German External Quality Assessment Scheme

Prof. Dr. med. Hans Drexler
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Information - Intercomparison programme RV72

Dear Colleague,

As you know, we have been carrying out a statistical quality control programme and certification for occupational medical and environmental medical toxicological analysis in biological materials since 1982. Within the framework of statistical quality control,

G-EQUAS 72 is going to take place from **August 2023 – January 2024.**

The round robin comprises the determination of a series of important occupational-medical and environmental-medical parameters in blood, plasma, serum, urine and hemoglobin samples.

You will find all relevant information, order forms and deadlines under www.app.g-equas.de/web. We would advise you to regularly check our website and to order online.

If you wish to participate in **G-EQUAS 72/2023** please order online via our homepage www.g-equas.de until

September 4th, 2023

You also may return the scanned request form with marked parameters by email.

Contact data:

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The required control materials will be shipped

as of September 15th (to overseas participants) and
as of September 22 nd 2023 (to European participants)

Deadline for reporting your results is

November 16th, 2023

Results that arrive after this date will not be considered in the evaluation process.

The **blood, plasma, serum**, **urine** and **hemoglobin** samples are native pooled materials which are spiked with defined amounts of the occupational and environmental-medical toxicological parameters after appropriate preparation. For the urine controls, plasma controls for metals, and hemoglobin controls, human materials were used. Whole blood and serum controls are of bovine origin. Headspace samples are prepared with bovine

blood. This procedure has proven its merit in previous round robins, as well as in international quality control programmes.

All samples should be handled with the same precautionary measures as when analysing samples from patients.

In G-EQUAS **72** 19 control materials in two different concentration settings are being offered. **Please see request form RV72 and result sheet RV72 for detailed information.**

Each participant receives samples in **two concentration settings** for each parameter to be analysed. Successful participation in the round robin is certified if both concentrations are correctly determined.
A certificate is awarded for the successful participation in this intercomparison programme for occupational-medical- and environmental-medical- toxicological analyses.

We wish you all the best for your test.

Kind regards,

Prof. Dr. med. H. Drexler

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General price information

The **basic payment of 250 € for Overseas participants and 180 € for European participants** covers the costs for the participation in the round robin, the evaluation, the report/certification and the shipping costs.

Additionally 30 € are charged for each single parameter in blood, plasma/serum or urine.

For each of the following parameter pools an amount of 60.00 € is charged. The pools comprises several parameters, the participant may report all or a selection. For each reported parameter an evaluation and certification is conducted.

parameter: **11**	Arsenic speciation (As^{3+}, As^{5+}, MMA, DMA, AsB)
parameter: **117**	N-Methylpyrrolidone metabolites (5-HNMP and 2-HMSI)
parameter: **80**	Pyrethroide metabolites (Acid part) (Br_2-CA, cis-Cl_2-CA, trans-Cl_2-CA, CTFCA)
parameter: **83**	Pyrethroide metabolites (Alcohol part) (3-PBA, FPBA)
parameter: **87**	Alkyl phosphates (DMP, DMTP, DMDTP, DEP, DETP, DEDTP)
parameter: **93**	Nicotine and metabolite (Nicotine, Cotinine)
parameter: **122**	Phthalate metabolites "DEHP" (5-carboxy-MEPP, 5-oxo-MEHP, 5-OH-MEHP, MEHP)
parameter: **129**	Phthalate metabolites "other" (MnBP, MiBP, MBzP, MEP)
parameter: **127**	Naphthols (1-Naphthol, 2-Naphthol)
parameter: **47**	Aromatic hydrocarbons (Benzene, Toluene, Xylenes, Ethylbenzene)
parameter: **51**	Chlorinated hydrocarbons (Dichloromethane, 1,2-Dichloroethane, Trichloroethene, Tetrachloroethene, 1,1,1-Trichloroethane, Tetrachloromethane, Trichloromethane
parameter: **54**	Alcohols ane Ethers (Methanol, Methyl-tert-butylether, Tetrahydrofuran, n-Butanol)
parameter: **55**	Ketones (Acetone, Methylethylketone, Methylisobutylketone, Methyl-n-butylketone)
parameter: **182**	Aromatic hydrocarbons (Benzene, Toluene, Xylenes, Ethylbenzene)
parameter: **134**	Diisocyanate metabolites, aromatic (MDA, 2,4-TDA, 2,6-TDA, 1,5-NDA)
parameter: **180**	Diisocyanate metabolites, aliphatic (IPDA, HDA)
parameter: **130**	Globin adducts (MeV, HEV, CEV, AAV, 2-HPV)
parameter: **95**	DDT parameters (p,p'-DDT and p,p`-DDE)
parameter: **97**	Hexachlorocyclohexane (α-, β-, γ-HCH)
parameter: **100**	PCBs (Ballschiter numbers 28, 52, 101, 138, 153, 180)
parameter: **120**	Perfluoroalkanoic acids (PFOA, PFNA, PFDA)
parameter: **121**	Perfluoroalkyl sulfonic acids (PFOS, PFHxS, PFHpS, PFBS)
parameter: **140**	Bisphenols (Bisphenol A, Bisphenol S, Bisphenol F)
parameter: **147**	Butadiene metabolites (DHBMA, MHBMA1, MHBMA2)
parameter: **149**	Acrylamide/Acrylonitrile metabolites (AAMA, GAMA, CEMA)

parameter: **152** other mercapturic acids (HEMA, 2-HPMA, 3-HPMA)
parameter: **195** Arsenic speciation (As^{3+}, As^{5+}, MMA, DMA, AsB)
parameter: **208** Benzophenones (Benzophenone-1, Benzophenone-3)
parameter: **220** DINCH metabolites
parameter: **223** DEHTP metabolites