

# Index

## A

- “ABCDEF” rule, 126–129
- $\alpha$ -bisabolol extract, 274
- abnormal cell growth, 3
- abrasions, 94
- AC (actinic cheilitis), 114
- acacia catechu extract, 270
- açai extract, 276
- acne keloidalis nuchae, 109–110
- acne vulgaris, 107–109
- acral lentiginous melanomas. *See* ALMs
- actin filaments, 237
- actinic cheilitis. *See* AC
- actinic keratosis. *See* AK
- Actinomycin D, 388–389
- acupressure facial, 189
- acupuncture facial, 190
- acute GvHD (graft-*versus*-host disease), 132–133
- acute myeloid leukemia. *See* AML
- adaptive immune system, 77–79
- adhesions, 23–24
- Adriamycin®, 346–349
- Adrucil, 326–329
- $\alpha$ -d- tocopherol (vitamin E), 259–260
- agaricus blazei murrill, 270–271
- agaricus mushroom extract, 270–271

- age spots, 101
- AHAs (alpha hydroxy acids), 143, 271
- AK (actinic keratosis), 96, 112–113
  - radical skin damage, 250
  - SCC (squamous cell carcinoma), 118
  - spa treatments, 137
- ALA (alpha lipoic acid), 252
- Alkeran, 319–320
- allergic reactions, skin
  - biological therapies, 68
  - chemotherapy, 35
- all-trans retinoic acid. *See* ATRA
- almond (sweet) oil, 263
- ALMs (acral lentiginous melanomas), 124–125
- aloe barbadensis leaf juice, 271–272
- alopecia
  - chemotherapy, 42–43, 158
  - radiation therapies, 57
- Aloxi, 411–412
- alpha hydroxy acids. *See* AHAs
- alpha lipoic acid. *See* ALA
- althaea officinalis extract, 272
- Altima, 342–343
- Altinac, 390–391
- aluminum salts, 295
- amelanotic melanomas. *See* AMs
- American Cancer Society, cancer deaths in United States among African Americans, 8
- American witch hazel extract, 278
- amino acids, 284–289
- AML (acute myeloid leukemia), 6
- AMs (amelanotic melanomas), 129
- anemia, 32
- Anergan, 414–416
- angiomas
  - cherry, 98

- spider nevus, 97
- anthem. nobilis flower extract, 272
- antibodies, 79. *See also* MABs
  - B- and T-lymphocytes, 78–79
- antigens, 77–78
- anti-oncogenes, 81
- antioxidants
  - chemotherapy, 257
  - skin care ingredients, 249–250
- Anzemet, 407–408
- apoptosis, 81
- Aprepitant, 406–407
- apricot kernel oil, 263
- ARA-C, 338–339
- arbutin, 272
- arctium lappa root extract, 273
- arctostaphylos uva-ursi leaf extract, 273
- aromatherapy, 207–208
- ascorbic acid (vitamin C), 257–258
- asiatic acid, 275
- aspalathus linearis extract, 273
- astragalus membranaceus root extract, 273
- astrocaryum murumuru butter, 262
- athlete's foot, 231
- atopic dermatitis, 105
- ATP (adenosine triphosphate), 241, 242–243
- ATRA (all-trans retinoic acid), 253
- atypical moles, 122
- avena sativa kernel extract, 274
- Avita, 390–391
- avobenzone, 289
- axillary lymph nodes, 146–147
  - lymphedema risks, 141
- azelaic acid, 274

## B

Bach flow essences, 207

bacterial skin infections, 227–231

baldness, 17

bamboo massages, 184–185

basal cell carcinomas. *See* BCCs

basophil cells, 74–75

BCCs (basal cell carcinomas), 85, 87, 114–115

- morpheaform BCC, 115

- nodular BCC, 115

- oncologic surgeries, 13–14

- versus* papules, 92

- radical skin damage, 250

- recognizing, 116–118

- rodent ulcers, 116

- spa treatments, 137

- superficial multifocal BCC, 116

B-cells, 77–79

B-complex vitamin, 256

bearberry leaf extract, 273

benign tumors, 3

beta hydroxy exfoliations/peels, 134

bilatfeal mastectomy, special bras, 64

biofeedback, 213

bioflavonoid (vitamin P), 260

biohazard waste, 222–223

biological therapies, 59–60

- administering, 65

- blood cell growth factors, 62

- cancer growth factors, 62–63

- cancer vaccines, 61

- cytokines, 63

- functions, 60

- gene therapies, 65

- interferons, 63

- interleukins, 63

- MAbs (monoclonal antibodies), 60–61
  - side effects, 66
    - fatigue, 66
    - hair, 70
    - hands/feet, 68–70
    - mouth/throat, 70
    - skin, 66–68
- biopsies
  - lymph node cancer, 148
  - types, 13
- biotene, 70
- biotherapies. *See* biological therapies
- biotin (vitamin B7 or vitamin H), 255
- birthmarks, 103
- blackheads, 109
- bleeding, 19–20
- blisters and chemotherapy
  - central lines, 41–42
  - warnings, 39–40
- blood cells
  - cancer growth blockers, 62–63
  - growth factors, 62
- blood thinners, 18
- blood vessels, 63
- blue lotus extract, 279
- boils, 229
- Bortezomib, 398–400
- boswellia serrata extract, 274
- botanicals, skin care ingredients, 270–284
- Bowen’s disease, 130–131
- brain cancer
  - debulking surgery, 15
  - image-guided surgery, 15
- brassica oleracea italica seed oil, 262
- BRCA gene mutation, 14
- breast cancers (women)

