Integumentary · Oncology

# Skin Cancers — All Types

Basal Cell · Squamous Cell · Melanoma · Actinic Keratosis. Recognition, prioritization, prevention, and clinical judgment for the NGN NCLEX 2026 test plan.

DIANE'S NGN NCLEX 2026 STUDY SERIES

1

OVERVIEW

## Definition & Why It Matters

- **Skin cancer** = abnormal proliferation of skin cells, most often triggered by **cumulative UV radiation** (sun + tanning beds).
- **Most common cancer** in the United States — but with the **highest cure rate when caught early**. The nurse's role in screening, teaching, and early recognition is central.
- **Three main types** (BCC, SCC, melanoma) plus a precancerous lesion (actinic keratosis). They differ in **appearance, aggressiveness, and metastatic potential** — and that's the heart of NCLEX prioritization.

### BCC

Most common · Slow-growing · Rarely metastasizes · Local destruction

### SCC

2nd most common · Faster-growing · Can metastasize · Often arises from AK

### Melanoma

Most deadly · Arises from melanocytes · High metastatic potential · Lowest cure rate when late

2

PATHOPHYSIOLOGY

# UV Damage → Mutation → Cancer

**STEP 1**

### UV Exposure

UVA + UVB penetrate epidermis

→

**STEP 2**

### DNA Damage

Mutations in keratinocytes & melanocytes

→

**STEP 3**

### Failed Repair

Tumor suppressor genes (p53) inactivated

→

**STEP 4**

### Uncontrolled Growth

Atypical cells proliferate & invade

→

**STEP 5**

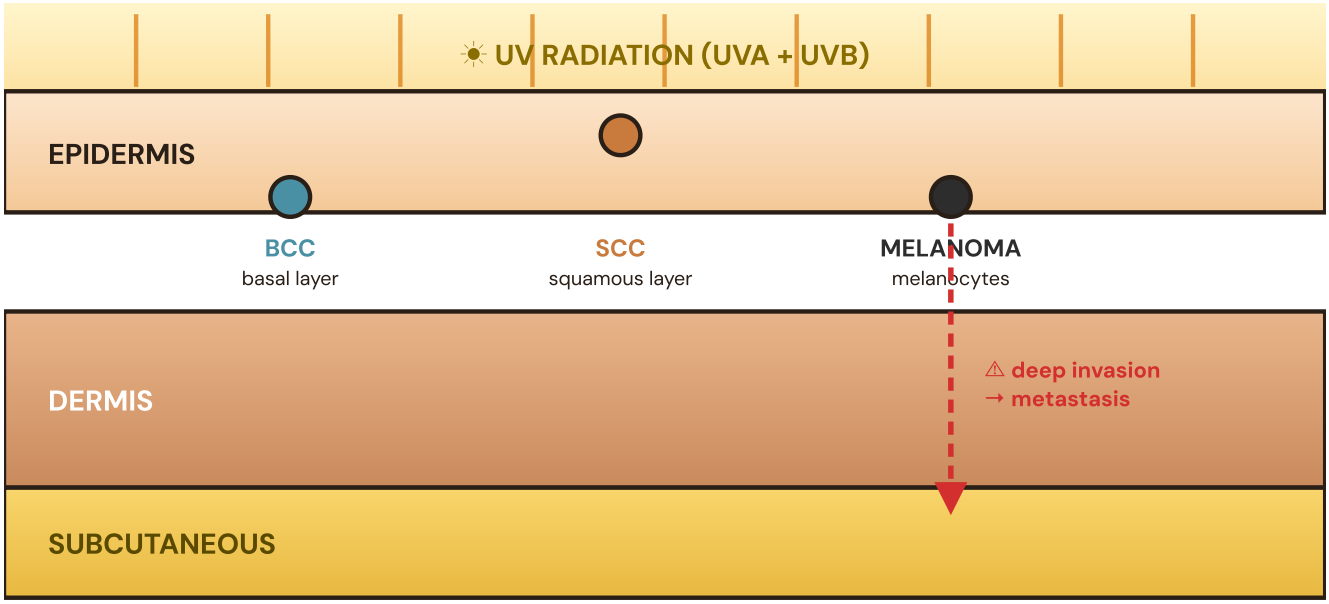
### Lesion / Metastasis

Local destruction or spread via lymph/blood (esp. melanoma)

3

TYPE COMPARISON

# The Four Lesions You Must Recognize




BASAL CELL CARCINOMA

## BCC — "Pearly & Polite"

Most common (~80%) | Rare metastasis | Highly curable

- **Pearly, waxy, translucent** papule or nodule
- **Telangiectasias** (visible tiny blood vessels) on surface
- Central depression or rolled border, may ulcerate ("rodent ulcer")
- Sun-exposed areas — face, nose, ears, neck, scalp
- Slow growth; locally destructive but rarely spreads

