

Common skin tumors

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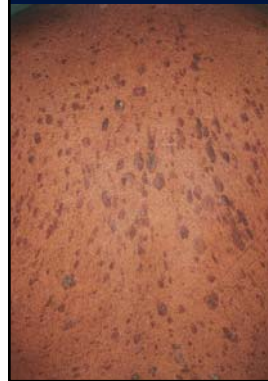
Topic

- Benign epidermal tumors
- Skin cyst and adnexal neoplasms
- Other common skin tumor
- Common skin malignancy

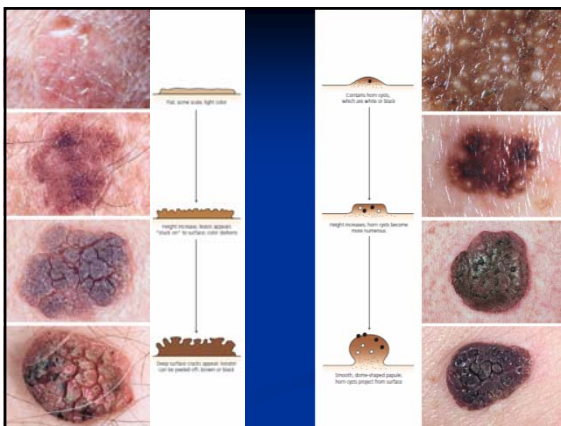
Benign Epidermal Tumors

- Seborrheic keratosis
 - Dermatitis papulosa nigra
 - Stucco keratosis
- Inverted follicular keratosis
- Acrokeratosis verruciformis
- Clear cell acanthoma
- Large cell acanthoma
- Porokeratosis
- Epidermal nevus
 - Inflammatory linear verrucous epidermal nevus
- Nevus comedonicus
- Epidermolytic acanthoma
- Flegel's disease
- Cutaneous horn
- Lichenoid keratosis
- Acanthosis nigricans
- Confluent and reticulated papillomatosis
- Warty dyskeratoma

Seborrheic keratoses

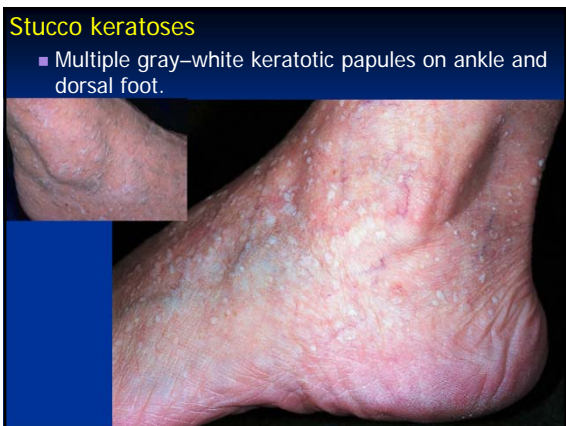


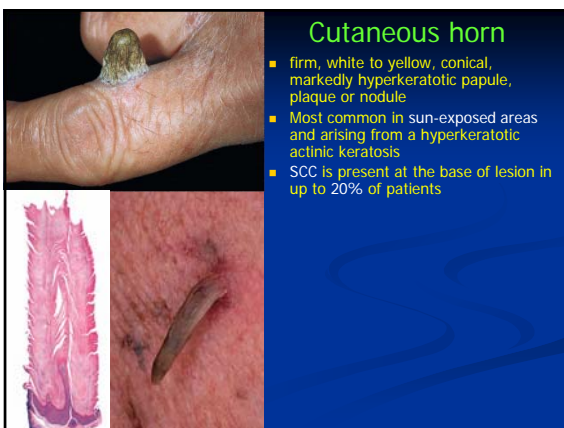
- very common brown macules, papules, plaques, or polypoid lesions
- over 40 y.
- increase number with age
- verrucous or 'stuck-on' the skin
- predilection for face, neck, and trunk
- occur anywhere except mucous membranes, palms, or soles
- sign of Leser-Trélat