- deaths in United States, 8
- preventative surgery, 14
- reconstructive surgery, 15
- breathing problems
  - biological therapies, 68
  - breathwork, 213
  - chemotherapy, 32, 34
- broccoli seed oil, 262
- bromelin, 269
- bruising of skin, 25–26, 100
  - oncologic surgeries, 156
- burdock root extract, 273
- Burkett's lymphoma, 7
  - EBV (Epstein-Barr virus), 9
- Busulfan, 303–304
- butchers broom root extract, 281
- butyrospermum parkii fruit, 262

## C

- café au lait, 102
- calendula officinalis flower extract, 274
- camellia sinensis leaf extract, 275
- Campbell de Morgan spots, 98
- Camptosar, 359–361
- Canada, skin cancers, 2007, 7
- cancer
  - causes, 3
  - cell structure, 3
  - deaths in Canada, 7–8
  - deaths in United States, 7–8
    - African Americans, 8
  - definition, 1
  - early detection, 76
  - metastasis, 2
  - normal cells *versus* cancer cells, 3
  - origins, 9

- stages, 5
  - statistics, 7–8
  - types, 6–7
- Cancer Prevention Coalition, 248
- cancer vaccines, 61
- Cancer Web site, 248
- candle tree leaf extract, 275
- cantella asiatica extract, 275
- Capecitabine, 329–331
- Carboplatin, 306–308
- carbuncles, 229
- carcinoma in situ. *See* CIS
- carica papaya, 270
- Carmustine wafers, 324
- carnosine, 286
- cassia alata leaf extract, 275
- cat's clow extract, 284
- CCNU, 325–326
- CDDP, 305–306
- CEENU, 325–326
- cells
- abnormal cell growth, 3
  - apoptosis, 81
  - cancer cells
    - life of, 81–83
    - versus* normal cells, 3
  - cell division, uncontrolled, 5
  - cell membrane, 237–239, 244–245
  - cell proliferation, 80
    - protecting against, 80–81
  - differentiation, 2–3
  - eukaryotes, 236, 238
  - oncogenes, 5, 80
    - proto-oncogenes and anti-oncogenes, 81
  - organelles, 236–245
  - prokaryotes, 238

- proto-oncogenes, 5
- stem cells, 88
- cellulitis, 227, 229. *See* lymphedema
- central lines
  - chemotherapy, 41–42, 158
  - oncologic surgeries, 24–25, 157
- centrioles, 237–238, 241
- centrosomes, 237–238, 241
- certification of estheticians, 165
- Cerubidine, 343–346
- cervical cancer, 61
- cervical lymph nodes, 145
- Champissage, 201
- chaparral leaf extract, 279
- chemical peels, 134–135, 196
- chemotherapy, 29–30
  - administering, 30, 32
  - medical devices
    - central lines, 41–42
    - IVs (intravenous) lines, 41
    - peripheral lines, 41
  - oncology massages, 158
  - side effects, 32–35
    - anemia, 32
    - breathing problems, 32
    - fatigue, 32
    - hair, 42–43
    - hand/feet, 43–44
    - mouth/throat, 34–35
    - nausea/vomiting, 34
    - neutropenia, 33
    - skin, 35–41
    - thrombocytopenia, 33
- cherry angiomas, 98
- chloasma, 101–102
- Chlorambucil, 308–310

cholecalciferol (vitamin D), 259  
choline, 256  
chromatherapy (color therapy), 209  
chromatin, 237, 239  
chronic GvHD (graft-*versus*-host disease), 133  
chronic myelocytic leukemia. *See* CML  
chrysanthemum parthenium extract, 277  
CIS (carcinoma in situ), 2  
Cisplatin, 305–306  
citrus grandis (grapefruit) seed extract, 251  
CML (chronic myeloid leukemia), 6  
    biological therapies, 68  
cobalamin (vitamin B12), 256  
cocoa butter, 264  
coenzyme Q10, 251  
cold sores, 232, 233  
cold therapies, 203  
collagen induction therapies, 193  
colloidal oatmeal, 287  
colon cancers  
    curative surgeries, 15  
    deaths in United States, 8  
colorectal cancer, U.S., African American deaths, 8  
color therapy (chromatherapy), 209  
comfrey extract, 282  
Compazine, 413–414  
compresses/poultices, 202, 203  
computerized tomography. *See* CT  
congenital Nevi, 122  
coning (ear candling), 192–193  
copper, 260  
core-needle biopsy, 13  
cornification of keratinocytes, 89  
Cosmegen, 388–389  
COX (cyclooxygenase), 270  
craniosacral therapy, 192

cristae, 237  
crusts/scabs, 94  
cryosurgery, 14  
crystal/gemstone facials, 185  
CT (computerized tomography), 15  
CTCL (cutaneous T-Cell lymphoma), 130  
CTL (cytotoxic T-lymphocytes), 78  
CTX, 311–313  
cupuacu seed butter, 264  
curative surgery, 15  
curcuma longa extract, 284  
cutaneous B-cell lymphomas, 7  
cutaneous T-Cell lymphoma. *See* CTCL  
cutch extract, 270  
cyclomethicone, 291  
cyclooxygenase. *See* COX  
Cyclophosphamide, 311–313  
cymbopogon schoenanthus oil, 276  
cystine, 285  
cysts, 95  
Cytarabine, 338–339  
cytokines, 63  
cytoplasm, 237–238, 243–244  
Cytosar-U, 338–339  
cytoskeleton, 237  
cytotoxic T-lymphocytes. *See* CTL  
Cytoxan, 311–313

## D

Dacarbazine, 315–316  
Dactinomycin, 388–389  
dandelion extract, 283  
Daunorubicin, 343–346  
debulking surgery, 14  
Decadrol Injection, 380–382  
Decadron, 383–384, 417–418