SQUAMOUS CELL CARCINOMA

## SCC — "Scaly & Sneaky"

2nd most common | Can metastasize | Faster-growing

- **Rough, scaly, red, firm** nodule or plaque
- May **ulcerate, crust, or bleed**; non-healing sore
- Often arises from **actinic keratosis** (precancer)
- Sun-exposed areas: lips, ears, hands, scalp; mucous membranes
- Higher metastatic risk on lips, ears, immunocompromised pts

MALIGNANT MELANOMA

## Melanoma — "Mean & Mortal" 🚨

Deadliest skin cancer | Metastasizes early

ACTINIC KERATOSIS

## AK — "Pre-Cancer Warning"

PRECANCEROUS | Can → SCC | Treat early

Arises from melanocytes

- **Asymmetric, irregularly bordered, multi-colored** mole or new lesion
- May arise from existing nevus or appear as new pigmented lesion
- Can develop **anywhere** — including soles, palms, under nails, mucosa
- Spreads via **lymph & blood** → lung, liver, brain, bone
- **Depth (Breslow)** = strongest prognostic factor

- **Rough, scaly, sandpaper-like** patches on sun-exposed skin
- Pink, red, or skin-colored; often felt before seen
- Common on face, scalp (bald), ears, forearms, dorsal hands
- Treat with **cryotherapy, topical 5-FU, imiquimod**
- Considered a **marker of significant UV damage**

## 🔍 ABCDE of Melanoma — The Self-Exam Rule

| A | B | C | D | E |
|---|---|---|---|---|
| **Asymmetry** | **Border** | **Color** | **Diameter** | **Evolving** |
| One half doesn't match the other | Irregular, ragged, blurred | Multiple shades — brown, black, red, white, blue | > 6 mm (pencil eraser) | Changing in size, shape, color, or sensation |

4

RECOGNITION CUES

# Early Findings vs. Red Flags

## Early / Local Findings

- New skin lesion or change in an existing mole
- Pearly, waxy bump (BCC) or scaly red patch (SCC)
- Sandpaper-like rough patch (AK)
- Itching, tingling, mild tenderness of a mole
- Sore that won't heal in 4+ weeks
- Small ulceration or crusting on a lesion

## Late / Red Flag Findings

- Bleeding or oozing lesion
- ABCDE-positive mole — asymmetric, multi-color, > 6 mm, evolving
- New pigmented streak under fingernail/toenail (subungual melanoma)
- Lymphadenopathy near lesion site
- Unintentional weight loss, fatigue, bone pain (metastasis)
- Neurologic changes, dyspnea, hepatomegaly (advanced spread)

## ⚠ High-Yield Risk Factors

- Fair skin / light eyes / red or blond hair
- History of blistering sunburns
- Tanning bed use
- Chronic sun exposure (outdoor workers)
- Family or personal history of skin cancer
- Immunosuppression (transplant, HIV)
- Multiple or atypical moles (> 50)
- Older age
- Arsenic / chemical exposure
- Prior radiation therapy

5

PRIORITY NURSING ACTIONS

# ABC + Safety + Wound & Surgical Care

## A Assess

- ✓ Full-body skin assessment — head-to-toe, including scalp, soles, between toes, nails
- ✓ Apply ABCDE criteria to every suspicious lesion
- ✓ Photograph lesions for tracking
- ✓ Palpate regional lymph nodes
- ✓ Assess pain, drainage, signs of infection at biopsy/excision sites

## B Biopsy & Surgical Care

- ✓ Prepare client for biopsy, wide excision, or **Mohs surgery** (tissue-sparing for face)
- ✓ Post-op: keep dressing clean, dry, intact for 24–48 h
- ✓ Monitor for bleeding, hematoma, infection
- ✓ Sutures generally removed by **day 7**; pull tape **toward the wound**
- ✓ Sentinel lymph node biopsy may be ordered for melanoma staging

## C Counsel & Coordinate

- ✓ Provide emotional support — cancer dx is psychologically heavy
- ✓ Reinforce sun-safe behavior & monthly self-skin exams
- ✓ Coordinate referrals: dermatology, oncology, plastic surgery
- ✓ Discuss treatment plan: cryotherapy, topical chemo, radiation, immunotherapy
- ✓ Support body image concerns after facial/visible excisions

- **Wound care priorities:** assess for infection (warmth, redness, purulence), keep edges approximated, no constrictive dressings.
- **Topical chemo (5-FU, imiquimod):** wear gloves to apply, expect redness/inflammation as therapeutic response, avoid sun exposure to treated area.
- **Post-cryotherapy:** blistering and scab formation are expected; do not pick or peel; healing 1–3 weeks.
- **Melanoma post-op:** monitor for lymphedema if lymph node dissection performed; elevate affected limb.

