

2020 round of TSE EURL EQAs:  
Results feedback  
Virtual  
11th October 2021

Rapid Tests Results of the 2020 EQA round  
and  
the forthcoming 2021 round of EQA

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# Results of the 2020 EQA round

## BSE



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# Results of the 2020 EQA round

## BSE

25 Participating MS:

Austria

Belgium

Bulgaria

Croatia

Cyprus

Czech Republic

Estonia

Finland

France

Germany

Greece

Hungary

Italy

Latvia

Lithuania

Netherlands

Norway

Poland

Portugal

Romania

Slovakia

Slovenia

Spain

Sweden

Switzerland



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# Methods of the 2020 EQA round

## BSE

### Samples included in the PT

Sample ID	Gold Standard	Dilution	Bovine Tissue Homogenate
RB2001	POS	1:4	POSITIVE - Dilution 1:4
RB2002	NEG	.	NEGATIVE
RB2003	POS	1:2	POSITIVE - Dilution 1:2
RB2004	POS	1:4	POSITIVE - Dilution 1:4
RB2005	NEG	.	NEGATIVE
RB2006	NEG	.	NEGATIVE
RB2007	POS	1:2	POSITIVE -Dilution 1:2



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# Methods of the 2020 EQA round - BSE

During preparation the samples were tested using:

## TeSeE SAP Combi Kit

### Batch 0E0078 EXP 16/04/2021

1/2	D.O.	3.152	3.132
1/4	D.O.	3.121	3.106
1/8	D.O.	2.861	2.946
1/16	D.O.	2.109	2.161

**CUT OFF 0.216**

## Idexx ultrashort protocol

### Batch ER361 EXP 17/05/2020

1/2	D.O.	3.408	3.4
1/4	D.O.	3.311	3.408
1/8	D.O.	3.285	3.227
1/16	D.O.	2.904	2.421

**CUT OFF 0.147**

**Distribution** date: 21-26-27 Oct 2020

**Deadline** 31 December 2020



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# All laboratories successfully passed the PT



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# Results of the 2020 round of EQA-BSE

BioRad-Sap Combi: 15 of the participating labs

Four batches used:

Batch #	# of MS per batch
0A0076	2
0C0077	7
0E0078	5
9F0074	1

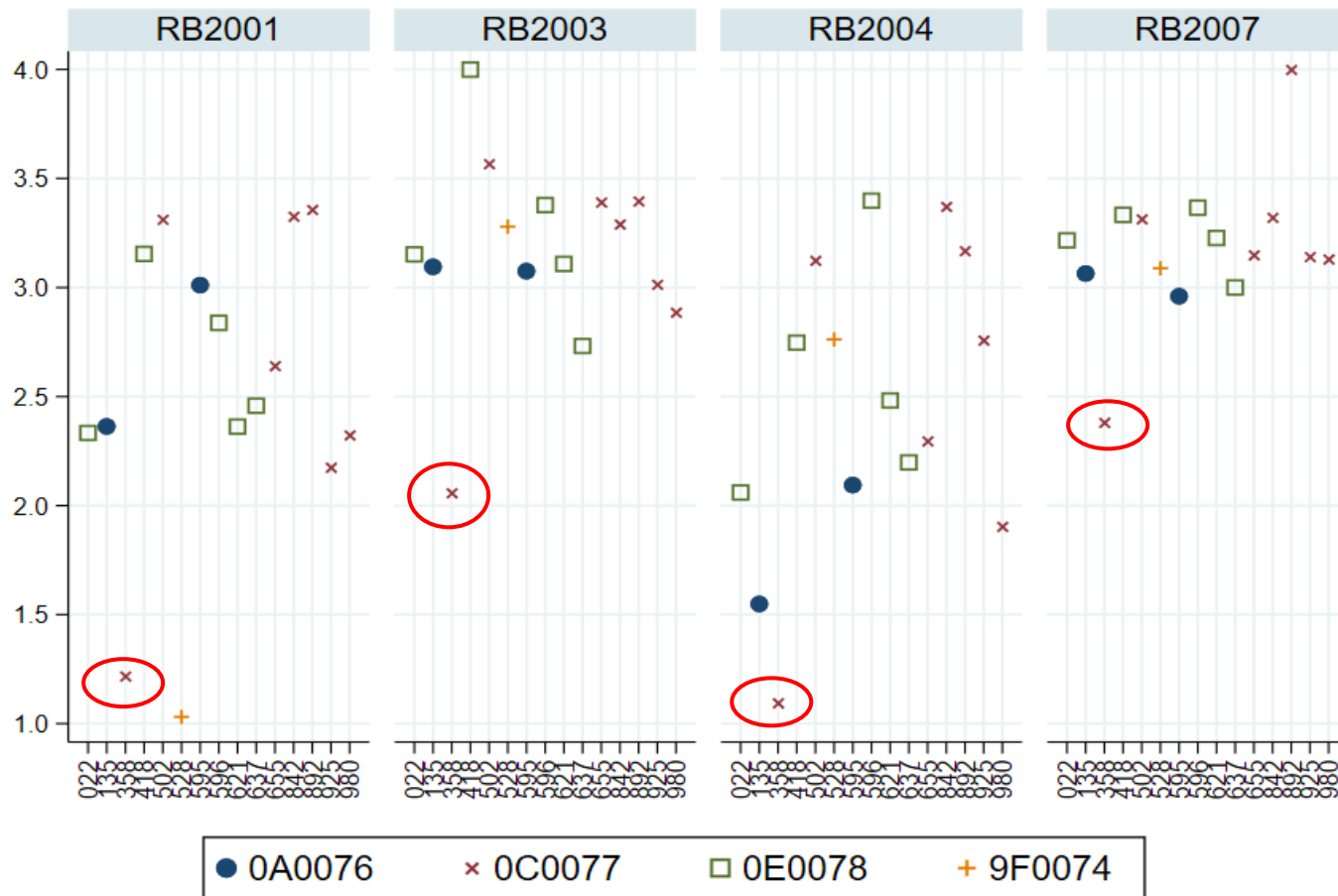


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# Results of the 2020 round of EQA-BSE

