THE PROJECT OF A COLLABORATIVE STUDY

WG decision to initiate a project launching collaborative study rounds

Investigation by means of collab study rounds :

Automn 2021	Winter 2022	Spring 2022	Summer 2022	Automn 2022	Winter 2023	Spring 2023	Summer 2023	Automn 2023	Winter 2024	Spring 2024	Summer 2024	Automn 2024
Advertising of the project	Round 1 →			Round 2 →			Round 3 →			Dissemination →		
	B,O,P Muscle + B Milk extracts			Eggs + Kidney/Liver extracts			Fish + Honey extracts			Scientific publication		
	Sending samples & Participants Analyses	Processing Results	Reporting results	Sending samples & Participants Analyses	Processing Results	Reporting results	Sending samples & Participants Analyses	Processing Results	Reporting results	Best practices guidance		

Preparing the first round for end 2021

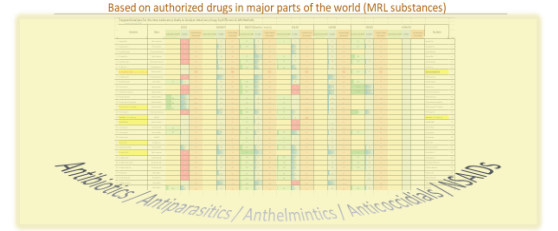
List of recognized official control laboratories to be advertised

⇒ After selection of interested advertised participants worldwide
Formal Invitation Letter with a Scheduled Plan
& Instructions for the Round will be provided

⇒ Capability of the available TQMS & HRMS methods in place to control the various analytes/ /materials combinations

A TOP30 SUBST. - Preparing the first round for end 2021

Based on authorized drugs in major parts of the world (MRL substances)



⇒ Proposal of TOP30 Vet Drug Analytes in 2 commodities : muscle (B,P,O)
and in milk (B,O,C)

- Selection of variation on at least 4 different materials per each commodity
- Selection of screening concentrations to be spiked in extracts of tissues and fluids

⇒ Issues also to handle : Stability of extracts, Transport and Lab delivery,
Collect of data, Processing of collected data …

List of recognized official control laboratories to be advertised

Current Official Control Labs to receive the Advert Letter	
Europe	32
North America	15
Latin America	14
Asia - Pacific	20
Africa – Middle East	3

Preparing the first round for end 2021

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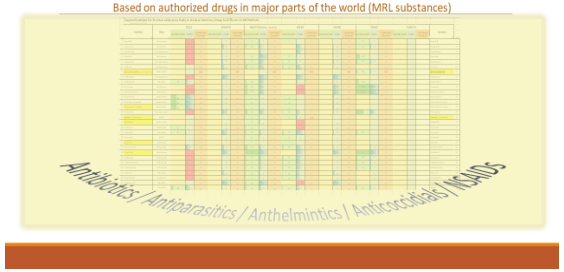

⇒ Proposal of TOP30 Vet Drug Analytes in 2 commodities : muscle (B,P,O,Py)
and in milk (B,O,C)

- ➢ Selection of variation on at least 4 different materials per each commodity
- ➢ Selection of screening concentrations to be spiked in extracts of tissues and fluids

⇒ Issues also to handle : Stability of extracts, Transport and Lab delivery,
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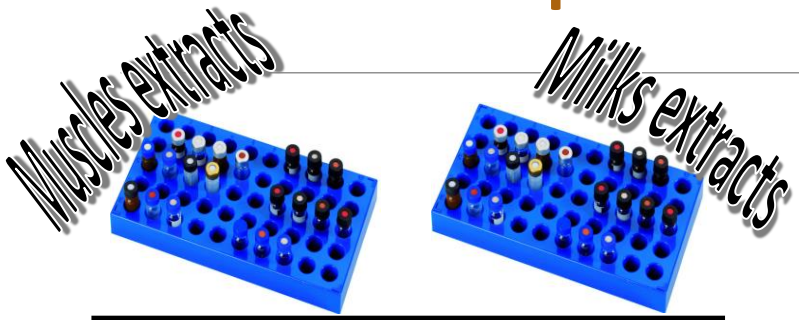
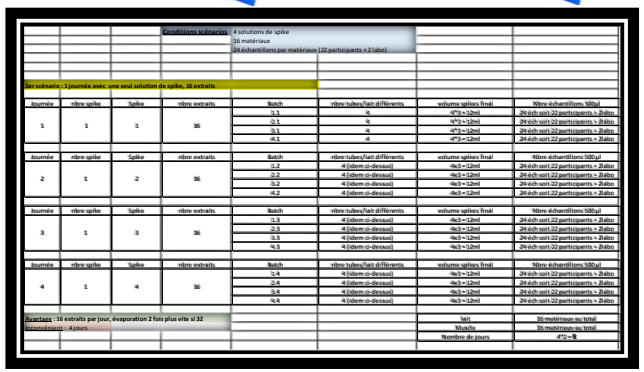
The study will be as easy as possible for the participants