- Injection, 380–382
- Decadron-LA Injection, 380–382
- deep massages, 155
- deep vein thrombosis. *See* DVT
- deglycyrrhizinated licorice. *See* DGL
- dehydration, 110
  - chemotherapy, 37–38
  - radiation therapies, 54
- Deltasone, 376–378
- dendritic cels. *See* Langerhans cells
- deoxyribonucleic acid. *See* DNA
- Depmedalone, 378–380
- Depoject, 378–380
- Depo-Medrol, 378–380
- Depopred, 378–380
- dermal melasma, 102
- dermatitis, 105–106
- Dermatofibrosarcoma Protuberans. *See* DFSP
- dermatosis papulosanigra, 107
- dermis
  - immune-related cells, 74
  - keratinocytes, 86
- desmoplastic neurotrophic melanomas. *See* DNMs
- desmosomes, 88–89
- detox foot baths, 205
- Dexamethasone
  - Infusion, 380–382
  - Oral, 383–384, 417–418
- Dexon, 383–384
- Dexone, 417–418
- DFSP (Dermatofibrosarcoma Protuberans), 7, 131
- DGL (deglycyrrhizinated licorice), 35
- diagnostic surgery, 13
- differentiation in cells, 2–3
  - TA (transient amplifying) cells, 88
- dimethyl sulfone, 276

dipeptides, 286–287

disinfectants, 228

DNA (deoxyribonucleic acid)

keratinocytes, 86

mtDNA (mitochondrial deoxyribonucleic acid), 242

nucleotides, 239

repair systems, 80–81

DNMs (desmoplastic neurotrophic melanomas), 129

Docetaxel, 370–371

Dolasetron, 407–408

Doxil®, 346–349

Doxorubicin, 346–349

Droxia, 386–387

dry skin. *See* xerosis

DTIC, 315–316

DTIC-DOME, 315–316

Duralone, 378–380

DVT (deep vein thrombosis), 16, 18

dysplastic Nevi, 122

## E

ear candling (coning), 192–193

ear therapies, 192–193

EBV (Epstein-Barr virus), 9

edema, 18

biological therapies, 69–70

oncologic surgeries, 156

radiation therapies, 159

EFA (essential fatty acids), skin care ingredients, 265–269

EGFRs (epidermal growth factor receptors), 62

side effects

hair, 70

hands/feet, 68–69

rashes, 66

EGFs (epidermal growth factors), 62

electrical muscle stimulators. *See* EMS

- electrolysis, 197–198
- electrosurgery, 14
- electrotherapies, 136–137, 193–195
- Ellence, 349–351
- Elspar, 384–385
- Emend, 406–407
- EMS (electrical muscle stimulators), 195
- endoplasmic reticulum. *See* ER
- Environmental Working Group, 248
- enzymes, skin care ingredients, 269–270
- enzyme treatments, 196–197
- eosinophil cells, 74–75
- epidermal cysts, 95
- epidermal growth factor receptors. *See* EGFRs
- epidermal growth factors. *See* EGFs
- epidermal melasma, 102
- epidermis
  - immune-related cells, 74
  - keratinocytes, 86
  - stratum corneum, 86
- Epirubicin, 349–351
- Epstein-Barr virus. *See* EBV
- EPT, 366–367
- Eptoposide
  - Infusion, 363–365
  - Oral, 361–363
- equisetum arvense extract, 276
- ER (endoplasmic reticulum), 237–240
- Erlotinib, 397–398
  - pigment changes, 68
- erosions, 94
- erythema, 100
  - biological therapies, 51
  - radiation therapies, 51
- erythematotelangiectatic rosacea, 98
- erythematous dry skin, 25

esophageal cancer, 15  
esophagitis, 53  
essential fatty acids. *See* EFAs  
esthetics, in situ (term), 2  
Etoposide (VP-16), 39  
eukaryotes, 236, 238  
eumelanin, 90  
euterpe oleracea extract, 276  
excisional biopsy, 13  
exfoliation, 134–135, 196–197  
external radiation therapies, 45  
eyebrows, 200

## F

facial therapies, 180–190  
faradic current electrotherapy, 194  
fatigue  
    biological therapies, 66  
    chemotherapy, 32, 158  
    radiation therapies, 48, 159  
FDA (Food and Drug Administration), 247  
feeding tubes, 15  
feet reactions. *See* hands/feet side effects  
Femara, 404–406  
ferulic acid, 276  
feverfew extract, 277  
figwort extract, 282  
filaments, actin and intermediate, 237  
fine-needle aspiration biopsy, 13  
5-FU, 36, 326–329  
flat warts, 233  
Fludara, 340–341  
Fludarabine Phosphate, 340–341  
Fluorouracil, 36, 326–329  
flushing, 39

folic acid (vitamin B9 or vitamin M), 256  
 folliculitis, 107  
 Food and Drug Administration. *See* FDA  
 foot warts, 233  
 fragrances, 293  
 fungal skin infections, 230, 231  
 furuncles, 229

## G

GA (Golgi apparatus), 237–240  
 galvanic current electrotherapy, 193–194  
 gamma linolenic acid. *See* GLA  
 Gefitinib, 395–396  
 Gemcitabine Hydrochloride, 335–337  
 Gemzar, 335–337  
 gene mutation
 

- DNA repair systems, 80–81
- recessive mutation, 81

 gene therapies, 65  
 genistein, 277–278  
 German chamomile, 274  
 German chamomile extract, 279  
 ginger root oil, 277  
 ginkgo biloba leaf extract, 278  
 ginseng extract, 281  
 GLAs (gamma linolenic acids), 267–369  
 Gleevec, rashes, 66, 393–395  
 Gliadel, 324  
 glutamine, 286  
 glutathione, 250  
 glycine, 286  
 glycine soja extract, 278  
 glycine soya oil, 262  
 glycolic acid, 271  
 glycols, 293–295  
 glycyrrhiza glabra root extract, 278

Golgi apparatus. *See* GA  
gota kola extract, 275  
graft-*versus*-host disease. *See* GvHD  
Granisetron, 408–409  
granulocyte cells, 75, 77  
grapefruit seed extract, 251  
green tea leaf extract, 275  
GvHD (graft-*versus*-host disease), 132