OD reported from the Labs for each batch applied and positive sample



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# Results of the 2020 round of EQA-BSE

IdexxShort: 9 of the participating labs

Four batches used:

Batch #	# of MS per batch
BS640	3
ES082	3
GS574	2
MR325	1

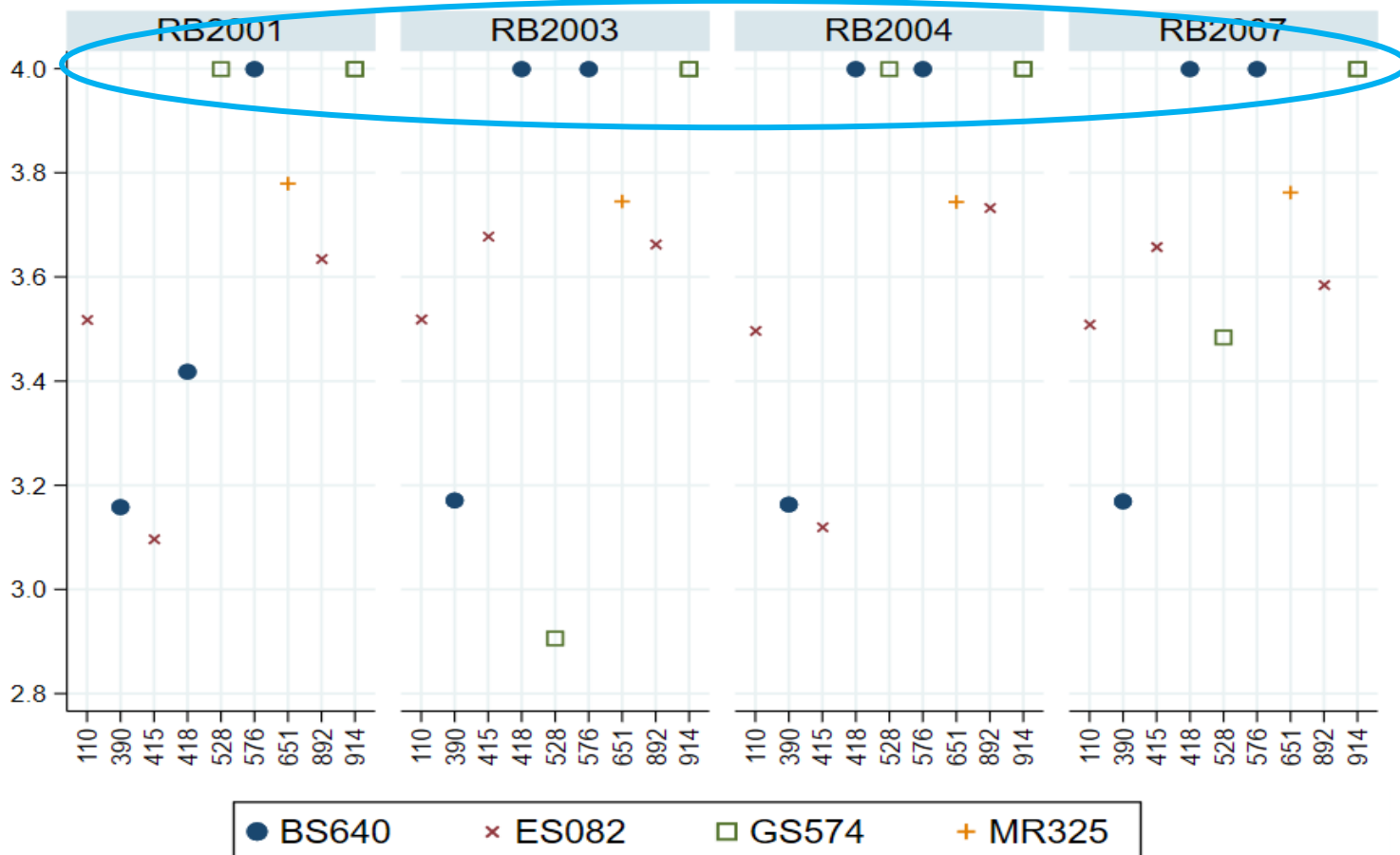


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# Results of the 2020 round of EQA-BSE

OD reported from the Labs for each batch applied and positive sample



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# Results of the 2020 round of EQA-BSE

IdexxUltrashort: 7 of the participating labs

Five batches used:

