Supplementary Table 1. An overview of the most frequently encountered analytical techniques in metabolomics

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| Analytical technique | Type of detectable metabolite | Advantages | Disadvantages |
| GC-MS | Volatile metabolites (and some nonvolatile metabolites after derivatization) of various polarities  | * High sensitivity
* Sample preparation is straightforward
* More robust than LC-MS
* Metabolite identification can be performed without a reference compound sample
 | * Limited ability to detect nonvolatile analytes
* Determination of response factors necessary for quantification
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| LC-MS | Volatile or nonvolatile primarily nonpolar metabolites | * High sensitivity
* Does not require derivatization of nonvolatile metabolites
 | * Determination of response factors necessary for quantification
* Periodic quality assurance needed
* Reference compound samples needed
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| NMR | All metabolites | * Non-destructive
* Minimal sample preparation
* Highly reproducible
* Quantitative (1H)
* Spatial mapping possible (MRI)
 | * Sensitivity inferior to MS
* Metabolite identification hindered by signal overlap issues
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