## H

hair

- hair loss solutions, 200–201
- hair removal, 197–199
- reactions to therapies
  - biological, 70
  - chemotherapy, 42–43
  - radiation, 57

hamamelis virginiana extract, 278

hand-foot syndrome. *See* HFS

hands/feet side effects

- biological therapies, 68–70
- radiation therapies, 51
- therapies for relief, 187, 203–206

HBV (hepatitis B virus)

- cancer origins, 9
- infection controls in spas, 217

HD. *See* Hodgkin's lymphoma/disease

Health Canada, 247

heat/thermal therapies, 201–203

helper T-cells, 78

hemangiomas, 103

hemidesmosomes, 88–89

henna tattoos, 200

hepatitis B virus. *See* HBV

herbal compresses, 202–203

herpes simplex, 232

- radiation therapies, 55
  - herpes zoster (shingles), 232
    - chemotherapy, 40–41
    - radiation therapies, 55
  - Hexadrol, 383–384, 417–418
  - Hexadrol Injection, 380–382
  - HFS (hand-foot syndrome)
    - chemotherapy, 43–44
    - versus* hands/feet side effects, 69
    - spa treatment warnings, 204
  - hives, 98
    - chemotherapy, 35, 158
  - Hodgkin’s lymphoma/disease, 7, 149–150
  - horsetail extract, 276
  - hot stone pedicures, 206
  - HPV (human papillomavirus)
    - cancer origins, 9
    - cervical cancer, 61
  - Hycamtin, 357–358
  - Hydrea, 386–387
  - hydrocortisone, 290
  - hydrolyzed wheat protein, 288
  - Hydroxyurea, 386–387
  - hyperpigmentation, 101–104
    - chemotherapy, 36
    - drug-induced biological therapies, 68
    - poikiloderma, 97
  - hypertrophic scars, 22–23
  - hypnotherapy, 210
  - hypo pigmentation, 104
    - poikiloderma, 97
- I**
- Idamycin, 352–354
  - Idarubicin, 352–354
  - Ifex, 313–315

Ifosfamide, 313–315

IL-2 (Interleukin-2), biological therapies, 67

image-guided surgery, 15

Imatinib

hyperpigmentation, 68

rashes, 66, 393–395

immune-related cells, epidermis and dermis, 74

immune systems

adaptive, 77–79

innate, 74–75, 77

integumentary, 74

immunology, 73–74

immunosuppression, transplants, 159

immunotherapies. *See* biological therapies

impetigo, 228

incisional biopsy, 13

Indian gooseberry extract, 251–252

Indian head massage, 201

infection controls, 224–227. *See* sanitation/infection controls in spa treatments

inguinal lymph nodes, 146

Ininotecan, 359–361

initiation stage, cancer, 5

innate immune system, 74–75

integumentary system. *See* skin (integumentary system)

intense pulse light. *See* IPL

interferons, 63

interleukins, 63

intermediate filaments, 237

internal radiation therapies, 45

intravenous lines. *See* IVs

IPL (intense pulse light), 136

Iressa, 395–396

irradiation, transplants, 159

IVs (intravenous) lines

chemotherapy, 30, 32, 41, 42, 158

oncologic surgeries, 24, 157

## J – K

Japanese kobido facial, 189

Jessners peels, 134

Jin shin jyutsu, 213

keloid scars, 22–23

keratin, 88

keratinocytes, 74, 86, 88–89

keratoses, 96

keratosis pilaris, 96

Kytril, 408–409

## L

LA (linoleic acid), 267

Langerhans cells, 74, 75, 77

    vimentin, 88

laparoscopic surgery, 13

L-arginine, 285

larrea divaricata leaf extract, 279

L-ascorbic acid (vitamin C), 257–258

laser therapy, 135

Lasparaginase, 384–385

lavandula angustifolia oil, 279

lavender oil, 279

L-carnitine, 286

L-cysteine, 285

Lebed method, 213

lecithin, 279

LEDs (light-emitting diodes), 197

lemongrass oil, 276

lentigo maligna melanomas. *See* LMMs

lesions, 91–92

    chemotherapy, 158

- natural skin color lesions, 92–93
- Letrozole, 404–406
- leukemia. *See also* AML
  - chemotherapy, 34
- Leukeran, 308–310
- leukocytes (white blood cells), 74–75
- leukopenia, 159
- leukoplakia. *See* AC
- licorice root extract, 278
- lidocaine, 290
- light-emitting diodes. *See* LEDs
- light therapy, 197
- limbs
  - oncologic surgeries, 157
  - restriction of use, 19
- linoleic acid. *See* LA
- lipids, skin care ingredients, 262–265
- liver cancer, 9
- liver spots, 101
- L-lactic acid, 271
- LLLT (low level laser therapy), 43
- LMMs (lentigo maligna melanomas), 123–124
- Lomustine, 325–326
- loricrin, 89
- low level laser therapy. *See* LLLT
- L-Pam, 319–320
- lukemias, 6–7
- lumpectomies, 171–174
- lung cancer deaths
  - Canada, 8
  - United States, 8
- lycopene, 251
- lymphatic system, 139–140
  - capillaries, 143
  - ducts, 143
  - lymph flow, 144–146

