

## Supplementary File S1

### Developing the search strategy

The search strategy was required to capture volatile organic compounds emanating from the human skin of adult participants using untargeted mass spectrometry methods. Review articles, conference abstracts, and animal and cell studies were excluded. The search strategy took account of the variability in the way authors describe their research and indexers index research with Medical Subject Headings (MeSH). All variations in spelling including truncated search terms using wild card characters and the “related articles” function were used in combination with the Boolean operators AND OR. Abbreviations and search terms are explained in Box 1

Box 1

|      |   |
|------|---|
| Exp  | Explodes a MeSH to capture more specific MeSH.  |
| /    | Indicates that the search term is a Medical Subject Heading (MeSH).   |
| AND  | Achieves a Boolean AND Combination.   |
| OR   | Achieves a Boolean OR Combination.  |
| .mp. | Searches for the term expressed in the title, original title, abstract, and subject heading.  |
| *    | Truncation operator, searches for words beginning with the stem, e.g. epidemiol* retrieves epidemiology, epidemiological and epidemiologic. |

The following databases were searched:

- Ovid MEDLINE (R) 1946 to 2022 June 05;
- Ovid Embase 1974 to 2022 June 05;
- Cochrane library from inception to 2022 June 05

Records identified from each electronic and regional database were downloaded into a separate Endnote bibliographic database, which were then combined to generate a single large Endnote bibliography containing all the records identified from all the databases in which duplicate records were removed.

### Final search strategy

The final search strategy and results for the MEDLINE search is shown below:

#### **Medline search**

Embase Classic+Embase <1947 to 2022 June 05>

| Number | Search Strategy | Number of articles |
|--------|-----------------|--------------------|
|--------|-----------------|--------------------|

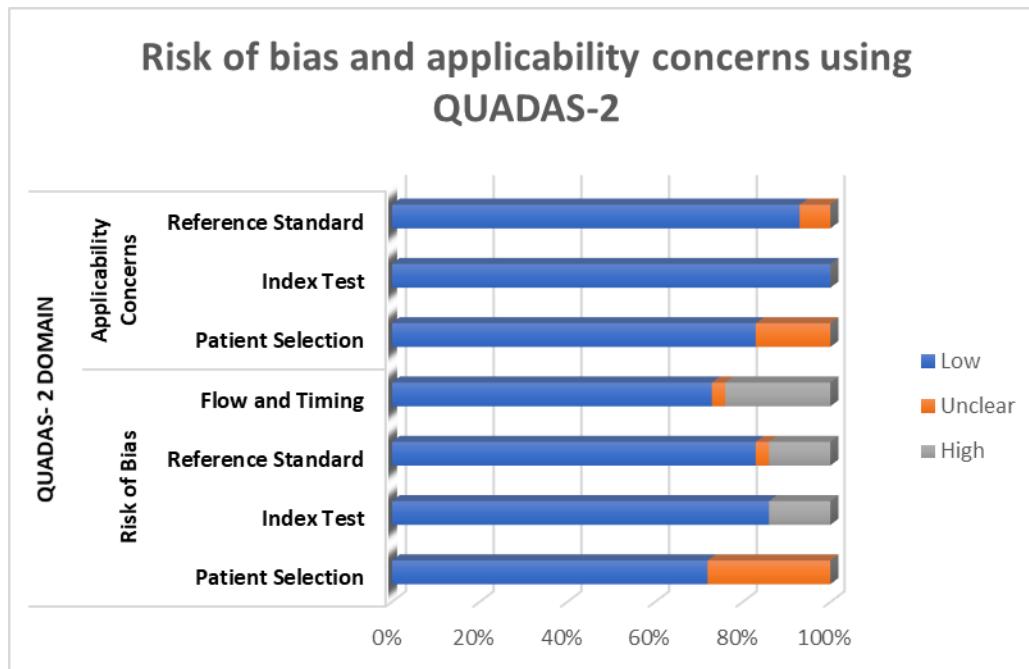
|   |   |          |
|---|---|----------|
| 1 | exp Human Experimentation/ or exp Humans/ or human experiment.mp. or exp Adult/   | 25626797 |
| 2 | skin.mp. or exp Skin/   | 1450023  |
| 3 | volatile organic compound.mp. or exp Volatile Organic Compounds/  | 22737    |
| 4 | exp Gas Chromatography-Mass Spectrometry/ or exp Volatile Organic Compounds/ or volatile compound.mp. or exp Chromatography, Gas/ | 183808   |
| 5 | 3 or 4  | 184367   |
| 6 | 2 and 5   | 3903     |
| 7 | exp Adult/ or adult.mp.   | 10819640 |
| 8 | 1 and 6 and 7   | 749      |

## Supplementary File S2

**Table S2a.** Quality assessment with Standards for Reporting of Diagnostic Accuracy studies (STARD) and Quality of Diagnostic Accuracy Studies-2 (QUADAS-2). Overall, there was a moderate to low risk of bias and low concern regarding applicability of the 29 studies reviewed.

| Study                    | QUADAS- 2                  |                   |            |                    |                 |                   |            |                    |             |  |
|--------------------------|----------------------------|-------------------|------------|--------------------|-----------------|-------------------|------------|--------------------|-------------|--|
|                          | Overall Diagnostic Quality | Patient Selection | Index Test | Reference Standard | Flow and Timing | Patient Selection | Index Test | Reference Standard | STARD Score |  |
| Vishinkin 2021           | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 21          |  |
| Wooding 2020             | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 15          |  |
| Ashrafi 2020             | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 20          |  |
| Monedeiro 2020           | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 26          |  |
| Roodt 2018               | Fair                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 19          |  |
| Mochalski 2018           | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 25          |  |
| Dolezal 2017             | Fair                       | Low               | Low        | High               | High            | Low               | Low        | Low                | 23          |  |
| Duffy 2017               | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 23          |  |
| Grabowska-Polanoska 2017 | Good                       | Low               | Low        | Low                | Unclear         | Low               | Low        | Unclear            | 18          |  |
| Martin 2016              | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 19          |  |
| Velhurst 2016            | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 23          |  |
| Mochalski 2014           | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 17          |  |
| Mochalski 2014           | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 21          |  |
| Broza 2014               | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 18          |  |
| Abaffy 2013              | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 20          |  |
| Kusano 2013              | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 19          |  |
| Dormont 2013             | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 24          |  |
| Ruzsanyi 2012            | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 27          |  |
| Prada 2011               | Fair                       | Low               | High       | High               | High            | Low               | Low        | Low                | 24          |  |
| Abaffy 2010              | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Unclear            | 12          |  |
| Thomas 2010              | Good                       | Low               | Low        | Low                | Low             | Low               | Low        | Low                | 18          |  |
| Turner 2008              | Fair                       | Unclear           | Low        | Low                | High            | Low               | Low        | Low                | 18          |  |
| Gallagher 2008           | Good                       | Unclear           | Low        | Low                | High            | Low               | Low        | Low                | 21          |  |
| Curran 2007              | Fair                       | Unclear           | Low        | Low                | Low             | Unclear           | Low        | Low                | 18          |  |
| Zhang 2005               | Fair                       | Unclear           | High       | High               | High            | Low               | Low        | Low                | 17          |  |
| Curran 2005              | Fair                       | Unclear           | Low        | Low                | Low             | Unclear           | Low        | Low                | 21          |  |
| Haze 2001                | Good                       | Unclear           | High       | Low                | High            | Unclear           | Low        | Low                | 21          |  |
| Meijerink 2000           | Good                       | Unclear           | Low        | Low                | Low             | Unclear           | Low        | Low                | 16          |  |
| Bernier 2000             | Fair                       | Unclear           | High       | High               | High            | Unclear           | Low        | Low                | 17          |  |

