



# La valutazione geriatrica multidimensionale nel paziente oncologico anziano

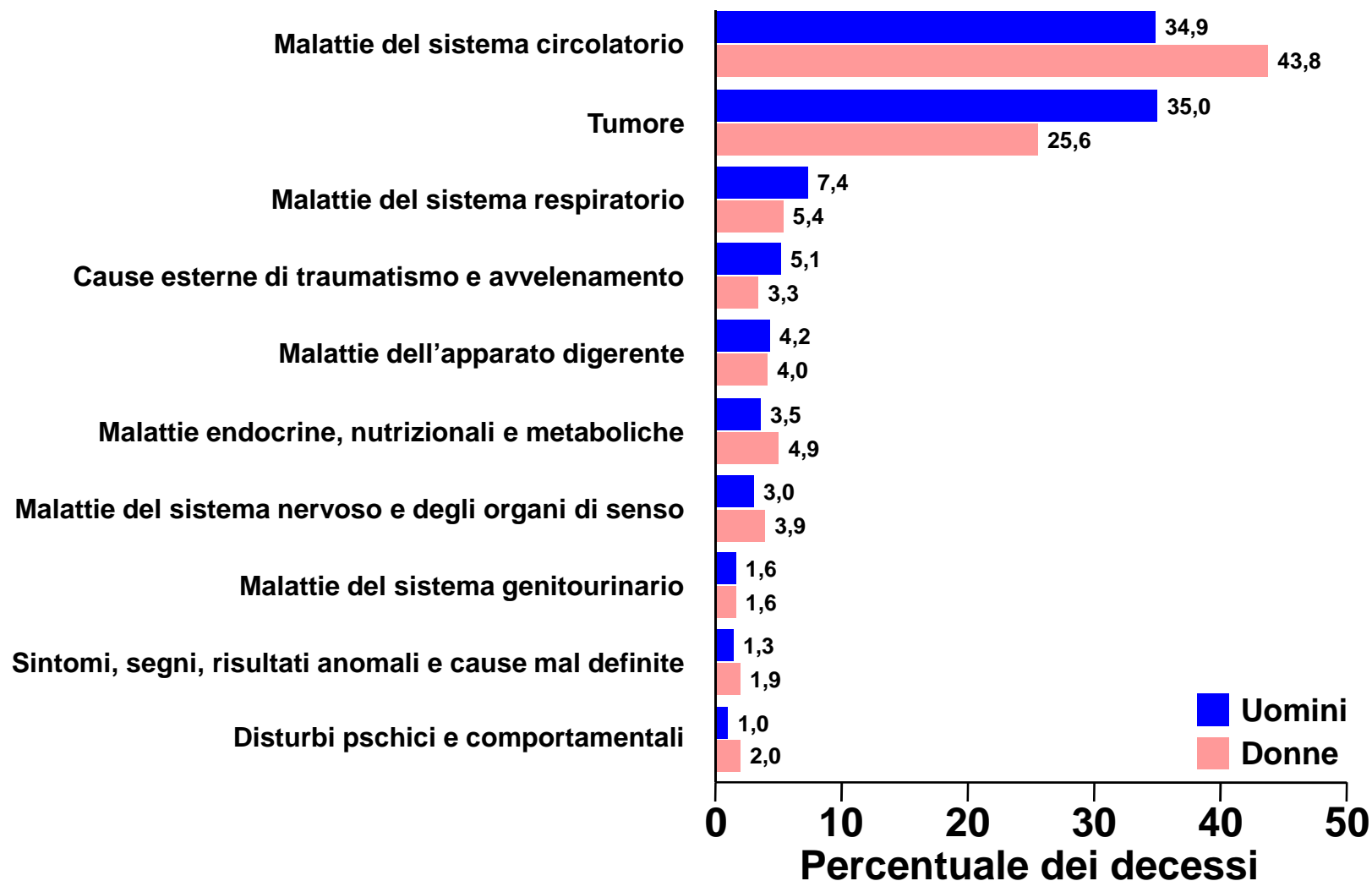
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## Classifica delle principali cause di morte



*Relazione sullo Stato Sanitario del Paese 2007-2008*  
 Ministero del Lavoro, della Salute e delle Politiche Sociali



