



Dermatology

Our skin is the largest and most visible organ in our body. It has many functions, including protection from pathogens (bacteria and other invaders), insulation, temperature regulation (sweat), sensation, and vitamin D and B synthesis. Without our skin we would not be able to function as we do. The condition of our skin tells a lot about our health and habits. Drinking plenty of water, eating healthy foods, and exercising regularly are the best ways to ensure healthy skin.

Acne

Acne is a skin condition characterized by clogged pores and their resulting pimples. Hair grows out of tiny pores in the skin, held in place by follicles. Small glands known as sebaceous glands empty an oily mixture of dead cells called sebum into the follicles. This sometimes clogs the follicles and sebum builds up in the pores. This fluid-filled pore is conducive to the growth of bacteria called *Propionibacterium acnes*. Our body tries to fight off these bacteria, giving us pimples in the process. There are many treatments available to kill the bacteria, shrink the sebaceous glands, prevent cells in the follicles from clumping and clogging, and heal the affected skin. The exact cause of acne is not understood, but doctors believe that hormones and genetics are primary factors. Links to chocolate, greasy food, dirty skin, and stress are being researched. Certain drugs, skin irritants and greasy cosmetics may exacerbate symptoms. Nearly 85 percent of people between the ages of 12 and 24 will develop acne.

	COMPANY	PRODUCT	PHASE
Acne	Anacor Pharmaceuticals, Inc.	AN0128	II
	Connetics Corporation	Velac Gel (clindamycin and tretinoin)	PA
	Connetics Corporation	Evoclin (Actiza)	M
	Berlex	Finevin Cream (azelaic acid)	M

Dermatomyositis

Dermatomyositis is a connective tissue disorder characterized by the inflammation of muscles and skin and X-ray findings include dystrophic calcifications in the muscles. Also associated with the disorder are "Gottron's papules," pink patches on the knuckles. The cause is unknown, but it can result from either a viral infection or an autoimmune reaction. It has been found that up to 50 percent of cases are a paraneoplastic phenomenon, indicating the presence of cancer.

	COMPANY	PRODUCT	PHASE
Dermatomyositis	Impax Laboratories, Inc.	Aminobenzoate Potassium Tablets	M

Dermatosis

Dermatosis is a generic term describing any of the diseases of the skin not characterized by the presence of inflammation. It is often acquired through the contact of hazardous material and can be prevented through proper protective measures.

	COMPANY	PRODUCT	PHASE
Dermatosis	Connetics Corporation	Luxiq Foam (betamethasone valerate)	M
Scaly Scalp	Connetics Corporation	Olux Foam (clobetasol propionate)	M

Diabetic Ulcers

An ulcer is an open sore of the skin, eyes, or mucous membrane, usually caused by an initial abrasion and maintained by inflammation and infection. Ulcers affect the integrity of the area in which they occur and are accompanied by secondary infection, generalized weakness, and lengthy healing time. Most diabetic ulcers occur on the foot and the leg and are caused by vascular deficiencies. Skin breakdown due to injury or trauma and pressure on the nail bed also can cause ulcers. Diabetics are specifically prone to ulcers because of their low potential to heal from injury.

COMPANY	PRODUCT	PHASE	
Genentech, Inc.	Topical VEGF / PRO128115	II	Diabetic Ulcers
Novartis AG	Regranax (becaplermin)	M	

Eczema

Eczema is a form of dermatitis, the inflammation of the upper layers of the skin. The term is broadly applied to persistent and recurring skin rashes characterized by redness, edema (swelling with fluid), itching and dryness, and possible crusting, flaking, blistering, cracking, oozing, or bleeding also possible. This sometimes leads to skin discoloration, but scarring is rare. Treatments include topical creams and ointments.

COMPANY	PRODUCT	PHASE	
AEROVANCE, Inc.	Aeroderm/ AER 001	II	Eczema
Anacor Pharmaceuticals, Inc.	AN0128	II	
Anesiva, Inc.	Avrina / NF-KappaB Decoy	II	
Arriva Pharmaceuticals, Inc	Recombinant alpha 1-antitrypsin / rAAT	II	
Connetics Corporation	Desilux (desonide)	PA	
Connetics Corporation	OLUX-EF/Primolux	PA	

Onychomycosis (Nail Fungus)

Onychomycosis is the medical term for a fungal infection of the nails, more commonly those on the toes. Approximately 6-8 percent of the adult population is affected by this condition. Fungi called dermatophytes are usually responsible for this infection; *Trichophyton rubrum* and *Trichophyton interdigitale* are the most common fungi which cause this condition, though yeasts and molds may also be responsible. Treatment is often very difficult, with topical nail polishes and natural remedies of vinegar, tea tree oil and grapefruit commonly used.