Batch #	# of MS per batch
BS640	2
ES082	1
GS574	1
JR907	1
MR325	2

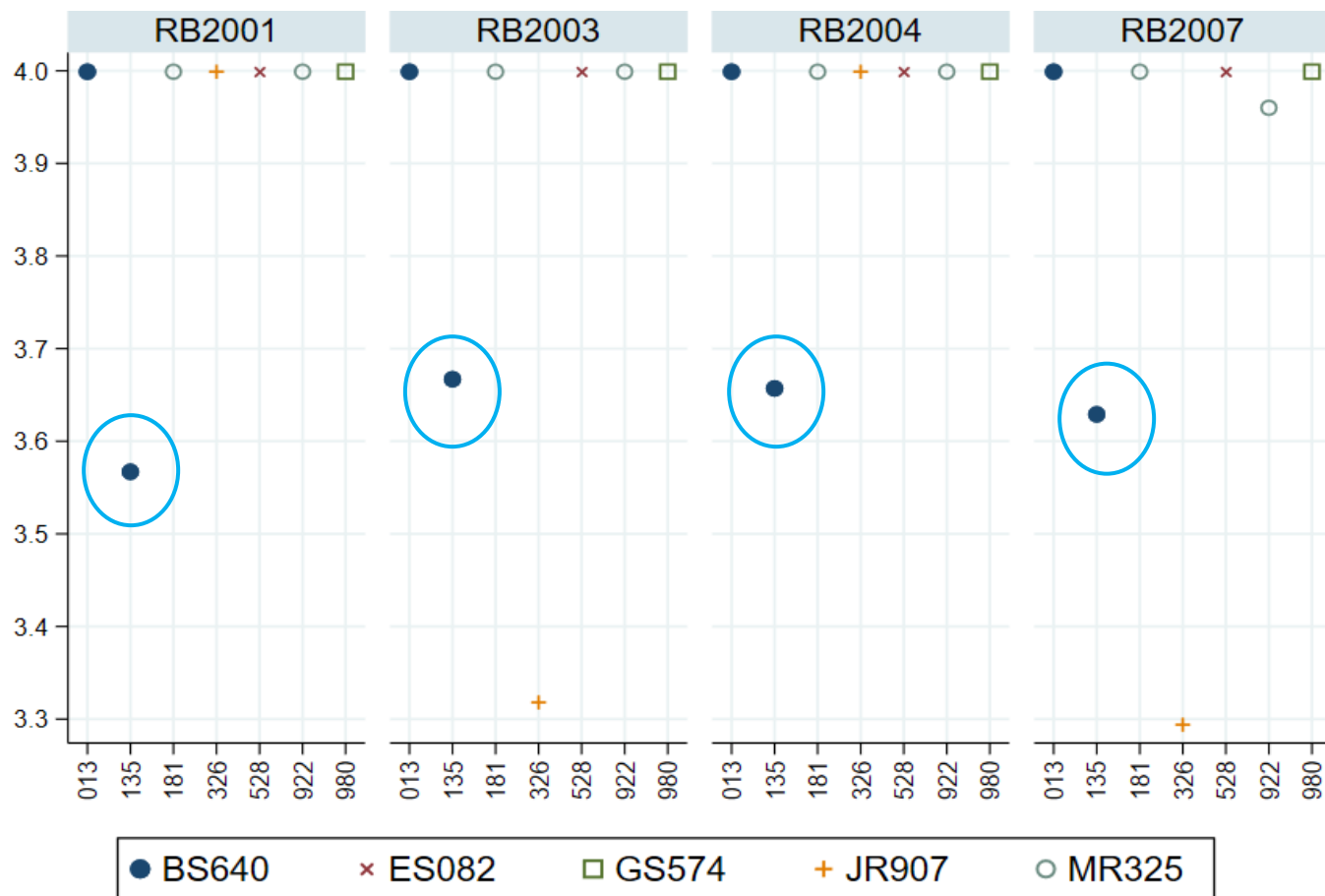


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# Results of the 2020 round of EQA-BSE

OD reported from the Labs for each batch applied and positive sample



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# Results of the 2020 round of EQA-BSE

ThermofisherPriostrip: 2 of the participating labs

One batch used:

