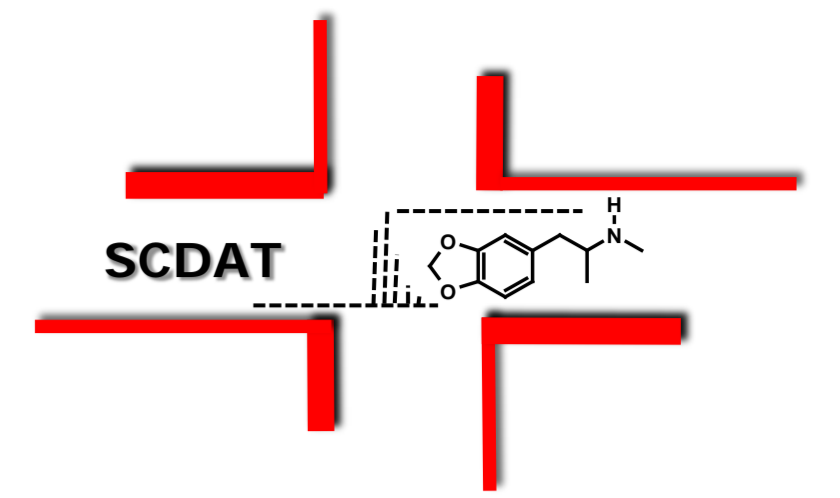


SWISS GUIDELINES 2010 FOR DRUGS OF ABUSE TESTING

Swiss Guidelines Committee for Drugs of Abuse Testing, SCDAT
www.scdat.ch



Preamble

- The Drugs of Abuse Testing (DAT) Laboratory Guidelines are intended as recommendations. They are not of legally binding nature. The objectives are periodical updates and harmonization of DAT in accordance with international guidelines.
- The DAT Laboratory Guidelines were elaborated by the SCDAT representing members of the following institutions: Swiss Federal Office of Public Health, Swiss Association of Pharmacists, Swiss Society for Clinical Chemistry, Swiss Society of Legal Medicine, Swiss Union for Laboratory Medicine, Swiss Association of Diagnostics Manufacturers, Swiss Society for Directors of Clinical Laboratories, University of Bern.
- The application of DAT in medical, forensic and social areas as well as at the workplace can have severe implications for the tested individual. Therefore, it is mandatory to perform analyses and interpret results with greatest care.
- The Guidelines support DAT labs in following the required quality assurance and consult Swiss quality control centers for inter-lab test rounds.
- Although the SCDAT tries to assure the reliability of the Guidelines it cannot assume any liability regarding its accuracy, correctness, and completeness nor any negative consequences when (mis)using the Guidelines. Explicitly, its content may be subject to change without prior notice.