COMPANY	PRODUCT	PHASE	
Anacor Pharmaceuticals, Inc.	AN2690	II	Onychomycosis

Psoriasis

Approximately 3 million Americans suffer from psoriasis, an inflammation of the skin that is most likely caused by an autoimmune response against the body's own skin cells. The build-up of skin cells results in thick, dry, scaly patches, which are usually red and itchy. Psoriasis is an inherited disorder, and therefore not contagious. The condition can be exacerbated by injuries and irritations that might stimulate an immune response (such as burns, sunburns, cuts, etc.), as well as certain medications, infections, stress, cold climate, consuming too much alcohol, and obesity.

	COMPANY	PRODUCT	PHASE
Psoriasis	Nektar Therapeutics	Cimzia (certolizumab pegol) / CDP 870	II
	CellGate, Inc.	PsorBan Ointment / CGC1072	II
	ChemoCentryx, Inc.	T487	II
	Anacor Pharmaceuticals, Inc.	AN0128	II
	Connetics Corporation	OLUX-EF / Primolux	PA
	Connetics Corporation	OLUX Foam (clobetasol propionate)	M
	Connetics Corporation	Luxiq Foam (betamethasone valerate)	M
	XOMA Ltd	Raptiva / Xanelim (efalizumab)	M
	Genentech, Inc.	Raptiva / Xanelim (efalizumab)	M
	Connetics Corporation	Soriatane (acitretin)	M

Rosacea

Rosacea is inflammation of the skin that causes redness of the face. It is characterized by small, red, pus-filled bumps or pustules and is often mistaken for acne. Adult acne is another common term for rosacea. The cause of rosacea remains unknown. Rosacea usually affects adults with fair skin between the ages of 30 and 60. The Mayo Clinic estimates that about 14 million Americans have this skin condition. If left untreated, rosacea tends to get worse over time, but it often remains cyclic, with occasional flare ups. Once diagnosed, rosacea is easily treatable.

	COMPANY	PRODUCT	PHASE
Rosacea	Berlex	Finacea Gel (azelaic acid)	M

Seborrheic Dermatitis

Seborrheic dermatitis is inflammation of the skin that causes flaky, white to yellowish scales to form in oily areas of the body, especially inside the inner ear, eyebrows, eyelids, nose, lips, skin folds or scalp. This can occur with or without reddened skin. When this condition occurs in infants, it is called cradle cap. The cause is unknown but it does appear to run in families. Risk is increased by stress, fatigue, weather extremes, infrequent bathing, the use of alcohol-containing lotions, skin disorders, and obesity. Certain medical conditions such as Parkinson's disease, stroke, and HIV have been linked to seborrheic dermatitis. There is no cure, but it can be treated with dandruff products and medicated lotions.

	COMPANY	PRODUCT	PHASE
Seborrheic Dermatitis	Connetics Corporation	Extina (ketoconazole)	PA
	Connetics Corporation	Luxiq Foam (betamethasone valerate)	M

Skin Aging

As we age, our skin becomes thinner, less elastic, and less able to heal itself. If time was spent in the sun in earlier years, sun spots and hyper pigmentation begin to show up on the face, hands, and other exposed areas of the body. Wrinkles also develop, most noticeably on the face and neck. Skin treatments focus on reversing the effects of aging on the skin to help maintain its youthful appearance by increasing elasticity and reducing wrinkles and age spots.

COMPANY	PRODUCT	PHASE	
Mentor Corporation	Botulinum toxin type A	II	Wrinkles
Senetek Plc	PRK124	II	Skin Aging
Senetek Plc	Kinerase	M	Photoaging
Senetek Plc	Kinetin	M	Skin Care Product
NutraCea	NutraBeauticals	M	
Mentor Corporation	NIA 24 (niacin)	M	
Mentor Corporation	Puragen	M	Wrinkles

Skin Itching

An itch is a sensation felt on the skin that causes a person to scratch that area and is often uncomfortable, causing distress. Scratching can sometimes break the skin and result in an infection. Itching can be due to many causes ranging from dry skin to cancer. The main chemical causing itching is histamine, a molecule released by mast cells (connective tissue) in the skin. Common causes for itching include skin conditions, mosquito bites, allergic reactions, Hodgkin's disease, jaundice, and certain medications. Topical ointments and creams are most commonly used to treat continuous itching.

COMPANY	PRODUCT	PHASE	
Acologix, Inc.	AC-820	II	Skin Itching
Parnell Pharmaceuticals, Inc.	EarSol-HC (hydrocortisone, yerba santa)	M	

Wounds

During the course of our daily activities, we often inadvertently injure ourselves, resulting in bleeding and scarring. The healing process largely occurs on its own with the help of white blood cells and clotting factors in the blood. Sometimes, if the wound is large enough, external help is needed to ensure proper closure of the wound. Topical creams are sometimes used to aid in maintaining moisture as well as cleanliness in the skin during the healing process.

COMPANY	PRODUCT	PHASE	
Oculus Innovative Sciences	Dermacyn	M	Wounds