Batch #	# of MS per batch
S190101G	2

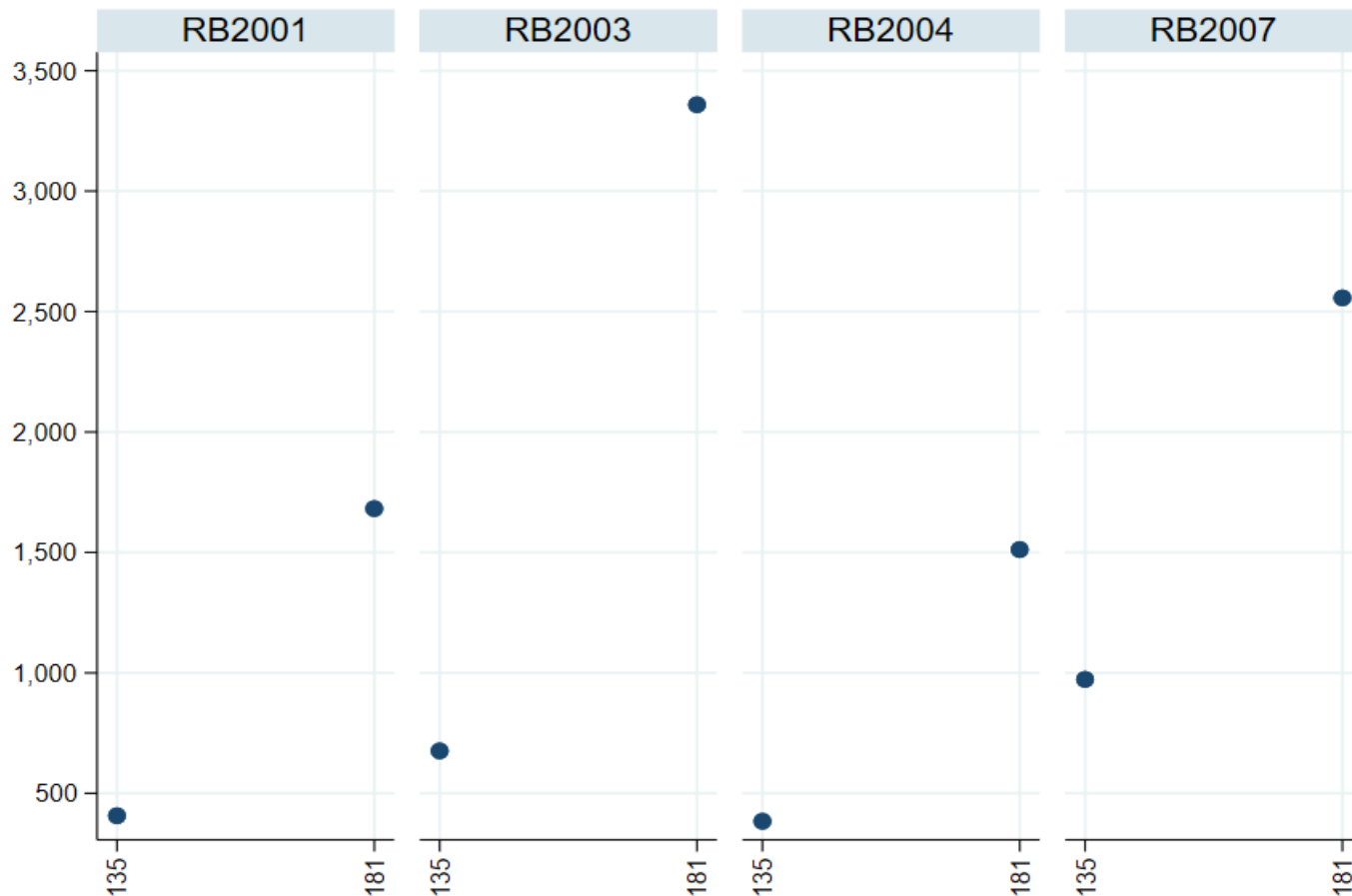


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# Results of the 2020 round of EQA-BSE

Results from the Labs for each batch applied and positive sample



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# SHORT CONCLUSIONS: PT BSE

## BIORAD-SAP COMBI

- It is the first most used test in routine: 44% (11/25) of the laboratories applies BioRad-Sap Combi test in routine. Four labs apply this test as alternative test;
- Lab 358 (batch: 0C0077) usually reports ODs lower than others. Many labs report overflow values ( $>3.999$ );
- No statistically significant ( $p < 0.05$ ) differences among participants neither batches.

## IDEXXSHORT

- It is the second most used test in routine: 32% (8/25) of the laboratories applies IdexxShort test in routine. Two labs apply this test as alternative test;
- Many labs report overflow values ( $>3.999$ );
- No statistically significant ( $p < 0.05$ ) differences among participants neither batches.



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# SHORT CONCLUSIONS: PT BSE

## IDEXXULTRASHORT

- It is the least used test in routine: 24,5% (6/25) of the laboratories applies IdexxUltraShort test in routine. One lab applies this test as alternative test;
- Only labs 135 (batch: BS640) and 326 (batch: JR907) report ODs lower than overflow value (3.999);
- No statistically significant ( $p < 0.05$ ) differences among participants neither batches.

## THERMOFISHERPRIOSTRIP

- Only 2 labs apply this test as alternative test;
- Only one batch applied: S190101G;
- No statistically significant ( $p < 0.05$ ) differences among participants.



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# Results of the 2020 EQA round

## Scrapie



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# Results of the 2020 EQA round- Scrapie

26 Participating MS:

Austria

Belgium

Bulgaria

Croatia

Cyprus

Czech Republic

Estonia

Finland

France

Germany

Greece

Hungary

Iceland

Italy

Latvia

Lithuania

Netherlands

Norway

Poland

Portugal

Romania

Slovakia

Slovenia

Spain

Sweden

Switzerland



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# Methods of the 2020 round of EQA-Scrapie

## Samples included in the PT

Sample ID	Gold Standard	Dilution	Ovine Tissue Homogenate
RS2001	NEG	.	TSE Negative
RS2002	POS	1:10	Classical SCRAPIE POSITIVE
RS2003	NEG	.	TSE Negative
RS2004	NEG	.	TSE Negative
RS2005	POS	1:5	Classical SCRAPIE POSITIVE
RS2006	POS	1:5	Classical SCRAPIE POSITIVE
RS2007	POS	1:10	Classical SCRAPIE POSITIVE



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# Methods of the 2020 round of EQA-Scrapie

