

# EGFR Inhibitors:

## Rash Management: Prevention Is Key



By Eden R. Stotsky-Himelfarb, BSN, RN  
Nurse Clinician, Department of Oncology/Surgery at Johns  
Hopkins Hospital

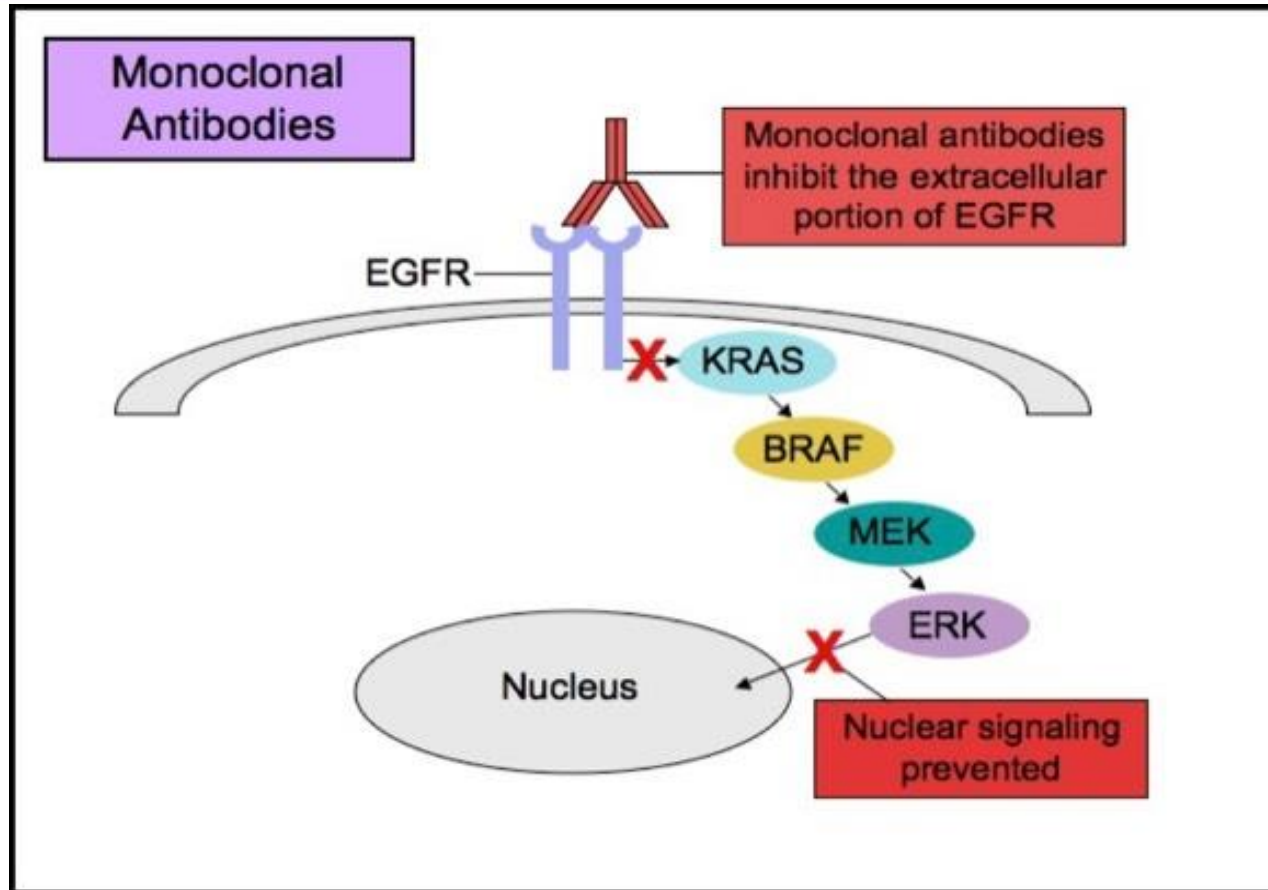
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# What is Epidermal Growth Factor Receptor (EGFR)?