**Table S2b: Risk of bias and applicability concerns using QUADAS- 2**



**Supplementary File S3: Details of Volatile Organic Compounds Emitted from Disease Free Human Skin**

| Author    | Year | Healthy/ Disease        | Number of Identified Compounds       | Compounds  |
|-----------|------|-------------------------|--------------------------------------|--|
| Vishinkin | 2021 | Infection               | 6                                    | Acetic acid, octanoic acid, 1-hexanol, 2-ethyl-, hexyl butyrate, toluene, cyclopropane, pentyl-  |
| Wooding   | 2020 | Healthy                 | 38                                   | Dodecanoic acid, Tetradecanoic acid/Myristic Acid, Pentadecanoic acid, Heptadecanoic acid 9,12-Octadecadienoic acid (Z,Z)-, Octanal, 2-Undecanone, 1-Octanol/Octanol/Isooctanol, 1-Nonanol, Octadecanol, 1-eicosanol, ethanol, 2-(2-ethoxyethoxy)-, ethanol, 2-(dodecyloxy)-, 1, octanol, 2-butyl, 1-heptanol, 6-methyl-, hexadecen-1-ol, trans-9-, Butyrolactone, 2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene (squalene), cyclooctatetraene, naphthalene, 5-ethyl-1,2,3,4-tetrahydro, cyclobutylamine, benzonitrile, 3,5-dimethyl-, pentadecane, 2-methyl-hexadecane, 3-methyl, Hexadecane, 2,6,10,14-tetramethyl-, Octane, 1,1'-oxybis-, 4-cyanocyclohexane, Methyl salicylate, acetic acid, octyl ester, octadecanoic acid, 2,3, dihydroxypropyl ester, benzene butanoic acid gamma-oxo-, ethyl ester, Isopropyl Palmitate 1,2-Benzenedicarboxylic acid, bis(2-methylpropyl) ester, octyl acrylate, benzaldehyde, 4-methyl-Benzenemethanol, $\alpha,\alpha$ -dimethyl-, phenanthrene, 2,6-Diisopropynaphthalene |
| Ashrafi   | 2020 | Wound Infection         | 10                                   | Hexanal, 2-(2-Dodecoxyethoxy) ethanol, Octane, 1,1'-oxybis-, 1,2,3,6-Tetrahydropyridine, Glycerol/ Propane-1,2,3-triol, Linolenic acid, Adenosine, L- glutamine, 1,3-Dihydroxyacetone dimer  |
| Monedeiro | 2020 | Visceral Adenocarcinoma | 52 (total), 18/52 (cancer compounds) | <b>Healthy:</b> Octanal, 1-Octanol/Octanol/Isooctanol, 1-Hexanol, 2-ethyl-, 2-methyl dodecanoic acid, Heptanal, n-Pentanal, 2-Butenal, (E)-, Methacrolein, 4-methyl-2-heptanone, 2-phenoxyethanol, 7-Octen-2-ol, 2,6-dimethyl-/Dihydromyrcenol, Limonene, 1-undecene, Carbon disulfide, Tridecane Furan, 2-pentyl-, Phenol, Benzyl alcohol, Acetic acid/Ethanoic acid, Toluene, Hexanal, Nonanal, Decanal, 2,4-dodecadienal, 2-Butanone, 5-Hepten-2-one, 6-methyl-, 6-Methyl-3,5-heptadiene-2-one, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, 2,4-dimethyl-3-pentanone, 2-butyl-cyclohexanone, 2,3-butanediol, 3,7-dimethyl-3-octanol, 3-methyl-1-butanol, Styrene, 4-methyl-1-hexene, 3,3-dimethyl-octene, 2-methylpentadecene, 5-methylhexen-2-ene, Acetonitrile, 2-methyl-pentane, 2,6,7-trimethyl-decane, 3-methyl-pentane, 6-methyl-tridecane, 5,8-diethyl-dodecane n-Heptane, methyl cyclopentane, 2,4-dimethyl-pentane, 3-ethyl-pentane, Butanoic acid, Heptyl ester, Oxalic acid,                                  |

|           |      |         |    |   |
|-----------|------|---------|----|---|
|           |      |         |    | allyl nonyl ester, 1,4-dimethylbenzene/xylene, Methyl benzoate, Ethylbenzene<br><br><b>Cancer:</b> Octanal, 1-Octanol/Octanol/Isooctanol, 1-Hexanol, 2-ethyl-, 2-methyl dodecanoic acid<br>Heptanal, n-Pentanal, 2-Butenal, (E)-, Methacrolein, 4-methyl-2-heptanone, 2-phenoxyethanol<br>7-Octen-2-ol, 2,6-dimethyl-/Dihydromyrcenol, Limonene, 1-undecene, Carbon disulfide, Tridecane, Furan, 2-pentyl-, Phenol, Benzyl alcohol  |
| Roodt     | 2018 | Healthy | 86 | Octanal, 1-Octanol/Octanol/Isooctanol, 1-Hexanol, 2-ethyl-, Heptanal, 2-Butenal, (E)-, 7-Octen-2-ol, 2,6-dimethyl-/Dihydromyrcenol, Limonene, Phenol, Benzyl alcohol, Acetic acid/Ethanoic acid, Hexanal, Nonanal, Decanal, 5-Hepten-2-one, 6-methyl-, 6-Methyl-3,5-heptadiene-2-one, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, Dodecanoic acid, Tetradecanoic acid/Myristic Acid, Pentadecanoic acid, Heptadecanoic acid, 9,12-Octadecadienoic acid (Z,Z)-, 2-Undecanone, 1-Nonanol, Butyrolactone, Benzenemethanol, $\alpha,\alpha$ -dimethyl-, Octanoic acid, Propanoic acid, Butanoic acid, Hexanoic acid, Heptanoic acid, Nonanoic acid, Decanoic acid, Tridecanoic acid, Hexadecanoic acid/n-hexadecanoic acid, Octadecanoic acid, Butanoic acid, 3-methyl-/Isovaleric acid, Hexanoic acid, 2-ethyl-, 2-Octenal, (E)-, 2-Nonenal, (E)-, 2-Decenal, (E)-2-Undecenal, Furfural/2-Furancarboxyaldehyde, 2-Furancarboxaldehyde, 5-methyl-, 2-Heptanone 2-Octanone, 2-Nonanone, 2-Decanone, 2-Dodecanone, 2-Tridecanone, 2-Pentadecanone, 2-Hexadecanone, Acetophenone/1-phenyl-ethanone, 1-Hydroxy-2-butanone, Furyl hydroxymethyl ketone, 4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl-, Ethanone, 1-(2-furanyl)-, Ethanone, 1-(4-methylphenyl)-, 2-Undecanone, 6,10-dimethyl-, 2,3-Pantanediol, Cyclopantanone, 2-Cyclopenten-1-one, Cyclopent-4-ene-1,3-dione, 2-Cyclopenten-1-one, 2-methyl-, 2-Cyclopenten-1-one, 3-methyl-, 1-Butanol, 2(3H)-Furanone, 5-methyl-, 2(5H)-Furanone 2(3H)-Furanone, 5-butyldihydro-, 2(3H)-Furanone, 5-hexyldihydro-, 2(3H)-Furanone, 5-heptyldihydro-, Linalool/3,7-dimethyl-1,6-octadien-3-ol, $\alpha$ -Pinene, Benzonitrile, Pyrrole, Pyridine Indole, 3-methyl-, 5,10-Diethoxy-2,3,7,8-tetrahydro-1H,6H-dipyrrolo[1,2- $\alpha$ :1',2'- $\delta$ ]pyrazine, Dimethyl sulfone, Dimethyl trisulphide, 1H-indole, Benzoic acid/Benzaldehyde, Benzeneacetaldehyde, Phenol, 2-methyl-, p-Cresol/4-methylphenol, Benzophenone, Benzothiazole |
| Mochalski | 2018 | Healthy | 17 | Heptanal, Acetic acid/Ethanoic acid, Hexanal, Benzoic acid/Benzaldehyde, 2-Propenal/Acrolein<br>Butanal, 3-methyl-, Propanal, 2-methyl-, 2-Ethacrolein, 2-Propanone/Acetone, 2-Pantanone<br>4-Methyl-2-pantanone, 2-Methyl-1-propanol, n-Butyl acetate, Ethyl formate, Ethyl propionate   |

