

TDMS No. 20117 - 02

Test Type: 1-YEAR

Route: SKIN APPLICATION

Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

All-trans-retinyl palmitate

CAS Number: 79-81-2

Date Report Requested: 06/29/2009

Time Report Requested: 16:32:02

First Dose M/F: NA / 06/22/03

Lab: NCTR

C Number: C20117

Lock Date: 12/01/2008

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Female

TDMSE Version: 2.1.0

DAY ON TEST	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	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
SKH-1 HAIRLESS MICE (NCTR)	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
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
ANIMAL ID	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8
NO CREAMNO SSL-F	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Abscess																									
Cyst Epithelial Inclusion																									
Hyperplasia, Squamous																									

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	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	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
NO CREAMNO SSL-F	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
ANIMAL ID	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

Dermis, Inflammation, Chronic Active											2										3									
Epidermis, Ulcer																					3									
Skin, Site Of Application	+ +																													
Abscess																														
Cyst, Multiple	X																													
Cyst Epithelial Inclusion											X										X									
Hyperplasia, Squamous											1																			
Dermis, Inflammation, Chronic Active											1																			

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
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 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	3	3	3	3	3	3	3	
	6	6	6	6	5	6	6	6	6	6	6	
	7	7	7	7	4	7	7	7	7	7	7	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
ANIMAL ID	5	5	5	5	5	5	5	5	5	5	5	
	8	8	8	8	9	9	9	9	9	9	9	
NO CREAMNO SSL-F	6	7	8	9	0	1	2	3	4	5	6	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Abscess								3				1 3.0
Cyst Epithelial Inclusion			X						X			2
Hyperplasia, Squamous												1 2.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0		
	3	3	3	3	3	3	3	3	3	3	3		
	6	6	6	6	5	6	6	6	6	6	6		
	7	7	7	7	4	7	7	7	7	7	7		
<hr/>													
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0		
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6		
NO CREAMNO SSL-F	5	5	5	5	5	5	5	5	5	5	5		
ANIMAL ID	8	8	8	8	9	9	9	9	9	9	9		
	6	7	8	9	0	1	2	3	4	5	6	* TOTALS	
<hr/>													
Dermis, Inflammation, Chronic Active												4	3 3.0
Epidermis, Ulcer													1 3.0
<hr/>													
Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36	
Abscess												4	1 4.0
Cyst, Multiple													1
Cyst Epithelial Inclusion													2
Hyperplasia, Squamous													1 1.0
Dermis, Inflammation, Chronic Active												2	2 1.5
<hr/>													
MUSCULOSKELETAL SYSTEM													
NONE													
<hr/>													
NERVOUS SYSTEM													
NONE													
<hr/>													
RESPIRATORY SYSTEM													
NONE													
<hr/>													
SPECIAL SENSES SYSTEM													
NONE													
<hr/>													
URINARY SYSTEM													
NONE													

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

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DAY ON TEST	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
	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	6	6	6	6	6	6	7	6	6	6	6	4	6	6	6	6	6	2	6	4	2	6	6	6	6
	7	7	7	7	7	7	0	7	7	7	7	8	7	7	7	7	7	7	8	0	7	7	7	7	7
SKH-1 HAIRLESS MICE (NCTR) MICE FEMALE ANIMAL ID	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
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	9	9	9	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2
PH 7.0 NO SSL-F	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1

females (cont...)

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion	X																								X
Ulcer																									
Dermis, Inflammation, Chronic Active																									

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
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Lab: NCTR

DAY ON TEST	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
	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	6	6	6	6	6	6	7	6	6	6	6	4	6	6	6	6	6	2	6	4	2	6	6	6	6	6
	7	7	7	7	7	7	0	7	7	7	7	8	7	7	7	7	7	7	8	0	7	7	7	7	7	7
SKH-1 HAIRLESS MICE (NCTR)	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
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
ANIMAL ID	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
PH 7.0 NO SSL-F	9	9	9	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2
	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	

females (cont...)