## Remaining lifetime risk of first cancer or major cardiovascular disease event by age reached free of events in participants of Physicians' Health Study

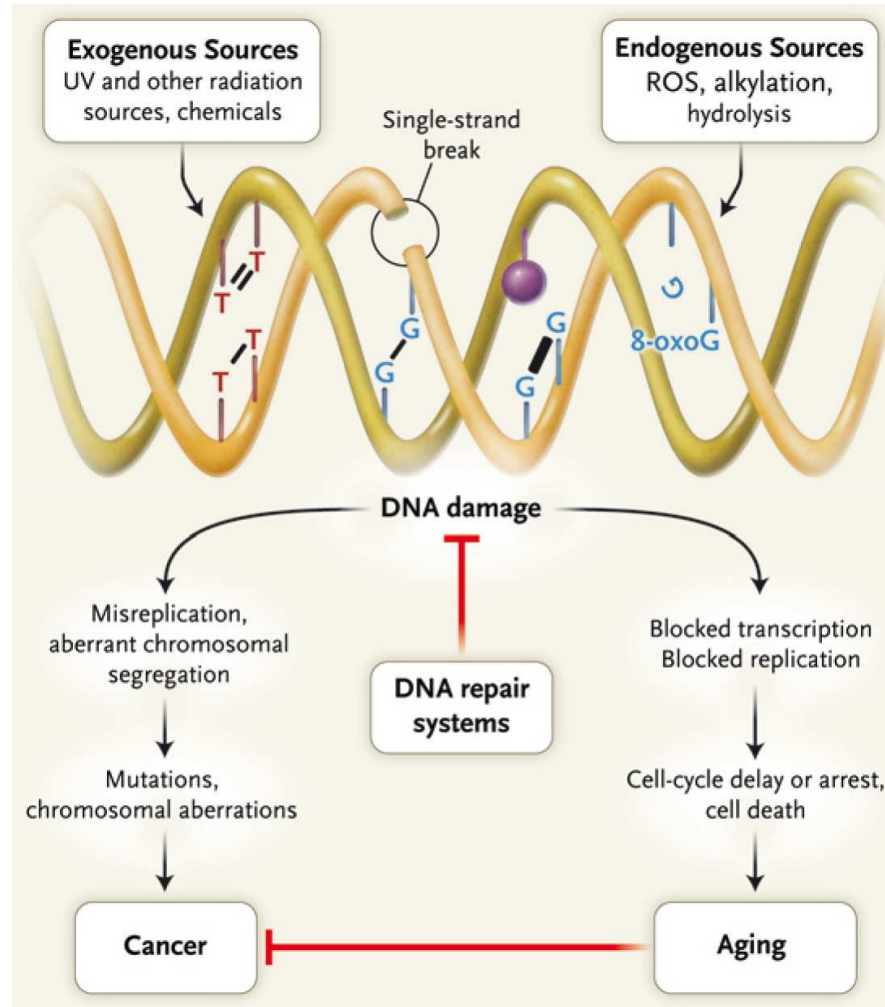
Age (years)	Remaining lifetime risk (%) (95% CI)		
	All cancer	Major cardiovascular disease	All cardiovascular disease
40	45.1 (43.8 to 46.3)	34.8 (33.1 to 36.5)	41.3 (39.9 to 42.7)
50	44.5 (43.3 to 45.7)	34.5 (32.8 to 36.2)	40.5 (39.1 to 41.9)
60	42.9 (41.6 to 44.2)	33.0 (31.2 to 34.8)	38.0 (36.5 to 39.5)
70	36.6 (35.2 to 38.0)	30.5 (28.5 to 32.4)	33.2 (31.5 to 34.9)
80	24.3 (22.5 to 26.1)	25.7 (23.3 to 29.1)	24.9 (22.7 to 27.1)
90	9.6 (7.2 to 11.9)	16.7 (12.9 to 20.6)	13.7 (10.3 to 17.2)

Remaining lifetime risk=mortality adjusted cumulative risk conditional on disease-free survival to age specified.