Index	Acquisition Date & Time	Sample Name	Component Name	Mass Info	Retention Time	Peak Area
	dd/mm/yyyy hh:mm	yymmdd_RO_ST_01_00	Analyte-1			
	dd/mm/yyyy hh:mm	yymmdd_MM_ST_01_00	Analyte-1			
	dd/mm/yyyy hh:mm	yymmdd_ReagentBlank	Analyte-1			
	dd/mm/yyyy hh:mm	yymmdd_MatrixBlank_1	Analyte-1			
	dd/mm/yyyy hh:mm	yymmdd_05xSPK_1	Analyte-1			
	dd/mm/yyyy hh:mm	yymmdd_1xSPK_1	Analyte-1			
	dd/mm/yyyy hh:mm	yymmdd_2xSPK_1	Analyte-1			
	dd/mm/yyyy hh:mm	yymmdd_RO_ST_01_00	Analyte-1			
	dd/mm/yyyy hh:mm	yymmdd_MM_ST_01_00	Analyte-1			
	dd/mm/yyyy hh:mm	yymmdd_RO_ST_01_00	Analyte-2			
	dd/mm/yyyy hh:mm	yymmdd_MM_ST_01_00	Analyte-2			
	dd/mm/yyyy hh:mm	yymmdd_ReagentBlank	Analyte-2			
	dd/mm/yyyy hh:mm	yymmdd_MatrixBlank_1	Analyte-2			
	dd/mm/yyyy hh:mm	yymmdd_05xSPK_1	Analyte-2			
	dd/mm/yyyy hh:mm	yymmdd_1xSPK_1	Analyte-2			
	dd/mm/yyyy hh:mm	yymmdd_2xSPK_1	Analyte-2			
	dd/mm/yyyy hh:mm	yymmdd_RO_ST_01_00	Analyte-2			
	dd/mm/yyyy hh:mm	yymmdd_MM_ST_01_00	Analyte-2			

At least 16 final extracts and 10 calibration standards per commodity (2 trays per round with each tray for a specific food commodity).

The participating laboratory is expected to cover the cost of shipping, which should be reasonable.

Prescribed sequences of analysis but with their own methods.

Detailed instructions and Excel results spreadsheets provided together with the extracts.

A high-level mixture of all TOP30 analytes provided with the samples to ensure that they are detectable.

For most laboratories, participation in this study is expected to take one analyst less than 1 week to perform per round.

Data/Factors proposed to be collected and determined for processing results

Identificative Param.

1. **Retention times**
2. **Low Resolution Reference ion ratios** (3 transitions or 2 transitions acceptable)
3. **High Resolution m/z Signals** (1 precursor or 1 prec+1 fragment) : for TOF, QTOF, or QExactive (mass accuracies set at 5 or 10 ppm)
4. **QC and Internal Standard(s) signals** to check consistency of sample preparation and internal stds in analysis
5. **Carry-over** from signal of blank

Quant/SemiQuant Param.

6. **Calibration parameters** (regression, …)
7. **Matrix effects** (in matrix / no matrix)
8. **Analyte concentrations** / or Analyte semi-quant (1 point calibration semi-quant)
9. **Peak heights** & **Peak areas**

Reminder : Total of 3 rounds expected for the period of study

- Round 1 : Winter 2022, Summer 2022 (FR-ANSES EU-RL)
- Round 2 : Automn 2022, Spring 2023 (US-DA-ARS)
- Round 3 : Summer 2023, Winter 2024 (CH-KLZH)

Eric

Steve

Anton

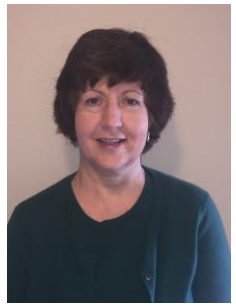
VETERINARY DRUG RESIDUE NACRW WORKING GROUP

NACRW
NORTH AMERICAN CHEMICAL RESIDUE WORKSHOP

THANK YOU FOR YOUR ATTENTION

PARAMETERS OF PROPOSED COLLABORATIVE STUDY

QUESTIONS



SHERRI TURNIPSEED AND ERIC VERDON

MONDAY JULY 26, 2021