6

PHARMACOLOGY

# Skin Cancer Treatments at a Glance

| Drug / Therapy | Class & Use | Mechanism | Key Side Effects & Nursing |
|---|---|---|---|
| **5-Fluorouracil (5-FU) topical** | Topical antineoplastic — AK, superficial BCC | Blocks DNA synthesis in rapidly dividing cells | Severe local redness, crusting, erosion (expected response). Wear gloves; avoid sun; not in pregnancy. |
| **Imiquimod (Aldara)** | Topical immune modulator — AK, superficial BCC | Stimulates local immune response against tumor cells | Redness, scabbing, flu-like symptoms. Apply at bedtime, wash off in AM. |
| **Interferon alfa-2b** | Immunotherapy — high-risk melanoma adjuvant | Boosts immune surveillance against tumor cells | Flu-like symptoms, fatigue, depression, ↓ WBC. Monitor CBC, LFTs, mood. |
| **Pembrolizumab / Nivolumab** | PD-1 checkpoint inhibitors — advanced melanoma | Releases immune system "brakes" → T-cells attack tumor | Immune-related AEs: pneumonitis, colitis, hepatitis, endocrinopathies. Report cough, diarrhea, jaundice. |
| **Ipilimumab** | CTLA-4 checkpoint inhibitor — melanoma | Activates T-cell anti-tumor response | High risk of severe colitis, dermatitis, hepatitis. Monitor stools, LFTs. |
| **Vemurafenib / Dabrafenib** | BRAF inhibitors — BRAF-mutated melanoma | Blocks mutated BRAF kinase driving tumor growth | Photosensitivity, rash, arthralgia, ↑ skin SCCs. Strict sun protection. |
| **Dacarbazine (DTIC)** | Alkylating chemo — metastatic melanoma | Damages tumor DNA | **Flu-like symptoms**, N/V, myelosuppression. Vesicant — central line preferred. |
| **Cryotherapy (liquid $N_2$)** | Procedure — AK, small BCC | Freezes & destroys atypical cells | Blister, scab, hypopigmentation. Keep clean & dry; do not pick scab. |
| **Radiation therapy** | Adjunct or primary — non-surgical candidates | Ionizing radiation damages tumor DNA | Skin: pruritis, erythema, sloughing. Plain water only, no soap/lotions w/ metals (zinc oxide), no powder, can use cornstarch. |

7

NCLEX TEST TRAPS

# Wrong vs. Right Thinking ⚠

| ⚠ THE TRAP | ✓ THE TRUTH |
| --- | --- |
| "All skin cancers look the same — any new spot is melanoma." | BCC = pearly waxy with telangiectasias. SCC = scaly red firm with crust. Melanoma = ABCDE-positive pigmented lesion. AK = sandpaper rough patch. **Recognize the description.** |
| "A small mole that hasn't changed in years can't be cancer." | The **"E" in ABCDE — Evolving** — is the most important. *Any* change in size, shape, color, or sensation requires evaluation, even in a long-standing mole. |
| "Topical 5-FU is causing a severe reaction — stop the medication." | Redness, crusting, and erosion with 5-FU are **the expected therapeutic response** — that's the drug working. Teach the client this is normal; do not discontinue without provider direction. |
| "Sunscreen is only needed at the beach or on hot, sunny days." | UV penetrates clouds, snow, glass, and water. Sunscreen SPF 30+ is needed **year-round, every day**, even on overcast days and in cars. |
| "Tanning beds are safer than the sun because the exposure is controlled." | Tanning beds emit concentrated UVA — they are a **Group 1 carcinogen** (same category as tobacco). Use before age 35 sharply increases melanoma risk. |
| "Dark-skinned clients don't need to worry about skin cancer." | Skin cancer is less common in darker skin tones **but more deadly when found** — often diagnosed late. Acral lentiginous melanoma appears on palms, soles, under nails. **Teach all clients to self-examine.** |
| "After radiation therapy, the client should apply zinc-oxide cream and powder to soothe the skin." | **NO ointments with metals (zinc oxide), NO talcum powder.** Use plain water only, no soaps, |

pat dry. Cornstarch is acceptable for itch.