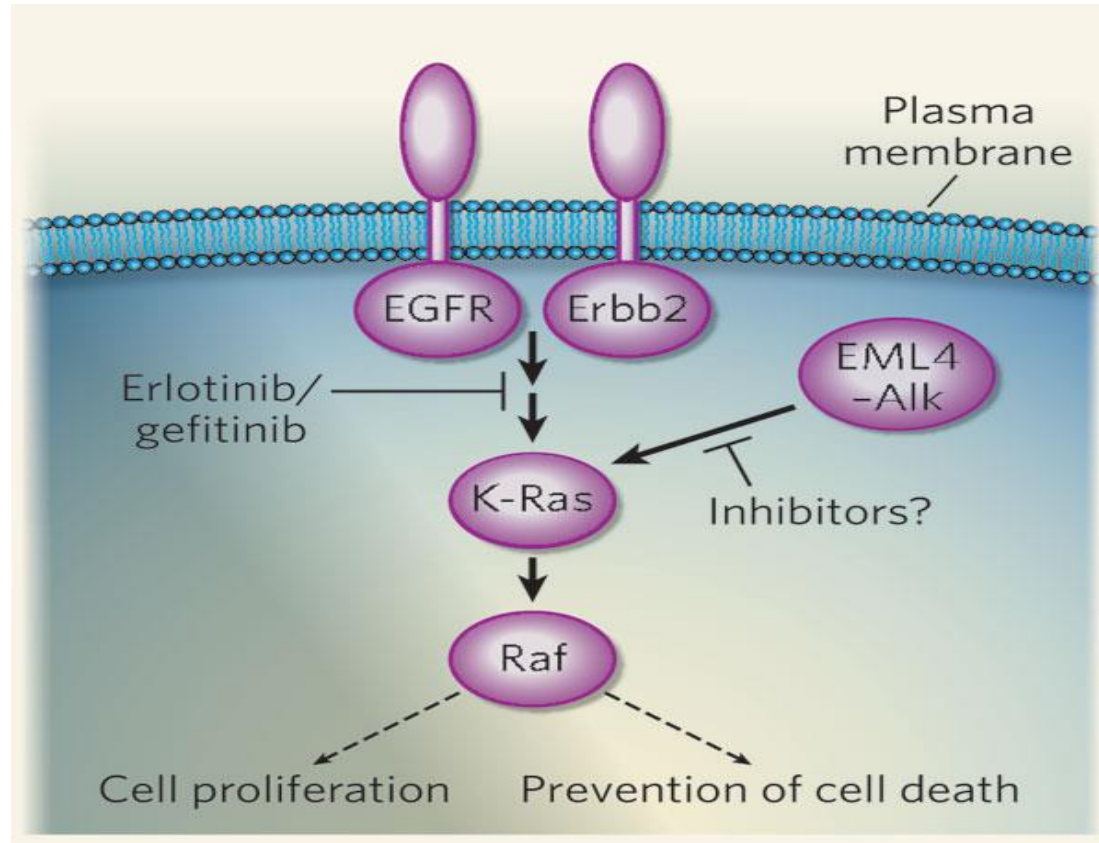


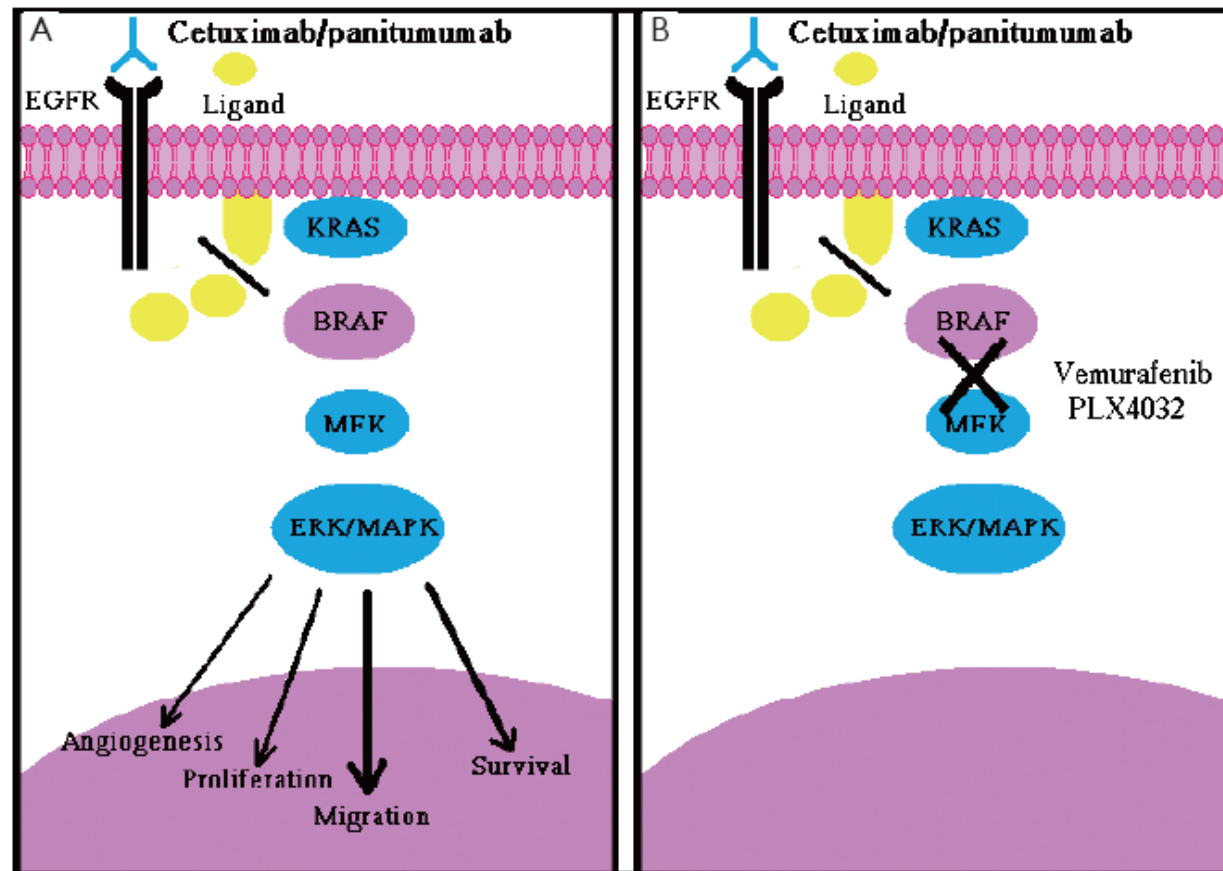
- EGFR is located on the surface of tumor cells and many skin cells
- When the ligands or growth factors bind to the receptors, they tell the cell to divide and grow
- Cetuximab (Erbix) and Panitumumab (Vectibix) *block* the ligand from binding, shutting down the growth and signaling cell death

# EGFR Pathway



# The K-ras Connection





# Why Skin is Important



- Skin is the largest organ
- Acts as a barrier to keep out fungus and bacteria
- Regulates our temperature
- Produces vitamin D
- Since the EGFR is in skin cells, the blockage by the inhibitors causes death of normal epidermal cells