***Driver JA et al, BMJ 2008; 337: a2467***



## Aging and cancer: a trade-off



*Hoeijmakers JHJ, N Engl J Med 2009; 361: 1475-85*

## Defining Competing Risk

**A competing risk is an alternative outcome that is of equal or more significant clinical importance than the primary outcome and alters the probability of the outcome of interest.**

*Berry SD et al, JAGS 2010; 58: 783-787*

La morte ha diecimila e più porte  
attraverso cui l'uomo esce di scena

*Nuland SB, Come moriamo. Mondadori. Milano, 1995*

**Over 20 years of follow-up, 66% of men with clinically localized prostate cancer died from causes unrelated to prostate cancer, compared with 30% who died from causes related to prostate cancer.**

*Albertsen PC et al, JAMA 2005; 293: 2095-2101*

## Examples of Geriatric Studies with Competing Risks that Could Affect the Risk of Disease

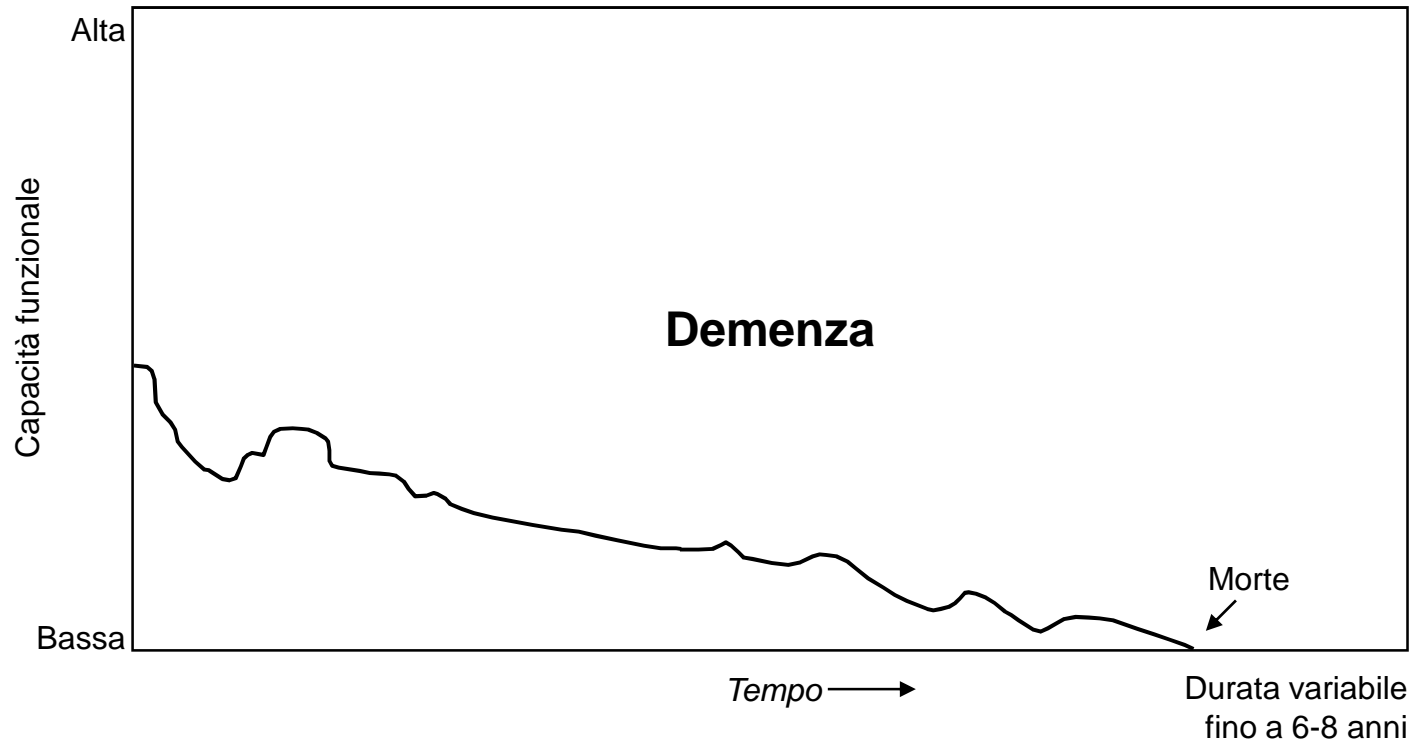
Geriatric Study Example	Competing Risks	Consequence of Ignoring Competing Risks
Incidence of second hip fracture	Mortality after the first hip fracture	Overestimate incidence of second hip fracture
Cancer-related mortality after treatment for breast cancer in postmenopausal women	Mortality from treatment toxicity; non-cancer-related mortality	Overestimate breast cancer-related mortality
Time to CABG in older adults with cardiac disease	Percutaneous intervention	Overestimate time to CABG
Effect of delirium on hospitalization in frail nursing home residents	Mortality within nursing home	Biased effect estimate of delirium on risk of hospitalization
Effect of age on macular degeneration	Mortality	Biased effect estimate of age on risk of macular degeneration

CABG = coronary artery bypass surgery.