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Abscess																											
Hyperplasia, Squamous Atypical, Two, Focal														X													
Hyperplasia, Squamous Dermis, Inflammation, Chronic Active		1	1				1							1			2										

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
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 Page 7

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	2	3	3	3	3	3	3	
	6	6	6	6	7	6	4	3	6	6	6	
	7	7	7	7	0	7	9	4	7	7	7	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
ANIMAL ID	6	6	6	6	6	6	6	6	6	6	6	
	2	2	2	2	2	2	2	2	3	3	3	
PH 7.0 NO SSL-F	2	3	4	5	6	7	8	9	0	1	2	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion						X					X	4
Ulcer											3	1 3.0
Dermis, Inflammation, Chronic Active											3	1 3.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	2	3	3	3	3	3	3	
	6	6	6	6	7	6	4	3	6	6	6	
	7	7	7	7	0	7	9	4	7	7	7	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
	6	6	6	6	6	6	6	6	6	6	6	
ANIMAL ID	2	2	2	2	2	2	2	2	3	3	3	
PH 7.0 NO SSL-F	2	3	4	5	6	7	8	9	0	1	2	* TOTALS

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36
Abscess					4							1 4.0
Hyperplasia, Squamous Atypical, Two, Focal												1
Hyperplasia, Squamous							1			1		7 1.1
Dermis, Inflammation, Chronic Active							2			1		2 1.5

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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2) Mild 4) Marked

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3
	6	6	6	3	6	6	6	6	6	6	6	6	6	6	2	6	6	6	6	6	6	6	5	2	6	
	7	7	7	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7	
SKH-1 HAIRLESS MICE (NCTR)	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
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
NO CREAM6.75SSLF	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
ANIMAL ID	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	

females (cont...)

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Abscess																									4	
Cyst Epithelial Inclusion				X				X																		
Dermis, Inflammation, Chronic Active																										

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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 I .. Insufficient tissue
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 BLANK .. Not examined microscopically
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DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3
	6	6	6	3	6	6	6	6	6	6	6	6	6	6	2	6	6	6	6	6	6	5	2	6	
	7	7	7	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7	
SKH-1 HAIRLESS MICE (NCTR)	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
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
NO CREAM6.75SSLF	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
ANIMAL ID	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9

females (cont...)

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion											X										X			
Hyperplasia, Squamous Atypical, One, Focal			X	X					X	X			X								X			
Hyperplasia, Squamous Atypical, Two, Focal																								
Hyperplasia, Squamous Atypical, Three, Focal						X															X			
Hyperplasia, Squamous Atypical, Four, Focal																						X		
Hyperplasia, Squamous Atypical, Five, Focal														X										
Hyperplasia, Squamous Dermis, Inflammation, Chronic Active								1						1	1	1			1		1	3		1 2

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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 1-4 .. Lesion qualified as:
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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3
	6	6	6	3	6	6	6	6	6	6	6	6	6	6	2	6	6	6	6	6	6	5	2	6	
	7	7	7	4	7	7	7	7	7	7	7	7	7	7	0	7	7	7	7	7	7	6	6	7	
SKH-1 HAIRLESS MICE (NCTR) MICE FEMALE ANIMAL ID	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
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
NO CREAM6.75SSLF	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9

females (cont...)

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	3	2	2	3	3	3	3	
	6	6	6	6	6	9	6	6	6	6	6	
	7	7	7	7	7	9	0	7	7	7	7	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	3	3	3	3	3	3	3	3	3	3	4	
NO CREAM6.75SSLF	0	1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Abscess												1 4.0
Cyst Epithelial Inclusion		X			X							4
Dermis, Inflammation, Chronic Active								4				1 4.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	3	3	3	3	3	2	2	3	3	3	3
	6	6	6	6	6	9	6	6	6	6	6
	7	7	7	7	7	9	0	7	7	7	7
<hr/>											
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7
ANIMAL ID	3	3	3	3	3	3	3	3	3	3	4
NO CREAM6.75SSLF	0	1	2	3	4	5	6	7	8	9	0
											* TOTALS

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion				X				X				4
Hyperplasia, Squamous Atypical, One, Focal		X	X	X					X	X		11
Hyperplasia, Squamous Atypical, Two, Focal								X				1
Hyperplasia, Squamous Atypical, Three, Focal												2
Hyperplasia, Squamous Atypical, Four, Focal												1
Hyperplasia, Squamous Atypical, Five, Focal												1
Hyperplasia, Squamous Dermis, Inflammation, Chronic Active			1	1								11 1.3
												1 3.0

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	0	0	0	0	0	0	0	0	0	0	0	
DAY ON TEST	3	3	3	3	3	2	2	3	3	3	3	
	6	6	6	6	6	9	6	6	6	6	6	
	7	7	7	7	7	9	0	7	7	7	7	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	3	3	3	3	3	3	3	3	3	3	4	
NO CREAM6.75SSLF	0	1	2	3	4	5	6	7	8	9	0	* TOTALS