# Skin Toxicities During Treatment



Acneiform  
Rash - occurs  
within the first  
month on face,  
chest and  
scalp



# Skin Toxicities During Treatment



Can be severe  
in approximately  
40% of people.





# Skin Toxicities During Treatment



Dry skin - It is important to keep the skin moist, because if the skin is broken down, it can allow for the penetration of bacteria



# Skin Toxicities During Treatment



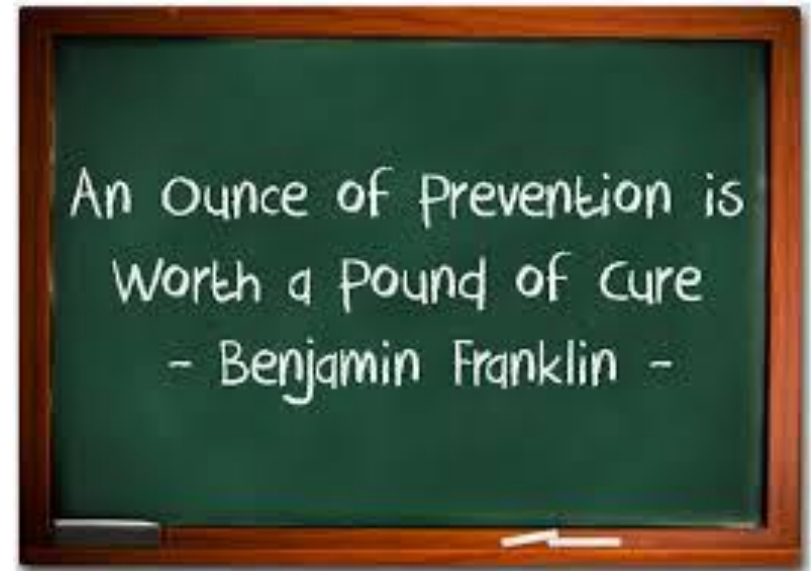
- Hair changes including thinning and hair loss and overgrowth and curling of eyelashes
- Nail changes including brittle nails, infections and separation from nail bed
- 90% of people will develop skin toxicities within the first month