Clinicopathologic Variants

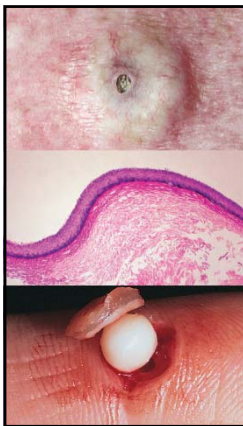
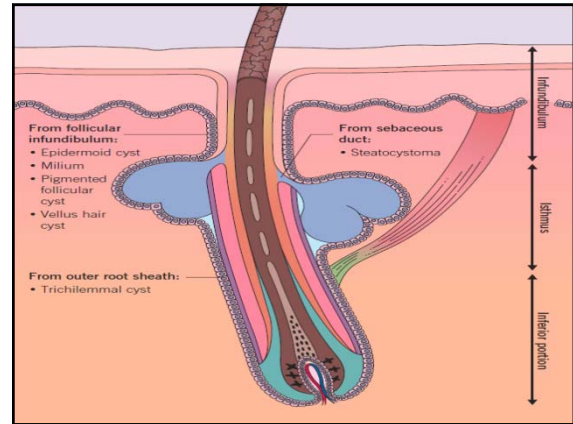
- Common Seborrheic Keratosis
- Dermatitis Papulosa Nigra
- Skin Tags
- Irritated Seborrheic Keratosis
- Stucco Keratosis
- Reticulated Seborrheic Keratosis
- Clonal Seborrheic Keratoses
- Seborrheic Keratosis With Squamous Atypia
- Melanoacanthoma
- Leser-Trélat sign





Cutaneous cysts lining

- stratified squamous epithelium
 - Epidermoid cyst
 - Milium
 - Trichilemmal cyst
 - Vellus hair cyst
 - Steatocystoma
 - Ear Pit / Preauricular cyst
- non-stratified squamous epithelium
 - Hidrocystoma
- no epithelium
 - Mucocele
 - Digital mucous cyst
 - Ganglion



Epidermoid (Epithelial) cyst

- sebaceous cyst is a misnomer
- most common cutaneous cysts
- occur anywhere but common on face and upper trunk
- young and middle-aged adults
- dermal nodules with central punctum
- Multiple cysts may associated with Gardner's syndrome (familial adenomatous polyposis)



Epidermoid (Epithelial) cyst

Inflamed epidermal cyst



Milia

- small epidermoid cysts
- 1-2 mm white to yellow subepidermal papules
- 40-50% of infants will have milia on face, will resolve spontaneously in the first 1 month
- may secondary from blistering processes or superficial ulceration from trauma or resurfacing, topical corticosteroid-induced atrophy





Milia

Trichilemmal (pilar) cyst

- 95% located on scalp
- Clinical = epidermal cyst

Vellus Hair Cysts

- numerous tiny dome-shaped papules, ranging from skin-colored to darkly pigmented on trunk
- most commonly located on the trunk
- multiple may be inherited in AD

Steatocystoma simplex/multiplex

- *sebaceous cyst*
- asymptomatic cysts in the dermis that drain oily fluid if punctured
- persist indefinitely
- chest, axillae, and groin
- Multiplex = autosomal dominant

Steatocystoma multiplex

Ear Pit / Preauricular cyst

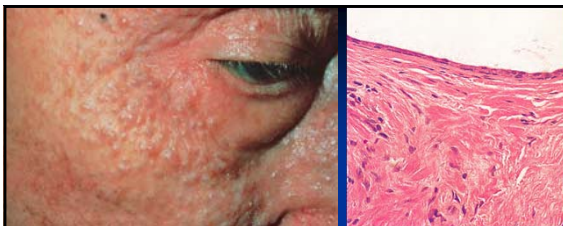
- congenital defects
- 0.5–1% of normal population
- may be transmitted in AD
- usually unilateral and right-sided