- quadrants, 142
- lymphatic vessels, 143, 144
- lymphedema, 26, 140, 150–151
  - versus* edema, 18
  - MLD (manual lymphatic drainage), 142
  - oncology massages, 142
  - radiation therapies, 56–57
  - risks after axillary node removal, 141
  - surgical side effects, 26–27
- lymph flow, 144–146
- lymph nodes, 143–144
  - cancer
    - lymphoma, 149–150
    - primary or secondary, 147–148
    - SLND (sentinel lymph node dessection), 148–149
  - of décolleté/upper abdomen, 146–147
  - of face and neck, 144–146
  - massages, knowledge of node positions, 164
  - oncologic surgeries, 157
- lymphocyte cells, 74, 144
  - B- and T-lymphocytes, antibodies, 78–79
  - B-cells and T-cells, 77–79
- lymphoma, 7, 147, 149–150
  - chemotherapy, 34
  - CTCL (cutaneous T-Cell lymphoma), 130
  - EBV (Epstein-Barr virus), 9
  - MF (mycosis fungoides), 130
  - Sézary syndrome, 130
- lysine, 285
- lysosomes, 237–240

## M

- MAbs (monoclonal antibodies), 60–61. *See also* antibodies
- macrophage cells, 75, 77
- macules, 101
- magnesium silicæ hydroxide, 295

- malignant melanomas. *See* MMs
- malignant processes, 6
- malignant tumors, 3
  - endings and suffixes indicating malignancy, 6
- manual lymphatic drainage massage. *See* MLD
- marshmallow extract, 272
- marsh skullcap extract, 282–283
- mask of pregnancy, 101–102
- massage therapies
  - chemotherapy, 38, 42
  - estheticians and patient medications, 302
  - lymph nodes, face and neck, 144–146
  - MISSION guidelines, 4
  - radiation, 47
- mast cells, 74–75
- mastectomies
  - lymph nodes, removal, 146
  - oncology massages, 171–174
  - reconstructive surgery, 15
  - special bras, 64
- material safety data sheets. *See* MSDS
- mechanical lymphatic drainage, 186
- Mechlorethamine, 317–318
- medical devices
  - chemotherapy
    - central lines, 41–42
    - IVs (intravenous) lines, 41
    - peripheral lines, 41
  - Spaulding Classification, 226
- meditation, 209
- Medralone, 378–380
- mehndi, 200
- melaleuca alternifolia leaf oil, 280
- melanin types, 90
- melanocytes, 89–91
  - vimentin, 88

- melanomas. *See* MMs; NMSCs
- melanosomes, 90, 91
- melasma, 101–102
- Melphalan, 319–320
- mentha piperita leaf oil, 280
- Mercaptopurine, 332–333
- metastasis, 2
- Methotrexate, 334–335
- Methylprednisolone, 378–380
- methylsulfonylmethane. *See* MSM
- Metoclopramide, 416–417
- MF (cycosis fungoides), 130
- microdermabrasions, 134–135, 190
- microorganisms, pathogens and immunity, 73
- micropigmentation, 27, 200–201
- microtubules, 237
- milk thistle extract, 283
- minerals, skin care ingredients, 260–262
- MISSION guidelines for massage therapies, 4
- mitochondria, 237–238, 242–243
- Mitoxantrone, 355–356
- mixed melasma, 102
- MLD (manual lymphatic drainage) massage, 142, 155, 185–186
- MMs (malignant melanomas), 121. *See also* non-pigmented melanoma subtypes
  - chemotherapy, 34
  - recognizing, 126–129
  - reconstructive surgery, 15
  - statistics, 2007
    - Canada, 7
    - United States, 8
- MOH's surgery, 14
- moles. *See* Nevi
- molybdenum, 261
- morpheaform BCC (basal cell carcinoma), 115
- mouth/throat side effects

- biological therapies, 70
- chemotherapy, 34–35, 158
- radiation therapies, 53–56
- M-Prednisol, 378–380
- MRI (magnetic resonance imaging), 15
- MSDS (material safety data sheets), 216
- MSM (methylsulfonylmethane), 276
- mtDNA (mitochondrial deoxyribonucleic acid), 242
- mucositis
  - chemotherapy, 34
  - radiation therapies, 53
- mucostitis, 227
- Muirhead, Toni, 4
- murumuru butter, 262
- music therapy, 211–212
- Mustargen, 317–318
- mycosis fungoides. *See* MF
- Myleran, 303–304

## **N**

- NAC (N-acetyl cysteine), 250
- N-acetyl cysteine. *See* NAC
- nasopharyngeal cancer, 9
- nasya therapy, 212
- National Toxicology Program reports, 248
- natural killer cells. *See* NKs and NKTs
- nausea/vomiting
  - chemotherapy, 34, 158
  - radiation therapies, 48–49
- Navelbine, 374–376
- neucleotides, 239
- neutropenia
  - chemotherapy, 33
  - radiation therapies, 52–53, 177
  - transplants, 159
- neutrophil cells, 75, 77

- Nevi (moles), 121–122
  - congenital Nevi, 122
  - dysplastic Nevi, 122
- Nexavar, 66
- NHL. *See* non-Hodgkin's lymphoma
- niacinamide (vitamin B3), 254
- Nirtogen Mustard, 317–318
- NKs (natural killer) cells, 74–75
- NKTs (natural killer T-cells), 75
- NMs (nodular melanomas), 125–126
- NMSCs (non-melanoma skin cancers), 114
  - statistics, 2007
    - Canada, 7
    - United States, 8
- nodular BCCs (basal cell carcinomas), 115
- nodular melanomas. *See* NMs
- nodules, 91, 92
- Nolvadex, 402–404
- non-Hodgkin's lymphoma, 7, 149–150
- non-melanoma skin cancers. *See* NMSCs
- non-pigmented melanoma subtypes, 129
- normal cells
  - versus* cancer cells, 3
  - carcinogenesis, 3
- Novatrone, 355–356
- nuclear envelope, 237
- nucleolus, 237–239
- nucleus, 237–239
- numbness, 19, 158
- nutrition
  - chemotherapy, 38, 42
  - radiation therapies, 57–58
- nymphaea coerulea extract, 280

