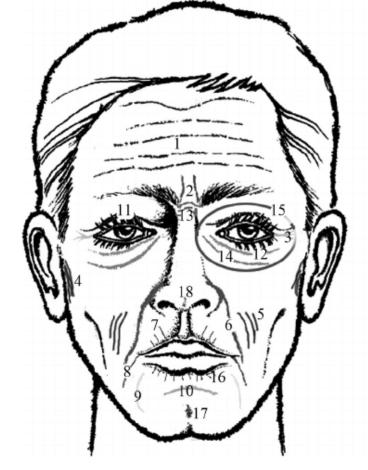
OBJECTIVE ASSESSMENT & REALISTIC EXPECTATIONS



RHYTIDES AND PHOTOAGING SCALES

- 1. Glogau photoaging classification
- 2. Fitzpatrick's classification of facial wrinkling
- 3. Hamilton scale
- 4. Lemperle scale
- 5. Larnier photographic scale
- 6. Wrinkle severity scale
- 7. L'Oreal scale



1 - Horizontal forehead lines 2 - Vertical glabellar line 3 - Periorbital lines (Crows feet) 4 - Periauricular lines 5 - Cheek fold/crease 6 - Nasolabial fold 7 - Perioral wrinkles/upper lip lines 8 - Chelion lines (Marionette lines) 9 - Mandibular folds 10 - Chin crease 11 - Upper eyelid crease 12 - Lower eyelid crease 13 - Transverse nasal line 14 - Infraorbital crease 15 - Orbital shape 16 - Lower lip lines 17 - Mental pit/crease 18 - Bifid nasal tip



GLOGAU PHOTOAGING CLASSIFICATION (THE WRINKLE SCALE)

TYPE I NO WRINKLES	TYPE II WRINKLES IN MOTION	TYPE III WRINKLES AT REST	TYPE IV ONLY WRINKLES	
Usually 20s-30s	Usually 30s-40s	Usually 50+	Usually 60+	
Early photoaging	Early to moderate photoaging	Advanced photoaging	Severe photoaging	
Mild pigmentary changes	Early senile lentigines	Obvious dyschromias, telangiectasia	Yellow-grey skin	
No keratoses	Palpable but not visible keratoses	Visible keratoses	Prior skin malignancies	
Minimal wrinkles	Parallel smile lines begin to appear lateral to mouth	Persistent wrinkling	No normal skin	





FITZPATRICK'S CLASSIFICATION OF FACIAL WRINKLING





www.researchgate.net/profile/Elana_Markovitz/publication/5308355/viewer/AS:103256692887568@1401629723003/background/3.png

HAMILTON SCALE

FACIAL AGING	CLINICAL MORPHOLOGY	TISSUE LOCATION	CLINICAL LOCATION	ETIOLOGY	OPTIMAL TREATMENTS	Periorbital Lines
Α	Folds	Muscular	Nasolabial folds, neck, eyelids	Loss of tone, gravity	Rhytidectomy, blepharoplasty	
В	Furrows	Musculo- cutaneous	Forehead, smile lines	Repeated facial expressions	Filler substances, injectables, implants	
С	Wrinkles	Cutaneous	Cheeks, crow's feet, perioral	Intrinsic aging, photoaging	Resurfacing, laser, chemical peel	
D	Combination				Combined approach	4 5

Image:https://www.researchgate.net/profile/Gottfried_Lemperle4/publication/11643185/viewer/AS:205817371467776@1426082094687/backgrou nd/10.png Ref: Lemperle, G. et al (2001). A classification of facial wrinkles. <u>Plastic & reconstructive surgery</u>, 108(6) 1735-1750



LEMPERLE SCALE





- Horizontal forehead furrows
- Glabellar frown lines
- Periorbital lines
- Periauricular lines (right)
- Cheek lines
- Nasolabial folds
- Radial upper lip lines
- Corner of the mouth lines
- Marionette lines
- Labiomental crease
- Horizontal neck folds

Image: http://images.alfresco.advanstar.com/alfresco_images/HealthCare/2015/10/13/a4a2f058-542d-4f27-9ecd-73e1f7cae17f/Figure%201.jpg

LEMPERLE SCALE

Marionette Lines

CLASS	DESCRIPTION
0	No wrinkles
1	Just perceptible wrinkles
2	Shallow wrinkles
3	Moderately deep wrinkles
4	Deep wrinkles, well-defined edges
5	Very deep wrinkles, redundant fold

