

<b>Sector:</b> Pigs						
<b>Date of last exchange:</b> 27/11/2020						
<input checked="" type="checkbox"/> Meeting <input type="checkbox"/> tel <input type="checkbox"/> email						
<b>Participants:</b> Arnaud Lebret (SNGTV), Boris Boubet (GDS), Xavier Sauz�a (CSMV), Claire Chauvin (Anses Ploufragan)						
<a href="#">Post-meeting comments</a>						
<b>Currently being resolved</b>	<b>Existing solution</b>					
Pathology	Problem encountered (Economic: E / Cascade: C / Other: A)	Type (E/C/A)	Alternatives identified	Impact (M/m/0/NSP)		Meeting PRIORITIES  Major: M minor: m
				Economic	Health or therapeutic	
<b>Post-weaning colibacillosis</b>	Commercial vaccines (as part of the SPC) are used on sows to prevent neonatal diarrhoea and are <b>not effective in post-weaning colibacillary diarrhoea</b> . COLIPROTEC F4/F18 vaccine is for pigs of at least 18 days of age: risk of infection exists between the end of immunity transmitted by the mother and that induced by vaccination after 18 days of age (weaning is at 21 days and diarrhoea can occur as soon as the following days). Results are not systematic. Problem, particularly in acute diarrhea linked to F4 enterotoxigenic E coli. F4/F18 corresponds to 60-70% of isolations => problem for the others 30%. Not yet enough hindsight on the efficacy of the most recent vaccines (see opposite).	A	<b>Antibiotics</b>  COLIPROTEC F4/F18 vaccine but for pigs of at least 18 days. Zinc oxide (but soon stopped) Other recent marketing authorisations (see SPC): SUISENG COLI /C (2020), VEPURED (2017) <b>but passive immunisation by vaccination of sows insufficient for post-weaning (see opposite)</b>	M (4)	M (4)	<b>MAJOR</b> No. 1
<b>Influenza</b>	<b>Current vaccines ± effective.</b> Dominant disease in fattening pigs units with inadequate efficacy in these animals. Inadequate vaccine schedule and problem of interference with maternal immunity. Evolution of strains in the field	A	<b>RESPIPORC FLU3, FLUPAN H1N1</b> Updating influenza vaccines in light of the new genotypes identified will be easier with NVR thanks to the possibility of using the multistrain approach for the vaccine.	M (3)	M (4)	<b>MAJOR</b> No. 2
<b>Streptococcus suis</b>	<b>No commercial vaccine</b> Autovaccines ± satisfactory	A	<b>Autovaccines</b> ( <i>S. suis</i> is the most frequent request) ± satisfactory <b>Antibiotics:</b> β Lactams (Cephalosporins) EcoAntibio project on immunisation by the mother	M (3)	M (3)	<b>MAJOR</b> No. 3
<b>Ileitis</b>	<b>A single oral vaccine which is ± effective</b> (ENTERISOL Ileitis _ Boehringer MA 2005), application which requires rigour (compatibility of drinking water and hygiene) but which is effective.	A	<b>New injectable vaccine</b> PORCILUS lawsonia (Intervet MA 2019): lack of sufficient experience on its efficacy at present. <b>Very recent new intradermal vaccines</b> (MA November 2020): Porcilis Lawsonia ID <b>Effective antibiotics</b> (tylosin, tylvalosin, lincomycin, tiamulin)	M (2)	M (3)	<b>MAJOR</b>
<b>Brachyspira</b>	<b>No commercial vaccine</b> (complex development - no isolation possible - PCR identification)  The sensitivity of <i>Brachyspira</i> strains must be monitored (strains less pathogenic in France than in other countries such as DE, NL, DK, SP where highly pathogenic strains and development of resistance) => remain very vigilant	A	<b>Macrolides</b> <b>Limited use of autovaccines</b> (no strains to offer in France as the bacterium is too difficult to isolate). Autovaccines, a priori used in Spain.	M (2)	M (4)	<b>MAJOR</b>
<b>Neonatal diarrhoea due to E.coli</b>	Commercial vaccines which increasingly rarely match the strains isolated in the field, are <b>weakly effective</b> . Multifactorial etiology of diarrhoea (viruses and bacteria) that is complex to identify. Problem of updating therapeutic regimens (amoxicillin LA, for example, depending on the physiological stage) and oral treatments against diarrhoea under the mother.	A	<b>Antibiotics</b> (risks of large antibiotics oral use in those diseases) <b>Vaccines - Recent marketing authorisations</b> (see SPC): SUISENG COLI /C (2020): lack of sufficient experience on its efficacy at present. <b>Autovaccines</b> regularly requested for lack of efficacy (but difficulties in identifying pathogenic strains). Field use of retrocontamination	M (2)	M (2)	<b>MAJOR</b>
<b>Neonatal diarrhoea due to Clostridium</b>	<b>Commercial vaccines ± effective</b>	A	<b>Antibiotics</b> (see risks mentioned above) Commercial vaccines ± effective. <b>Not enough hindsight on recent marketing authorisations:</b> SUISENG COLI /C (Hipra - 2020) and ENTEROPORC AC (IDT - 2017). Use of <b>autovaccines</b> (anaerobic pathogens)? Enterococcus: <b>autovaccines</b> could be a solution, efficacy difficult to assess.	M (2)	M (2)	<b>MAJOR</b>