## O

- oat kernal extract, 274

- occipital lymph nodes, 145
- octinoxate, 289
- octyl salicylate, 289
- octyl salicylate homosalate, 289
- ocular rosacea, 99
- Office of Environmental Health Hazard Assessment (CA), 248
- oleoresin *rosmarinus officinalis* oil, 280
- olfaction, 209
- oncogenes, 5, 80–81
- oncologic surgeries, 11–12
  - cancers
    - internal, 14–15
    - topical skin, 13–14
  - cryosurgery, 14
  - curative, 15
  - debulking, 15
  - diagnostic, 13
  - electrosurgery, 14
  - esthetician's role, 27
  - follow-up, 15
  - image-guided, 15
  - laparoscopic, 13
  - laser, 13–14
  - MOH's, 14
  - oncology massages, 156–157
  - palliative, 15
  - preventative, 14
  - reconstructive, 15
  - robotic, 15
  - side effects, 16–27
  - staging
    - Roman Numeral, 12
    - TMN (Tumor, Nodes, Metastasis), 12
  - supportive, 15
  - surgical incisions, 19
- oncology massages, 153–155

- bolster use, 164
- certification of estheticians, 165
- conditions/side effects for consideration
  - after chemotherapy, 158
  - after oncologic surgeries, 156–157
  - after radiation therapy, 159
  - after transplants, 159
- lymphedema, 142
- lymph nodes, positions, 164
- oils, gels, and lotions, 165
- pressure depth, 161–162
- procedures, 165–174
- psychological effects, 162, 163
- skin palpation, 160–161
- Oncovin, 373–374
- Ondansetron, 410–411
- Onxol, 368–370
- organelles, 236–245
- oryza sativa oil, 263
- OTC (over-the-counter) ingredients, 290
- ovarian cancer
  - debulking surgery, 15
  - preventative surgery, 14
- over-the-counter products. *See* OTC
- oxybenzone, 289
- oxygen facial, 188–189

## **P – Q**

- PABA (para-amino benzoic acid), 257
- Paclitaxel, 368–370
- palliative surgery, 15
- palmar-plantar erythrodysesthesia. *See* PPE
- Palonosetron, 411–412
- P-amino benzoic acid, 289
- panax ginseng extract, 281
- panthenol (vitamin B5), 255

- papain, 270
- papules, 91, 92
- papulopustular rosacea, 99
- para-amino benzoic acid. *See* PABA
- parabens, 292–293
- parafango, 201–202
- paraffin therapy, 202
- Paraplatin, 306–308
- parchment-like skin, 37–38
- paronychia, 229–230
  - hands/feet side effects, 69
- parotid lymph nodes, 145
- patchouli oil, 280–281
- pathogens, microorganisms and immunity, 73
- PDT (photodynamic therapies), 14, 136
- pedicures, hot stone, 206
- Pemetrexed, 342–343
- peppermint leaf oil, 280
- peptides, 287
- peripheral lines
  - chemotherapy, 41
  - oncologic surgeries, 157
- peripherally inserted central catheters. *See* PICCs
  - chemotherapy, 41
- peripheral neuropathy, chemotherapy, 158
- permanent makeup, micropigmentation, 27
- perpheral IVs (intravenous lines), 24
- petechiae, 25
  - chemotherapy, 158
  - oncologic surgeries, 156
- phagocyte cells, 75
- Phenergan, 414–416
- pheomelanin, 90
- phlebitis, 66
- phospholipids, 263
- photodynamic therapies. *See* PDT

- phototoxic chemotherapy drugs, 36
- phyllanthus emblica (Indian gooseberry) extract, 251–252
- phytonadione (vitamin K), 260
- phytotherapies (plant medicine), 207
- PICCs (peripherally inserted central catheters), 24–25
- pigment changes, 68
- PIH (post inflammatory pigmentation), 102
- pityriasis versicolor, 230
- plantar warts, 233
- plant medicine (phytotherapies), 207
- plant medicines in therapies, 207
- Platinol, 305–306
- pogostemon cablin oil, 280–281
- poikiloderma, 97
- ports, central lines, 24
  - chemotherapy, 41, 158
- port wine stains, 104
- post auricular lymph nodes, 145
- post inflammatory pigmentation. *See* PIH
- poultices/compresses, 202, 203
- PPE (palmar-plantar erythrodysesthesia), 43
- pre-auricular lymph nodes, 145
- Prednisone, 246, 376–378
- preservatives, 292
- pressure depth, oncology massages, 161–162
- preventative surgery, 14
- primary tumors
  - CIS (carcinoma in situ), 2
  - internal tumors, characteristics, 1
  - metastasis, 2
  - skin cancers, 1
- Prochlorperazine, 413–414
- progression stage, cancer, 5
- prokaryotes, 238
- Promethazine, 414–416
- promotion stage, cancer, 5

- prostate cancers (men)
    - deaths in United States, 8
    - robotic surgery, 15
  - proteasome inhibitors, 62–63
  - proteins, 286–288
  - protheses, nose, 87
  - proto-oncogenes, 5, 81
  - prunus amygdalus dulcis oil, 263
  - prunus armeniaca kernel oil, 263
  - pruritis, 105
    - biological therapies, 67
    - chemotherapy, 35
    - radiation therapies, 51–52
  - psoriasis, 106
  - psychological effects, massages, 162, 163
  - Purinethol, 332–333
  - purpura, 100
    - chemotherapy, 40
  - pustules, 95
  - pyridoxine (vitamin B6), 255
- quadrants, lymphatic system, 142

## R

- radiation dermatitis, 50–51
- radiation recall
  - chemotherapy, 39
  - radiation therapies, 51, 159
- radiation site markings, 49–50
- radiation therapies
  - administering, 46, 48
  - frequency, 48
  - nutrition, 57–58
  - oncology massages, 159
  - side effects
    - hair, 57

