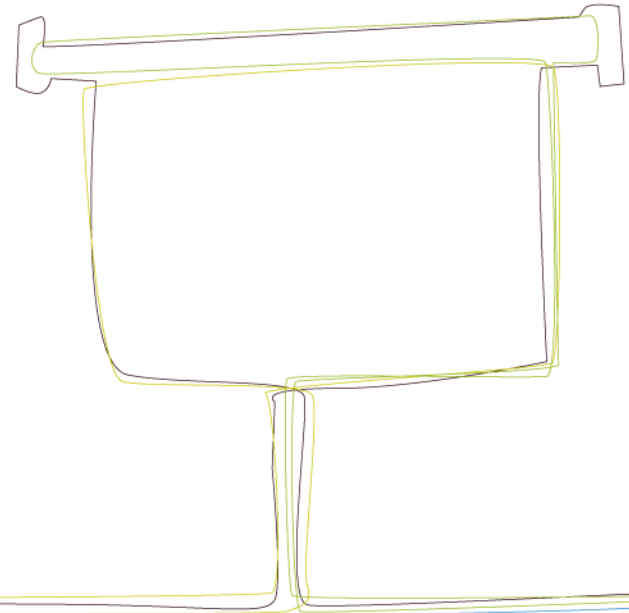


# IDEA Annual Review 2015

## Analytical efforts in support of pre-hapten assessment

IDEA Hydroperoxides TF



# Analytical efforts in support of pre-hapten assessment



- To apply QRA to haptens formed from pre-haptens over time, a solid analytical understanding is important.
- The analytical TF has focused its initial efforts on the pre-haptens Limonene (Lim) and Linalool (Lin), which form the corresponding hydroperoxides.
- Qualified reference materials were made available to meet analytical needs.
- Efforts were made to develop and test a range of methods.

# Analytical efforts in support of pre-hapten assessment



- The Standard development and qualification involved:

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# Analytical efforts in support of pre-hapten assessment

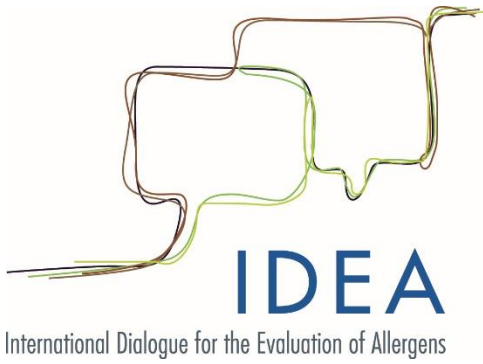


- The work has provided the basis for:
  - Several potential methods for the quality control for hydroperoxides in raw materials:
    - Silylation + GC-MS or GC-FID
    - Chemical reduction with TPP + GC
    - LC-MS/MS
  - Early leads for assessing hydroperoxides in consumer products.
- The methods are complementary.

# Analytical efforts in support of pre-hapten assessment



- For routine use of these methods, we still need to:
  - Assess the impact of analytical interferences on the quantification of hydroperoxides
  - Assess the variability of selected methods
  - Develop sample preparation methods to be compatible with these hydroperoxides and applicable to cosmetic products
  - Confirm that methods are applicable to the various consumer product types
  - Organize the first ring test in consumer products



Thank you for  
your attention