# Skin Toxicities During Treatment



All patients should be treated prophylactically to prevent the rash

Preventing the side effects is the most important, should be handled as nausea and diarrhea are treated



# Skin Pre-Treatments



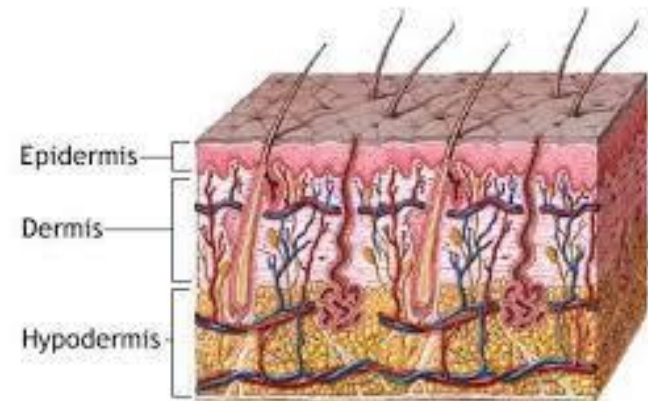
- Prophylactic treatment for weeks 1-6 on treatment
- Tetracycline family antibiotic twice a day for 6 weeks at start of treatment
- Sunscreen (PABA free, SPF 15+, UVA/UVB protection) - apply before going outdoors and every 2 hours

# Skin Pre-Treatments



Moisturizers - apply to face hands, feet back, neck and scalp while skin is still damp

Topical steroids - for the face: low dose and a cream, for the scalp: higher dose and an ointment, for the body: higher dose and a lotion



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# Guidelines for Moisturizing



- Short lukewarm baths or showers
- Wear loose clothes
- Lower heat in the home
- Pat skin dry do not rub
- Use fragrance free soap and laundry detergent
- Avoid alcohol-based skin-care products
- Get treated to prevent the rash when treatment starts

# More Tips to Help Manage Rash



- Antihistamines may help with itching - topical or oral
- Drink plenty of fluids
- Don't shave face or legs if skin reactions occur to give your skin a rest
- Keep both fingernails and toenails clean and dry - don't bite your nails or cut your cuticles
- Eyelashes may grow so long they bother you - Hair changes may occur - these will resolve on their own after treatment stops

# Things you can do while undergoing EGFR-inhibitor therapy



- Moisturize your skin multiple times throughout the day with a fragrance- and dye-free moisturizer
- Use sun protection with an SPF of 30 or higher; reapply throughout the day or as recommended
- Limit sun exposure by wearing long-sleeved shirts and pants; wear a hat when outdoors
- Wear rubber or cotton-lined gloves when washing dishes or cleaning
- Use mild soaps when washing skin



# Things to avoid while undergoing EGFR-inhibitor therapy



- Skin products with perfumes, dyes, or alcohol
- Over-the-counter acne medications, creams, and gels
- Pushing back your cuticles or biting your fingernails
- Strong soaps or detergents
- Wearing tight shoes, which may irritate feet or toenails
- Sun exposure or ultraviolet light exposure from sun-tanning lamps and beds
- Using artificial/acrylic nails

# Contact Your Doctor Immediately if You Experience



- shortness of breath
- fever
- wheezing
- swelling of face
- feelings of your throat closing up
- difficulty in breathing

# Post Treatment Effects



- In fair skinned individuals: post-inflammatory Erythema (redness) can be treated with topical medicines or lasers
- For darker skinned individuals: post-inflammatory hyperpigmentation, which may last for months to years treated with lasers or topical bleaching agents
- Important to treat prophylactically

# Consequences of Untreated Side Effects



- Psychosocial
- Financial
- Physical health
- Overall quality of Life
- Treatment disruptions



[eden@jhmi.edu](mailto:eden@jhmi.edu)

Thank you!

Enjoy the rest of your  
day/evening!