#### **Appendix 1: Final Search Strings**

#### **PUBMED**

#### Tanning + cancer

(((((((("Sunburn"[Mesh] OR "Sunbathing"[Mesh] OR "Suntan"[Mesh] OR Sunlight/adverse effects[mh] OR Ultraviolet rays/adverse effects[mh]) AND indoor) OR "indoor tanning" OR "sunbed" OR "sunbeds" OR "sun beds" OR "tanning beds" OR "tanning beds" OR "tanning booths" OR "tanning salon" OR "tanning salons" OR suntan parlors OR "solarium" OR "solariums" OR "solaria" OR "sunlamp" OR "sunlamps" OR "sun lamp" OR "sun lamps" OR "artificial tanning" OR "UV tanning" OR "non-solar ultraviolet radiation"))) AND ((("skin neoplasms"[MeSH Terms] OR skin cancer OR skin cancers OR skin neoplasm OR skin neoplasms OR ((cutaneous OR skin\* OR dermatol\*) AND (basal cell OR squamous cell)) OR non-melanoma skin cancer OR non-melanoma skin cancers OR "Carcinoma, Basal Cell"[Mesh] OR "basal cell carcinoma" OR "basal cell carcinomas" OR "Carcinoma, Squamous Cell"[Mesh] OR "squamous cell carcinoma" OR "squamous cell carcinomas" OR Melanoma[Mesh] OR melanoma\*))))))

English: 955 All: 1002

### Tanning + "benefits"

(((((((("Sunburn"[Mesh] OR "Sunbathing"[Mesh] OR "Suntan"[Mesh] OR Sunlight/adverse effects[mh] OR Ultraviolet rays/adverse effects[mh]) AND indoor) OR "indoor tanning" OR "sunbed" OR "sunbeds" OR "sun bed" OR "tanning bed" OR "tanning beds" OR "tanning booths" OR "tanning salon" OR "tanning salons" OR suntan parlors OR "solarium" OR "solariums" OR "solarium" OR "solariums" OR "solaria" OR "sunlamp" OR "sunlamps" OR "sun lamp" OR "sun lamps" OR "artificial tanning" OR "UV tanning" OR "non-solar ultraviolet radiation")))))) AND ("vitamin D" OR "vitamin D"[mh] OR "mood enhancing" OR "mood-enhancing" OR "mood enhancement" OR "endorphin" OR "endorphins" OR seasonal affective disorder[mh] OR depression[mh] OR anxiety[mh] OR "pain relief" OR "photoprotection" OR "photo protection" OR "photoprotective" OR "phototherapy" OR "beauty" OR cosmetic[mh] OR "acne" OR "psoriasis"))

English: 549 All: 571

# Tanning + cancer + "benefits"

(((((((("Sunburn"[Mesh] OR "Sunbathing"[Mesh] OR "Suntan"[Mesh] OR Sunlight/adverse effects[mh] OR Ultraviolet rays/adverse effects[mh]) AND indoor) OR "indoor tanning" OR "sunbed" OR "sunbeds" OR "sun bed" OR "tanning bed" OR "tanning beds" OR "tanning booth" OR "tanning booths" OR "tanning salon" OR "tanning salons" OR suntan parlors OR "solarium" OR "solariums" OR "solaria" OR "sunlamp" OR "sunlamps" OR "sun lamp" OR "sun lamps" OR "artificial tanning" OR "UV tanning" OR "non-solar ultraviolet radiation"))) AND ((("skin neoplasms"[MeSH Terms] OR skin cancer OR skin cancers OR skin neoplasm OR skin neoplasms OR ((cutaneous OR skin\* OR derma\*) AND (basal cell OR squamous cell)) OR non-melanoma skin cancer OR non-melanoma skin cancers OR "Carcinoma, Basal Cell"[Mesh] OR "basal cell carcinoma" OR "basal cell carcinomas" OR "Carcinoma, Squamous Cell"[Mesh] OR "squamous cell carcinoma" OR "squamous cell carcinomas" OR Melanoma[Mesh] OR melanoma\*))))) AND ("vitamin D" OR "vitamin D"[mh] OR "mood enhancing" OR "mood-enhancing" OR "mood enhancement" OR "endorphin" OR "endorphins" OR seasonal affective disorder[mh] OR depression[mh] OR anxiety[mh] OR "pain relief" OR "photoprotection" OR "psoriasis")))