Methods, Matrices, Monographs

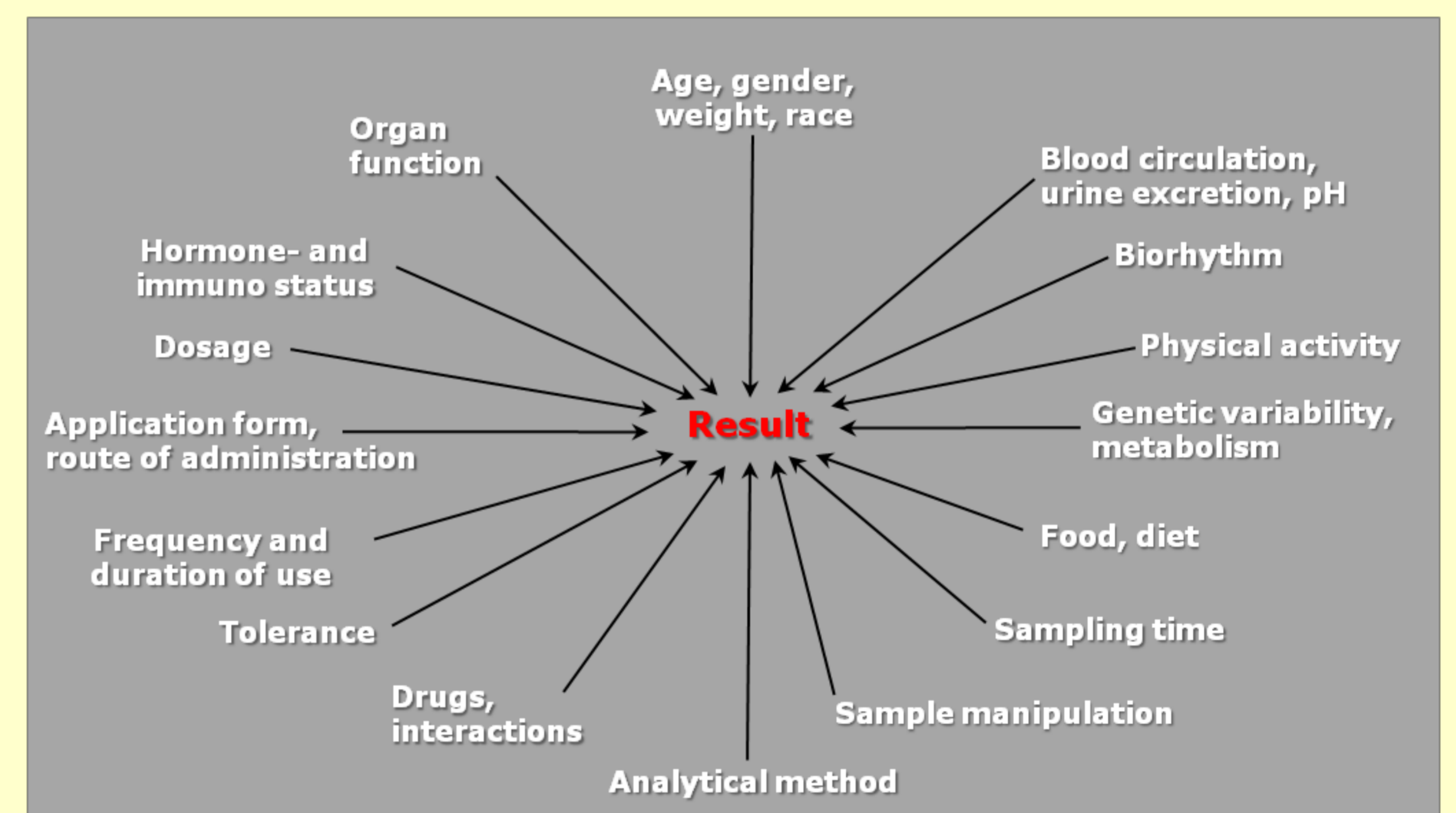
- **Immunochemical methods:**
 - Non-instrumental immunoassays: rapid DAT, onsite, no mass screening, only indicative, „yes/no“; urine, saliva, sweat.
 - Instrumental immunoassays: single substance (e.g. cocaine) or substance group tests (e.g. amphetamines), mass screening, only indicative, „yes/no“; urine.
 - Relevant criteria: Cut-off, detection limit, sensitivity, specificity.
- **Chromatographic-spectroscopic methods:**
 - GC-MS, HPLC-MS, HPLC-DAD.
 - Urine, blood, serum, plasma, (saliva, sweat).
 - Confirmation or differentiation of immunochemical result.
 - Relevant criteria: Cut-off, detection limit, sensitivity, specificity.
- **Monographs:**
 - Amphetamines, barbiturates, benzodiazepines, cannabis, cocaine, GHB, ketamine, LSD, methadone, methaqualone, benzylpiperazines, opiates, psilocybin.

Areas of Application

- A** DAT in **Hospitals** ➤ Differential diagnosis.
- B** DAT in **Social Medicine** ➤ Heroin substitution, heroin-based or withdrawal treatment programs.
- C** DAT in **Forensics** ➤ Post mortem toxicology, traffic, etc.
- D** DAT at **Workplace** ➤ Public transportation, industry, army, school.

