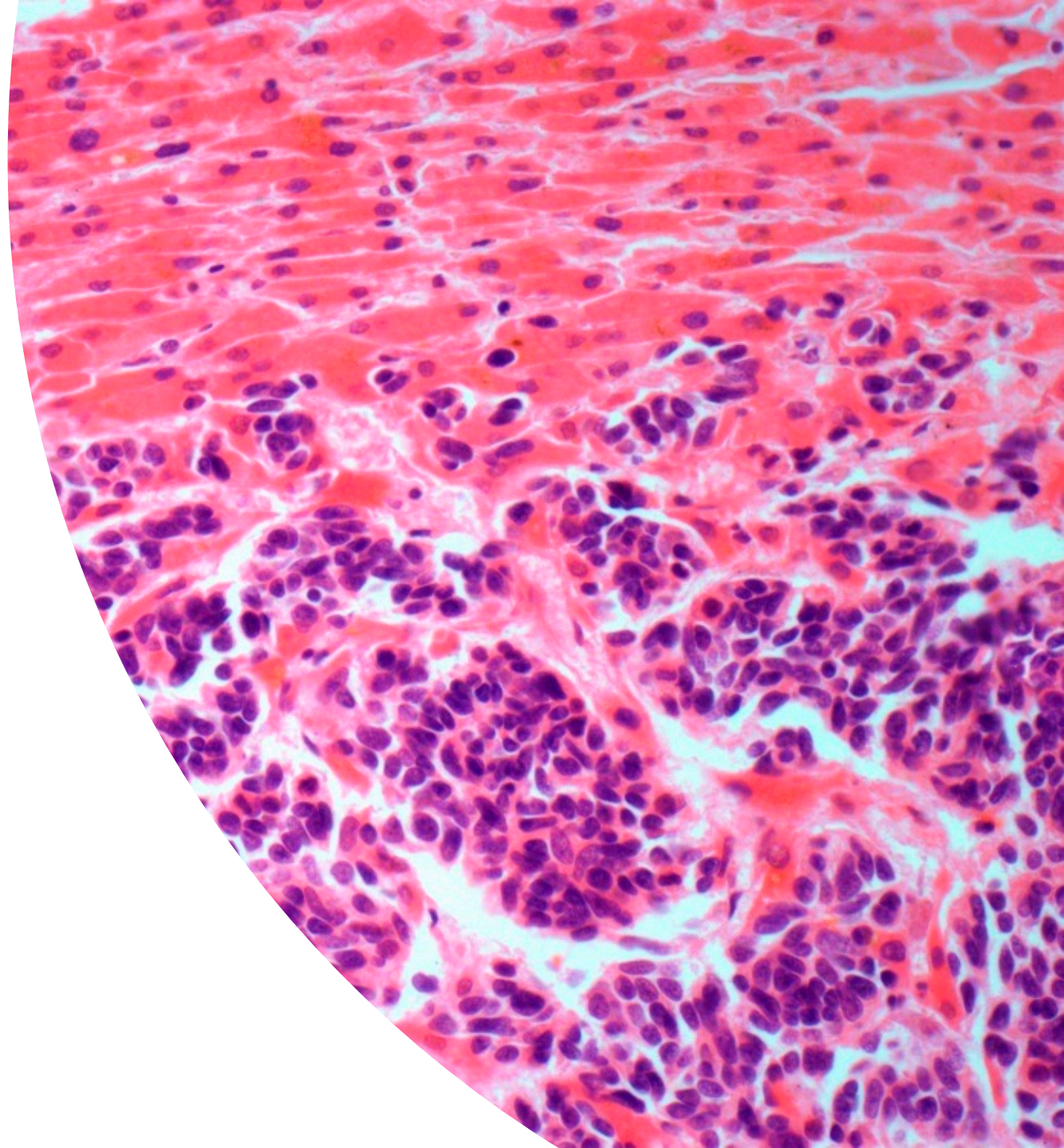






Samenvatting

- (Behandeling van) Kanker:
 - symptomen
 - beperkingen in het functioneren
- Consequenties voor KvL en gezondheid
- Ondersteunende zorg is fundamenteel om de gezondheid van mensen met en na kanker te bevorderen
- Exercise is Medicine



A woman with a shaved head is smiling while performing a shoulder press exercise in a gym. She is wearing a dark blue t-shirt with a colorful graphic on the front. The gym equipment is visible in the background.

Dank voor
uw
aandacht