

RB264

on  
Bov 92 A  
1d

BSE - TRANSMISSION STUDIES

DATES OF INOCULATION AND RESULT/ONSET OF CLINICAL SIGNS  
CHARACTERISTIC OF A SCRAPIE-LIKE DISEASE

IA BSE COW BRAIN - To various host species

	<u>Place</u>	<u>Route</u>	<u>Exposure</u>	<u>Status</u>	<u>Rounded Minimum Incubation Period</u>
MICE	NPU	I/C I/P	Nov/Dec 1987	Clin.Sep 88	9.7M (292d)
MICE	RVC	Oral	Early 1988	Clin.1989	15M
CATTLE	CVL	I/C I/P	Jan/May 1988	Clin. Jul 89	18M (8.6M*)
HAMSTERS	CVL	I/C I/P	Feb/May 1988	All dead -ve <sup>oo</sup>	No distinction between challenge and controls
MARMOSETS	CRC	I/C	Feb 1988	Healthy	
PIGS	CVL	I/C I/P I/V Oral	24 Feb/5 Mar 1989 25 May/7,15 Jun 1990	Clin.Jun 90 Healthy	15M (481d)
SHEEP	NPU	I/C Oral	24 Jun 1988 12 Aug 1988	Clin.Aug 89 Please see sheet 1B	14M
GOATS	NPU	I/C Oral	24 Jun 1988 4 Aug 1988	Clin.Dec 89 Healthy	18M
CHICKEN	CVL	I/C I/P Oral (Crop)	5/18 Jun 1990 6,11,18 Jul 1990	Healthy Healthy	
MINK	USA	I/C Oral	21 Feb 1991 21 Feb 1991	Healthy Healthy	

Clin. clinical positive confirmed by histopathology  
 \* onset of prodromal phase  
 oo in confidence (unpublished)

PLACENTA

CATTLE	CVL	Oronasal	Nov 1989	Healthy
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As at 30 April 1991

Bov 92 A

In Confidence

BSE TRANSMISSION EXPERIMENTS - PROGRESS TO DATE (30.4.91)

Source Material - Bovine Brain

IB	<u>PARENTERAL</u>	A <u>CONTROLS</u>	B <u>CHALLENGE</u>	<u>REMARKS</u>
	Cattle	8 alive	16 dead	A healthy B positive BSE
	Sheep		a) 2/6 dead - line b) 2/5 dead + line	a) 1 positive scrapie 1 negative pathology b) 1 negative pathology 1 pending
	Goats		3 dead 0 alive	B positive scrapie
	Chickens	13 alive 1 dead	9 alive 3 dead	A 1 dead SAF -ve (sudden death) rest healthy B 3 dead SAF -ve rest healthy
	Pigs	5 alive 2 dead 4 killed @ 2Y	4 alive 2 dead 1 clinical 3 killed @ 2Y	A 2 intercurrent deaths 4 killed pending B 2 intercurrent deaths  1 confirmed positive 3 killed pending
	Marmosets		2 alive (BSE)	B healthy
	Mink	Inoculated	21/2/91 USA	A, B healthy

IC	<u>ORAL</u>	A <u>CONTROLS</u>	B <u>CHALLENGE</u>	<u>REMARKS</u>
	Sheep		a) 1/6 dead + line b) 1/8 dead - line	a) 1 positive scrapie (? natural) b) clinical negative positive pathology
	Goats			B All healthy
	Chickens	As above	11 alive 3 dead	B 3 died at dosing rest healthy
	Pigs	10 alive	10 alive	A, B all healthy

Source Material - Bovine Placenta

ID	<u>ORAL</u>	A <u>CONTROLS</u>	B <u>CHALLENGE</u>	<u>REMARKS</u>
	Cattle	9 alive	12 alive	A, B all healthy