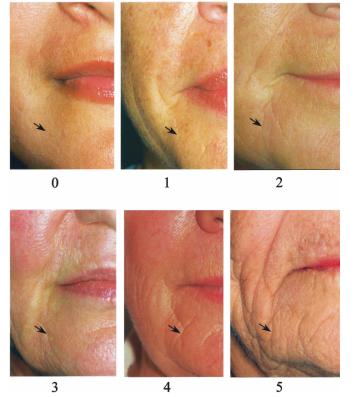




Image: http://plasticsurgerykey.com/wp-content/uploads/2016/03/B9780702031687000208_f020-001-9780702031687.jpg

LARNIER PHOTOGRAPHIC SCALE

The Larnier scale 4 -6





Image: Wickett, R. (2015). Efficacy methodology & assessment of cosmetics. University of Cincinatti.

WRINKLE SEVERITY RATING SCALE

WSRS = Wrinkle Severity Rating Scale

_	Production of the local division of the loca	
5	Extreme	Extremely deep and long folds, detrimental to facial appearance. 2-4mm Visible V-shaped fold when stretched Unlikely to have satisfactory correction with injectable implant alone.
4	Severe	Very long and deep folds; prominent facial feature. Less than 2mm visible fold when stretched. Significant improvement is expected from injectable implant.
3	Moderate	Moderately deep folds. Clear facial feature visible at normal appearance but not when stretched. Excellent correction is expected from injectable implant.
2	Mild	Shallow but visible fold with a slight indentation; minor facial feature. Implant is expected to produce a slight improvement in appearance.
1	Absent	No visible fold, continuous skin line.





Image: Treacy, P. (2013). Multiprocedural synchronous facial rejuvenation. Ailesbury Clinics Ltd.

L'OREAL SCALE



Roland BAZIN + Eric DOUBLET

SKIN AGING

4

ATLAS

éditions MED'COM

VOLUME 1 Caucasian Type



Grading scale	Descriptive parameter	Categories of skin aging and photodamage						
		Rhytides	Laxity	Elastosis	Dyschromia	Erythema telangiectasia	Keratoses	Texture
0	None	None	None	None	None	None	None	None
1	Mild	Wrinkles in motion, few, superficial	Localized to NL folds	Early, minimal yellow hue	Few (1-3) discrete small (<5 mm) lentigines	Pink E or few T, localized to single site	Few	Subtle irregularity
1.5	Mild	Wrinkles in motion, multiple, superficial	Localized, NL and early ML folds	Yellow hue or early, localized PO EB	Several (3- 6), discrete small lentigines	Pink E or several T localized to 2 sites	Several	Mild irregularity in few areas
2	Moderate	Wrinkles at rest, few, localized, superficial	Localized, NL/ML folds, early jowels, early submental/SM	Yellow hue, localized PO EB	Multiple (7- 10), small lentigines	Red E or multiple T localized to 2 sites	Multiple, small	Rough in few, localized sites
2.5	Moderate	Wrinkles at rest, multiple, localized, superficial	Localized, prominent NL/ML folds, jowels and SM	Yellow hue, PO and malar EB	Multiple, small and few large lentigines	Red E or multiple T, localized to 3 sites	Multiple, large	Rough in several localized areas
3	Advanced	Wrinkles at rest, multiple, forehead, PO and perioral sites, superficial	Prominent NL/ML folds, jowels and SM, early neck strands	Yellow hue, EB involving PO, malar, and other sites	Many (10- 20) small and large lentigines	Violaceous E or many T, multiple sites	Many	Rough in multiple, localized sites
3.5	Advanced	Wrinkles at rest, multiple, generalized, superficial; few, deep	Deep NL/ML folds, prominent jowels and SM, prominent neck strands	Deep yellow hue, extensive EB with little uninvolved skin	Numerous (>20) or multiple large with little uninvolved skin	Violaceous E, numerous T, little uninvolved skin	Little uninvolved skin	Mostly rough, little uninvolved skin
4	Severe	Wrinkles throughout, numerous, extensively distributed, deep	Marked NL/ML folds, jowels and SM, neck redundancy and strands	Deep yellow hue, EB throughout, comedones	Numerous, extensive, no uninvolved skin	Deep, violaceous E, numerous T throughout	No uninvolved skin	Rough throughout

Comprehensive grading scale of rhytides, laxity, and photodamage in skin

E: Erythema; EB: elastotic beads; ML: melolabial; NL: nasolabial; PO: periorbital; SM: submental/submandibular; T: telangiectasia.

