01/31/2017 Re-Scoring of: 04/05/2015 Brunt Scoring of Monks 20 wk LN OP OR foster pup expt

H&E for most criteria PSR for Fibrosis PAS for foamy macs	Group ---> animal# ---> animal sub # --->		LN:LN 367 LA	367 LB	367 LC	367 LF	367 LG	367 LH	367 RLA	367 RLB	368 A	368 B	368 C	368 RA	368 RC	LN:LN ave	std dev	N	sem	LN:OP 360 LA	360 LB	360 LC	360 LD	361 RA
Feature		Points														ave	std dev	N	sem					
Liver cell injury																								
ballooning	none	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	few	2																						
	many	4																						
acidophil bodies	none	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	few	2																						
	many (≥1 per 200x field)	4																						
Necrotic cells	none	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	present (≥2/200x field)	2																						
pigmented macrophages	none	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	many	1																						
megamitochondria	none	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	present	1																						
sinusoidal dilatation & congest	none	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	Yes (≥3 RBC diam)	1																						
True abscesses (>6 cell diams)	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	Yes (>1 / 40x field)	2																						
Injury Subtotal			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**
Inflammation																								
lobular inflammation	<2 per 200x field	0	0	0	0		0				0		0		0					0	0	0	0	0
	2 per 200x field	1								1		1		1										
	2-4 per 200x field	2				2		2	2															
	>4 per 200x field	3																						
foci of inflammatory cells	absent (< 1 / 200x field)	0	0		0		0				0		0							0	0		0	
	present (1 or more / 200x field)	1		1		1		1	1	1		1		1	1							1		1
lipogranulomas	absent	0	0		0		0				0	0	0							0	0	0	0	
	present	2		1		1		1	1	1				1	1									1
portal inflammation	none to minimal	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	more than minimal	1																						
Ceroid laden Kupffer c	No	0	0		0		0				0		0		0						0		0	0
	Yes (≥3 / 200x field)	1		1		1		1	1	1		1		1						1		1		
Langhans giant cells	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	Yes (≥1 / 200x field)	1																						
Foamy macrophages	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	Yes	1																						
Inflam Subtotal			**0**	**3**	**0**	**5**	**0**	**5**	**5**	**4**	**0**	**3**	**0**	**4**	**2**	**2**	**2**	**13**	**1**	**1**	**0**	**2**	**0**	**2**
Reactive Chnages																								
Mallory's hyaline	none	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	many	1																						
Glycogenated nuclei	none (< 1 / 200x field)	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	few (1-3 per 200x field)	1																						
	many (> 3 /200x field)	2																						
ductal reaction	none	0	0	0	0		0	0	0	0	0	0	0		0					0	0	0	0	0
	minor	1				1								1										
	robust	2																						
mitotic figures	<2 per 200x field	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	>2 per 200x field	0																						
hyperpl nod regen morph	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	yes	1																						
hyalinized & thickened PV&HA	none	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	present	1																						
Giant Cell Transformation	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0
	Yes	1																						
Reactive Subtotal			**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**
Steatosis																								
Macrovesicular steatosis	<10%	0	0		0		0				0	0	0							0	0	0		
(CLD larger then nuclei)	10-33%	1		1		1		1	1	1				1	1								1	1
	33-66%	2																						
	>66%	3																						
Microvesicular steatosis	not present	0					0				0		0											
(filled with CLDs, central nuc	present (>5% of hepatos)	1	1	1	1	1		1	1	1		1		1	1					1	1	1	1	1
Steatosis Subtotal			**1**	**2**	**1**	**2**	**0**	**2**	**2**	**2**	**0**	**1**	**0**	**2**	**2**	**1**	**1**	**13**	**0**	**1**	**1**	**1**	**2**	**2**
Fibrosis																								
now assessed by quantitative PSR stn			**now assessed by quantitative PSR stn**																	**now assessed by quantitative PSR**				
(see separate graphed result)																								
Summary																								
			LN:LN 367 LA	367 LB	367 LC	367 LF	367 LG	367 LH	367 RLA	367 RLB	368 A	368 B	368 C	368 RA	368 RC	LN:LN				LN:OP 360 LA	360 LB	360 LC	360 LD	361 RA
Scoring by Category																								
Cell Injury			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.00**	**0.00**	**13.00**	**0.00**	**0**	**0**	**0**	**0**	**0**
Inflammation			**0**	**3**	**0**	**5**	**0**	**5**	**5**	**4**	**0**	**3**	**0**	**4**	**2**	**2.38**	**2.14**	**13.00**	**0.62**	**1**	**0**	**2**	**0**	**2**
Reactive Changes			**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0.15**	**0.38**	**13.00**	**0.11**	**0**	**0**	**0**	**0**	**0**
Steatosis			**1**	**2**	**1**	**2**	**0**	**2**	**2**	**2**	**0**	**1**	**0**	**2**	**2**	**1.31**	**0.85**	**13.00**	**0.25**	**1**	**1**	**1**	**2**	**2**
Fibrosis	**Not Included Here, Quantitated Separately**																							
Total			**1**	**5**	**1**	**8**	**0**	**7**	**7**	**6**	**0**	**4**	**0**	**7**	**4**					**2**	**1**	**3**	**2**	**4**
	ave															**3.85**								
	std dev															**3.08**								
	n															**13**								
	sqr rt N-1															**3.46**								
	sem															**0.89**								

