



#### Key conclusions for the IDEA Annual Review

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## Aim for July 2014: QRA 2 as applied to fragrance ingredients



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Hazard assessment
External exposure
(aggregate for an
                                (LLNA)
                               (checked using HRIPT)
 ingredient)
                                   NESIL
    Revised CEL \rightarrow \downarrow \leftarrow AEL \leftarrow
                          Revised SAFs
             Risk assessment
```

#### **IDEA-Next steps**



- Improved collaboration with the clinics eg to address the effectiveness of the QRA.
- Assessment of the importance of other sources of exposure to fragrance materials.
- A fundamental review of the methodology for hazard identification and characterisation.

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### Feedback from the clinics on the effectiveness of QRA 2



## A high quality, coordinated prospective study involving leading clinics which requires:

- -harmonisation of both patch testing technique and test materials,
- -collection of relevant exposure information eg occupation, consumer habits, past and present topical drugs used, product type, body site of initial and present dermatitis, etc.

### **QRA** developments: hazard assessment



Predictions using structural considerations

Identification and characterisation of haptens and pre- and pro-haptens. Identification of a TTC like system to identify priorities for in depth consideration.

 Replacement of the LLNA test by nonanimal alternatives

Utilising understanding of toxicokinetics, modes of action and causes of human variability.

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#### **QRA** development: Exposure assessment



- Other sources of exposure to a specific fragrance ingredient.
- Professional use
- Household and aromatherapy products
- Exposure to combinations of fragrance ingredients (Cummulative exposure).
- Requires MoA /SAR data.
- Estimate of internal dose
- Hapten formation (pre-and pro-haptens).

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### **QRA 3 (201?)**



Internal exposure
(total aggregate and cummulative plus toxicokinetics)

New **SAFs** 

Hazard assessment

Non animal evaluation (SAR/ MoA based)

 $\downarrow$ 

 $\downarrow$ 

**NESIL** 

 $\rightarrow$  CEL  $\rightarrow$   $\downarrow$  AEL  $\leftarrow$   $\leftarrow$ 

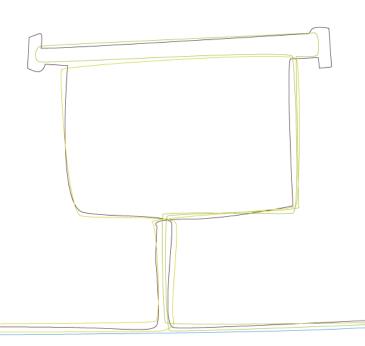
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New **SAFs** 

Risk assessment



# Thank you very much for your attention



December 17, 2014