**During preparation the samples were tested using:**

## **TeSeE SAP Combi Kit**

**batch 0E0078 EXP 16/04/2020**

1/5 D.O. 1.568 1.534

1/10 D.O. 1.154 1.260

1/20 D.O. 0.603 0.572

1/40 D.O. 0.270 0.294

**CUT-OFF 0.219**

## **Idexx Ultrashort**

**Batch BS640 EXP 12/03/2021**

1/5 D.O. 3.066 3.134

1/10 D.O. 3.093 3.102

1/20 D.O. 3.032 3.025

1/40 D.O. 2.404 2.513

**CUT-OFF 0.1995**

**Distribution date: 21-26-27 Oct 2020**

**Deadline 31<sup>st</sup> December 2020**



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# All laboratories successfully passed the PT



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# Results of the 2020 round of EQA- Scrapie

TeSeE SAP Combi Kit : 15 of the participating labs

Three batches used:

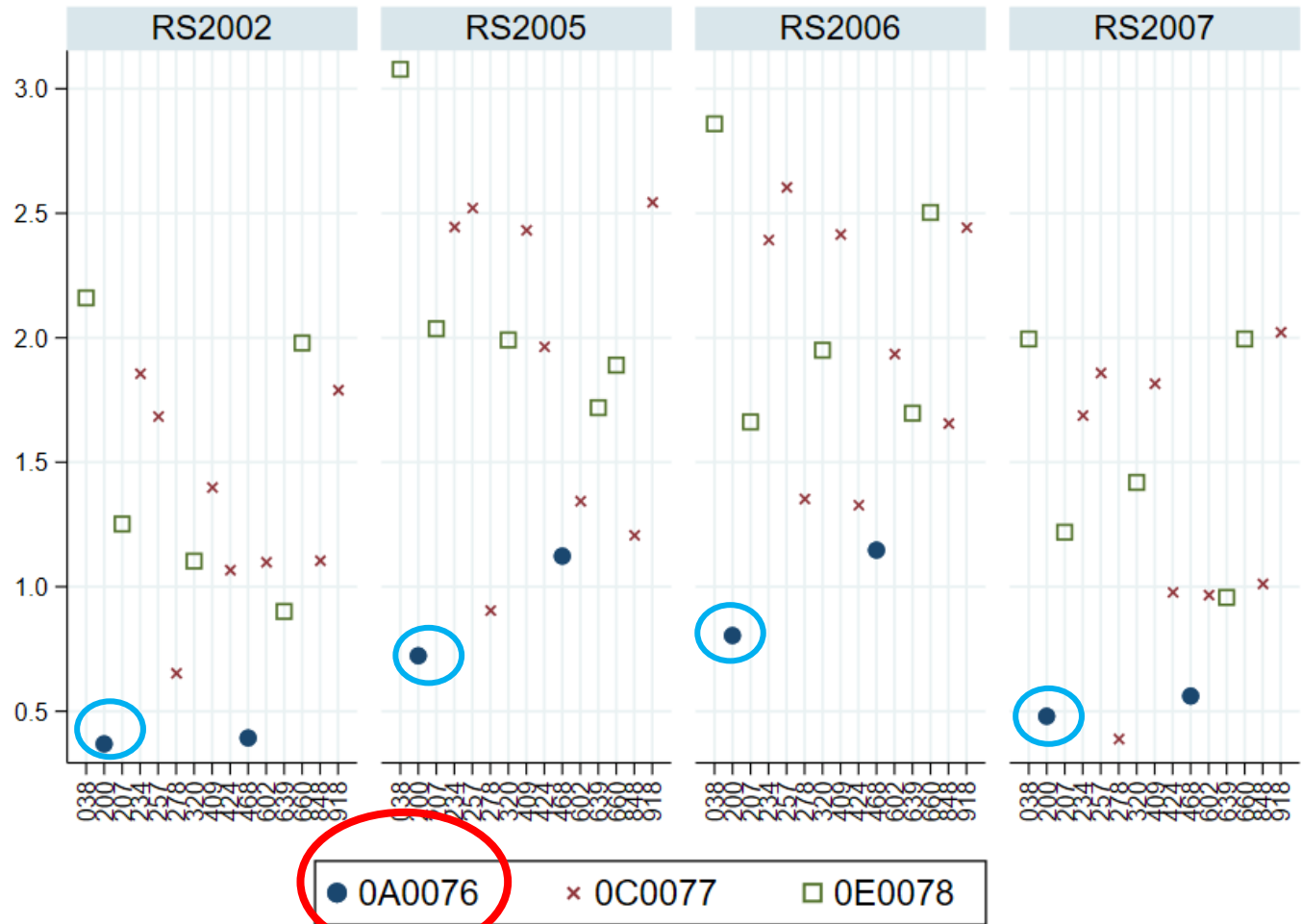
Batch #	# of MS per batch
0A0076	2
0C0077	8
0E0078	5



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TeSeE SAP Combi Kit :OD reported from the Labs for each batch applied and positive sample



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# Results of the 2020 round of EQA- Scrapie