361 RB	361 RC	356 RLA	356 RLD	359 RLA	359 RLB	360 RLA	360 RLB	360 RLC	ave	std dev	N	sem
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**				
0	0	0	0	0	0	0	0	0				
0		0	0	0	0	0	0	0				
	1											
0			0	0	0	0	0	0				
	1	1										
0	0	0	0	0	0	0	0	0				
	0			0		0	0	0				
1		1			1							
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
1	**2**	**2**	**0**	**0**	**1**	**0**	**0**	**0**				
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	0		0	0	0	0	0	0				
		1										
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0				
0	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**				
0		0	0	0	0	0	0	0				
	1											
				0				0				
1	1	1	1		1	1	1					
1	**2**	**1**	**1**	**0**	**1**	**1**	**1**	**0**				

LN:OR

356 A	356 B	358 LA	358 LB	359 RA	360 RA	360 RC	359 RB	359 RC	359 RF	359 RG	359 RH	364 A	364 B	ave	std dev	N	sem
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**				
0	0	0	0		0		0	0	0	0	0		0				
				1		1						1					
0	0	0	0		0					0	0		0				
				1		1	1	1	1			1					
0	0	0	0		0					0	0		1				
				1		1	1	1	1			1	1				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
1	**0**	**0**	**0**	**4**	**1**	**4**	**2**	**3**	**3**	**0**	**1**	**4**	**2**				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0			0			0			0				
1					1	1		1	1		1	1					
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	0	0	0	0	0	0	0	0	0	0	0	0				
1	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**1**	**0**	**1**	**1**	**0**				
	0	0								0			0				
1			1	1	1		1	1	1		1	1					
						2											
		0								0							
1	1		1	1	1	1	1	1	1		1	1	1				
2	**1**	**0**	**2**	**2**	**2**	**3**	**2**	**2**	**2**	**0**	**2**	**2**	**1**				

k stn

now assessed by quantitative PSR stn

361 RB	361 RC	356 RLA	356 RLD	359 RLA	359 RLB	360 RLA	360 RLB	360 RLC	LN:OP ave	std dev	N	sem
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.00**	**0.00**	**14.00**	**0.00**
1	**2**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0.79**	**0.89**	**14.00**	**0.25**
0	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0.07**	**0.27**	**14.00**	**0.07**
1	**2**	**1**	**1**	**0**	**1**	**1**	**1**	**0**	**1.07**	**0.62**	**14.00**	**0.17**
2	**4**	**4**	**1**	**0**	**2**	**1**	**1**	**0**				
									1.93			
									1.38			
									14			
									3.61			
									0.38			

LN:OR 356 A	356 B	358 LA	358 LB	359 RA	360 RA	360 RC	359 RB	359 RC	359 RF	359 RG	359 RH	364 A	364 B	LN:OR ave	std dev	N	sem
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.00**	**0.00**	**14.00**	**0.00**
1	**0**	**0**	**0**	**4**	**1**	**4**	**2**	**3**	**3**	**0**	**1**	**4**	**2**	**1.79**	**1.58**	**14.00**	**0.44**
1	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**1**	**0**	**1**	**1**	**0**	**0.50**	**0.52**	**14.00**	**0.14**
2	**1**	**0**	**2**	**2**	**2**	**3**	**2**	**2**	**2**	**0**	**2**	**2**	**1**	**1.64**	**0.84**	**14.00**	**0.23**
4	**1**	**0**	**2**	**6**	**4**	**8**	**4**	**6**	**6**	**0**	**4**	**7**	**3**				
														3.93			
														2.53			
														14			
														3.61			
														0.70			