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Apocrine hidrocystoma

- 1-3 mm (face, scalp)
- translucent, skin-colored to bluish cysts on face
- adenomas of apocrine sweat gland coils



Eccrine hidrocystoma

- solitary or multiple*
- can enlarge with heat exposure or during the summer and regress with cooler temperatures
- cystic dilation of eccrine ducts due to retention of eccrine secretions

Cutaneous cysts lining

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 - Steatocystoma
 - Ear Pit / Preauricular cyst
- non-stratified squamous epithelium
 - Hidrocystoma (apocrine/eccrine)
- no epithelium
 - Mucocele
 - Digital mucous cyst
 - Pseudocyst of the auricle
 - Ganglion

Mucocele

- Common - lower labial mucosa
- dome-shaped, bluish, translucent papules or nodules
- disruption of ducts of minor salivary glands



Digital mucous cyst

- dorsal surface of finger distal phalanx
- depressed nail deformity



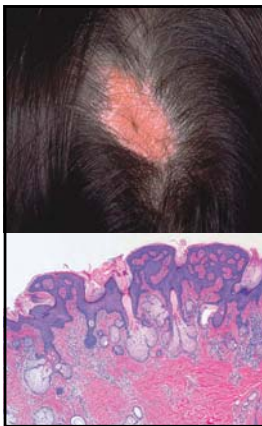


Pseudocyst of the auricle

- scaphoid fossa of ear in middle-aged men
- usually unilateral
- painless swelling
- ? chronic trauma

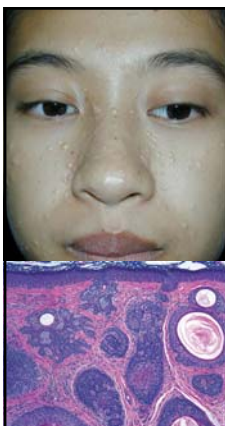
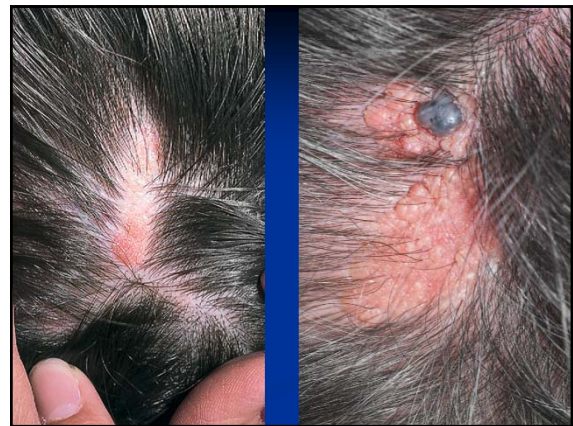
Adnexal Neoplasms

- Follicular lineage
 - Nevus sebaceus
 - Trichoepithelioma
 - Trichofolliculoma
 - Pilomatricoma
- sebaceous differentiation
 - Sebaceous gland hyperplasia
 - Fordyce's disease
- apocrine differentiation
 - Syringoma
- eccrine differentiation
 - Eccrine nevus



Nevus sebaceus

- papillomatous yellow-orange linear plaque on the scalp or face
- associated with alopecia
- sebaceous glands are most prominent during early infancy and post-puberty
- scalp or face



