

## Geriatric Cancer Prevention & Care

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### Editorial

The National Institute on Aging has characterized the aging of our society as a “silver tsunami” [1]. With the aging of the population one may expect an increased incidence and prevalence of aging-related diseases, of which cancer is one of the most common and relevant. More than half of patients newly diagnosed with cancer have  $\geq 65$  years (1) by 2030, the elderly will bear 70% of all cancer diagnoses [2]. These demographic shifts in our society are thus expected to exert a substantial stressor in health care system. Although that, very few data are available to guide treatment choices in this population. Shifting cancer demographics and age-, race-, or ethnicity-associated genetic, molecular, cellular, and physiologic effects influence treatment patterns and outcomes, potentially resulting in increased likelihood of under or overtreatment, which can influence both risk of treatment toxicity and survival [3]. Thus the oncological elderly scenario is a challenge to physicians and health system in terms of assessment, management and treatment.

Aging is an ongoing process that leads to the loss of functional reserve of multiple organ systems, increased susceptibility to stress and disease, it is associated with increased prevalence of chronic disease, and, eventually, functional dependence. There is an associated increase of prevalence of chronic disease and deterioration of organ function, and, often a loss of functional independence. Appropriate management of these older individuals with cancer is increasingly thought to require consideration of their comorbidities and geriatric concerns. Deaths attributable to cancer and comorbidity appeared inter-related, with cancer specific deaths dominating for more lethal cancers and comorbid deaths dominating for the remaining majority [4].

Aging is associated with a progressive decrease in lung performance, decline of renal function and cardiovascular changes that interact with specific patho-physiological mechanisms that underlie a disease. Under normal conditions, the physiologic changes, age related, do not produce any problems for the elderly patient, but when the patient is subjected to the stress of oncological treatment, there may be inadequate functional reserve, in that condition, the physiological changes in the body composition, may alter the pharmacodynamic and pharmacokinetic response to treatment in elderly, and can increase the number of adverse drugs reactions (ADRs) [5].

Finally, the challenge in the treatment of elderly oncological patients is to evaluate and to quantify if the cancer therapy could improve quality of life or extend survival, and to assess if the benefits of the treatment are superior to the risk treatment related, by an holistic, multidimensional and individualized approach. It has been shown how the “fit” elderly who receive cancer treatment appears to receive benefits that are similar to those in younger population, but in front of “fit” elderly, it is possible to find “frail” elderly, that the treatment can be more dangerous than beneficial [6.] Thus the Comprehensive Geriatric Assessment (CGA), full or short form, is fundamental in the decision management plan of elderly patients with cancer, it has been shown to improve overall survival and to decrease the institutionalization risk. CGA includes assessment tools to predict the functional age of elderly patients with cancer and components that have been associated with the type of cancer treatment and survival, it identified deficits and problems that may impact morbidity and mortality [7].

In this scenario resources needed for cancer prevention, screening, detection and treatment will need to increase concomitantly at aging society, optimal cancer care should be defined and Geriatric-Oncology represent the future of both Geriatric and Oncological sciences.

### References

1. Fried LP, Hall WJ (2008) Editorial: Leading on behalf of an aging society. *J Am Geriatr Soc* 56: 1791-1795.
2. Smith BD, Smith GL, Hurria A, Hortobagyi GN, Buchholz TA (2009) Future of cancer incidence in the United States: burdens upon an aging, changing nation. *J Clin Oncol* 27: 2758-2765.
3. Erikson C, Salsberg E, Forte G, Bruinooge S, Goldstein M (2007) Future supply and demand for oncologists : challenges to assuring access to oncology services. *J Oncol Pract* 3: 79-86.
4. Kendal WS (2008) Dying with cancer: the influence of age, comorbidity, and cancer site. *Cancer* 112: 1354-1362.
5. Colloca G, Santoro M, Gambassi G (2010) Age-related physiologic changes and perioperative management of elderly patients. *Surg Oncol* 19: 124-130.
6. Balducci L, Colloca G, Cesari M, Gambassi G (2010) Assessment and treatment of elderly patients with cancer. *Surg Oncol* 19: 117-123.
7. Wildiers H, Heeren P, Puts M, Topinkova E, Janssen-Heijnen ML, et al. (2014) International Society of Geriatric Oncology Consensus on Geriatric Assessment in Older Patients With Cancer. *J Clin Oncol* .