***Berry SD et al, JAGS 2010; 58: 783-787***

# Traiettorie delle malattie cronicoprogressive

Decadimento di lunga durata

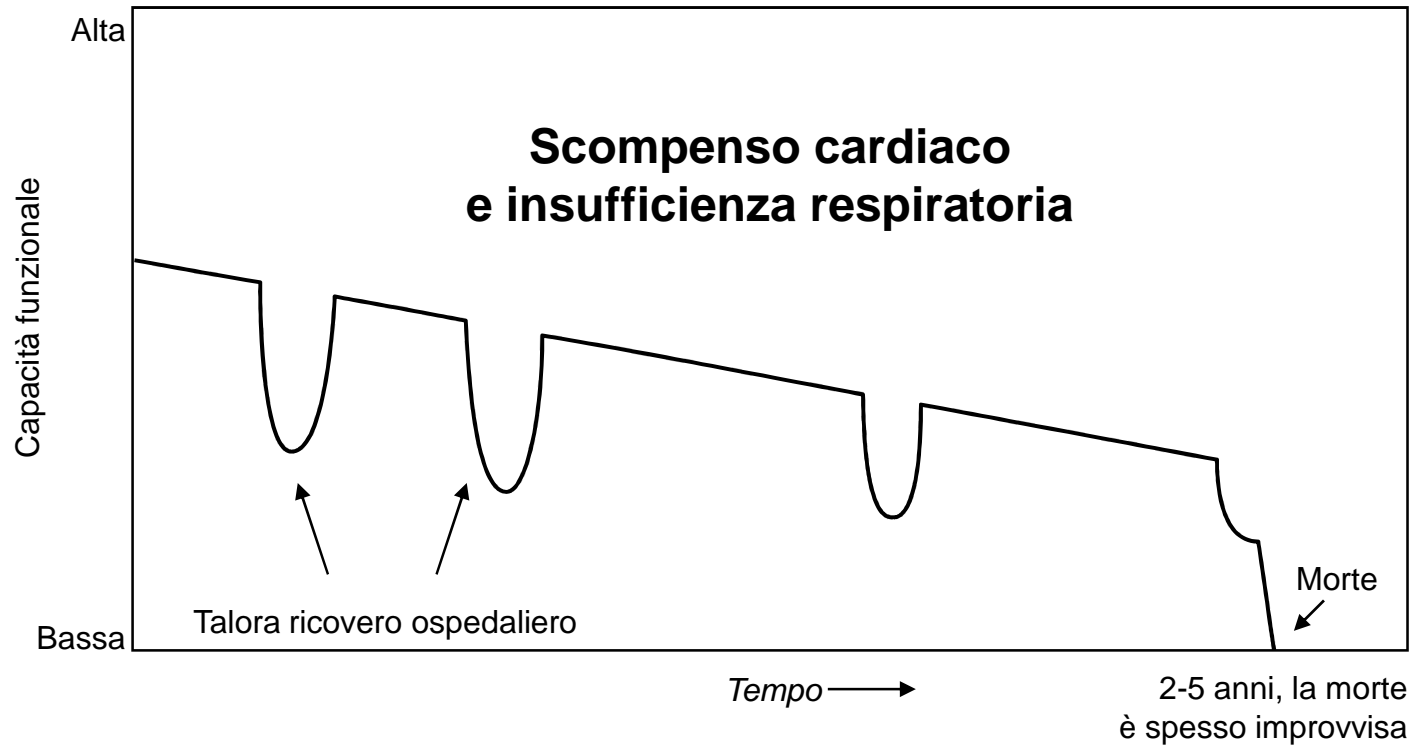