BIORAD-SHEEP/GOAT: only 2 of the participating labs

Batch #	# of MS per batch
0E0042	1
0E0043	1



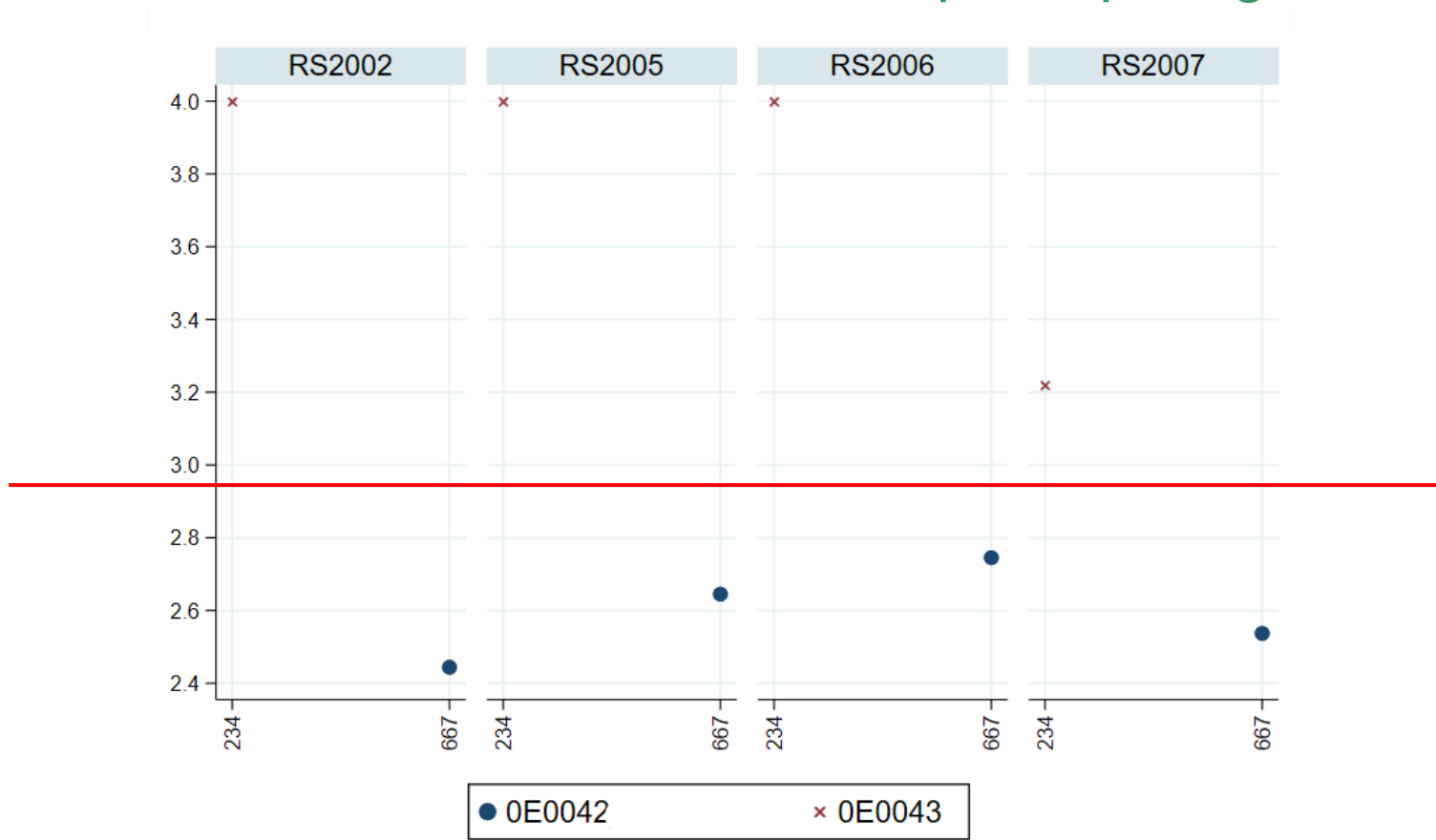
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# Results of the 2020 round of EQA- Scrapie

## BIORAD-SHEEP/GOAT: 2 of the participating labs



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# Results of the 2020 round of EQA- Scrapie

IDEXXSHORT: 11 of the participating labs

Four batches used:

