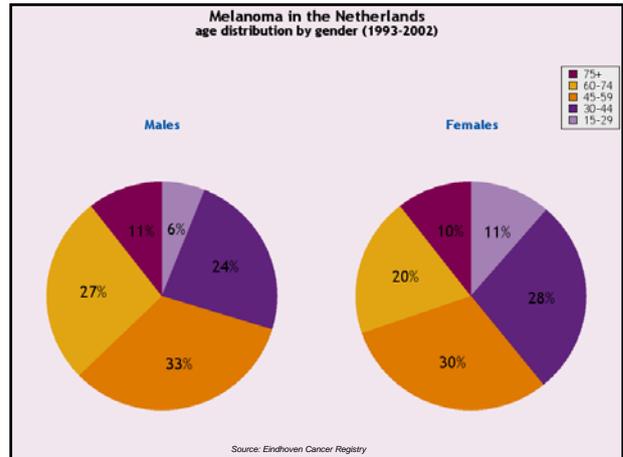


Epidemiology of melanoma in older patients

Maryska Janssen-Heijnen

Elderly melanoma patients

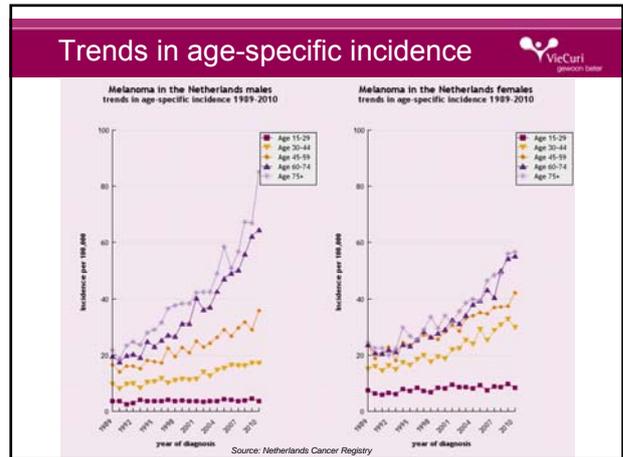


Literature:

Elderly with melanoma compared to younger patients:

- Incidence up to 10-fold higher
- Greater increase in incidence and mortality over time
- More rapid increase among males → reverse male-female ratio
- Increase in incidence of thick melanomas (>4.0 mm); only among elderly males
- Poorer survival

(Jemal et al JNCI 2001; Hegde et al Clin Dermatol; de Vries et al Nat Rev Clin Oncol 2010)



Risk factor: sun bathing

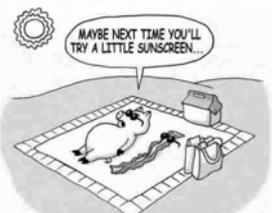




Sun protection campaigns:



Stabilization of incidence in younger age groups





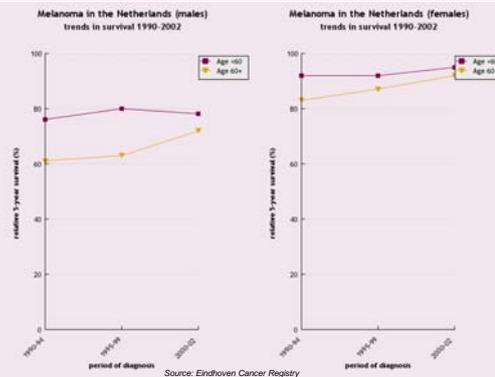
However,



campaigns have not reversed the early-life sun exposure in older age groups



Poorer survival for elderly



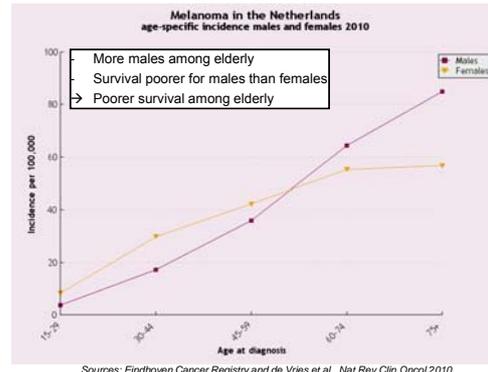
Elderly have a poorer survival



Possible explanations:

