



# Assessing the cancer with the most significant increasing trends in Crete: Melanoma 1992 to 2013

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## Purpose

➤ **Sun exposure** is an established cause of malignant melanoma and Greece is among the countries with the sunniest days per year.

**Overall aim:** to report the **incidence rates** of malignant melanoma of skin (MM) in Crete from the period 1992 to 2013 and describe the **demographic** and **clinical characteristics** of patients diagnosed.

## Methods

- ❖ Data on MM: **CRC's database** (ICD-10 O: C43).
- ❖ **Age - Standardized Incidence Rates (ASIR)** and **Age - specific incidence rates (AsIR)** were estimated.
- ❖ Graphs were exported for overall rates, as well as by grouping for multiple-morbidities, stage at diagnosis and anatomical site (information available for **85% of the data**).

## Results - I

❑ Rates varied from **2.9 to 15.9/100,000/year** for both genders. ASIR increased rapidly among females (**ASIR<sub>1992-2013</sub>=2.1-17.3/100,000**).

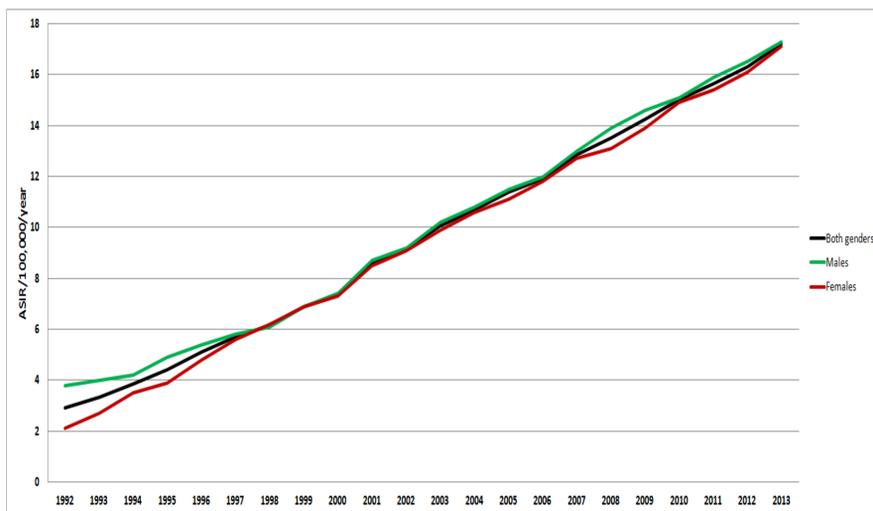


Figure: ASIR from 1992 to 2013 per gender

- ❑ ASIRs in males **increased from the age of 20-24 years** (ASIR=14.6/100,000/year) **reaching a peak at the age of 90 years** (ASIR=84.1/100,000/year).
- ❑ **Males present higher rates** especially in the **age-groups of 60-90 years** (ASIR-males/females ratio=120%).
- ❑ **Increase in females** is presented **at a younger age** (15-20 years) and is steadily increasing until the age of 50-55 years (ASIR-males/females ratio= 85%).

## Results - II

- ❑ Most MM are diagnosed at **stage I (59%)** and II (29.5%). The 44.1% of MM in males occur in the **trunk**, while in females the vast proportion is found in the **legs** (37.1%).
- ❑ After the MM diagnosis, increased risk of secondary cancer was observed for **breast, prostate, and non-Hodgkin lymphoma** (RR=2.2; 95%CI=1.528-2.847).

## Discussion

- Melanoma rates **increased** the past decades in Greece, similarly to many European countries.
- **Reducing sun exposure** and receiving **sun protection measurements** is an important melanoma prevention strategy.
- The **differences** in males/females rates and the age differences observed in the onset, are probably attributed to behaviors related to **cultural norms**.
- Patients that have been diagnosed with melanoma should be extra **alert** due to the increased risk of developing **secondary cancer**.

## Conclusions

There is an **increase** in the incidence of melanoma in Crete during the last 20 years. MM is more **frequent in males**, but females presented more rapidly increasing trends.

## Future research

- ✓ Community education programs focusing on **sun smart strategies**.
- ✓ Promotion of screening and **early detection** of MM.
- ✓ Link data of the CRC with the **hospital records** to further study the **individual-level risk factors** and exposures (including clinical characteristics).
- ✓ **Field study** among municipalities with lower and higher risk in order to reveal **variations on potential risk factors** (focus on occupational and lifestyle factors).
- ✓ Explore the **role of the GPs** in rural municipalities towards **effective screening and prevention** (behavioral change interventions in high risk areas).

## Affiliations:

1. Cancer Registry of Crete



Figure: CRC's team. Photos are placed according to authors order.



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