

## The suppressive effect of organism senescence on cancers

Alvaro Macieira-Coelho

French National Institute of Health (INSERM), France

Most of the scientific literature reports that aging favors the development of cancers. However, more than half of the cancers become clinically manifest during the second half of the human life span and their frequency increases with age, but their natural history starts way back at earlier ages. The incidence of each type of cancer is related inter alia to the developmental stages of the human life span. There are cancers characteristic of the early and late post-natal developmental stages, others of maturity, others of the stage of sexual involution, and finally during human senescence the incidence declines for all cancers. In general the progression of cancers is also slower in the old. There are several possible explanations for this decline, which will be described. The idea that aging favors the development of cancers is so ingrained that even when the data point against this view, investigators do not accept it. The evolution of neoplastic disease is the result of pre- and postnatal aggressions suffered by the organism, individual susceptibility, and developmental events that evolve continuously from beginning to the end of the human life span. One has to stop accepting the dogma that aging favors neoplastic growth and ask why tumors are characteristic of the different developmental periods and why the incidence declines during senescence. These questions should be solved before the origins of cancers can be understood.

## **Biography**

Alvaro Macieira-Coelho completed an MD at the University of Lisbon, Portugal, was an intern at the University Hospital, and completed a PhD at the University of Uppsala, Sweden. He was appointed Head of the Department of Cell Pathology, Cancer Institute, Villejuif, France and Research Director at the French National Institute of Health. He has authored 150 peer-reviewed articles and published nine books. Awards: Fritz Verzar prize, University of Vienna; Doctor Honoris Causa, University of Linköping; Johanan of International visiting Professor, Mario Negri Institute, Milan; Seeds of Science Career prize, Lisbon.

macieiracoelho@gmail.com