English: 363 All: 379

#### **EMBASE**

#### Tanning + Cancer

(indoor AND (tan OR tanning OR sunburn OR sunburns OR 'sun burn' OR 'sun burns' OR sunbathing OR suntan OR sunlight OR 'ultraviolet ray' OR 'ultraviolet rays' OR 'uv tanning') OR 'indoor tanning' OR sunbed OR sunbeds OR 'sun beds' OR 'tanning beds' OR 'tanning beds' OR 'tanning booth' OR 'tanning booths' OR 'tanning salon' OR 'tanning salons' OR 'sun tan parlor' OR 'sun tan parlors' OR solarium OR solaria OR sunlamp OR 'sun lamp' OR sunlamps OR 'sun lamps' OR 'artificial tanning' OR 'non-solar ultraviolet radiation' OR 'non-solar uv radiation' OR 'nonsolar uv radiation' OR 'skin cancers' OR 'skin neoplasms' OR 'nonmelanoma skin cancer' OR 'nonmelanoma skin cancer' OR 'non-melanoma skin cancer' OR 'non-melanoma OR melanomas)

English: 1179 All: 1242

### Tanning + "benefits"

(indoor AND (tan OR tanning OR sunburn OR sunburns OR 'sun burn' OR 'sun burns' OR sunbathing OR suntan OR sunlight OR 'ultraviolet ray' OR 'ultraviolet rays' OR 'uv tanning') OR 'indoor tanning' OR sunbed OR sunbeds OR 'sun bed' OR 'sun beds' OR 'tanning bed' OR 'tanning beds' OR 'tanning booth' OR 'tanning booths' OR 'tanning salon' OR 'tanning salons' OR 'sun tan parlor' OR 'sun tan parlors' OR solarium OR solaria OR sunlamp OR 'sun lamp' OR sunlamps OR 'sun lamps' OR 'artificial tanning' OR 'non-solar ultraviolet radiation' OR 'non-solar uv radiation' OR 'nonsolar uv radiation' OR 'mood-enhancing' OR 'mood-enhancement' OR 'photo protection' OR 'photoprotection' OR 'photoprotective' OR 'anxiety' OR 'depression' OR 'endorphin' OR 'endorphins' OR 'phototherapy' OR 'seasonal affective disorder' OR 'pain relief' OR 'acne' OR 'psoriasis')

English: 572

All: 618 + acne 706 all, 655 Enligh)

# **Tanning + "benefits" + cancer**

(indoor AND (tan OR tanning OR sunburn OR sunburns OR 'sun burn' OR 'sun burns' OR sunbathing OR suntan OR sunlight OR 'ultraviolet ray' OR 'ultraviolet rays' OR 'uv tanning') OR 'indoor tanning' OR sunbed OR sunbeds OR 'sun bed' OR 'sun beds' OR 'tanning bed' OR 'tanning beds' OR 'tanning booth' OR 'tanning booths' OR 'tanning salon' OR 'tanning salons' OR 'sun tan parlor' OR 'sun tan parlors' OR solarium OR solaria OR sunlamp OR 'sun lamp' OR sunlamps OR 'sun lamps' OR 'artificial tanning' OR 'non-solar ultraviolet radiation' OR 'non-solar uv radiation' OR 'nonsolar uv radiation' OR 'skin cancers' OR 'skin neoplasms' OR 'nonmelanoma skin cancer' OR 'nonmelanoma skin cancer' OR 'non-melanoma skin cancers' OR 'non-melanoma oR melanoma) AND ('cosmetic' OR 'beauty' OR 'vitamin D' OR 'mood' OR 'mood-enhancing' OR 'mood-enhancement' OR 'photo protection' OR 'photoprotection' OR 'photoprotective' OR 'anxiety' OR 'depression' OR 'endorphin' OR 'endorphins' OR 'phototherapy' OR 'seasonal affective disorder' OR 'pain relief' OR 'acne' OR 'psoriasis')