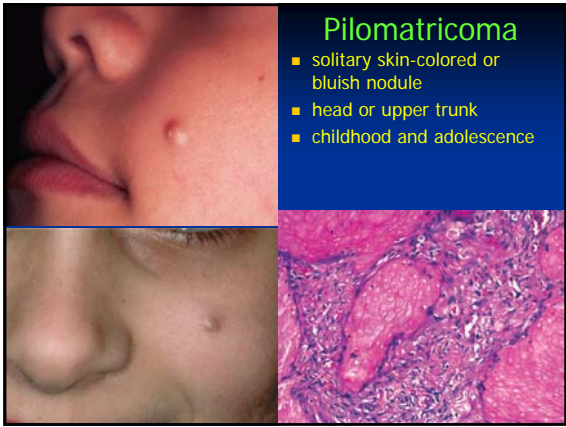
Trichoepithelioma

- skin-colored papule or small nodule
- face or upper trunk, lesions have a special predilection for the nose



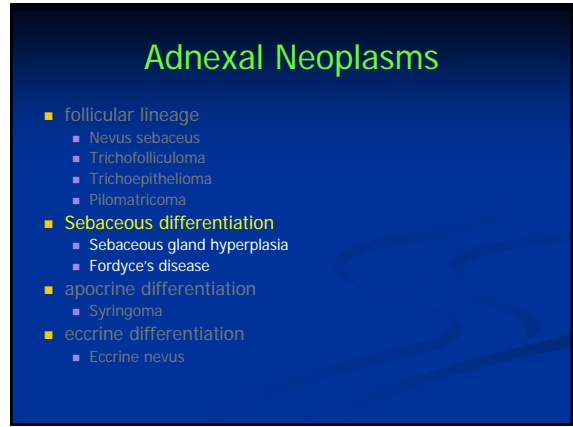
Trichofolliculoma

- a skin-colored papule with a dilated central pore
- no treatment is needed



Pilomatricoma

- solitary skin-colored or bluish nodule
- head or upper trunk
- childhood and adolescence



Adnexal Neoplasms

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Sebaceous gland hyperplasia

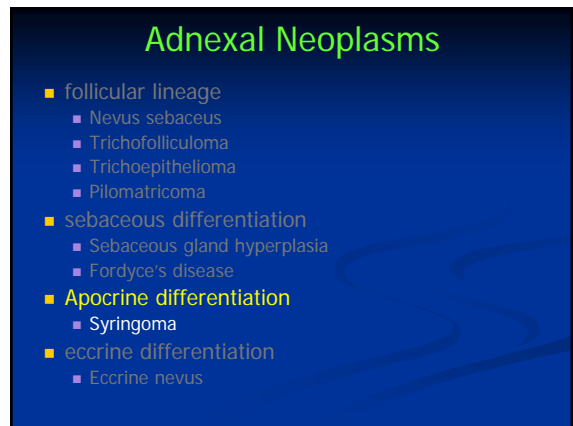
- yellowish, occasionally telangiectatic papules
- usually on central or upper face



Sebaceous gland hyperplasia



ectopic sebaceous glands (Fordyce's granules/spot)



Adnexal Neoplasms

- follicular lineage
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- Apocrine differentiation
 - Syringoma
- eccrine differentiation
 - Eccrine nevus

Syringoma

- small firm skin-color papules
- periorbital area (eyelids)

Vascular Neoplasms

- Infantile hemangioma
- Pyogenic granuloma
- Cherry angioma

Infantile Hemangioma

- most common benign tumors of childhood
- more common in females (2-5:1) and in premature
- rapid growth (proliferate phase) within first 5 months
- heal with telangiectasias, atrophy, fibro-fatty residuum, scarring


01/11/00 (2 mo.) 16/01/01 (4 mo.)

11/12/01 (1 y. 3 mo.) 22/04/03 (2 y. 6 mo.)

Cherry angiomas (senile angiomas, de Morgan spots)

- Bright red, dome-shaped to polypoid papules 1-6 mm.
- during adult life
- on trunk and upper extremities


Pyogenic Granuloma (Lobular capillary hemangioma)



- Reactive vascular hyperplasia
- most common in children and young adults
- rapidly growing, friable, red papule or polyp of skin or mucosa
- frequently ulcerates
- not involute spontaneously
- Electrocautery or CO₂ laser

Fibrous and Fibrohistiocytic Proliferations of the Skin

- Cutaneous angiofibroma
 - Fibrous papule
 - Pearly penile papule
- Acral fibrokeratoma
- Dermatofibroma



Dermatofibroma

Hyperpigmented firm papule 0.5-2 cm.