- lymphedema, 56–57
- mouth/throat, 53–56
- nausea/vomiting, 48–49
- neutropenia, 52–53, 177
- skin, 49–52
- thrombocytopenia, 52–53
- types
  - external, 45
  - internal, 46
- raindrop therapy, 206–207
- rashes
  - biological therapies, 66–67
  - chemotherapy, 35, 158
- rassoul scalp therapy, 191
- recessive gene mutation, 81
- reconstructive surgery, 15
- rectal cancer deaths in United States, 8
- red bush extract, 273
- red clover extract, 284
- Red Man disease, 130
- red raspberry fruit extract, 281
- reflexology, 31
  - biological therapies, 66
  - foot therapies, 206
- Reglan, 416–417
- reiki facial, 189–190
- renal cancer, 68
- Renova, 390–391
- Retin-A, 253, 390–391
- Retin A Micro Gel, 390–391
- retinoic acid, 135
  - ATRA (all-trans retinoic acid), 253
  - Retin-A, 253, 390–391
- retropharyngeal lymph nodes, 145
- Rheumatrex, 334–335
- rhinectomy, 87

- riboflavin (vitamin B2), 254
- ribosomes, 237–240
- rice bran oil, 263
- robotic surgery, 15
- rodent ulcers, 116
- Roman chamomile flower extract, 272
- Roman Numeral Staging, 12
- rooibos extract, 273
- rosa canina fruit extract, 281
- rosacea, 98–99
- rosa damascena flower distillate, 281
- rose flower distillate, 281
- rosehip fruit extract, 281
- rosemary oil, 280
- rose quartz massages, 184
- Rubex®, 346–349
- rubus idaeus fruit extract, 281
- ruscus aculeatus root extract, 281

## S

- SA (salicylic acid), 134
- sage oil, 282
- salix alba bark extract, 282
- salvia officinalis oil, 282
- sanitation/infection controls in spa treatments, 176–177
  - blood-borne pathogen standards, 216
  - engineering controls, 221–224
  - hand washing, 215–216
  - infection controls, 217–220, 224–227
    - bacterial skin infections, 227–231
    - viral skin infections, 231–234
  - MSDS (material safety data sheets), 216
- sarcomas, 7
- SC (stratum corneum), 86
  - ingredient penetraion, 295–297
  - skin care FDA regulations, 247

- spa treatments, 137
- scabs/crusts, 94
- scalp therapy, 190–192
- scars, 22–24, 94
- SCC (squamous cell carcinoma), 6, 118, 120–121
  - keratinocytes, 85–86, 88
  - oncologic surgeries, 13–14
  - radical skin damage, 250
  - spa treatments, 137
- scrophularia nodosa extract, 282
- scutellaria galericulata extract, 282–283
- sea shell massages, 182–183
- sebaceous cysts, 95
- sebaceous hyperplasia, 93
- seborrheic dermatitis, 106
- seborrheic keratosis, 96
- sebum and acne, 109
- selenium, 261
- sepsis, 227
- shea butter, 262
- shingles (herpes zoster), 232
  - chemotherapy, 40–41
  - radiation therapies, 55
- shiro-abahyanga-nasya scalp therapy, 191
- shirodhara scalp therapy, 191–192
- Sign chi do, 213
- silybum marianum extract, 283
- 6-MP, 332–333
- skin (integumentary system), 74, 85–86
  - adhesions, 23–24
  - breaks in skin, 94–96
  - bruising, 25–26, 100, 156
  - dehydration, 110
  - elasticity loss
    - chemotherapy, 37–38
    - radiation therapies, 54

- erythematous dry skin, 25
- lesions, 91–92, 158
  - natural skin color lesions, 92–93
- numbness or sensitivity, 19, 158
- scarring, 22–24
- side effects from
  - biological therapies, 66–68
  - chemotherapy, 35–41, 158
  - internal cancers, 130–133
  - radiation therapies, 49–52, 159
  - transplants, 159
- skin redness/blueness, 97–100
- skin cancers, 111–112. *See also* specific cancers
  - CIS (carcinoma in situ), 2
  - statistics, 2007
    - Canada, 7
    - United States, 8
- skin care ingredients
  - ALA (alpha lipoic acid), 252
  - amino acids, 284–289
  - antioxidants, 249–250
  - botanicals, 270–284
  - EFA (essential fatty acids), 265–269
  - enzymes, 269–270
  - lipids, 262–265
  - minerals, 260–262
  - negative effects, 291–295
  - OTC (over-the-counter) products, 290
  - regulations, 247–249
  - skin penetration, 295–297
  - sunscreens, 289–290
  - vitamins, 252–260
  - water, 249
- Skin Deep Web site, 248
- skin needling, 193
- SLND (sentinel lymph node dessection), 148–149

Society for Oncology Massage, 4  
 SOD (superoxide dismutase), 250  
 solar lentigo, 101  
 solar keratosis. *See* AK  
 Soltamox, 400–402  
 Solu-Medrol, 378–380  
 sonfyi extract, 283  
 sonocytology, 245  
 Sorafenib
 

- hands/feet side effects, 68
- rashes, 66

 sound therapy, 210–212  
 soybean oil, 262, 277  
 spa treatments, 175–176
 

- aromatherapy, 207–208
- biofeedback, 213
- breathwork, 213
- chromatherapy (color therapy), 209
- client intake forms, 177–179, 220
- cold therapies, 203
- collagen induction therapies, 193
- craniosacral therapy, 192
- ear therapies, 192–193
- electrotherapies, 193–195
- esthetician psyche, 179
- exfoliation, 134–135, 196–197
- facial therapies, 180–190
- hair loss solutions, 200–201
- hair removal, 197–199
- hands/feet therapies, 203–206
- heat/thermal therapies, 201–203
- hypnotherapy, 210
- Jin shin jyutsu, 213
- Lebed method, 213
- meditation, 209
- microdermabrasions, 134–135, 190