II INFECTIVITY OF TISSUES FROM CATTLE WITH BSE OR ANIMALS WITH

Bov 92 A

FOR MICE

Route of Inoculation I/C 0.02 ml I/P 0.1 ml 10% suspension

	<u>Place</u>	<u>Exposure</u>	<u>Results/ Clinical +ve</u>	<u>Minimum Incubation Period</u>
SEMEN	NPU	3 Aug 1989 (Tox)		
		30 Aug 1989		
SPLEEN	NPU	3 Aug 1989		
		4 Sept 1989		
BUFFY COAT	NPU	1 Nov 1989		
M DIAPHRAGMA	NPU	9 Nov 1989		
M SEMITENDINOSUS	NPU	6 Nov 1989		
COW BRAIN X 2	NPU	2 Nov 1989		
		7 Nov 1989		
FIXED COW BRAIN X 2	NPU	8 Nov 1989		
PLACENTA	NPU	2 Feb 1990		
MILK (TOXICITY TRIAL)				
MILK				
MIDRUM				
LIVER	NPU	11 Jan 1991		
UDDER				
MES. LYMPH NODE (LN)	NPU	9 Nov 1990		
CSF	NPU	10 Jan 1991		
KIDNEY				
*EMBRYOS				
*UTERINE FLUSHINGS				
SEMEN (2nd SAMPLE)				
PANCREAS	NPU	24 Apr 1991		
DISTAL ILEUM				
PREFEMORAL LN	NPU	9 Nov 1990		
PROXIMAL COLON	NPU	24 Apr 1991 (1/50 i/p)		
RUMEN (PILLAR)	NPU	15 Feb 1991		
FETAL CALF BLOOD	NPU	29 Nov 1991		
BONE MARROW (STERNUM)	NPU	5 Mar 1990		

\* not available in sufficient quantity yet

As at 28 April 1991

III INFECTIVITY OF TISSUES FROM BSE ANIMALS FOR MICE BY ORAL EXPOSURE

Bov 92A

	<u>Place</u>	<u>Exposure</u>	<u>Results/ Clinical +ve</u>	<u>Minimum Incubation Period</u>
BRAIN + CSF	RVC	Early 1988	1989	15M
UDDER + MILK	RVC	Early 1988 )		
SUPRAMAMMARY LN	RVC	Early 1988 )		
PLACENTA	RVC	Early 1988 )		
SPLEEN	RVC	Early 1988 )		
CARCASE + MES LN	RVC	Early 1988 ) *		
		)		
		)		
SPLEEN	NPU	27 Jan 1990 )		
PLACENTA x 2	NPU	2 Feb 1990 )		

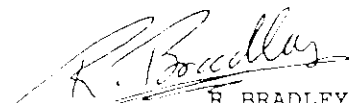
- \* (1) All negative
- (2) 12 month parenteral passage using :-  
a) spinal cord  
b) spleen  
All negative
- (3) 18 month parenteral passage as in (2)  
All negative at 30/4/91 but incomplete

As at 30 April 1991

Bov 92A

IV INFECTIVITY OF BRAIN FROM SPECIES OTHER THAN CATTLE  
FOR MICE OR OTHER SPECIES

<u>Source</u>	<u>Place</u>	<u>Route</u>	<u>Exposure</u>	<u>Status</u>	<u>Min i/p</u>
FIXED NYALA BRAIN	NPU	i/c i/p	27 Dec 1989	Positive	343d.
FIXED KUDU BRAIN	NPU	i/c i/p	28 Dec 1989	Positive	302d.
CATS	NPU	- i/c i/p	22 Aug 1990	Healthy	
			26 Sep 1990	"	
			16/29 Jan 1991	"	
CWD	NPU	i/c i/p	5 Mar 1991	"	
EXPTL PIG SE	NPU	i/c i/p	30 Oct 1990	"	
<u>SCRAPIE</u>					
GREY FACE TO MICE	NPU	i/c i/p	8 Jan 1988	Positive (longer than BSE)	
TO MARMOSETS	CRC	i/c	Feb 1988	Positive	38M
<u>OTHER POSITIVE EXPERIMENTS</u>					
FORMALIN/BSE - MICE	NPU	i/c i/p	8 Nov 1989	Positive	
			9 Nov 1989	Positive	
1M NaOH 263 K TO MICE	NPU	i/c	29 Sep 1990	Positive	
2M NaOH 263 K TO MICE	NPU	i/c	16 Sep 1990	Positive	
RIII BSE TO HAMSTER	NPU	i/c or			
		i/p or both	4 Apr 1990	Positive	
VM BSE TO HAMSTER	NPU	"	3 Apr 1990	Positive	
-ve LINE CHEVIOT BSE					
- MICE	NPU	i/c i/p	27 Apr 1990	Positive	

  
R BRADLEY  
AS at 28 April 1991

Mr R C Lawson (For Tyrrell Committee)  
cc CVO  
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Dr B J Shreeve  
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