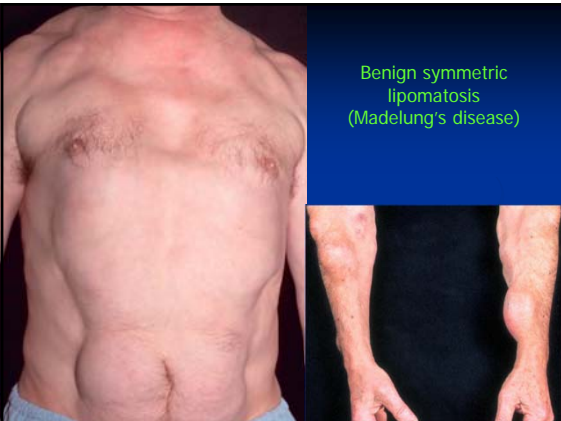


Lipoma

- Lipoma : most common soft-tissue tumor
- Asymptomatic, soft, subcutaneous nodule arising at any site relative sparing of the head, hands, and feet
- Multiple lipomas are seen in
 - Madelung's disease
 - Gardner syndrome
 - Proteus syndrome
 - familial multiple lipomatosis
 - adiposis dolorosa
 - Bannayan-Riley-Ruvalcaba syndrome




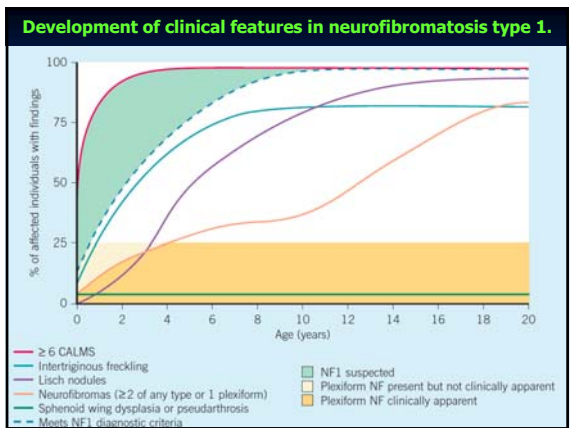
Benign symmetric lipomatosis (Madelung's disease)



Neurofibromatosis

- Neurofibromas (60-90%)
 - Skin-colored to tan-violet papule or nodule
 - May be pedunculated or have the "buttonhole" sign
 - Predilection for the trunk and head
- Café-au-lait macules (>90%)
- Axillary and/or inguinal freckling (~80%)
- Plexiform neurofibroma (25%)





Becker's nevus

- Unilateral, hyperpigmented and often hypertrichotic patch or slightly elevated plaque
- Usually on shoulder of male patients
- Onset during adolescence

Congenital nevomelanocytic nevus

- present at birth
- Small < 1.5 cm, medium, giant > 20cm
- Risk of melanoma ?

Giant congenital melanocytic nevus

Acquired melanocytic nevi

- **Junctional**
 - dark brown macule with lighter brown rim.
- **Compound**
 - light to medium brown papule.
- **Intradermal**
 - soft light pink papule.