8

PATIENT & FAMILY EDUCATION

## Sun-Safe Living & Self-Surveillance

### ☀ Sun Protection

- Apply broad-spectrum SPF 30+ sunscreen daily, year-round
- Reapply every 2 hours and after swimming/sweating
- Avoid sun 10 AM – 4 PM (peak UV)
- Wear wide-brim hats, UPF clothing, UV-blocking sunglasses
- Seek shade; UV reflects off water, sand, snow
- NEVER use tanning beds — Group 1 carcinogen

### 🔍 Self-Skin Exam (Monthly)

- Examine in well-lit room with full-length and hand mirror
- Check all areas: scalp, face, ears, back, soles, between toes, under nails, genitals
- Use ABCDE on every mole
- Photograph suspicious lesions for tracking
- Report any new, changing, bleeding, or non-healing lesion
- Annual full-body dermatology exam (more often if high-risk)

### 💊 Treatment & Recovery

- Topical chemo: redness/crusting is expected — do not stop
- Wear gloves applying topical agents; avoid sun on treated areas
- Post-excision: keep dressing clean, dry, intact; report bleeding/infection
- Sutures out by day 7; pull tape *toward* the wound
- Avoid tight clothing over surgical site
- Attend all follow-up appointments — recurrence risk is real

### 👨‍👩‍👧 Family & Lifestyle

- Teach children sun safety early — sunburns in childhood double melanoma risk
- Family members of melanoma pts should screen annually
- Maintain hydration & nutrition; vitamin D from diet/supplements (not sun)
- Avoid known carcinogens (arsenic in well water, occupational chemicals)
- Connect with cancer support groups for emotional coping
- Never share razors over a lesion — bleeding risk

9

MEMORY ANCHORS

# Mnemonics & Pattern Recognition

## A · B · C · D · E

**A**symmetry · **B**order irregular · **C**olor varied · **D**iameter > 6 mm · **E**volving — the melanoma self-exam rule.

## "BCC = Pearly · SCC = Scaly · Mel = Multi-color"

Three lesions, three textures: **P**early (BCC) — **S**caly (SCC) — **M**ulti-color (melanoma). Match the description to the diagnosis.

## "S · L · I · P · S · L · O · P · S · L · A · P"

**SLIP** on a shirt · **SLOP** on sunscreen · **SLAP** on a hat · plus **SEEK** shade and **SLIDE** on sunglasses. The classic sun-protection bundle.

## "AK → SCC"

Actinic **K**eratosis is the **K**nown precursor to **S**quamous **C**ell **C**arcinoma. Treat AK aggressively to prevent progression.

## "Melanoma = Mean & Mortal"

**M**etastasizes early · spreads via **M** lymph & blood · **M** highest mortality · Breslow depth = key prognostic.

## "Pearly & Polite — Rarely Roams"

BCC is **P**early & **P**olite — locally destructive but **R**arely **R**oams (rarely metastasizes). Excision is usually curative.

10

NCJMM · CLINICAL JUDGMENT

# 6-Step NGN Reasoning Framework

1

### Recognize Cues

Identify abnormal findings from the skin exam, history, and lesion description.

2

### Analyze Cues

Cluster cues — does the pattern match BCC, SCC, melanoma, or AK?

3

### Prioritize Hypotheses

Rank concerns: melanoma > SCC > BCC > AK based on metastatic risk.

4

### Generate Solutions

Plan biopsy, referral, education, sun-safe behavior, surgical/medical care.

5

### Take Action

Implement: photograph lesion, refer to derm, teach ABCDE & SPF use, prep for excision.

6

### Evaluate Outcomes

Reassess: lesion change, post-op healing, sun-safe behavior adoption, screening adherence.

## 📋 NGN Clinical Scenario

**Setting:** Outpatient dermatology clinic. A 62-year-old male golfer with fair skin and a history of multiple sunburns presents with "a sore on my ear that won't heal for 3 months." Exam reveals a 1.2 cm scaly, ulcerated, crusted lesion on the right helix. He also has multiple rough, sandpaper-like patches on his bald scalp. He denies pain but reports the ear lesion bleeds when he showers.

**Recognize Cues:** Non-healing ulcerated lesion (3 months), scalp AK, fair skin, chronic sun exposure, outdoor occupation.

**Analyze:** Scaly, crusted, ulcerated lesion in sun-exposed area + AK on scalp — classic for **squamous cell carcinoma** arising from actinic keratosis. Ear location ↑ metastatic risk.

**Prioritize:** (1) Biopsy of ear lesion · (2) Treat scalp AK to prevent further SCC · (3) Sun-protection teaching · (4) Full-body skin screen · (5) Lymph node assessment.

**Take Action:** Document lesion size/photo, prep for shave or punch biopsy, palpate cervical/preauricular lymph nodes, teach SPF 30+ daily & wide-brim hat, schedule cryotherapy or topical 5-FU for AK lesions.

**Evaluate:** Biopsy result confirms diagnosis · Excision margins clear · No lymphadenopathy · Client demonstrates ABCDE self-exam · Wears hat and SPF at follow-up · Schedules annual derm screening.