

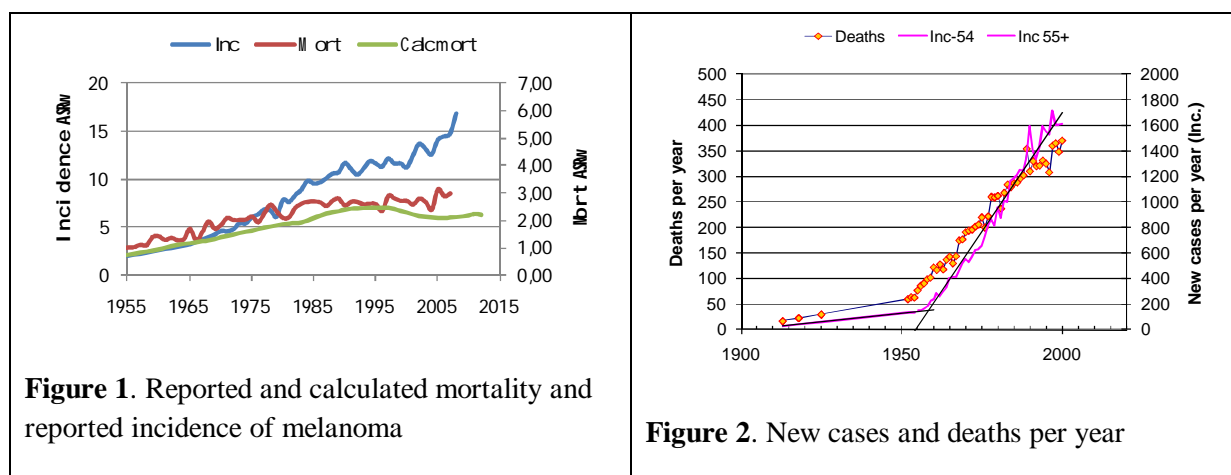
## An inconvenient graph

The official explanation to the steadily increasing rates of malignant melanoma in Western countries since the mid 20<sup>th</sup> century is that we are spending an ever increasing fraction of our lives at the sea shore or in artificial sun tanning equipments.

This means that the body gets so many UV-induced skin damages that the natural repair mechanisms of the body eventually has no chance to keep up with those damages. Thus, the net risk of getting melanoma will increase at the same pace we expand our sun tanning habits.

Melanoma incidence was noticed to increase quite suddenly from about 1960 onwards, presumably as a response to an even faster increase in population exposure to UV radiation from the Sun. It has been pointed out in many papers that melanoma can take decades to develop. Skin damages attained as a young child might not develop into cancer until the age of 40 or 50 years. So, when did this sudden population wide sun tanning exposure really take place? Was it in 1929?

Figure 1 below shows the development of incidence and mortality among Swedish men during the 20<sup>th</sup> century. Included is also a calculated mortality response curve based on survival statistics of melanoma patients.



It appears that the mortality started to increase even before the incidence of new cases increased, see Fig. 2. This should be expected if the repair efficiency suddenly becomes disturbed. Already weak cancer patients should be the first to respond to a weakened immune system by increasing mortality. See ref 1-2.

It cannot, however, be logically explained by the theory of increasing UV exposure. So, this graph is truly very inconvenient both for the sun cream industry that wants to keep focus on the Sun, and for the radio industry, that does not want us to focus on the immune disturbing radiation that constantly became broadcasted from 1955 and onwards.

## References

Hallberg Ö, Johansson O. Melanoma incidence and frequency modulation (FM) broadcasting. Arch Environ Health (2002); 57: 32-40

Hallberg Ö. and Johansson O. Malignant Melanoma of Skin - Not a Sunshine Story!, Med Sci Monit, (2004); 10(7): CR336-340