

Results report

Farm data:

Farm Code:	Secondary id	REGA Id:	
Owner		Species	Swine
Village:		Region:	
Veterinarian:		Farm name:	

Registry data:

Registry Id:	Report 1	Num. of samples	1
Registry date	16/04/2020	Date of samples:	15/04/2020
D. Public.:	22/04/2020	D. Public. Partial:	

Observations

Microbiology

Epidemiological link:

Sows farm: Transition farm:

Microbiology

- Isolation and identification

Strain	Sample	Sample description	Type	rial identification m	Result	Microorganism
XXXXXXXX	1	1	Lung	MALDI-TOF	Growth	<i>Actinobacillus pleuropneumoniae</i>

Serotype APP

Strain	APP1	APP2	APP3	APP4	APP5	APP6	APP7	APP8	APP9/11	APP10	APP12	APP13	APP14	APP15	APP16	APP17	APP18
XXXXXXXX	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	POS	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG

Antimicrobial susceptibility

Actinobacillus pleuropneumoniae (Sample: 1, Strain: XXXXXXX)

Cat.	Antibiotics	Technique	Current analysis		XXXXXXXX 29/04/2019		XXXXXXXX - 12/12/2018		XXXXXXXX - 02/12/2018			
			CMI (µg/mL)	Result	Isovean farm		Old samples		Old samples		CMI (µg/mL)	Result
					CMI (µg/mL)	□	CMI (µg/mL)	□	CMI (µg/mL)	□		
D	Amoxicillin --- Beta-lactamics	CMI	0.25	Sensible	0.25	□	0.25	□	≤ 0.12	□	-	-
D	Doxycycline --- Tetracyclines	CMI	0.5	Sensible	0.5	□	0.5	□	0.5	□	-	-
D	Sulfamethoxazol/Trimethoprim --- Sulfamides	CMI	≤ 0.06	Sensible	≤ 0.12	□	≤ 0.12	□	≤ 0.12	□	-	-
C	Florfenicol --- Fenicols	CMI	0.25	Sensible	0.25	□	0.25	□	0.25	□	-	-
C	Tiamulin --- Pleuromutilins	CMI	8	Sensible	16	□	16	□	16	□	-	-
C	Tildipirosin --- Macrolides	CMI	4	Sensible	8	□	4	□	4	□	-	-
C	Tilmicosin --- Macrolides	CMI	8	Sensible	16	□	16	□	8	□	-	-
C	Tulathromycin --- Macrolides	CMI	16	Sensible	32	□	32	□	32	□	-	-
B	Ceftiofur --- Cephalosporins	CMI	≤ 0.06	Sensible	≤ 0.06	□	≤ 0.06	□	≤ 0.06	□	-	-

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Village:		Region:	
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Registry data:

Registry Id:	Report 1	Num. of samples	1
Registry date	16/04/2020	Date of samples:	15/04/2020
D. Public.:	22/04/2020	D. Public. Partial:	

► *Actinobacillus pleuropneumoniae* (Sample: 1, Strain: XXXXXXXX)

Cat.	Antibiotics	Technique	Current analysis		XXXXXXX - 29/04/2019		XXXXXXX - 12/12/2018		XXXXXXX - 02/12/2018	
			CMI (µg/mL)	Result	Isowean farm		Old samples from curre		Old samples from curre	
B	Enrofloxacin --- Quinolones	CMI	0.06	Sensible	0.06		0.06		0.06	

The greener, the more susceptible is the strain and the redder, the less susceptible is the strain for each particular antimicrobial. The MIC of each drug and microorganism is interpreted as susceptible or resistant depending if this particular strain can be treated or not, respectively with a veterinary medicinal product containing the antimicrobial at the registered dose. A clinical breakpoint is used to do so. Additional information about the distance between the MIC obtained and the clinical breakpoint established for each drug is represented. Thus, a graph from green (susceptible) to red (resistant) is enclosed for each antimicrobial in the report.

There is also a recent recommendation of EMA and AEMPS that now comprises four categories of antimicrobials, from A (avoid), B (restrict), C (caution) to D (prudence). If it is taken into account the legislation about prudent use of antimicrobials, Category D antimicrobials should be used as first therapeutic option. If these drugs are unable to solve the clinical case, category C antimicrobials should be used as second option. If all the them are unable to solve the clinical case, Category B antimicrobials can be chosen as last therapeutic option.