<b>Neonatal diarrhoea due to Enterococcus</b>	<b>No vaccine available</b> Enterococcus: the drastic reduction in antibiotic use has not reduced its prevalence and its involvement in diarrhoea. Only the use of autovaccines is possible without the implementation of a <b>retrocontamination</b> procedure, which is a priori prohibited.	A		M (2)	M (2)	<b>MAJOR</b>
<b>Neonatal diarrhoea due to Rotavirus</b>	<b>No vaccine available</b> Rotaviruses are a source of significant problems In the field, procedures are sometimes put in place to retrocontaminate sows with pig diarrhoea	A	A live vaccine is authorised in North America ( <b>Merck's ProSystem RCE available in the US</b> ) <b>against Rotavirus/Coli/Clostridium</b> <b>Cattle vaccines</b> effectiveness ? <b>Confirmation of their use in the field</b>	M (2)	M (2)	<b>MAJOR</b>

<b>Haemophilus parasuis</b>	<b>Commercial vaccines ± effective</b> (PORCILIS GLASSER - MA Intervet 2004 and SUVAXYN M HYO PARASUIS - MA Zoetis 2008) and not always available. SUVAXYN discontinued in 2018. Uncommon, sporadic disease. The issue of strain typing remains problematic. No cross-protection between different serotypes. Problem with strain typing as the analysis laboratories do not seem to use the same techniques, hence the difficulties in validating the absence of interest in commercial vaccines (type 4 for one of them or type 4 and type 5 for the second which also includes mycoplasma valence)	A	<b>Import of SUVAXYN Respifen</b> but limited use because of complex supply flows (import) and pathology not very recurrent <b>Autovaccines</b>	m (1)	m (2)	minor
<b>Post-partum sows</b>	<b>Discontinuation of SERGOTONINE®</b> by the only supplier laboratory. Discontinuation too recent to be able to assess the impact. Piglet stillbirth and sow milk losses => economic loss + subsequent fertility, necessary use of ATB if problem.	A/E	<b>Importation (Spain or Poland) of medicines without serotonin</b> (ergometrin alone). <b>HEMOGEN indications:</b> control of uterine haemorrhage post partum or during caesarean sections / prevention of uterine prolapse post partum / accelerate placenta expulsion and uterine involution. <b>SERGOTONINE indications:</b> prevention and treatment of post partum complications and abortions: placental retention / uterine hypotonia / uterine subinvolution / pre-lactation mammary oedema with or without manifestation of blood transvasation / haemolyactation / capillary haemorrhages of the urogenital sphere.	m	m	minor
<b>Genital infections in sows</b>	<b>Non authorised topical administration of injectable or intramammary ATB treatments</b> , without available appropriate dosing regimen.	A	<b>Injectable or intramammary ATB used locally</b>	m	m	minor
<b>Anaesthesia</b>	<b>No practical</b> (and usable by the breeder) <b>or rapid</b> (local or systemic) anaesthetics. Practical difficulty linked to : speed of action of the treatments and synchronisation of the operation, user safety during treatment (wearing gloves possible? => minor problem if it can resolve the availability problem) Problem limited to farms still practising castration and not IMPROVAC® vaccination: reserved for certain farms (~ 20% of pigs), including outdoor farms, particularly during late culling imposed by the specifications. Problem encountered only when non-castrated pigs are not accepted and/or when the vaccine is refused for societal reasons => political and sector issues. <i>The problem will become significant for the majority of pigs in France when castration without anaesthesia will no longer be legally possible. IMPROVAC is a possible alternative but which poses difficulties downstream (re-organisation of slaughter chains, installation of noses on slaughter chains, etc.)</i>	A	Live castration without anaesthesia (legally possible until the end of 2021, <b>prohibited from 2022</b> ). <b>IMPROVAC®</b> <b>Breeding non castrated males.</b>	M or m according to specifications	m	minor
<b>Actinobacillosis</b>	Commercial vaccine ± effective 1 single vaccine (PORCILIS ACTINOPORC - MA Intervet 1996)	A	Autovaccines (common) Satisfactory ATB treatments (tetracyclines, sulphonamides)	m	m	minor
<b>Leptospirosis (sows)</b>	<b>One vaccine available =&gt; less deprived</b> 1 vaccine marketed by MSD (MA 2016): PORCILIS ERY+PARVO+LEPTO <b>Only available since 2019</b> . Reduced the use of tetracyclines on sows. Insufficient hindsight to estimate its current effectiveness.	A	Antibiotics	m (1)	m (1)	minor