*Lunney JR et al, JAGS 2002; 50: 1108-12*



## Traiettorie delle malattie cronicoprogressive

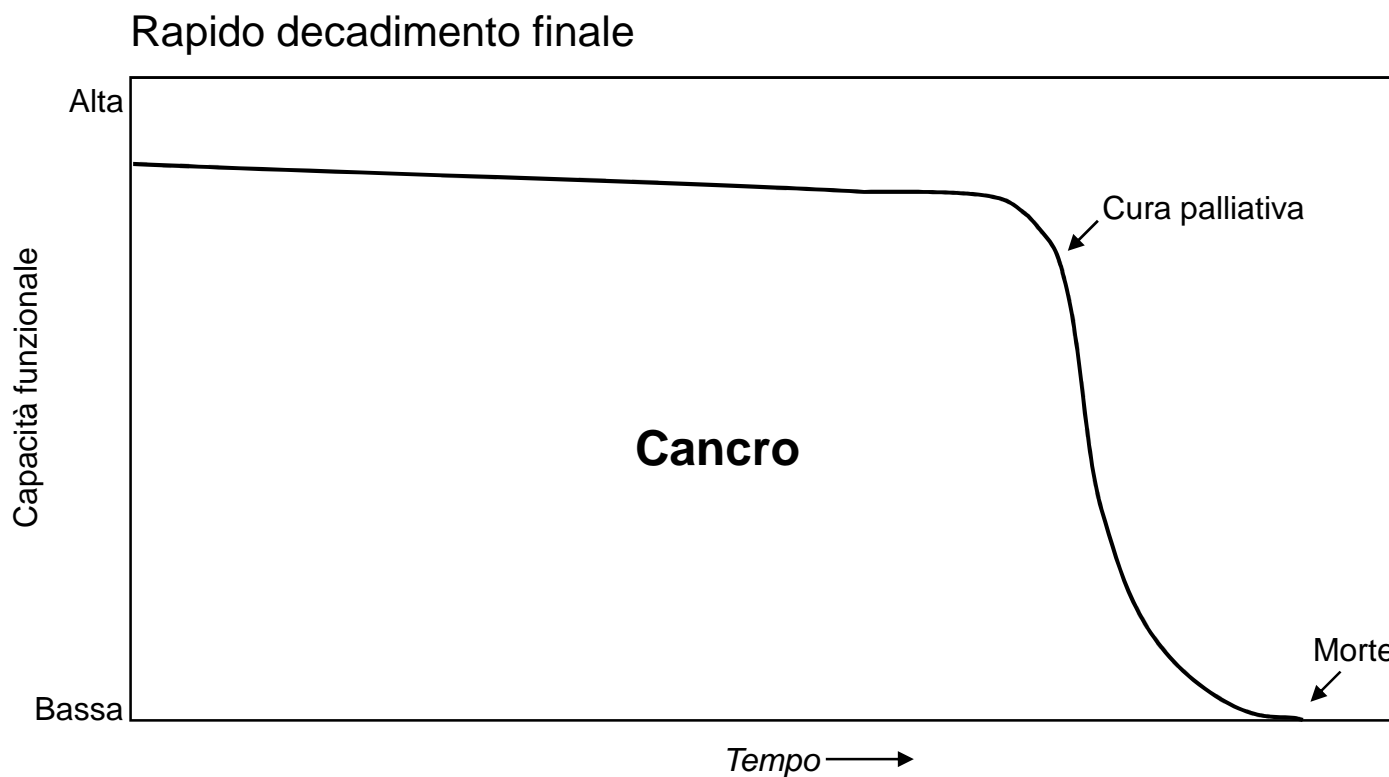
Ridotta capacità funzionale con episodi di aggravamento