Pharmacological interpretation

The strain of *Actinobacillus pleuropneumoniae* is susceptible to eight family of antimicrobials. Thus, the treatment is probable to be efficacious with aminopenicillins (amoxicillin), tetracyclines (doxycyline), cefalosporins (ceftiofur), macrolides (tilmicosin, tulathromycin and tildipirosin), pleuromutilins (tiamulin), quinolones (enrofloxacin), fenicols (florfenicol) and sulfamides. (sulfamethoxazole/trimethopim). If it is taken into account the legislation about prudent use of antimicrobials, sulfamides , tetracyclines and aminopenicicillins should be used as first therapeutic option (Category D). If these families are unable to solve the clinical case, fenicoles, macrolides and pleuromutilins should be used as second therapeutic option. If all the them are unable to solve the clinical case, cefalosporins and quinolones can be chosen as last therapeutic option (category B).



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Results report

Farm data:

Farm Code:	Secondary id	REGA Id:	
Owner		Species	Swine
Village:		Region:	-
Veterinarian:		Farm name:	

Registry data:

Registry Id:	Report 2	Num. of samples	1
Registry date	22/02/2019	Date of samples:	21/02/2019
D. Public.:	07/03/2019	D. Public. Partial:	

Observations

Microbiology

Epidemiological link:

Sows farm: Transition farm:

Microbiology

- Isolation and identification

Strain	Sample	Sample description	Type	rial identification m	Result	Microorganism
XXXXXXXX	1	1	Lung	Vitek	Growth	<i>Actinobacillus pleuropneumoniae</i>

Antimicrobial susceptibility

▶ *Actinobacillus pleuropneumoniae*(Sample: 1,Strain: XXXXXXXX)

Cat.	Antibiotics	Technique	Current analysis		XXXXXXXX 16/01/2019		XXXXXXXX-02/01/2019		XXXXXXXX -04/12/2018		XXXXXXXX-18/10/2018	
			CMI (µg/mL)	Result	Sow farm		Sow farm		Isowean farm		Sow farm	
					CMI (µg/mL)	□	CMI (µg/mL)	□	CMI (µg/mL)	□	CMI (µg/mL)	□
D	Amoxicillin --- Beta-lactamics	CMI	0.25	Sensible	0.25	□	0.25	□	0.25	□	0.25	□
D	Doxycycline --- Tetracyclines	CMI	2	Resistant	2	□	2	□	4	□	2	□
D	Sulfamethoxazol/Trimethoprim --- Sulfamides	CMI	4	Resistant	4	□	8	□	8	□	8	□
C	Florfenicol --- Fenicols	CMI	0.25	Sensible	0.25	□	0.25	□	0.25	□	0.25	□
C	Tiamulin --- Pleuromutilins	CMI	8	Sensible	16	□	16	□	8	□	16	□
C	Tildipirosin --- Macrolides	CMI	4	Sensible	4	□	4	□	4	□	4	□
C	Tilmicosin --- Macrolides	CMI	8	Sensible	8	□	16	□	8	□	16	□
C	Tulathromycin --- Macrolides	CMI	32	Sensible	32	□	64	□	16	□	32	□
B	Ceftiofur --- Cephalosporins	CMI	≤ 0.06	Sensible	≤ 0.06	□	≤ 0.06	□	≤ 0.06	□	≤ 0.06	□
B	Enrofloxacin --- Quinolones	CMI	≤ 0.03	Sensible	≤ 0.03	□	≤ 0.03	□	≤ 0.03	□	≤ 0.03	□

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There is also a recent recommendation of EMA and AEMPS that now comprises four categories of antimicrobials, from A (avoid), B (restrict), C (caution) to D (prudence). If it is taken into account the legislation about prudent use of antimicrobials, Category D antimicrobials should be used as first therapeutic option. If these drugs are unable to solve the clinical case, category C antimicrobials should be used as second option. If all the them are unable to solve the clinical case, Category B antimicrobials can be chosen as last therapeutic option.

Pharmacological interpretation

The strain of *Actinobacillus pleuropneumoniae* is susceptible to six family of antimicrobials. Thus, the treatment is probable to be efficacious with aminopenicillins (amoxicillin), cefalosporins (ceftiofur), macrolides (tilmicosin, tulathromycin and tildipirosin), pleuromutilins (tiamulin), quinolones (enrofloxacin and marbofloxacin), and fenicols (florfenicol). If it is taken into account the legislation about prudent use of antimicrobials, aminopenicillins should be used as first therapeutic option (Category D). If this family is unable to solve the clinical case, fenicoles, macrolides and pleuromutilins should be used as second therapeutic option. If all the them are unable to solve the clinical case, cefalosporins and quinolones can be chosen as last therapeutic option (category B).



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