EtG-Proficiency Test 2015

• Registration on website: 06.08.-20.09.2015
• Sample shipment by IRM Zurich: 27.09.2015
• Analysis period: 28.09.-11.11.2015
• Statistics obtained from the BAM 13.11.2015
• Certificates will be sent out in December 2015
• 35 inscriptions
Samples

- 3 authentic samples (negative, low and high)
- 100 mg per sample
- Washed and cut
- Homogeneity tested at IRM Zurich
- At least 25 mg recommended for analysis
- Labs should perform analysis according to their routine method
Statistics

- 32 results submitted
- Lab experiences:
  - > 300 analyses/year: 16 labs
  - 50-300 analyses/year: 7 labs
  - < 50 analyses/year: 9 labs
- Pulverization: 17 labs
- Incubation/extraction: water 28 labs, water and MeOH and/or ACN 3 labs, MeOH 1 lab
- Measurement:
  - LC-MS/MS: 22 labs, GC-MS/MS: 10 labs
EtG-Results

• Data treatment according to ISO-5725-5 (with PROLab Plus software)

• Acceptance criteria: Horwitz Z-score <=2 (robust mean of results for all samples)
Sample: HEtG 15/1-A
Measurand: EtG
Statistical method: ISO 5725-5
No. of laboratories: 26
No. of measurement values: 26

Assigned value: 13.064 pg/mg (Empirical value)
Target s.d.: 4.015 pg/mg (Horwitz function)
Rel. target s.d.: 30.73%
Reproducibility s.d.: 4.522 pg/mg
Rel. reproducibility s.d.: 34.61%
Range of tolerance: 5.035 - 21.094 pg/mg (|Z-Score| <= 2.000)

Assigned value **A: 13.1 pg/mg** (accepted range **5.0 – 21.1 pg/mg**)
Target SD: 30.7 %

5 labs were not able to detect EtG in this sample
26 of 32 results within the tolerance criteria
Assigned value B: < 3.0 pg/mg

31 of 32 results within the tolerance criteria

9 labs reported results for sample B

(1 lab 9.2, 1 lab < 7.0, 7 labs < 2.7 pg/mg)
Assigned value **C: 93.8 pg/mg** (accepted range **50.9 – 137 pg/mg**)

24 of 32 results within the tolerance criteria
Organization of next EtG PT test

• 2 test rounds previewed in April/May and October/November 2016

• Data treatment will be provided by BAM (Germany) with PROLab Plus

• Feedback concerning forms are welcome (registration, instructions, results) – email to frank.sporkert@chuv.ch