Batch #	# of MS per batch
BS640	4
ES082	3
GS574	2
MR325	2

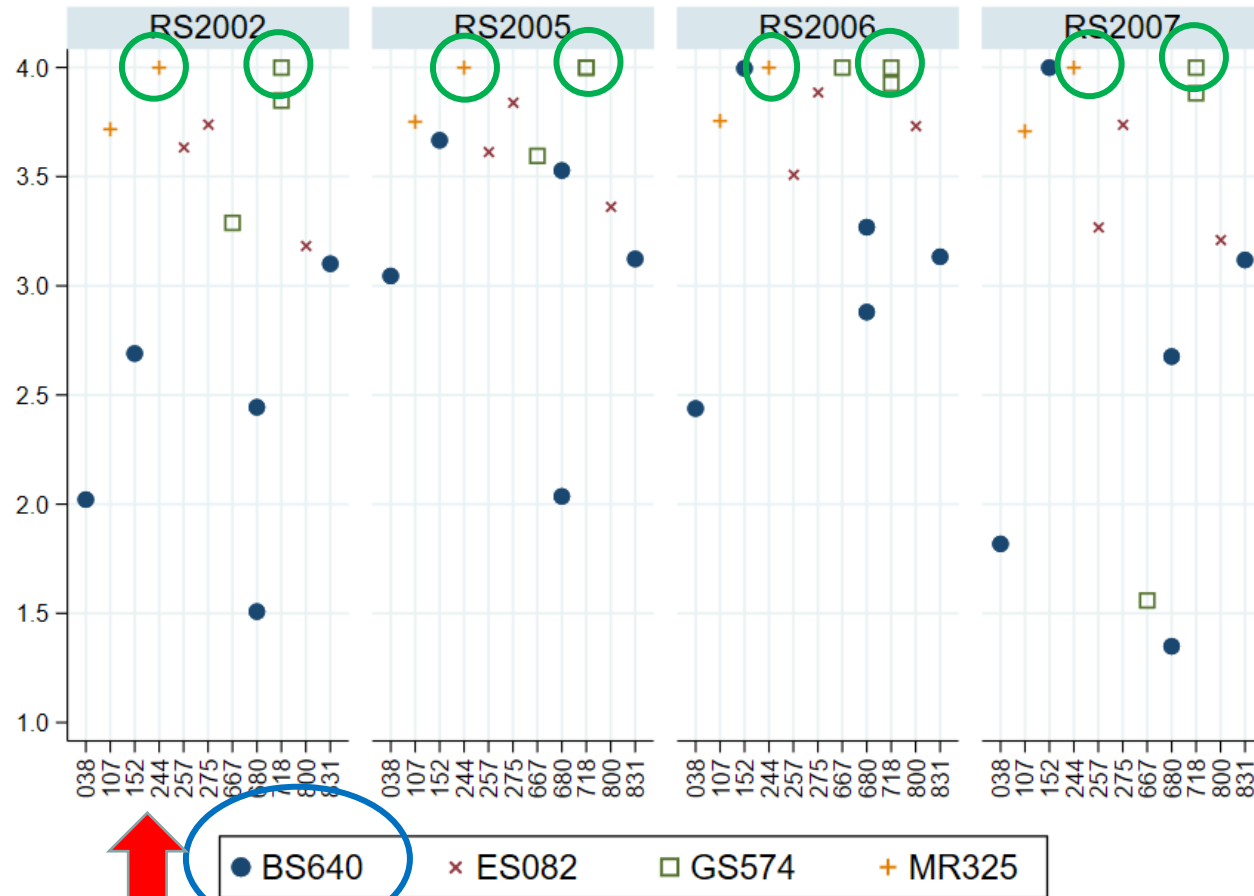


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# Results of the 2020 round of EQA- Scrapie

IDEXXSHORT: OD reported from the Labs for each batch applied and positive sample



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# Results of the 2020 round of EQA- Scrapie

IdexxUltrashort: 6 of the participating labs

Five batches used:

Batch #	# of MS per batch
BS640	2
GS574	1
JR907	1
MR325	1
ES082	1

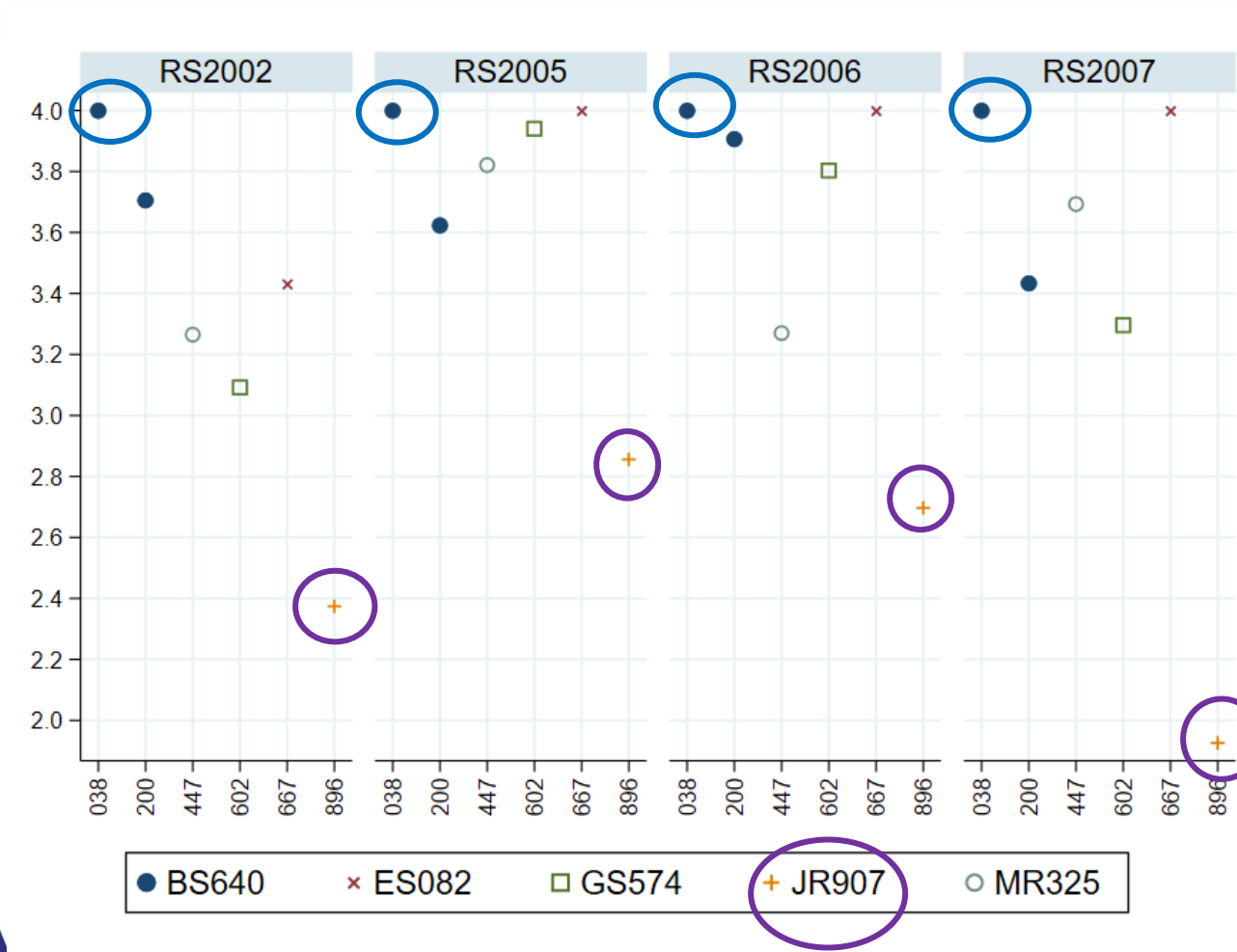


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# Results of the 2020 round of EQA- Scrapie

IdexxUltrashort: OD reported from the Labs for each batch applied and positive sample



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# SHORT CONCLUSIONS: PT SCRAPIE

## TeSeE SAP Combi Kit

- ❖ It is the first most used test in routine: 50% (13/26) of the laboratories applies BioRad-Sap Combi test in routine. Two labs apply this test as alternative test;
- ❖ Lab 038 (batch: 0E0078) reports ODs higher than others for all positive samples (especially for RS2005); labs 200 (batch: 0E0076), 278 (batch: 0E0077) and 468 (batch: 0E0076) report ODs lower than others;
- ❖ No statistically significant ( $p < 0.05$ ) differences among participants;
- ❖ No statistically significant ( $p < 0.05$ ) differences among batches, but RS2002 and RS2006 are border-line ( $p < 0.08$ ).



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# SHORT CONCLUSIONS: PT SCRAPIE

## IDEXXSHORT

- ❖ It is the second most used test in routine: 35% (9/26) of the laboratories applies IdexxShort test in routine. Four labs apply this test as alternative test;
- ❖ Lab 244 (batch: MR325), 718 (batch: GS574) and 275 (batch: ES082) usually report ODs higher than other labs. Many labs report overflow values ( $>3.999$ ). Labs using batch BS640 usually report lowest ODs;
- ❖ No statistically significant ( $p < 0.05$ ) differences among participants;
- ❖ Statistically significant difference among batches for sample RS2002. No statistically significant ( $p < 0.05$ ) differences for the remaining positive samples but RS2005 and RS2006 are border-line ( $p < 0.08$ ).



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# SHORT CONCLUSIONS: PT SCRAPIE

## IDEXXULTRASHORT

- ❖ It is the last test used in routine: 15% (4/26) of the laboratories applies IdexxUltraShort test in routine. Two labs apply this test as alternative test;
- ❖ Lab 038 (batch: BS640) usually report ODs higher than other labs. Many labs report overflow values ( $>3.999$ ). Lab 896 (batch JR907) usually report lowest ODs;
- ❖ No statistically significant ( $p < 0.05$ ) for differences among participants neither batches.

## BIORAD-SHEEPPGOAT

- ❖ Only two participants use this test as alternative to routine;
- ❖ Lab 234 (batch: 0E0043) usually reports ODs higher than lab 667 (batch: 0E0042\_0E0043);
- ❖ No statistically significant ( $p < 0.05$ ) differences among participants neither batches.



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# The forthcoming 2021 round of EQA Rapid Tests



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# Proficiency Testing – 1

## PARTICIPANTS

### BSE

Austria	Italy
Belgium	Latvia
Bulgaria	Lithuania
Croatia	Netherlands
Cyprus	Norway
Czech Republic	Poland
Estonia	Portugal
Finland	Romania
France	Slovakia
Germany	Slovenia
Greece	Spain
Hungary	Sweden
	Switzerland

### SCRAPIE

Austria	Italy
Belgium	Latvia
Bulgaria	Lithuania
Croatia	Netherlands
Cyprus	Norway
Czech Republic	Poland
Estonia	Portugal
Finland	Romania
FranceGermany	Slovakia
Greece	Slovenia
Hungary	Spain
Iceland	Sweden
	Switzerland



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# Proficiency Testing - 2

- Homogenisation, dilution and creation of aliquots of brain tissue for preparation of Proficiency Samples;
- Analysis by Rapid Tests (IDEXX HerdChek BSE– Scrapie Ag Test Kit and Bio-Rad TeSeE SAP Combi Kit) and Western Blot;
- Interpretation of the results;
- Homogeneity and Stability assessment;
- Atypical scrapie will not be included in the 2021 PT scheme



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# Proficiency Testing - 3

- Packaging and dispatch (dry ice - UN3373 – Import permit);
- Scrapie and BSE Rapid Test and Confirmatory Western Blot schemes: same package (delivery);
- Documenting of results: EURL web site still not available, a web repository folder will be available;



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# Proficiency Testing - 4

## Timescale

- Dispatch of PT samples: before 15th December;
- Less time to perform the PTs and send back the results to EURL than the last PT
- Deadline to perform the PTs and send back the results to EURL: end of December 2021
- Results obtained twice by the same operator will be required



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# Rapid Tests EQA rounds

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