|         |      |                      |     |   |
|---------|------|----------------------|-----|---|
|         |      |                      |     | Vinyl butyrate, Ethyl isovalerate   |
| Dolezal | 2017 | Healthy (all female) | 137 | <p>Heptanal, Octanal, Limonene, Nonanal, Decanal, Tetradecanoic acid/Myristic Acid, Pentadecanoic acid, Heptadecanoic acid, Benzenemethanol, <math>\alpha,\alpha</math>-dimethyl-, Hexadecanoic acid/n-hexadecanoic acid, Octadecanoic acid, 2-Decanone, Acetophenone/1-phenyl-ethanone, <math>\alpha</math>-Pinene, Tridecane, styrene, ethylbenzene, 2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene (squalene), 9-Octadecenoic acid, 13-Docosenoic acid, Dodecanal,, Tetradecanal, Undecanal, Octadecanal, Hexadecanal, Heptadecanal, Tridecanal, 4,8,12-Tetradecatrienal, 5,9,13-trimethyl-, 2,6-Di-tert-butyl-o-benzoquinone, 1-Hexadecanol, Octadecan-2-ol, 1-tetradecanol, Pentadecan-1-ol, n-Octacosan-1-ol, 1-Dodecanol, 1-Dodecanol, 2-methyl-2-Methyl-1-undecanol, 2-Butoxyethanol, 1-Decanol, 2-ethyl-, 2-(2-Dodecoxyethoxy)ethanol<br/> <math>\beta</math>-Pinene/6,6-dimethyl-2-methylene-, (IS)-Bicyclo[3.1.1]heptane, 1- dodecane, a- Springene, Docosanamide, Dodecane, Decane, Ethyl cyclohexane, 4-methyl octane, 3- methyl octane , Caffeine, Tocopherol, Octadecanoic acid, phenyl ester, Tetradecanoic acid, undecyl ester hexanedioic acid, octyl ester, Butan-2-yl 4-ethylbenzoate, Butyl pentanoate, 2,3-Diacetyloxypropyl acetate (Triacetin), Butyl octanoate, Isopropyl dodecanoate, 2-Ethylhexyl benzoate/Benzoic acid, 2-ethylhexyl ester, Propan-2-yl tetradecanoate, 1,4-dioxacycloheptadecane-5,17-dione, 1,2,3-Propanetriol 2-octadecanoyl ester, 2,3-Dihydroxypropyl hexadecanoate, 2,3-Dihydroxypropyl 10-hydroxyoctadecanoate, 2,3-dihydroxypropyl 12-hydroxyoctadecanoate, Tetradecyl dodecanoate Hexadecyl octanoate, 2,3-dihydroxypropyl octadec-9-enoate, Octadecyl 2-ethylhexanoate, Dodecyl tetradec-9-enoate, Tetradecyl tetradecanoate, Decyl octadecenoate, Dodecyl hexadec-9-enoate, Octadecyl tetradec-9-enoate, Hexyl octadec-9-enoate, Hexadecyl tetradecanoate Tetradecyl hexadec-9-enoate, Octadecyl hexadec-9-enoate, Lauryl palmitoleate, Heptadecyl heptadecanoate, Icosyl octadecenoate, Dodecyl x-ester, 2-ethylhexyl 2-ethylhexanoate, Butyl hexanoate, Hexadecanoic acid, 1-methylethyl ester, Ethyl hexadecanoate/Palmitic acid, ethyl ester, Propan-2-yl hexadecanoate, Methyl octadecenoate, Butyl nonanoate, 1,2,3- triethyl 2-hydroxypropane- 1,2,3 tricarboxylate, cholesta-3,5-diene, Cholest-5-en-3-ol (3<math>\beta</math>)-, propanoate Cholest-5-en-3-ol (3<math>\beta</math>)-, nonanoate, Cholest-5-en-3-ol (3<math>\beta</math>)-, tetradecanoate, Cholesta-4,6-dien-3-ol, (3<math>\beta</math>)-, Cholesterol, Cholest-7-en-3-ol, (3<math>\beta</math>,5<math>\alpha</math>)- (Lathosterol), Lanost-8-en-3-ol, Benzene, 1,1'-(2-butene-1,4-diyl)bis-, Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-, Benzene, 1-ethyl-2-methyl-, Benzene, (1-methylethyl)-, <math>\alpha</math>-hexyl cinnamaldehyde, Phenol, 3,5-bis(1,1-dimethylethyl)-Naphthalene, Naphthalene, 1-methyl-, Epimanool</p> |

|                    |      |                                 |    |   |
|--------------------|------|---------------------------------|----|---|
| Duffy              | 2017 | Healthy                         | 35 | Heptanal, Octanal, Nonanal, Decanal, Tetradecanoic acid/Myristic Acid, Pentadecanoic acid Hexadecanoic acid/n-hexadecanoic acid, 2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene (squalene), Dodecanal, Tetradecanal, Undecanal, Tridecanal, 1-Hexadecanol Acetic acid/Ethanoic acid, Hexanal, 1-Octanol/Octanol/Isooctanol, 1-Hexanol, 2-ethyl-, 5-Hepten-2-one, 6-methyl-, Dodecanoic acid, Nonanoic acid, Decanoic acid, 2-Decenal, (E)-, 2-Undecanone, 6,10-dimethyl-, Octane, 1,1'-oxybis-, Isopropyl Palmitate, Undecanoic acid, Glycine Lilial/α-methyl-β-(p-tert-butylphenyl)propanal, Tridecanol/1-tridecanol, Pentadecene, 1- Tridecene Tetradecane, Pentadecane, Propanoic acid, 2-methyl-, 1-(1,1-dimethylethyl)-2-methyl-1,3-propanediyl ester, N,N-dimethyl-1-hexadecanamine        |
| Grabowska-Polanska | 2017 | Healthy (mechanical disruption) | 49 | Heptanal, Octanal, Nonanal, Decanal, Acetic acid/Ethanoic acid, Hexanal, Limonene, Acetophenone/1-phenyl-ethanone, α-Pinene, Styrene, Ethylbenzene, Ethyl cyclohexane, Benzoic acid/Benzaldehyde, 2-Propenal/Acrolein, Propanal, 2-methyl-, 2- Propanone/Acetone, n-Butyl acetate, Phenol, Butyrolactone, 1-Butanol, n-Pentanal, Carbon disulfide, Toluene, 2-Butanone, Acetonitrile, n-Heptane, Methyl cyclopentane, 2,4-dimethyl-pentane, 1,4-dimethylbenzene/xylene n-Butanal, Acetaldehyde, 2-Propenal, 2-methyl-, Butanal, 2-methyl-, Ethanol/ethyl alcohol, 2-Propanol, 1,3-Pentadiene, 2-methyl-, (Z)-, 2-Butene, (E)-, Dimethyl sulfide, Nonane, Hexane, Cyclohexane, Methyl cyclohexane, 2,4-dimethylhexane, 2,3 dimethylheptane, Ethyl cyclopentane, Butane, Methyl acetate, Ethyl Acetate, Benzene |
| Martin             | 2016 | Healthy (psychological stress)  | 4  | Benzoic acid, n- decanoic acid, xylene (downregulated), 3- carene (downregulated)   |
| Velhurst           | 2016 | Healthy                         | 23 | Decanoic acid, Tetradecanoic acid/Myristic Acid, Pentadecanoic acid, Hexadecanoic acid/n-hexadecanoic acid, Dodecanoic acid, Nonanoic acid, 1-Dodecanol, 2-methyl, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, Octanoic acid, Hexanoic acid, Heptanoic acid, Tridecanoic acid, Butanoic acid, 3-methyl-/Isovaleric acid, Hexanoic acid, 2-ethyl-, 3-methyl-1-butanol, 9-hexadecanoic acid, Cedrol, Lactic acid, Isopropyl Myristate, Ethyl tetradecanoate, Ethyl citrate, Tributyl acetylcitrate, 1,1-dimethyl-3-phenyl propanol   |
| Mochalski          | 2014 | Healthy                         | 64 | Benzoic acid/Benzaldehyde, Heptanal, Octanal, Nonanal, Hexanal, 5-Hepten-2-one, 6-methyl-, Limonene, 2-Propenal/Acrolein, Propanal, 2-methyl-, 2-Propanone/Acetone, n-Butyl acetate, Butyrolactone, n-Pentanal, 2-Butanone, Acetonitrile, n-Heptane, n-Butanal, Acetaldehyde, 2-Propenal, 2-methyl-, Butanal, 2-methyl-, Ethanol/ethyl alcohol, 2-Propanol, 1,3-  |