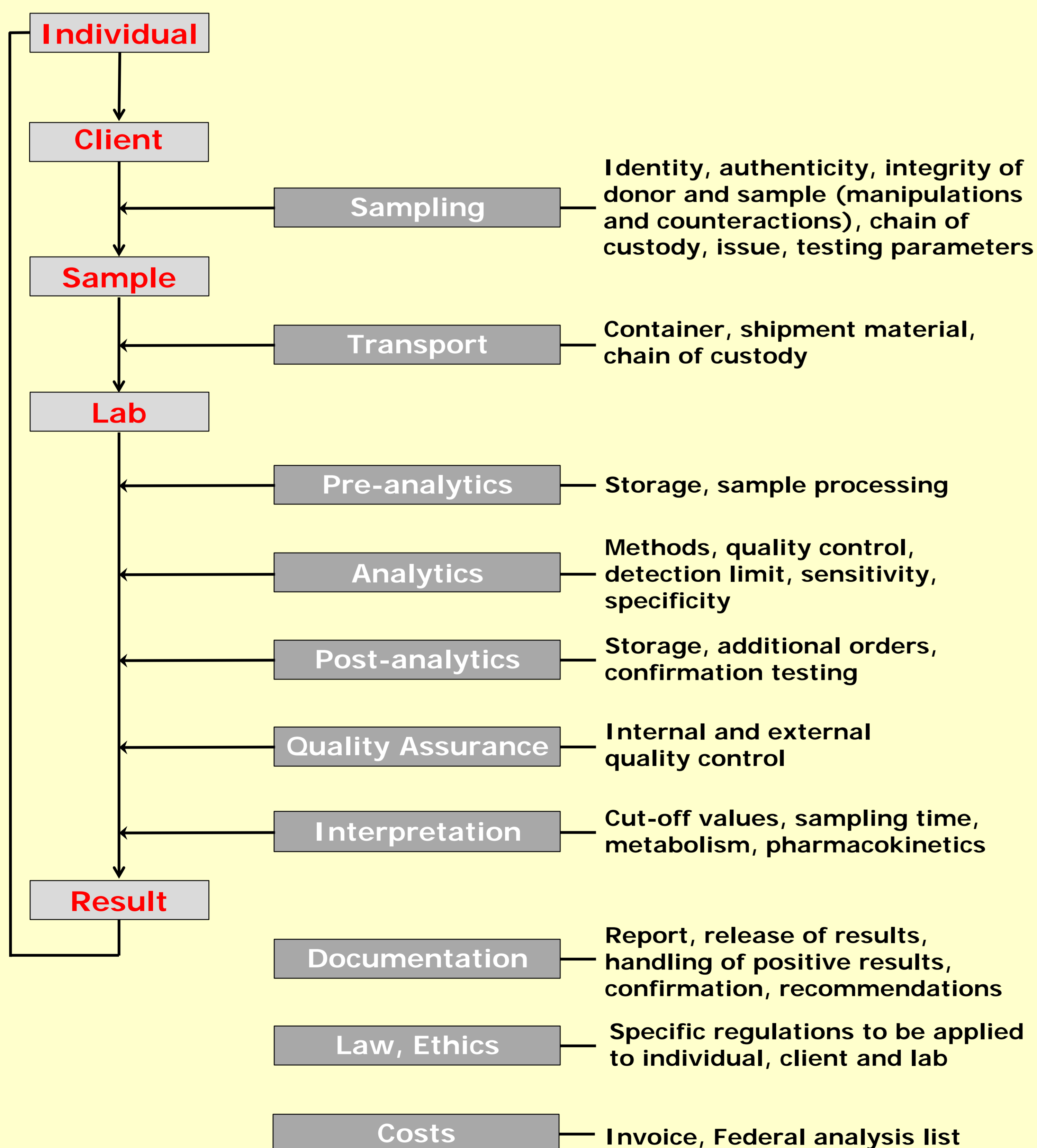
Interpretation

- Steps: ➤ Analytical, toxicological, medical interpretation by lab expert and/or client.
- Factors to be considered:



- Significance of result?
- Consequences of result: legal, financial, social, medical and/or ethical?

Scope



Quality Assurance

- **A-D** ➤ Internal and external quality control.
- **A-B, (D)** ➤ Requirements for the lab according to Swiss regulations.
- **C-D** ➤ Confirmation of positive results mandatory.
- **A-B** ➤ Confirmation optional, depending on requirements and requests.

Documentation, Reporting, Archiving

- Information while maintaining safety and confidentiality in chain of custody.
- Urgency of DAT: **A** (emergency unit) 3h; **A-C** 24h; **B-D** few days.
- Analysis order (ID, clinical details, sample details, personal data, tests required).
- Report (sample, result, interpretation, administrative data).
- Archiving (electronic media and/or hardcopies); **A-B** 5 years, **C-D** 10 years.

Legal and Ethical Aspects, Data Protection

- Client clearly identified, known legitimacy to order DAT.
- Lab being qualified/certified and having adequate permits (cantonal, federal).
- Labs authorized for DAT: **A-B** Licensed medical labs; **C** Forensic labs.
- Authorized clients: **A** Medical personnel; **B** Persons authorized by withdrawal/substitution programs or as carer; **C** Forensic toxicologist or labs authorized by Justice; **D** Everybody, as long as individual is informed and agrees.
- Protection of individual's rights and data according to (inter)national laws, regulations and ethical commitments.