*Lunney JR et al, JAGS 2002; 50: 1108-12*



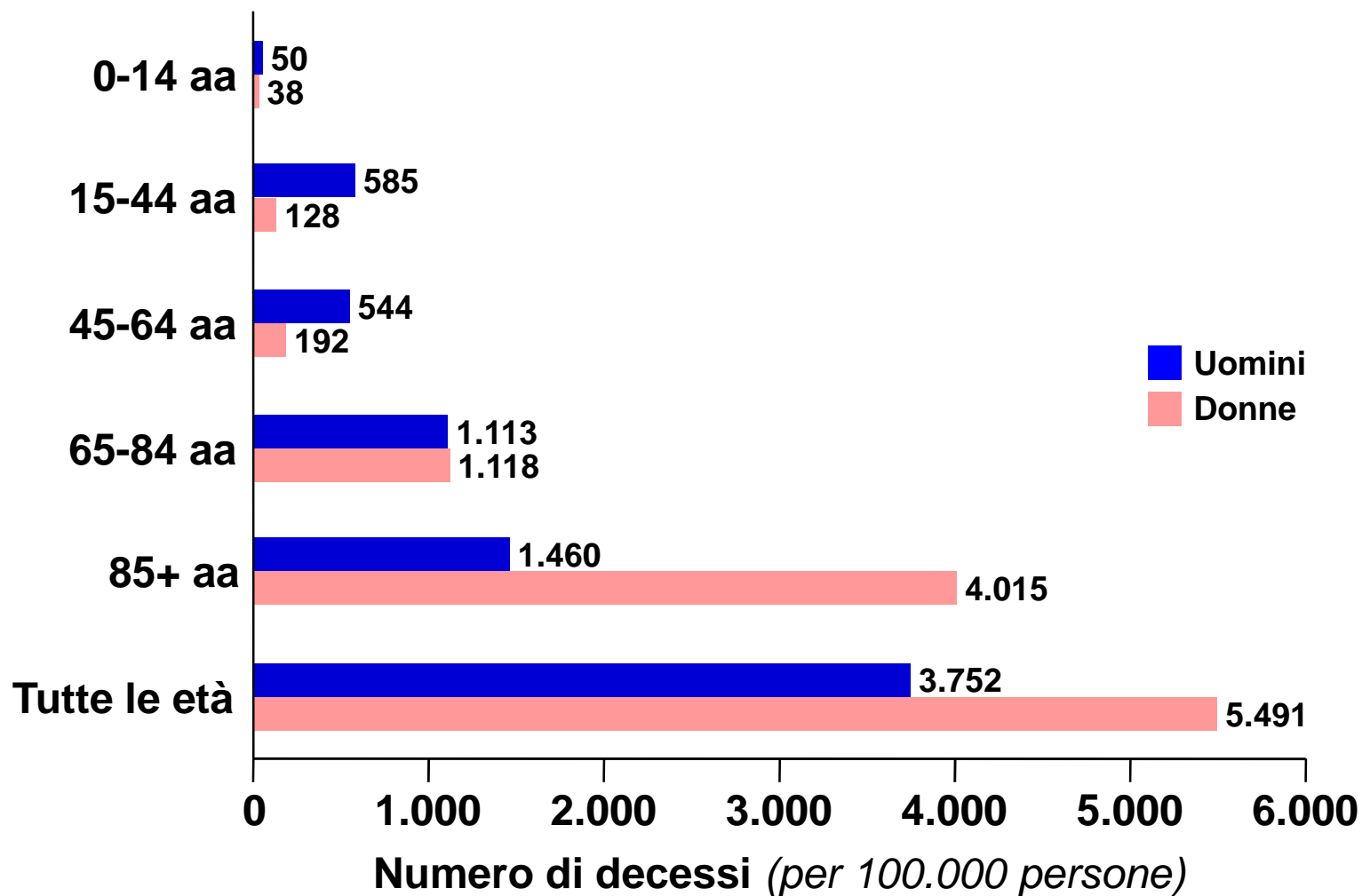
## Traiettorie delle malattie cronicoprogressive



*Lunney JR et al, JAGS 2002; 50: 1108-12*



## Mortalità per “Sintomi, segni, risultati anomali e cause mal definite”- Italia 2006 (R00-R99 ICD10)



*Relazione sullo Stato Sanitario del Paese 2007-2008*  
*Ministero del Lavoro, della Salute e delle Politiche Sociali*



## Rates of Euthanasia or Assisted Suicide in 2005 According to Characteristics of Patients

Total deaths	no	136,402
Euthanasia	no	2,297 (1.7%)
Assisted suicide	no	113 (0.1%)

### Age

0-64 yr	3.5%
65-79 yr	2.1%
≥ 80 yr	0.8%

*van der Heide A et al. End-of-Life Practices in the Netherlands under the Euthanasia Act. N Engl J Med 2007; 356: 1957-65*

