

Labelling Topical Preparations for the Skin

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Global Burden of Skin Disease

Eczema
Psoriasis
Acne vulgaris
Pruritus
Alopecia areata
Decubitus ulcer
Urticaria
Scabies
Fungal skin diseases
Impetigo
Abscess
Other bacterial skin diseases
Cellulitis
Viral warts
Molluscum contagiosum
Non-melanoma skin cancer

For all these skin diseases
topical medications exist

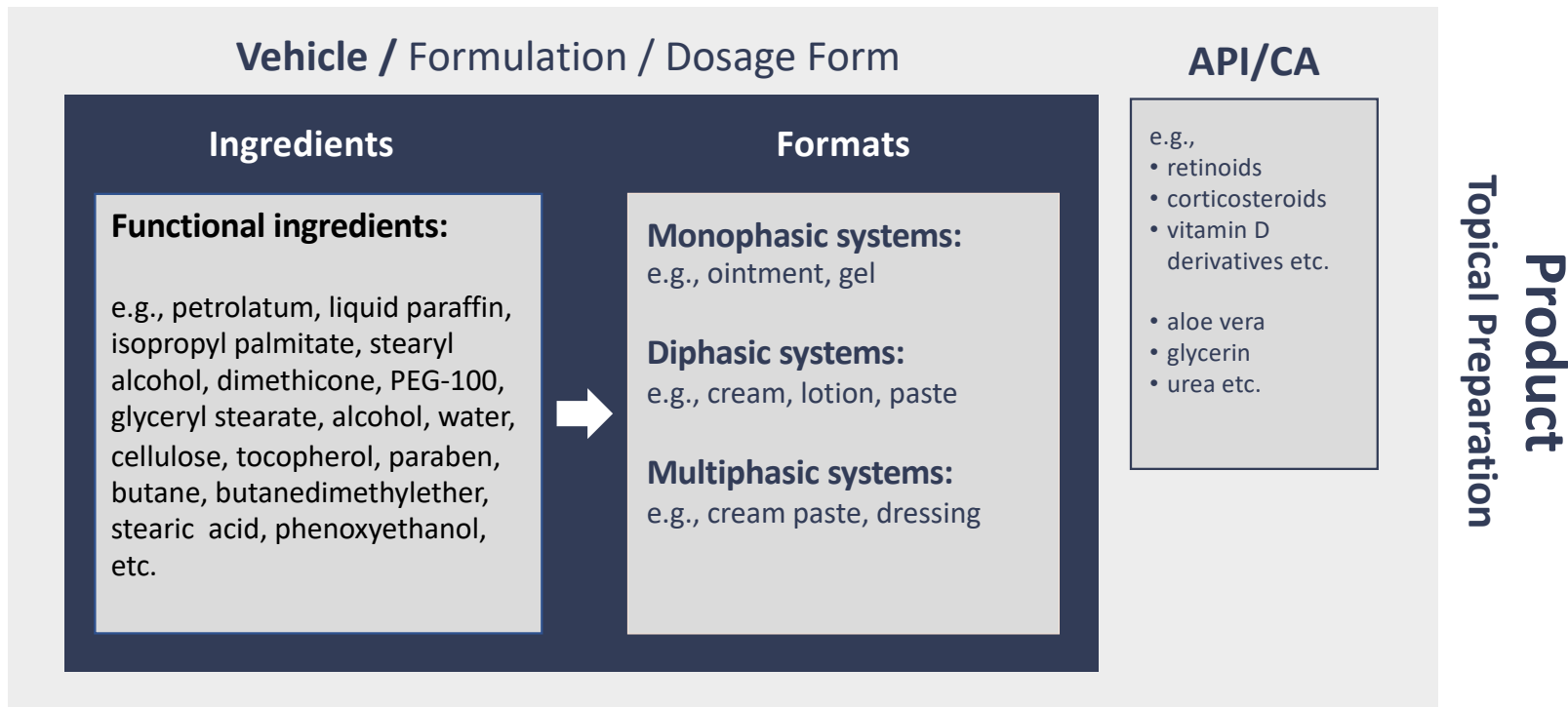
Hay RJ et al. The global burden of skin disease in 2010: an analysis of the prevalence and impact of skin conditions. *J Invest Dermatol.* 2014;134(6):1527-34. doi: 10.1038/jid.2013.446

