



Transplacental bluetongue infection in Belgium

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Transplacental bluetongue infection in cattle foetus

-Abortions entered as BT suspicion:

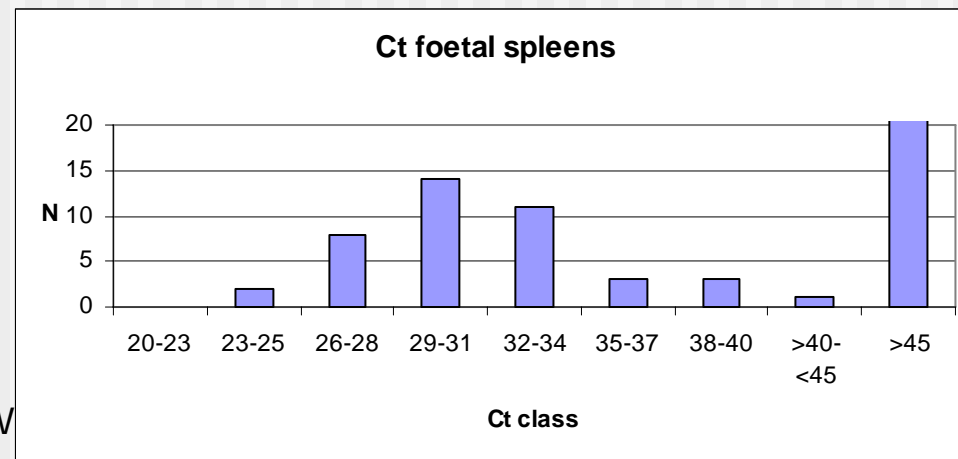
Spleen fetes N = 68

BT RT-qPCR Pos = 28 (41%)

-Abortions ad random:

Spleen fetes N = 232

BT RT-qPCR Pos = 42 (18%)





Transplacental bluetongue infection in cattle neonati (Tests before colostrum uptake)

		A	B	C	D	E	F	G	O
Dam	cELISA	+	+	+	+	+	+	+	-
Dam	PCR	-	+	-	-	+	-	+	-
Calf	cELISA	-	-	+	+	+	-	-	-
Calf	PCR	-	-	-	+	+	+	+	-
Tot	121	105	3	4	1	2	3	0	3

Conclusions:

- Transplacental infection in cattle is proven for BTV8
- RT-qPCR test of the Dam doesn't tell anything about the BT infection status of the foetus
- As well immune-competent as immune-tolerant calves are born



Transplacental bluetongue infection in sheep neonati (Tests before and after colostrum uptake)

Ewe		Lamb 0h		Lamb 17-70h		N		
ELISA	PCR	ELISA	PCR	ELISA	PCR			
+	-	-	-	+	-	43	S	61 ewe/lamb
+	-	nd	nd	+	-	11	T	
-	-	-	-	-	-	6	U	
+	-	-	-	-	-	1	V	
nd	nd	nd	nd	-	-	4	W	33 lambs
nd	nd	nd	nd	+	-	29	Z	

Conclusions:

-So far, no proof yet of transplacental infection in sheep for BTV8



Transplacental bluetongue infection in calves born in insect free period

- Newborns 15 December 2007 – 15 March 2008 N = 109
BT RT-qPCR/cELISA Pos = 11
Dams: BT RT-qPCR + / cELISA + = 3
BT RT-qPCR - / cELISA + = 3

Conclusions:

- Proof of transplacental infection in newborn calves for BTV8 during insect free period in Belgium



Transplacental bluetongue infection: surveillance in young cattle

	cELISA +	cELISA -	PCR +	PCR -
Young cattle 2006	351	9	nd	nd
Young cattle 2007	148	18	nd	nd
Young cattle 2008	140	6	4	92

Conclusions:

-Proof of transplacental infection in newborn calves for BTV8