Reproduced from: Alexiades-Armenakas MR, Dover JS, Arndt KA. The spectrum of laser skin resurfacing: Nonablative fractional, and ablative laser resurfacing. J Am Acad Dermatol 2008; 58:719. Table used with the permission of Elsevier Inc. All rights reserved.

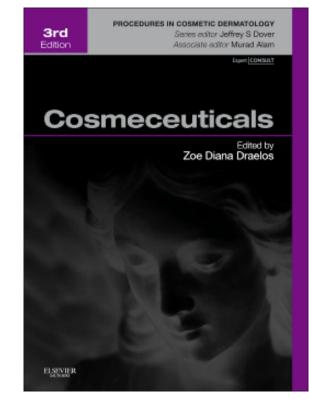


THE FUNDAMENTALS OF MEDICAL GRADE SKINCARE



WHY PREPARE WITH COSMECEUTICALS (MEDICAL GRADE SKINCARE)?

- Client safety
- Pigment inhibition reduce the risk of PIHP
- Optimising cellular function and communication
- Regulating cellular turnover
- Minimising down time
- Best practice for achieving maximum results from client investment





ESSENTIALS FOR CLIENT PREPARATION

- Vitamin A the form of retinol (stabilised)
- Vitamin B3 in the form of Niacinamide
- Vitamin C in the form of L-Ascorbic acid
- Physical sun protection in the form of mineral Zinc Oxide



VITAMIN A: RETINOL (STABILISED)

Gold Standard cosmeceutical

Exerts a multitude of actions on the skin including:

- Regulation of cellular turnover
- Normalisation of sebum production
- Repairs DNA damage to prevent mutation
- Reduction of epidermal inflammation
- Stimulation and protection of collagen





VITAMIN A: RETINOL (STABILISED)

Essential for client preparation prior to clinical treatment:

- Increases cellular turnover to reduce melanin deposition into the keratinocytes
- Reduces melanin clumping
- Assists to speed up removal of pigment from skin surface
- Regulates melanocyte size
- Inhibits the enzyme tyrosinase which reduces melanin production







VITAMIN B3: NIACINAMIDE

- Reduces the risk of PIHP by preventing melanosome transfer from the melanocyte to the keratinocyte
- Increases production of major skin proteins to restore and strengthen epidermal barrier function and reduce inflammation 2.
- Increases ceramide production to enhance hydration and prevent trans epidermal water loss 3.
- Stimulates collagen synthesis 4.
- Prevents UV damage by reducing sunlight induced carcinogens, free radicals and immune suppression in skin cells 5.
- Reduces excessive oil production and inflammation in acne sufferers by interacting with the B3 receptors in the pilosebaceous unit 6.











VITAMIN C: L-ASCORBIC ACID

- L- ascorbic acid is the only bioidentical form of Vitamin C and the only form recognisable to the skin cells
- Directly stimulates collagen synthesis and reduces collagen breakdown
- Inhibits tyrosinase enzyme to reduce pigmentation and protect from PIHP
- Accelerates healing following clinical treatments
- Alleviates inflammation: reduces pro-inflammatory signals sent by skin cells
- Potent antioxidant: neutralizes free radical reactive oxygen species which create cell damage and premature aging
- Prevents immunosuppression caused by exposure to UV light





PREVENTING PIHP

- Fitzpatrick Skin Types III-IV
- Tretinoin
- Hydroquinone
- Kojic acid
- Azelaic acid
- Alpha-hydroxy acids
- Glycolic acids





PEPTIDE INGREDIENTS: AS PIGMENT INHIBITORS

Oligopeptide 34

- Melanosome transfer inhibitor
- Tyrosinase enzyme inhibitor
- No toxicity versus hydroquinone
- Safe for long term use

Aged pigment and lesion was significantly decreased after 8 weeks



In vivo efficacy study



PHYSICAL SUN PROTECTION: MINERAL ZINC OXIDE

- Physical sunscreen, the hero ingredient being Zinc Oxide
- Zinc oxide is a mineral ingredient providing optimal protection from all UVA and UVB light
- Zinc Oxide forms a physical barrier on the skin surface, reflecting and scattering the suns rays rather than absorbing them as chemical sunscreens do decreasing melanocyte stimulation





PHYSICAL SUN PROTECTION: MINERAL ZINC OXIDE

- Zinc Oxide has been found to display potent antiinflammatory and healing properties
- The antimicrobial properties of Zinc Oxide help to reduce bacteria associated with acne
- To reduce the risk of PIHP, a Zinc Oxide based sunscreen fortified with antioxidant protection should be used for a minimum of two weeks prior to clinical treatments and ongoing thereafter