Dalgard FJ, et al. The psychological burden of skin diseases: a cross-sectional multicenter study among dermatological out-patients in 13 European countries. *J Invest Dermatol.* 2015;135(4):984-91. doi: 10.1038/jid.2014.530

What is a Topical Preparation

- **Topical** derives from **τοπικός** >> **topikos** >> "of a place"
 - local, localized, confined to a specific place
- **Topical** preparations are applied to surfaces with typical and specific surfaces on or in the body

What is a Topical Preparation



Vocabulary of Topical Preparations

- Regulatory bodies
 - local, regional, international bodies
- Industry and Academia
 - pharmaceutical and cosmetic industry, academia
- Healthcare professionals
 - physicians, pharmacists, nurses
- Consumer

Definitions and Designations

- Compendial definitions (pharmacopeia)
 - ointment, cream
- Scientific and technical definitions
 - solution, emulsion // ointment, cream
- Fanciful designations
 - serum, fluid, concentrate
- Effect designations
 - moisturizer, emollient, lubricant

Definitions and Designations

Formats

Uses

Effects

Analogies

“Magics”

		Solid nanoparticle
Ointment		Tape
	Cremole*	Dressings
		Foam
Gel		Emulgel*
	Gelcream*	
Cream		Liposome
	Lotion	Nanoemulsion
Paste	Solution	Patch
		Creampaste