- More males among elderly than among younger patients
- Other subtype distribution
- More late diagnosis
- Weaker immune system
- More serious comorbidity and decreased organ functions
- Less aggressive treatment

More males among elderly



Other subtype distribution



Elderly present with more nodular melanomas and lentigo maligna melanomas:

- Survival of nodular melanoma is significantly poorer (De Vries et al Ann Oncol 2007; Hollestein et al Ann Oncol 2011)
- Appear more frequently in hard-to-see anatomical sites (head&neck, scalp and back)

More late diagnosis



- Elderly present with more thick melanomas (>4.0 mm):
 - Males: 20% (age 65+) vs 8% (age <65)
 - Females: 16% (age 65+) vs 5% (age <65)
- Increase in thick melanomas over time among elderly males (Jemal et al JNCI 2001; Kruijff et al Br J Cancer 2012; Chao et al Ann Surg Oncol 2003)
- Less sentinel node metastasis at a given thickness: Possibly explained by a weaker immune system (Hegde et al Clin Dermatol 2009; Lasithiotakis et al Melanoma Res 2010)

Possible reasons for late diagnosis



Elderly:

- Increased proportion of nodular melanomas, which lack early melanoma signs and symptoms
- Less attentive to changes on their skin
- Perform self-examination less often
- More melanomas in hard-to-see anatomical sites
- Deteriorating vision
- Loss of partner
- Development of benign skin lesions → lower consciousness of melanoma
- Participate less often in skin cancer screening programs

Weaker immune system

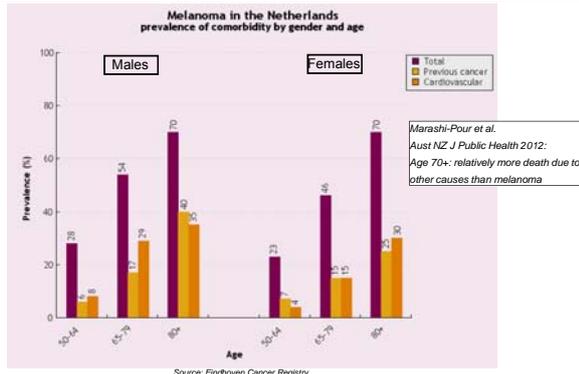


Melanoma is a highly immunogenic tumour

Weaker immune system in elderly:

- Reduces a patient's reaction to infections and cancer
- May reduce the sensitivity of sentinel node biopsy (Azimi et al JCO 2012)
- May lower the response to immune-based treatment

More comorbidity



Less aggressive treatment



- More complex treatment due to comorbidity/polypharmacy/reduced functional reserves and weaker immune system
- Surgery:
Generally a minor procedure that can be performed under local anesthesia
Elderly have more lentigo maligna melanomas that tend to arise more often on functionally and aesthetically important areas (e.g. around eyes, nose, mouth) → difficult surgery (Lasithiotakis et al Melanoma Res 2010)
- Sentinel node biopsy and sentinel node dissection:
Fear for lymphedema, nerve damage and wound complications, although there is no evidence for a higher complication rate in elderly (Lee et al J Clin Oncol 2004)
- Adjuvant therapy in melanoma (e.g. interferon-α):
Potential benefit should outweigh the expected toxic effects
- Treatment of metastasized disease:
Toxicity and costs are high
Adverse events among trial patients are associated with poor performance status (Jatoi et al J Geriatr Oncol 2012)

Summary and conclusions



Elderly:

- Strong increase in incidence and mortality of melanoma
- More often late diagnosis
- Poorer prognosis
- Currently, early detection is best chance of influencing behaviour
- Perhaps future screening campaigns should focus on elderly (especially men)
- Safety and effects of treatments need to be further investigated in elderly, with a special emphasis on Quality-of-Life