|           |      |         |     |   |
|-----------|------|---------|-----|---|
|           |      |         |     | Pentadiene, 2-methyl-, (Z)-, 2-Butene, (E)-, Dimethyl sulfide, Nonane, Ethyl Acetate, $\beta$ -Pinene/6,6-dimethyl-2-methylene-, (IS)-Bicyclo[3.1.1]heptane, Butanal, 3-methyl-, 2-Pantanone, 2-Butenal, (E)-, 2-Heptanone, Furan, 2-pentyl-, n-Propanal, 2-Hexenal, (E)-, 2-Butenal, 3-methyl-, Butanal, 2-ethyl-2-Hexanone, 3-Buten-2-one/Methyl vinyl ketone, 3-Penten-2-one, 4-methyl-, p-cymene, Styrene, p, $\alpha$ -dimethyl-, Eucalyptol, 1-Octene, 1-Heptene, 2-Heptene, Isoprene, 1-Nonene, 2-Pentene, 2-methyl-, 1,3-Pentadiene, 2-methyl-, (E)-, Propene, 1-Pentene, 2-Butene, (Z)-, 2-Butene, 2,3-dimethyl-, Sulfide, allyl methyl, n-Octane, n-Pentane, Furan, 3-methyl-, Furan, 2-methyl-, 1,3-Dioxolane, 2-methyl-, Furan, 2,5-dimethyl-, 1,3-Dioxolane, Isopropyl acetate, Isobutyl acetate   |
| Mochalski | 2014 | Healthy | 12  | Heptanal, Octanal, Nonanal, Hexanal, 5-Hepten-2-one, 6-methyl-, Limonene, 2- Propanone/Acetone, 2- Butanone, 2-Propenal, 2-methyl-, n- Propanal, 3-Buten-2-one/Methyl vinyl ketone, 2-Pentene, 2-methyl-  |
| Broza     | 2014 | Healthy | 271 | Heptanal, Octanal, Nonanal, Hexanal, 5-Hepten-2-one, 6-methyl-, Limonene, 2- Propanone/Acetone, 2- Butanone, Benzoic acid/Benzaldehyde, Propanal, 2-methyl- n-Butyl acetate, n-Heptane, Butanal, 2-methyl- nonane, Ethyl Acetate, $\beta$ -Pinene/6,6-dimethyl-2-methylene-, (IS)-Bicyclo heptane, Butanal, 3-methyl-, Eucalyptol, 1-Octene, Isoprene, 1-Nonene n-Pentane, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, Isopropyl Myristate, Decanal Acetic acid/Ethanoic acid, Dodecanal, Undecanal, Tridecanal, 1-Hexanol, 2-ethyl-, 2-Decenal, (E)-, Isopropyl Palmitate, Lilial/ $\alpha$ -methyl- $\beta$ -(p-tert-butylphenyl)propanal, Tetradecane, Pentadecane, Acetophenone/1-phenyl-ethanone, $\alpha$ -Pinene, Ethylbenzene, Carbon disulfide, Toluene, Methyl cyclopentane, 2,4-dimethyl-pentane, Hexane, Methyl cyclohexane, Benzene 1-Dodecanol, Dodecane, Decane, 4-Methyl-2-pentanone, 7-Octen-2-ol, 2,6-dimethyl-/Dihydromyrcenol, 1H-indole, 3,7-dimethyl-3-octanol, 3-methyl-pentane, Propanedioic acid 2-n-butylacrolein, 1,7,7-trimethylbicyclo(2;2;1)heptan-2-one, Tonalid, $\alpha$ -Isomethylionone, 2-methyl-5-(1-methylethenyl)-, (R)- 2-Cyclohexen-1-one, 1-(1-methylethoxy)-2-propanol propylene glycol/1,2-propanediol, 2,2'oxybis-ethanol, 2-(2-hydroxypropoxy)-1-propanol 2,2-dimethyl-, diacetate 1,3-Propanediol, 2-(2-Hexyloxyethoxy)ethanol, (E)-3-Nonen-1-ol, 3,7-dimethyl-6-octen-1-ol, 3,7-dimethyl-1,6-octadien-3-ol, 3,7-dimethyl-,acetate 6-octen-1-ol, 3,7-dimethyl-,acetate 1,6-octadien-3-ol, 3,7-dimethyl-,acetate, (Z)-2,6-Octadien-1-ol, 5-methyl-2-(1-methylethenyl)-, acetate 4 hexen-1-ol, cyclohexanol,2-(1,1-dimethylethyl)-, 4-methyl-1-(1-methylethyl)- 3-Cyclohexen-1-ol, 1-methyl-4-(1- |