- nasya therapy, 212
- olfaction, 209
- plant medicines, 207
- preparations, 176
- raindrop therapy, 206–207
- room setup, 180
- sanitation, 176–177
- scalp therapy, 190–192
- Sign chi do, 213
- skin needling, 193
- sound therapy, 210–212
- Tai Chi, 212
- ultrasound, 195–196
- vacuomobilization, 196
- Spaulding Classification, medical devices, 226
- sphingolipids, 263–264
- spider nevus/angiomas, 97
- squalene, 264
- SSMs (superficial spreading melanomas), 123
- staging, oncologic surgery
  - Roman Numeral, 12
  - TMN (Tumor, Nodes, Metastasis), 12
- stem cells, 88
- Steven-Johnson Syndrome, 40
- stone lymph drainage, 186, 188
- stratum corneum. *See* SC
- stratum granulosum, 89
- strawberry hemangiomas, 103
- Streptozocin, 322–323
- submandibular lymph nodes, 145
- sugaring (hair removal), 199
- sulfur, 261
- Sunitinib side effects
  - hair, 70
  - hands/feet, 68
  - mouth/throat, 70

- pigment changes, 68
- rashes, 66
- sun protection
  - spa treatments, 136–137
  - sun blocks, 288–289
  - sunscreens, 289–290
- sun spots. *See* AK
- superficial multifocal BCC (basal cell carcinoma), 116
- superficial spreading melanomas. *See* SSMs
- superficial subcutaneous lipoma, 93
- superoxide dismutase. *See* SOD
- supportive surgery, 15
- supraclavicular lymph nodes, 145, 147
- surgeries. *See* oncologic surgeries
- surgical incisions, 19
- Sutent, 66
- symphytum officinale extract, 282

## T

- TA (transient amplifying) cells, 88
- tags (skin), 93
- Tai Chi, 212
- talon noir, 103
- Tamoxifen
  - Oral, 402–404
  - Oral (Solution), 400–402
- taraxacum officinale extract, 283
- Tarceva, 68, 397–398
- Taxol, 368–370
- Taxotere, 370–371
- TCA (trichloroacetic acid), 135
- T-cells, 77–79
- TCRs (T-cell receptors), 78
- tea tree leaf oil, 280
- telangiectasia, 97
  - poikiloderma, 97

- radiation therapies, 52
- Temodar, 320–322
- Temozolomide, 320–322
- temsirolimus, edema, 69–70
- Teniposide, 366–367
- Thalidomide, 393
- Thalomid, 393
- theobroma cacao butter, 264
- theobroma grandiflorum seed butter, 264
- thermal/heat therapies, 201–203
- thiamine (vitamin B1), 254
- thioctic acid, 252
- threading (hair removal), 199
- three stage theory of cancer, 5
- throat/mouth, chemotherapy, 34–35
- thrombocytopenia
  - chemotherapy, 33
  - radiation therapies, 52–53
  - transplants, 159
- thrombosis
  - chemotherapy, 158
  - oncologic surgeries, 156
- tinea pedis, 231
- tinea versicolor, 230
- titanium dioxide, 289
- TKIs (tyrosine kinase inhibitors), 62–63
  - rashes, 62–63
- TMN (Tumor, Nodes, Metastasis) staging, 12
- tonsillar lymph nodes, 145
- Topotecan Hydrochloride, 357–358
- Topsar, 363–365
- Torisel, 69–70
- totara extract, 283
- totarol extract, 283
- touch therapy, 176
- toxic chemical exposure, cancer causes, 3

transient amplifying cells. *See* TA

Tretinoin

Oral, 392

Topical, 390–391

Trexall, 334–335

trichloroacetic acid. *See* TCA

tricholoma matsutake extract, 283

trifolium pretense extract, 284

Tumor, Nodes, Metastasis staging. *See* TMN

tumors

benign, 3

malignant, 3

suppressor genes, 5

turmeric extract, 284

tyrosine kinase inhibitors. *See* TKIs

tyrosine kinases, 62

## U

ubiquinone, 251

ulcers, 94

ultrasound, 15

ultrasound therapies, 195–196

ultraviolet radiation. *See* UV

uncaria tomentosa extract, 284

United States, skin cancer statistics, 2007, 7

urea, 291–292

urticaria, 98

UV (ultraviolet radiation)

cancer causes, 3

skin cancers, 1

stratum corneum, 86

sunscreens/sun blockers, 288–290

## V

vaccines for cancer, 61, 79

sunscreens, 289–290

vacuoles, 237–238, 241  
vacuomobilization, 196  
varicella zoster, 55  
Vasanoid, 392  
vegetal ceramide, 264–265  
Velban, 371–372  
Velcade, 398–400  
Vepesid  
    Injection, 363–365  
    Oral, 361–363  
vesicles, 95, 158, 237–238, 241  
vibrational acupressure facial, 189  
vibrational aromatherapy, 189  
vibroacoustics sound therapy, 211  
vimentin, 88  
Vinblastine, 371–372  
Vincasar, 373–374  
Vincristine, 373–374  
Vinorelbine Tartrate, 374–376  
vitamin B, 253  
vitamins, skin care ingredients, 252–260  
vitiligo, 104  
VM-26, 366–367  
vomiting/nausea  
    chemotherapy, 34, 158  
    radiation therapies, 48–49  
VP-16, 361–363  
Vumon, 366–367

## **W**

warm stone massages, 183  
warts, 233  
waxing, 198–199  
wheat proteins, 288  
white blood cells (leukocytes), 74–75  
whiteheads, 109

white willow bark extract, 282  
wound healing process, 20–22, 158

## **X – Z**

Xeloda, 329–331  
xerosis (dry skin), 104  
biological therapies, 68  
chemotherapy, 36–37, 158  
radiation therapies, 53–54

Zanosar, 322–323  
zinc, 261–262  
zinc oxide, 288  
zingiber officinale oil, 277  
Zofran, 410–411