Spray
Shampoo
Roll-on

Soak
Lubricant
Absorbent
Humectant
Balm
Emollient
Moisturiser
Gloss
Demollient

Milk
Shake
Paint

Serum
Fluid
Concentrate

* Note, that format combinations are often created for marketing purposes

Consumer's Perception

- Quality
 - translucent
- Effect
 - cooling
- Target/use
 - young skin

GEL

- Quality
 - sticky
- Effect
 - occlusive
- Target/use
 - diseased skin

OINTMENT

Metamorphosis

**SOLUTION
SPRAY**



primary formulation

fresh foam



collapsed foam



FOAM

secondary formulation

first encounter
application feel

**GEL
OINTMENT**

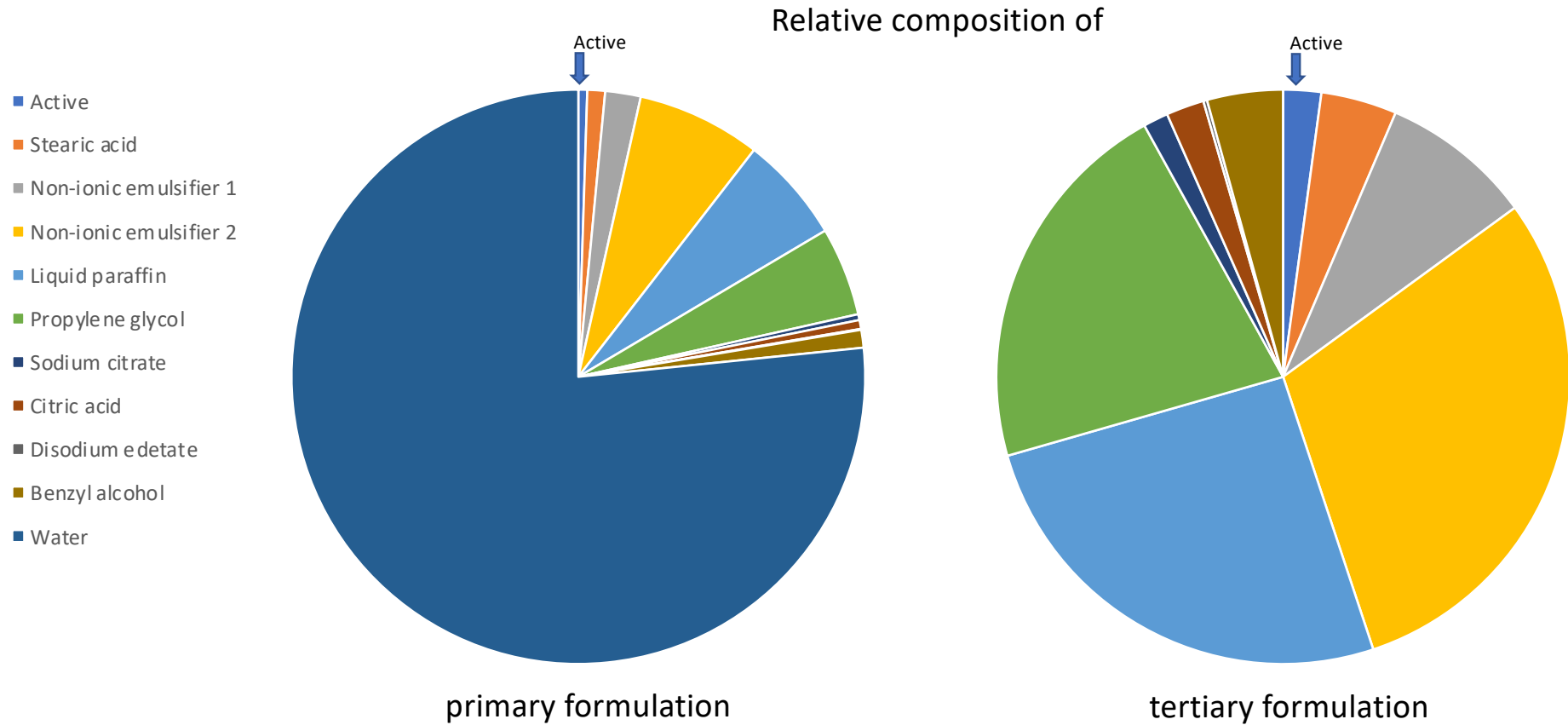


tertiary formulation

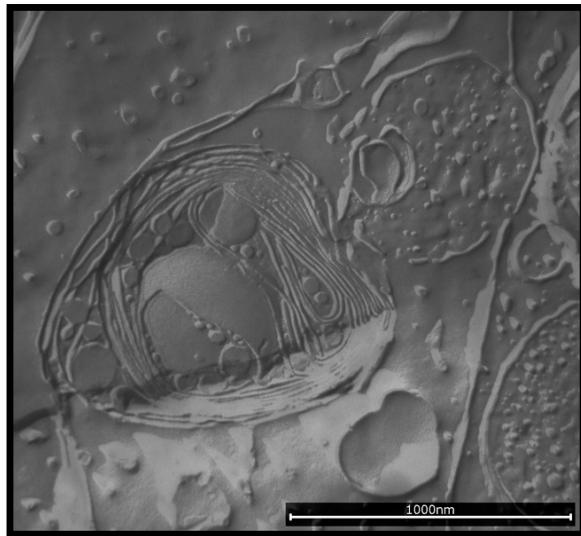
second encounter
skin feel

Sum of ingredients
after evaporation of
all volatile vehicle
ingredients

Metamorphosis

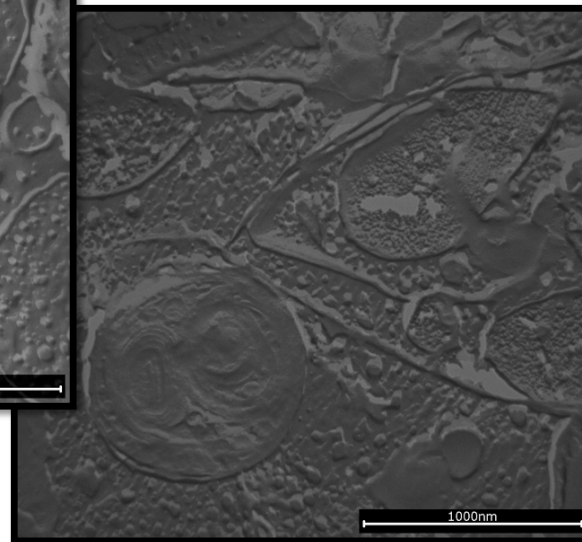


Metamorphosis

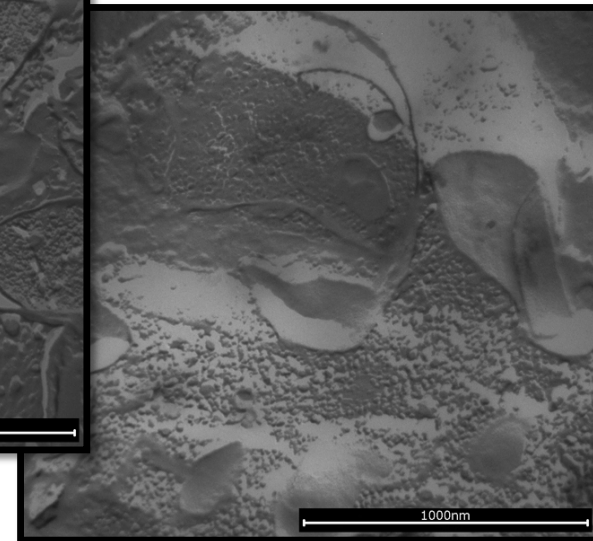


1 second

liposomal product



1 minute



3 minutes

courtesy of Stephan Dähnhardt-Pfeiffer, Microscopy Services

Well Absorbed !





Cochrane
Library

Cochrane Database of Systematic Reviews

Dressings and topical agents for treating venous leg ulcers (Review)

Norman G, Westby MJ, Rithalia AD, Stubbs N, Soares MO, Dumville JC

Plain Language Summary

Dressings and topical agents (gels, ointments and creams) for treating venous leg ulcers

Dressing

Impregnated dressings may have a range of bases, such as foams or alginates.

Topical agents

The following types of topical agents are considered as interventions in this review.

Cadexomer-iodine paste consists of a water-soluble, modified starch polymer containing iodine. It releases free iodine when ex-

Collagenase-containing ointment is an enzymatic debriding ointment. Collagenase is thought to digest collagen in necrotic

Hydrogels consist of a starch polymer and up to 96% water. They

Topical phenytoin is thought to promote wound healing by a

Silver sulfadiazine cream is a topical antimicrobial cream that

Authors' Conclusions

There is a lack of high-quality research evidence relating to whether particular wound dressings or topical treatments have a beneficial impact on healing of venous leg ulcers. This is despite the existence

REVIEW



An update on the topical and oral therapy options for treating pediatric atopic dermatitis

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and caregivers are willing to apply. For example, some patients are not willing to use an ointment due to its greasy feel, but these same patients may be willing to apply a cream or a spray. Reassurance of the safety of topical corticosteroids,

to prevent transepidermal water loss [6]. Ointments are most effective, followed by creams. Due to their high water content, lotions are least effective in the treatment of AD [11]. Benefits

and ointments. Ointments are best for dry skin and are associated with less burning than creams and lotions [17]. Use of

Is there a Way out of
this Babylonian
Confusion?