methylethenyl)-, acetate cyclohexanol,  
Oxacycloheptadec-8-en-2-one , p-menth-1-en-8-ol (alpha-  
terpineol), patchouli ethanol, veridiflorol, 1,3-  
pentadiene, 2,7-dimethyl-1,7-octadiene, 3,7-dimethyl-  
(S)-1,6-Octadiene, 5-octadecene, 4-cyanocyclohexene,  
monoamide,N-(2-ethylhexyl)-pentyl ester oxalic acid,  
sulfur dioxide, sulfurous acid, hexyl octyl ester, 2-  
ethylhexyl hexyl ester Sulfurous acid, Octadecane  
Butane,2,2-dimethyl, Nonadecane, Dodecane,2,6,10-  
trimethyl-, 2-methyl butane, 3,4-dimethylheptane, 2-  
methylheptane, 3-methyl heptane, 2,2,4,6,6-pentamethyl-  
Heptane , 5-methyl- Tetradecane, 4-methyl-pentadecane,  
2-bromotetradecane, 1-methanol, 3,3-dimethyl-2-(3-  
methyl-1,3-butadienyl)-Cyclohexane, 2-methyl-  
octadecane, 2-bromododecane, 2,2,4,4,6,8,8-  
heptamethylnonane, 1,2-dimethyl-cis-cyclopropane, 1,2-  
dimethyl-trans-cyclopropane, Butane, 1,1,2,3,4,4-  
hexachloro-tetrafluoro-, 2,3-dimethyl butane, (2-Methyl-  
propyl)-cyclohexane, 2,3-Dihydro-2,5-dimethyl-5H-1,4-  
dioxepin, 1-2-chloro-Benzamide, N-tetrahydrofurfuryl-  
1-ethenyl-3-methylene-cyclopentene, 1-(hexyloxy)-5-  
methyl-hexane, Bicyclo[3.1.0]hexan-2-ol, 2-methyl-5-(1-  
methylethyl)-, (1.alpha.,2.alpha.,5.alpha.)- , 3,7-dimethyl-  
1,3,6-Octatriene, 1-methyl-4-(1-methylethyl)- 1,4-  
Cyclohexadiene, 1-methyl-2-octyl-cyclopropane,  
Aristolene, 1,2,3,4,5,6,7,8-octahydro-1,4,9,9-tetramethyl-,  
[1S-(1.alpha.,4.alpha.,7.alpha.)]- 4,7-Methanoazulene, 5,5-  
Dimethyl-3-vinyl cyclohex-2-en-1-one, 4,4-Dimethyl-2-  
pentyl methylphosphonofluoride  
Alpha, alpha.4-trimethyl- 3-Cyclohexene-1-methanol, 4-  
(2,6,6-trimethyl-2-cyclohexen-1-yl)-, (E)- 3-Buten-2-one,  
4,7-Methano-1H-inden-6-ol, 3a,4,5,6,7,7a-hexahydro-,  
acetate, 1H-3a,7-Methanoazulene, octahydro-3,8,8-  
trimethyl-6-methylene-, [3R  
(3.alpha.,3a.beta.,7.beta.,8a.alpha.)]- , 1-(4-tert-  
Butylphenyl)propan-2-one, 3-(4-Isopropylphenyl)-2-  
methylpropionaldehyde, Cyclohexane, 1-ethenyl-1-  
methyl-2-(1-methylethenyl)-4-(1-methylethylidene)-, 4-  
(2,6,6-trimethyl-1-cyclohexen-1-yl)-, (E)- 3-Buten-2-one ,  
1,2-dimethyl-3,5-bis(1-methylethenyl)-Cyclohexane,  
Azulene, 1,2,3,4,5,6,7,8-octahydro-1,4-dimethyl-7-(1-  
methylethenyl)-, [1S-(1.alpha.,4.alpha.,7.alpha.)]- ,  
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl- 4H-Inden-4-  
one, 1-(2,6,6-trimethyl-2-cyclohexen-1-yl)- 1-Penten-3-  
one , 5-methyl-2-(1-methylethyl)-, cis- Cyclohexanone,  
Tricyclo[4.3.0.0(7,9)]nonane, 2,2,5,5,8,8-hexamethyl-,  
(1.alpha.,6.beta.,7.alpha.,9.alpha.)-, (1S)-  
Bicyclo[3.1.1]hept-2-ene, 6,6-dimethyl-2-[2-  
(phenylmethoxy)ethyl]-, 7-Acetyl-6-ethyl-1,1,4,4-  
tetramethyltetralin, tetradecyl oxirane  
1-(1,2,3,4,7,7a-hexahydro-1,4,4,5-tetramethyl-1,3a-  
ethano-3aH-inden-6-yl)- Ethanone, 2,5-dihydro-furan, 2-  
Propenoic acid, 3-phenyl-, 2-methyl-2-propenyl ester,  
12,15-octadecadiynoic acid, methyl ester, acetic acid,  
hexyl ester, isoctyl mercaptoacetate, 1,3-dimethylbutyl  
acetate

|         |      |                                 |    |   |
|---------|------|---------------------------------|----|---|
|         |      |                                 |    | bornyl acetate, 2-Deoxysorbitol pentaacetate, 2-ethylhexyl octyl ester Oxalic acid, Butyric acid, 1-methyl-1-p-tolylethyl ester, 2-methyl-, 1-(1,1-dimethylethyl)-2-methyl-1,3-propanediyl ester, Propanoic acid, 6-ethyloct-3-yl isohexyl ester Oxalic acid, 2-hydroxy-phenylmethyl ester benzoic acid, (2-phenyl-1,3-dioxolan-4-yl)methyl ester, trans- 9-Octadecenoic acid, 2-hydroxy-, pentyl ester Benzoic acid, 2-hydroxy-,3-methylbutyl benzoic acid, ethylene brassylate, 5-(1-Isopropenyl-4,5-dimethylbicyclo[4.3.0]nonan-5-yl)-3-methyl-2-pentenol acetate, 4-tert-butylcyclohexyl acetate, 3,N-dihydroxybutanamide, 1-Propanamine, N,2-dimethyl-N-nitroso-, nopyl acetate, 4-(2,5, dimethyl-1H-pyrrol-1-yl)-N,N-dimethyl-Benzenamine, trichloromethane, 2-chloropropane, Benzene, 1,3-dimethyl, Benzene, 1,2,3-trimethyl-, Benzene, (1-butylheptyl)-, Benzene, (1-pentylheptyl)-, Benzene, 1,4-bis(1,1-dimethylethyl)-, (1-methylnonyl)-benzene, 1,1'-(3,3-dimethyl-1-butenylidene)bis- Benzene, (1-propyloctyl)- Benzene, (1-ethyloctyl)- Benzene, benzeneethanol,a,a-dimethyl-1-acetate, Benzenemethanol, .alpha.-methyl-, acetate, 2H-1-Benzopyran, 3,5,6,8a-tetrahydro-2,5,5,8a-tetramethyl-, cis-, 1,3-didecyl- Benzene, o-xylene |
| Kusano  | 2013 | Healthy                         | 35 | Heptanal, Octanal, Nonanal, Benzoic acid/Benzaldehyde, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, Decanal, Dodecanal, Undecanal, 1-Hexanol, 2-ethyl-, Tetradecane, Pentadecane, Acetophenone/1-phenylethanone, Dodecane, Octadecane, Dodecanoic acid, Hexanoic acid, Tetradecanal, Pentadecene, Phenol, 2-Decanone, Tridecane, Benzyl alcohol, 2-Nonenal, (E)-, Furfural/2-Furancarboxyaldehyde, Linalool/3, 7-dimethyl-1,6-octadien-3-ol, Phenylpropanoic acid, Heptadecene, Undecane, Hexadecane, Eicosane, Tricosane, Docosane, Decanoic acid, methyl ester, Methyl 9-methyltetradecanoate, Octanoic acid, methyl ester  |
| Abaffy  | 2013 | Melanoma                        | 6  | Dodecanoic acid, Toluene, Tetradecanoic acid/Myristic Acid, Hexadecanoic acid/n-hexadecanoic acid, 1-eicosane, 2- ethylhexyl- 4- methoxy- cinnamate   |
| Dormont | 2013 | Healthy (compared 4 techniques) | 44 | Nonanal, Decanal, 5-Hepten-2-one, 6-methyl-, Benzoic acid/Benzaldehyde, Octanal, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, Nonane, Tetradecane, Heptadecene<br>Pentadecane, Hexadecane, Dodecanal, 2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene (squalene), Decane, Nonanoic acid, Tetradecene, Hexanal, Dodecane, Undecane, 2-Nonenal, (E)-, Tridecane, $\alpha$ -Pinene, Undecanal, Limonene, Pentadecene, Linalool/3,  |