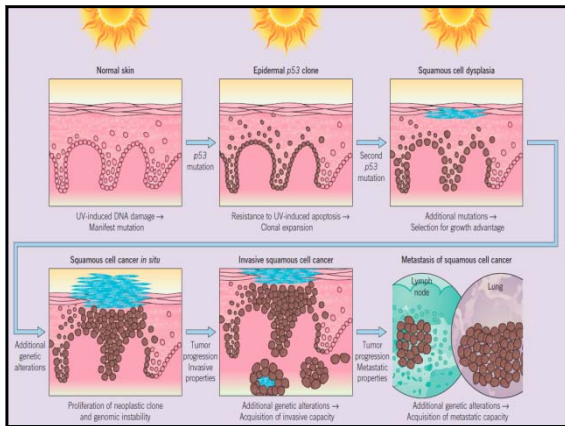
Precancerous lesions (Squamous Cell Carcinoma in Situ)

- Bowen's disease
- Leukoplakia
- Actinic keratosis
- Erythroplasia of Queyrat



มะเร็งผิวหนัง

- Non-melanoma skin cancers (NMSC)
 - Squamous cell carcinoma
 - Basal cell carcinoma
- Malignant melanoma



Risk factors for development of SCC and BCC

	SCC	BCC
ENVIRONMENTAL EXPOSURES		
Cumulative/occupational sun exposure	+	
Intermittent/recreational sun exposure		+
Other exposures to UV light (PUVA, tanning beds)	+	+
Ionizing radiation	+	+
Chemicals (arsenic)	+	(+)
HPV	+	
Cigarette smoking	+	
PIGMENTARY PHENOTYPE		
Fair skin	+	+
Always burns, never tans	+	+
Freckling	+	+
Red hair	+	+

Risk factors for development of SCC and BCC

	SCC	BCC
GENETIC SYNDROMES		
Xeroderma pigmentosum	+	+
Oculocutaneous albinism	+	(+)
Epidermodysplasia verruciformis	+	
Dystrophic epidermolysis bullosa (primarily recessive)	+	
Ferguson-Smith syndrome	+	
Muir-Torre syndrome	+*	(+)*
Nevoid basal cell carcinoma syndrome		+
Bazex and Rombo syndromes		+
PREDISPOSING CLINICAL SETTINGS		
Chronic non-healing wounds	+	
Longstanding discoid lupus erythematosus, lichen planus (erosive) or lichen sclerosus	+	
Porokeratosis (especially linear)	+	
Nevus sebaceus		+ [†]
IMMUNOSUPPRESSION		
Organ transplantation	+	(-)
Other (e.g. chronic lymphocytic leukemia treated with fludarabine, AIDS patients with HPV infection)	+	

Risk factors for recurrence

	Low risk	High risk
CLINICAL RISK FACTORS		
Location/size	Area L <20 mm	Area L ≥20 mm
	Area M <10 mm	Area M ≥10 mm
	Area H <6 mm	Area H ≥6 mm
Borders	Well defined	Poorly defined
Primary vs recurrent	Primary	Recurrent
Tumor at site of prior radiation therapy	Negative	Positive
Tumor at site of chronic inflammatory process (SCC only)	Negative	Positive
Rapidly growing tumor (SCC only)	Negative	Positive
Neurologic symptoms: pain, paresthesia, paralysis (SCC only)	Negative	Positive
Immunosuppression	Negative	Positive

