



## Title: Extracutaneous Melanomas in Sun Shielded Body Sites

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### *Abstract*

Primary malignant melanomas (MMs) of the mucosal membranes have attracted growing attention because of their poor prognosis and the evidence that MM genesis is complicated and involves more factors than UV radiation. The Swedish National Cancer Registry for the years 1960- 2004 cited 46402 patients with a primary cutaneous MM, versus 4432 with an extracutaneous MM. However, this numerical difference between cutaneous and extracutaneous MMs in absolute numbers is deceptive. The spatial density (numbers per square unit) of areas that extracutaneous MMs occupy exceeds the average density of that for cutaneous MMs and is even comparable to the density of chronically sun-exposed facial skin! We are conducting systematic epidemiological, clinical, pathological, molecular genetic, virologic, therapeutic, and prognostic studies of archive materials from patients with MMs cited above. The mucosal MMs were often amelanotic and misinterpreted as polyps. They differed histologically from cutaneous MMs, e.g. in predominant histogenetic phenotypes. We and others have found mutations of the Nras gene significantly more often in cutaneous than in mucosal MMs but no significant difference in mutations of the TP53 gene or in p53p expression. Mutations in the BRAF gene have been reported in cutaneous but not mucosal MMs, whereas cKIT expression and KIT gene mutations have been found in mucosal but not regularly in cutaneous MMs. Based on our examination of viral DNA, human papilloma-, herpes-, and polyoma-viruses are unlikely to be a major cause of MMs. The prognosis of patients with mucosal MMs is dismal in spite of available therapeutic strategies. Continuing efforts to find non-UV light associated etiologic factors are urgent as is identifying or developing therapy.

### *Biography*

Dr. Boel Ragnarsson-Olding received her basic training at the Medical School of the Karolinska Institute in Stockholm, Sweden. After training in gynecology and gynecological oncology, she joined the staff of the Department of Oncology (Radiumhemmet) at the Karolinska University Hospital in 1986. As a specialist in general oncology, she has served at the Melanoma Unit since 1987, where she is currently Chief Physician. She has also been a coordinator for training of students in oncology. Dr. Ragnarsson-Olding has focused her research on extracutaneous melanomas (MMs) since 1989, and pioneered this field in Scandinavia at a time when this research attracted few investigators worldwide. She was trained in molecular biology at the Cancer Center Karolinska and defended her doctoral thesis Malignant Melanoma of the Vulva in 1999 and attained her PhD degree. Dr. Ragnarsson-Olding independently and with colleagues, postdoctoral fellows and other specialists investigates national series of extracutaneous MMs with the ultimate goal of improving therapeutic strategies and identifying non-UV-associated factors in the pathogenesis of MM. The investigations have been reported in international journals and presented at international congresses, e.g., the 17<sup>th</sup> International Pigment Cell Conference (Japan 2000) and the 6<sup>th</sup> World Congress on Melanoma (Canada 2005), by invitation.