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|----------|------|-----------------|----|--|
|          |      |                 |    | 7- dimethyl-1,6-octadien-3-ol, Tridecanal, Ethyl Acetate, Methyl octadecenoate, Diethylsulfide, Methyl hexadecanoate, Octadecyl acetate<br><br>Hexadecene, Decanoic acid, Octanoic acid, 1-Dodecanol, Lilial/ $\alpha$ -methyl- $\beta$ -(p-tert-butylphenyl)propanal , 2-Decenal, (E)-, 2-Octenal, (E)-, Benzothiazole, (E)-2-Undecenal<br>(E)-2-Heptenal, (E,E)-2,4-Nonadienal, Nonalactone  |
| Ruzsanyi | 2012 | Healthy         | 10 | Nonanal, Decanal, 5-Hepten-2-one, 6-methyl-, Benzoic acid/Benzaldehyde, Octanal, Ethanol/ethyl alcohol, 1-Hexanol, 2-ethyl-, Ammonia, n-Butyl acetate, 2-Butenal, 3-methyl-  |
| Prada    | 2011 | Healthy         | 51 | Octanal, Nonanal, Benzoic acid/Benzaldehyde, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, Decanal, Dodecanal, Undecanal, Tetradecone, Pentadecane, Dodecane, Pentadecene, Tridecane, 2-Nonenal, (E)-, Linalool/3, 7- dimethyl-1,6-octadien-3-ol, Heptadecene, Undecane, Hexadecane, Hexanal, 5-Hepten-2-one, 6-methyl-, Limonene, Nonane, Ethyl Acetate, Tridecanal, $\alpha$ -Pinene, Decane, Nonanoic acid, 2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene (squalene), Methyl octadecenoate, Tetradecene, Diethylsulfide, Methyl hexadecanoate, Octadecyl acetate, 2-Decenal, (E)-, Lilial/ $\alpha$ -methyl- $\beta$ -(p-tert-butylphenyl)propanal , 1-Dodecanol, Decanoic acid, Octanoic acid, 2-Octenal, (E)-, Benzothiazole, (E)-2-Undecenal, (E)-2-Heptenal, (E,E)-2,4-Nonadienal, Nonalactone, Hexadecene   |
| Abaffy   | 2010 | Melanoma        | 9  | Octanal, Nonanal, Decanal, Hexanal, Limonene, Heptanal, Ethylbenzene, 2-Ethylhexyl benzoate/Benzoic acid, 2-ethylhexyl ester, 1-Methyl-bis(1,2,4)-triazole-5,1'  |
| Thomas   | 2010 | Wound Infection | 46 | Nonanal, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, 1-Hexanol, 2-ethyl-, Tetradecanal, Propylene glycol/1,2-propanediol, Butylated hydroxytoluene, Carene/3-carene<br><br>Phenol, 3,5-bis(1,1-dimethylethyl)-, 1-eicosanol, 2-hexadecanol, 1-Dodecanol, 3,7,11-trimethyl- , 1,3-Pantanediol, 2,2,4-trimethyl- , 1-decanol,2-hexyl, 1-Propyl-3,6-diazahomoadamantan-9-ol, 2-Propanol, 1-(2-methoxy-1-methylethoxy)- , 3-decen-1-ol, E-2-Tetradecen-1-ol , Z,Z-2,5-Pentadecadien-1-ol, Cyclodecanol, 2-t-Butyl-5-propyl-[1,3]dioxolan-4-one, 1-nonadecene, 2-Methyl-Z-4-tetradecene, 7-tetradecene, Disulfide, dimethyl, Dodecane, 1,2-dibromo-, 3-Isopropyl-6a,10b-dimethyl-8-(2-oxo-2-phenyl-ethyl)-dodecahydro-benzo[f]chromen-7-one, 2-propanol, 1-(1-methyethoxy), 1,4-Methanoazulen-3-ol decahydro-1,5,5,8a-tetramethyl-, [1s-(1.a.,3.b.,3a.b.,4.a.,8a.b.)]-, a-Ethylether of 11-epi-dihydroartemisinin, 4-Trifluoroacetoxypentadecane, 4-Trifluoroacetoxytetradecane, 2-Trifluoroacetoxypentadecane |

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|-----------|------|---------|----|--|
|           |      |         |    | Propanoic acid, 2-methyl-, 3-hydroxy-2,4,4-trimethylpentyl ester, E-2-Methyl-3-tetradecen-1-ol acetate, Pentanoic acid, 2,2,4-trimethyl-3-carboxyisopropyl, isobutyl ester, 1,2-Benzenedicarboxylic acid, butyl 2-ethylhexyl ester, 2,6-Nonadienoic acid, 7-ethyl-9-(3-ethyl-3-methyloxiranyl)-3-methyl-, methyl ester, [2R-[2.a.(2E,6E),3.a.]-, Myristic acid, 9-hexadecenyl ester, (Z)-, Octadecanoic acid, 4-hydroxy-, methyl ester, Cyclopropaneoctanoic acid, 2-[(2-pentylcyclopropyl)methyl]-, methyl ester, trans,trans-Z-3-Octadecen-1-ol acetate<br>2-Indazol-2-ylphenylamine, Octadecane, 1-chloro, 1,3,5-Tris(trimethylsiloxy)benzene, 3-Benzoylmethyl-3-hydroxy-5-nitro-2-indolinone, 3-tert-butyl-5-chloro-2-hydroxybenzophenone  |
| Turner    | 2008 | Healthy | 6  | 2- Propanone/Acetone, Acetaldehyde, Ethanol/ethyl alcohol, Methanol, Propanol, Ammonia   |
| Gallagher | 2008 | Healthy | 90 | 2- Propanone/Acetone, Nonanal, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, Octanal Decanal, Benzoic acid/Benzaldehyde, Dodecanal, Linalool/3, 7- dimethyl-1,6-octadien-3-ol, 5-Hepten-2-one, 6-methyl-, Acetophenone/1-phenyl-ethanone, Hexanoic acid, Phenol, Acetic acid/Ethanoic acid, Lilial/ $\alpha$ -methyl- $\beta$ -(p-tert-butylphenyl)propanal, 7-Octen-2-ol, 2,6-dimethyl-/Dihydromyrcenol, 1,7,7-trimethylbicyclo(2;2;1)heptan-2-one, 3,7-dimethyl-6-octen-1-ol, p-menth-1-en-8-ol (alpha-terpineol), 4-tert-butylcyclohexyl acetate, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-cyclopenta-gamma-2-benzopyran/galaxolide, p- cymene, Octanoic acid, Butanoic acid, 3-methyl-/Isovaleric acid, Hexanoic acid, 2-ethyl-, cedrol, 2-ethylhexyl 2-ethylhexanoate, Hexadecanoic acid, 1-methylethyl ester, $\alpha$ -hexyl cinnamaldehyde, Propanoic acid, Butanoic acid Pyridine, Dimethyl sulfone, p-Cresol/4-methylphenol, 4-cyanocyclohexane, 2-(4-tert-butylphenyl) propanal , 5-(hydroxymethyl)-2-furaldehyde, 3,5,5-trimethylcyclohex-2-en-1-one (isophoron), 1-(2-methoxypropoxy)-2-propanol, 1,1'-oxybis-2-propanol, 1-octen-3-ol, 3,7-dimethyl-2,6-octadien-1-ol 2-(2-propyl)-5-methyl-1-cyclohexanol (menthol) /Cyclohexanol, 5-methyl-2-(1-methylethyl)-, [1R-(1.alpha.,2.beta.,5.alpha.)]-, Furfural alcohol/2-furanmethanol, 1-phenylethylester acetic acid, Tetradecanoic acid, 1-methylethyl ester, 1,3-diacetoxypropan-2-yl acetate, 2-hydroxy, hexyl ester benzoic acid , Methyl 2-pentyl-3-oxo-1-cyclopentyl acetate, Methoxy acetic acid, dodecyl ester Homomenthylsalicylate, 2-ethylhexylsalicylate , 2,4,6-tri-tert-butyl-phenol, Phenyl ethyl alcohol/phenylethanol, 2,6-bis(1,1-dimethylethyl)-4-(1-oxopropyl)phenol, 1-Hexanol, 2-ethyl-2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene (squalene), Dodecanoic acid, |