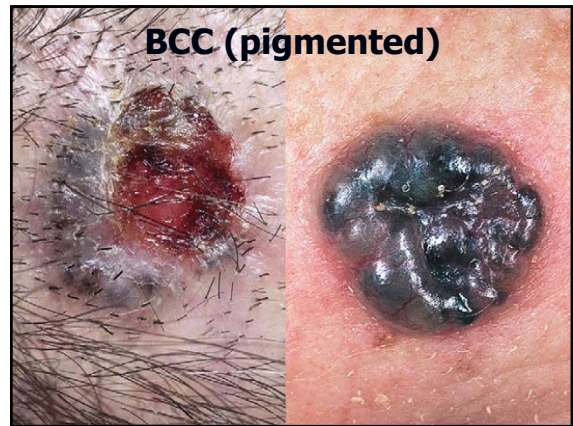
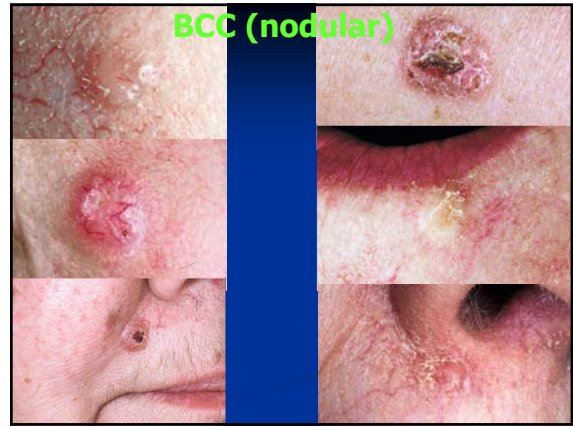
- **Area L** (low risk) : trunk, extremities.
- **Area M** (middle risk) : cheeks forehead, neck, scalp.
- **Area H** (high risk) : "mask areas" of face (central face, eyelids, eyebrows, periorbital, nose, lips, chin, mandible, preauricular and postauricular skin/sulci, ear "temple"), genitalia, hands and feet.

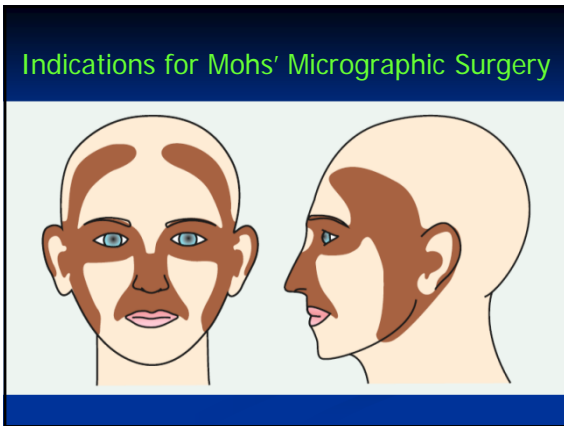
Risk factors for recurrence

	Low risk	High risk
PATHOLOGIC RISK FACTORS		
Perineural involvement	Negative	Positive
Subtype (BCC only)	Nodular, superficial	Micronodular, infiltrating, sclerosing
Degree of differentiation (SCC only)	Well differentiated	Moderately or poorly differentiated
Desmoplasia (SCC only)	Negative	Positive
Adenoid, adenosquamous or desmoplastic (SCC only)	Negative	Positive
Tumor thickness (SCC only)	<2 mm	≥ 2 mm (see text)

Basal cell carcinoma (BCC) Squamous cell carcinoma (SCC)

Characteristic	Lightly pigmented skin color	Darkly pigmented skin color
NMSC incidence (per 100,000)	230	3.4
BCC:SCC ratio	4 : 1	1 : 1.1
BCC male:female ratio	1.5 : 1	1.3 : 1
SCC male:female ratio	2.1 : 5.1	1.3 : 1
% of BCCs developing in head and neck region	60-80	90
% of SCCs developing in head and neck region	65	35
% of SCCs developing in scars and chronic non-healing ulcers	<2	30-40
NMSC incidence rates	Increasing	n/a
NMSC mortality rates	Decreasing	Decreasing
% of skin cancer deaths due to NMSC in persons <50 years of age	10	70
% of skin cancer deaths due to NMSC in persons >85 years of age	55	65





Type of melanoma	Freq. (%)	Site	Radial growth	Special features
Superficial spreading melanoma	60-70	Any site, preference for lower extremities (female), trunk (male)	Yes	More pagetoid, less solar elastosis
Nodular melanoma	15-30	Any site, preference for trunk, head, neck	No	Nodule with vertical growth
Lentigo maligna melanoma	5-15	Face, especially nose and cheeks	Yes	Slower growth over years on sun-damaged skin
Acral lentiginous melanoma	5-10	Palms, soles, subungual	Yes	Most common melanoma in patients with darker skin types