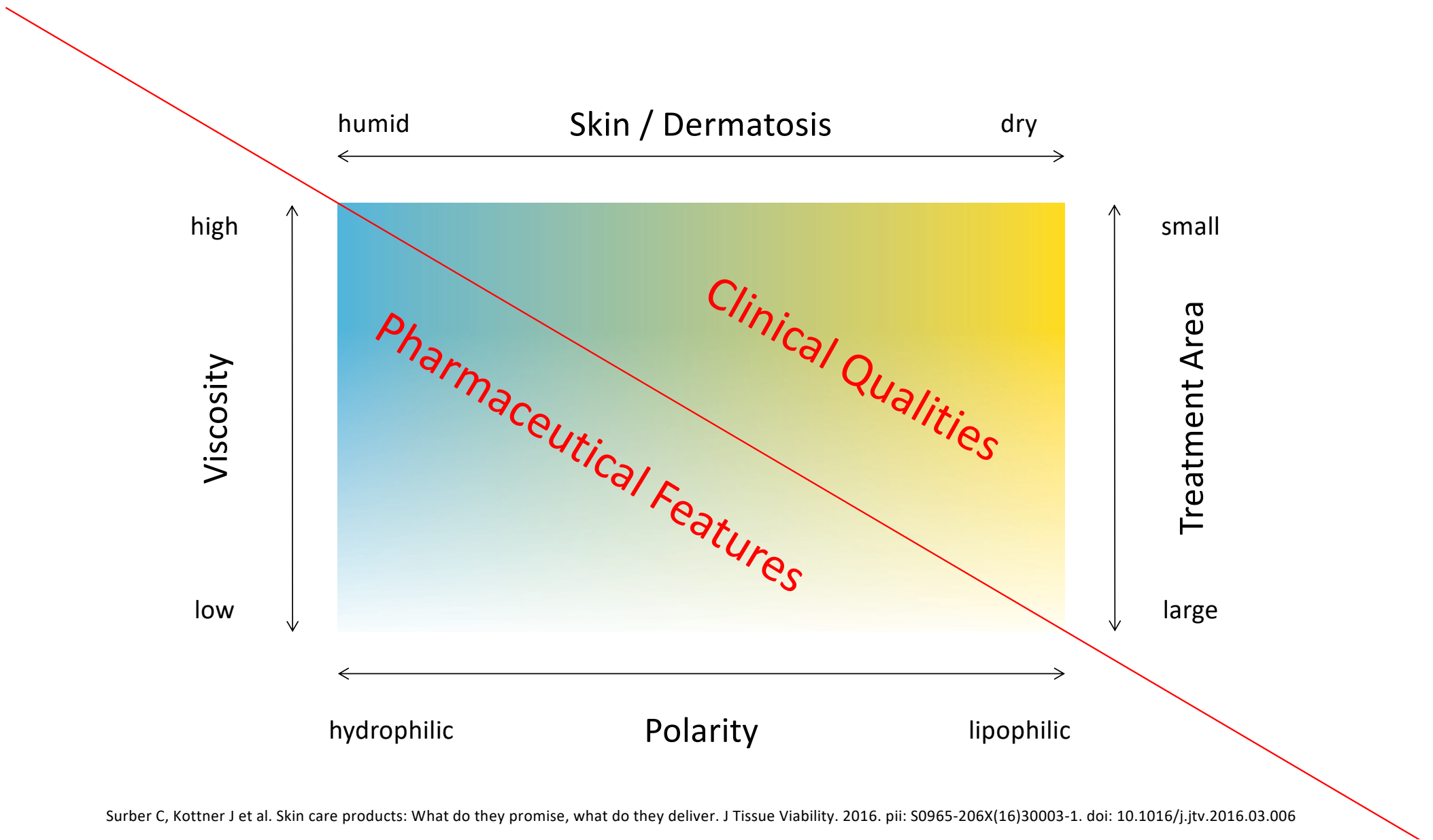


Is there a Way out of this Babylonian Confusion?

- Do we recognize the challenge?
- Do we see a need for action?

- Are the linguistic and terminological difficulties recognized?
- Is it recognized that insufficient attention has been paid to the importance of vehicle, vehicle format and active substances in terms of effect?

- Is there a willingness to resolve the confusion?



Who is willing to help to find a mutual language, vocabulary, terminology or nomenclature?

Without alternative we fall back into default options