English: 280

### **WEB OF SCIENCE**

### Tanning + cancer

(((((((("Sunburn"[Mesh] OR "Sunbathing"[Mesh] OR "Suntan"[Mesh] OR Sunlight/adverse effects[mh] OR Ultraviolet rays/adverse effects[mh]) AND indoor) OR "indoor tanning" OR "sunbed" OR "sunbeds" OR "sunbeds" OR "sunbeds" OR "tanning beds" OR "tanning beds" OR "tanning booths" OR "tanning salon" OR "tanning salons" OR suntan parlors OR "solarium" OR "solariums" OR "solaria" OR "sunlamp" OR "sunlamps" OR "sun lamp" OR "sun lamps" OR "artificial tanning" OR "UV tanning" OR "non-solar ultraviolet radiation"))) AND ((("skin neoplasms"[MeSH Terms] OR skin cancer OR skin cancers OR skin neoplasm OR skin neoplasms OR ((cutaneous OR skin\* OR dermatol\*) AND (basal cell OR squamous cell)) OR non-melanoma skin cancer OR non-melanoma skin cancers OR "Carcinoma, Basal Cell"[Mesh] OR "basal cell carcinoma" OR "basal cell carcinomas" OR "Carcinoma, Squamous Cell"[Mesh] OR "squamous cell carcinoma" OR "squamous cell carcinomas" OR Melanoma[Mesh] OR melanoma\*))))))

English: 869 All: 887

### Tanning + "benefits"

(((((((("Sunburn"[Mesh] OR "Sunbathing"[Mesh] OR "Suntan"[Mesh] OR Sunlight/adverse effects[mh] OR Ultraviolet rays/adverse effects[mh]) AND indoor) OR "indoor tanning" OR "sunbed" OR "sunbeds" OR "sun bed" OR "tanning bed" OR "tanning beds" OR "tanning booths" OR "tanning salon" OR "tanning salons" OR suntan parlors OR "solarium" OR "solariums" OR "solarium" OR "sunlamp" OR "sunlamps" OR "sun lamps" OR "sun lamps" OR "artificial tanning" OR "UV tanning" OR "non-solar ultraviolet radiation")))))) AND ("vitamin D" OR "vitamin D"[mh] OR "mood enhancing" OR "mood-enhancing" OR "mood enhancement" OR "endorphin" OR "endorphins" OR seasonal affective disorder[mh] OR depression[mh] OR anxiety[mh] OR "pain relief" OR "photoprotection" OR "photoprotection" OR "photoprotective" OR "phototherapy" OR "beauty" OR cosmetic[mh] OR "acne" OR "psoriasis"))

English: 246 All: 250

# Tanning + cancer + "benefits"

(((((((("Sunburn"[Mesh] OR "Sunbathing"[Mesh] OR "Suntan"[Mesh] OR Sunlight/adverse effects[mh] OR Ultraviolet rays/adverse effects[mh]) AND indoor) OR "indoor tanning" OR "sunbed" OR "sunbeds" OR "sun beds" OR "tanning beds" OR "tanning beds" OR "tanning booths" OR "tanning salon" OR "tanning salons" OR suntan parlors OR "solarium" OR "solariums" OR "solarium" OR "sunlamps" OR "sunlamps" OR "sun lamps" OR "sun lamps" OR "artificial tanning" OR "UV tanning" OR "non-solar ultraviolet radiation"))) AND ((("skin neoplasms"[MeSH Terms] OR skin cancer OR skin cancers OR skin neoplasm OR ((cutaneous OR skin\* OR derma\*) AND (basal cell OR squamous cell)) OR non-melanoma skin cancer OR non-melanoma skin cancers OR "Carcinoma, Basal Cell"[Mesh] OR "basal cell carcinoma" OR "basal cell carcinomas" OR "Carcinoma, Squamous Cell"[Mesh] OR "squamous cell carcinoma" OR "squamous cell carcinomas" OR Melanoma[Mesh] OR melanoma\*))))) AND ("vitamin D" OR "vitamin D"[mh] OR "mood enhancing" OR "mood-enhancing" OR "mood enhancement" OR "endorphin" OR "endorphins" OR seasonal affective disorder[mh] OR depression[mh] OR anxiety[mh] OR "pain relief" OR "photoprotection" OR

"photo protection" OR "photoprotective" OR "phototherapy" OR "beauty" OR cosmetic[mh] OR "acne" OR "psoriasis")))

English: 144 All: 146