|        |      |         |    |   |
|--------|------|---------|----|---|
|        |      |         |    | Tetradecanoic acid/Myristic Acid, Hexadecanoic acid/n-hexadecanoic acid, Pentadecanoic acid<br>Tridecanoic acid, 9-hexadecanoic acid, Lactic acid, 1-Butanol, Heptadecanoic acid, Ethyl hexadecanoate/Palmitic acid, ethyl ester, 6-Methyl-3,5-heptadiene-2-one, 2-Cyclopenten-1-one, 2-methyl-, 2-Cyclopenten-1-one, 3-methyl-, Benzothiazole, glycerol/Propane-1,2,3-triol, 2,5-hexanedione, 6-hydroxy-hexan-2-one, 3- hexanol, 2- hexanol, 1,6-heptadien-4-ol, 3-hexene-2,5-diol, 3-methyl-cyclopentanol, 1-methyl-cyclopentanol, 2-methyl-cyclopentanol, 2(5H)-furanone, 3-methyl, 1-methoxyhexane, Ethyl carbamate , 4-ethyl-morpholine, Lactic acid, methyl ester<br>1-methyl hexyl acetate, Methoxy acetic acid, tetradecyl ester, Hexadecanoic acid, 2-hydroxyethylester, Ethyl (-)-lactate, 4-vinyl imidazole  |
| Curran | 2007 | Healthy | 62 | Nonanal, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, Decanal, Pyridine, Tetradecanoic acid, 1-methylethyl ester, Octanal, Benzoic acid/Benzaldehyde, Dodecanal, Linalool/3, 7- dimethyl-1,6-octadien-3-ol, 5-Hepten-2-one, 6-methyl-, Phenol, 3,7-dimethyl-6-octen-1-ol , Furfural alcohol/2-furanmethanol, Phenyl ethyl alcohol/phenylethanol, Tetradeanal, Hexanal, Heptanal, Undecanal, Tetradeane, Pentadecane, Dodecane, Tridecane, 2-Nonenal, (E)-, Heptadecene, Undecane, Hexadecane, Nonane, Tridecanal, Toluene, 2-Decanone, Benzyl alcohol, Furfural/2-Furancarboxyaldehyde, Eicosane, Decanoic acid, Methyl ester, Octanoic acid, Butanal, 2-methyl-, $\beta$ -Pinene/6,6-dimethyl-2-methylene-, (IS)-Bicyclo[3.1.1]heptane, 2-Decenal, (E)-Benzene, 1,3-dimethyl, Benzene, 1,2,3-trimethyl-, n-Octane, Decanoic acid, 1-Octanol/Octanol/Isooctanol, 1,4-dimethylbenzene/xylene, Benzene, 1-ethyl-2-methyl-, Naphthalene, 1-Nonanol, 2-Octenal, (E)-, Cyclohexadecane, Cyclotetradecane, 7-Hexadecenoic acid, methyl ester, Dodecanoic acid, methyl ester, Furancarboxylic acid-methyl ester, Hexadecanoic acid, methyl ester, Hexanedioic acid, dimethyl ester, Propanedioic acid, dimethyl ester, Nonanoicacid, methyl ester, 1-chlorononane, Thiazolidine, Benzene, 1,3,5-trimethyl, Benzene,1-ethyl-3-methyl-, 1,2,4-Trimethylbenzene |
| Zhang  | 2005 | Healthy | 34 | Nonanal. Decanal, Octanal, Benzoic acid/Benzaldehyde, 3,7-dimethyl-6-octen-1-ol , Phenyl ethyl alcohol/phenylethanol, Tetradeane, Pentadecane, Dodecane, Tridecane, Undecane, Hexadecane, Eicosane, Acetophenone/1-phenyl-ethanone, Lilial/ $\alpha$ -methyl- $\beta$ -(p-tert-butylphenyl)propanal, Cedrol, 3,7-dimethyl-2,6-octadien-1-ol , 1-Hexanol, 2-ethyl-, Limonene, Pentadecene, $\alpha$ -Pinene, Methyl salicylate, 5-Methyl-2-isopropyl cyclohexanol, 1,3,5,7-Cyclooctene, Camphene, 3-Dodecene, Caryophyllene, Hexadecene, 2-Methyl dodecane   |

|           |      |         |    |   |
|-----------|------|---------|----|---|
|           |      |         |    | Cyclopentadecane, 2-Methyl hexadecane, Isobornyl propionate, Tetramethyl thiourea, Diphenyl ether   |
| Curran    | 2005 | Healthy | 46 | Nonanal, Decanal, Octanal, Benzoic acid/Benzaldehyde, Tetradecone, Dodecane, Tridecane, Undecane, $\alpha$ -Pinene, Hexadecene, Pyridine, Tetradecanoic acid, 1-methylethyl ester, 5-Hepten-2-one, 6-methyl-, Phenol, Furfural alcohol/2-furanmethanol, Tetradeanal, Hexanal, Heptanal, Undecanal, 2-Nonenal, (E)-, Heptadecene, Nonane, Toluene, Benzyl alcohol, Furfural/2-Furancarboxyaldehyde, Decanoic acid, methyl ester, Octanoic acid, methyl ester, Naphthalene 7-Hexadecenoic acid, methyl ester, Dodecanoic acid, methyl ester, Furancarboxylic acid-methyl ester, Hexadecanoic acid, methyl ester, Hexanedioic acid, dimethyl ester, Propanedioic acid, dimethyl ester, 1-chlorononane, 1-phenylethylester acetic acid, Dodecanoic acid, Tetradecanoic acid/Myristic Acid, Methyl 9-methyltetradecanoate, 2-Undecanone, 6,10-dimethyl-, Methylpentadecanoic acid, Nonanoic acid, methyl ester, Tridecanoic acid, methyl ester Cyclopentanetridecanoic acid-methyl ester, Hexanoic acid-methyl ester, Undecanoic acid-methyl ester   |
| Haze      | 2001 | Healthy | 22 | Nonanal, Decanal, Octanal, Dodecane, Undecane, Hexanal, Heptanal, 2-Nonenal, (E)-, Nonane 1-Hexanol, 2-ethyl-, 1-Octanol/Octanol/Isooctanol, Acetic acid/Ethanoic acid, 1-Butanol, 4-Methyl-2-pentanone, 1-Hexadecanol, Octadecanol, Butyric acid , 6- methyl-5-heptanone, 1-hexanol, 1-Decanol, Amyl alcohol/1-pentanol, 4-methyl-2-pentene  |
| Meijerink | 2000 | Healthy | 75 | Nonanal, Decanal, Octanal, Hexanal, Heptanal, 1-Octanol/ Octanol/ Isooctanol, Acetic acid/Ethanoic acid, 1-Butanol, 1-Hexadecanol, 1-hexanol, 1-Decanol, amyl alcohol/1-pentanol, Pyridine, 5-Hepten-2-one, 6-methyl-, Furfural alcohol/2-furanmethanol, Benzyl alcohol, Furfural/2-Furancarboxyaldehyde, Phenyl ethyl alcohol/phenylethanol, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, 1-Nonanol, 2-Propanone/Acetone, Hexanoic acid, Butanoic acid, 3-methyl-/Isovaleric acid, Hexanoic acid, 2-ethyl-, Propanoic acid, Butanoic acid, 2-(2-propyl)-5-methyl-1-cyclohexanol (menthol) /Cyclohexanol, 5-methyl-2-(1-methylethyl)-, [1R-(1.alpha.,2.beta.,5.alpha.)]-, 6-Methyl-3,5-heptadiene-2-one, Ethanol/ethyl alcohol, 1-Dodecanol 1H-indole, 2-Propanol, 3-Penten-2-one, 4-methyl-, 3-methyl-1-butanol, ethyl tetradecanoate 1-tetradecanol, 2-Nonanone, Benzonitrile, 3-hydroxy-2-butanone, Cyclohexanone, 1-heptanol 2-methyl-1-butanol, 3,5,5-trimethyl-1-hexanol, 1-methoxy-2-propanol, 3-methyl-2-buten-1-ol 4-methyl-4-penten-2-ol, 3-ethyl-2,2-dimethyloxirane, linalooloxide, linalooloxide A, Nicotine, Ethyl butanoate, Ethyl 2-methylbutanoate, Ethyl 3-methylbutanoate, |

|         |      |         |     |   |
|---------|------|---------|-----|---|
|         |      |         |     | Ethyl isohexanoate, 1-methoxy-2-propyl acetate, Ethyl hexanoate, Ethyl 4-methylhexanoate, Ethyl heptanoate, Ethyl 4-methylheptanoate, Ethyl octanoate, Ethyl 4-methyloctanoate, Ethyl nonanoate, Ethyl decanoate, Ethyl 4-methyldecanoate, dec-9-enoic acid, ethyl ester, Ethyl undecanoate, Ethyl 4, Methylundecanoate, Ethyl isododecanoate, Ethyl dodecanoate, Ethyl 4-methyldodecanoate, Ethyl isotridecanoate, Ethyl isotetradecanoate, Ethyl 9-tetradecenoate, Ethyl pentadecanoate, Ethyl 9-hexadecenoate  |
| Bernier | 2000 | Healthy | 215 | Nonanal, Decanal, Acetic acid/Ethanoic acid, 1-Decanol, Pyridine, 5-Hepten-2-one, 6-methyl-, Furfural alcohol/2-furanmethanol, Benzyl alcohol, Phenyl ethyl alcohol/phenylethanol, Geranylacetone/6,10-Dimethylundeca-5,9-dien-2-one, Hexanoic acid, Propanoic acid, 6-Methyl-3,5-heptadiene-2-one, 1H-indole, 1-tetradecanol, 4-methyl-4-penten-2-ol, Nonane, 4-methyl-2-pentene, Benzoic acid/Benzaldehyde, Tetradecane, Hexadecene, Tetradecanoic acid, 1-methylethyl ester, Phenol, Heptadecene, Toluene, Octanoic acid, methyl ester, Hexadecanoic acid, methyl ester, Hexanedioic acid, dimethyl ester, 1-chlorononane, Dodecanoic acid, Tetradecanoic acid/Myristic Acid, Methylpentadecanoic acid, Nonanoic acid, methyl ester tridecanoic acid, methyl ester, 3,7-dimethyl-6-octen-1-ol, Pentadecane, Hexadecane, 3,7-dimethyl-2,6-octadien-1-ol, Dodecanal, 2-Decanone, n-Octane, Decanoic acid, 1,4-dimethylbenzene/xylene, Cyclohexadecane, Cyclotetradecane, Thiazolidine, 1-octen-3-ol Octanoic acid, 2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene (squalene), Hexadecanoic acid/n-hexadecanoic acid, Pentadecanoic acid, Tridecanoic acid, Lactic acid, Heptadecanoic acid, Glycerol/Propane-1,2,3-triol , 2-hexadecanol, Ethylbenzene, Decane Nonanoic acid, Tetradecene, Octadecane, Tricosane, Docosane, n-Heptane, Carbon disulfide , Hexane, Benzene, Dimethyl sulfide, 2-Pentanone, 2-Hexanone, 1-Pentene, Furan, 3-methyl-Furan, 2-methyl-, Heptanoic acid, Undecanoic acid, Tridecanol/1-tridecanol, N,N-dimethyl-1-hexadecanamine, Styrene, 2,4-dimethylhexane, Octadecanoic acid, Octadecanoic acid, phenyl ester, Tetradecanoic acid, undecyl ester, Hexanedioic acid, octyl ester cholesta-3,5-diene, 2-methyl dodecanoic acid, Docosanoic acid, Heptanedioic acid, 2- propenoic acid , 2-butenoic acid, 2-methyl-2-butenoic acid, 3-methyl-2-pentenoic acid, 3-methylpentanoic acid, Methyltridecanoic acid, Methylheptadecanoic acid, Hexanedioic acid, 4-hydroxy-3-methoxybenzoic acid, 9-Hexadecenoic acid, 2-methylhexadecanal, Butanone, 3-, Pentanone , 2-non-en-4-one, 2- butanol, 2-decanol, 2-heptadecanol, 2-methyl-3-pentanol, Ethylene glycol, 2-hexen-1-ol, 4-hexen-1-ol, 1-hexen-3-ol, 1-hepten-3-ol, 2-octen-1-ol, 2-methyl-3, Octenol, Nonenol, Dodecenol, |

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|  |  | <p>Methyldodecene, 2-methyl-2-dodecene, 3-ethyl-1,4-hexadiene</p> <p>2,6-dimethyl-1-heptene, 2-methyl-1-heptene, 4-ethyl-3-heptene, 2-methyl-1-hexene, 2-methyl-2-undecene, 3-methyl-5-undecene, 4-methyl-4-undecene, 9-octadecene, 2-octene, 3-octene, 4-octene, 3,4-nonadiene, Trimethyl-1,5-heptadiene, 2,7-dimethyl-1-octene, 5-decene, Undecadiene</p> <p>4-nonene, Dimethylpentadiene, Methylheptadecane, Trimethyl-3-methylenehexadecane, Heneicosane, Pentacosane, Menthan, N-menth-6-ene, 2-(2H-benzotriazol-2-yl)-4-methylphenol, 2-butenoic acid, butyl ester, Butanoic acid, methyl ester, 13-methylpentadecanoic acid, methyl ester, 14-methylpentadecanoic acid, methyl ester, Octadecenoic acid, methyl ester, Hexadecanoic acid, butyl ester, Tetracosanoic acid, methyl ester</p> <p>Pentanedioic acid, ester, Pentanedioic acid, mono(2-ethylhexyl) ester, Heptanedioic acid, dibutyl ester, Hydroxybutanoic acid, ethyl ester, 3-hydroxybenzoic acid, methyl ester, 4-hydroxybenzoic acid, propyl ester, 2-hydroxybenzoic acid, phenylmethyl ester, 2,4-dihydroxy-3,6-dimethylbenzoic acid, 16-methylheptadecanoic acid, methyl ester, Propanamide, N,N-diethyl-3-methylbenzamide (DEET)</p> <p>N,N-bis(2-hydroxyethyl)dodecanamide, N,N-didodecyl formamide, 1,3-butanediamine, N,N-dimethyl-1,2-ethanediamine, N-ethylcyclopentamine, N,N-dimethyl-3-butoxypyropylamine, N,N-dimethyl-3-benzyloxypropylamine, N-methyl-N-nitroso-1-dodecanamine, N,N-dimethyl-1-dodecanamine, N,N-dimethyl-1-tridecanamine, N,N-dimethyl-1-tetradecanamine, N,N-dimethyl-1-pentadecanamine, N,N-dimethyl-1-heptadecanamine, N,N-dimethyl-1-octadecanamine</p> <p>methyl iodide, 1-chlorohexane, 1-chloroheptane, 1-chlorododecane, 1-chlorotetradecane, 1-chloropentadecane, 1-chlorohexadecane, 2-methyl-1H-pyrrole, 3-methyl-1H-pyrrole, 3-pyridinamine, 4-pyridinamine, 4-methyl-2-pyridinamine, 2-methylpyridine, 4(1H)-pyridinone, 6-amino-3-pyridine carboxylic acid, 3(1-methyl-2-pyrrolidinyl)pyridine (nicotine), 1,2,3,4-tetrahydroquinoline, 2,3,4-trimethylquinoline, 2-ethylpiperidine, 1-piperidineethanol, 4-piperidinemethanamine, 1-phenyl-3-(1-piperidinyl)-2-buten-1-one, 4,5-dihydro-2-methyl-1H-imidazole, 1,5-dimethyl-1H-pyrazole, pyrazine, 2,6-dimethylpyrazine, trimethylpyrazine, 2-methylisothiazole, Thiomethane, 2-thiopropane, 1-methylthiobutane, 1-thiododecane, 3-methylthietane, 3-(methylthio)-1,2-propanediol, o-(2-butenylthio)phenol, cholest-5-en-3-ol, 4-hydroxybenzoic acid, 3-hydroxy-4-methylbenzaldehyde, 4-phenylmethoxybenzaldehyde, propylbenzene, 4,4'-dimethyl-1,1'-biphenyl</p> |
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