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20117 - 02

Test Type: 1-YEAR

Route: SKIN APPLICATION

Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

All-trans-retinyl palmitate

CAS Number: 79-81-2

Date Report Requested: 06/29/2009

Time Report Requested: 16:32:02

First Dose M/F: NA / 06/22/03

Lab: NCTR

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	
	6	3	6	6	6	3	3	6	3	6	6	6	6	6	2	6	6	9	6	6	6	6	6	6	
	7	4	7	7	7	4	4	7	4	7	7	7	7	7	7	7	8	7	7	7	7	7	7	7	
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
PH 7.0 6.75SSLF	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion	X			X		X			X			X				X								
Hyperplasia, Squamous												4												
Dermis, Inflammation, Chronic Active																								

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	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
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	
	6	3	6	6	6	3	3	6	3	6	6	6	6	6	2	6	6	9	6	6	6	6	6	6	6	
	7	4	7	7	7	4	4	7	4	7	7	7	7	7	7	7	7	8	7	7	7	7	7	7	7	
SKH-1 HAIRLESS MICE (NCTR)	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	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
PH 7.0 6.75SSLF	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	

females (cont...)

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Abscess																									
Cyst Epithelial Inclusion									X														X		
Hyperplasia, Squamous Atypical, One, Focal		X					X									X			X						
Hyperplasia, Squamous Atypical, Two, Focal				X	X			X							X									X	
Hyperplasia, Squamous Atypical, Three, Focal	X		X							X	X	X													
Hyperplasia, Squamous Atypical, Four, Focal													X					X							
Hyperplasia, Squamous Atypical, Five, Focal										X												X			
Hyperplasia, Squamous Atypical, Greater Than Five, Focal						X									X										
Hyperplasia, Basal Cell		2																							
Hyperplasia, Squamous		1	2					1	1	3		2	2		2	2	2		1		1	2	1		2
Dermis, Inflammation, Chronic Active									1	2					2	1	2				2		1		2
Epidermis, Inflammation, Suppurative																									
Epidermis, Necrosis										1															
Epidermis, Ulcer																									

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20117 - 02
Test Type: 1-YEAR
Route: SKIN APPLICATION
Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

All-trans-retinyl palmitate

CAS Number: 79-81-2

Date Report Requested: 06/29/2009
Time Report Requested: 16:32:02
First Dose M/F: NA / 06/22/03
Lab: NCTR

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	
	6	3	6	6	6	3	3	6	3	6	6	6	6	6	2	6	6	9	6	6	6	6	6	6	
	7	4	7	7	7	4	4	7	4	7	7	7	7	7	7	7	8	7	7	7	7	7	7	7	
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	
PH 7.0 6.75SSLF	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females
(cont...)

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 18

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	2	2	3	2	2	3	3	3	3	3	3	
	7	3	4	2	1	6	6	6	0	6	6	
	2	5	6	8	4	7	7	7	6	7	7	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	7	
PH 7.0 6.75SSLF	6	6	6	6	7	7	7	7	7	7	7	
	6	7	8	9	0	1	2	3	4	5	6	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion												6
Hyperplasia, Squamous												1 4.0
Dermis, Inflammation, Chronic Active								3				1 3.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	2	2	3	2	2	3	3	3	3	3	3
	7	3	4	2	1	6	6	6	0	6	6
	2	5	6	8	4	7	7	7	6	7	7
.....											
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	7
PH 7.0 6.75SSLF	6	6	6	6	7	7	7	7	7	7	7
	6	7	8	9	0	1	2	3	4	5	6
											* TOTALS

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36
Abscess								3				1 3.0
Cyst Epithelial Inclusion			X	X			X					5
Hyperplasia, Squamous Atypical, One, Focal		X					X					6
Hyperplasia, Squamous Atypical, Two, Focal												5
Hyperplasia, Squamous Atypical, Three, Focal										X		6
Hyperplasia, Squamous Atypical, Four, Focal							X					3
Hyperplasia, Squamous Atypical, Five, Focal												2
Hyperplasia, Squamous Atypical, Greater Than Five, Focal	X		X					X				5
Hyperplasia, Basal Cell												1 2.0
Hyperplasia, Squamous	3	2		3	3		3	1	1	2	1	24 1.8
Dermis, Inflammation, Chronic Active	2			1	2		4	1	1		1	15 1.7
Epidermis, Inflammation, Suppurative					1							1 1.0
Epidermis, Necrosis									1			2 1.0
Epidermis, Ulcer					1							1 1.0

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 20

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20117 - 02

Test Type: 1-YEAR

Route: SKIN APPLICATION

Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

All-trans-retinyl palmitate

CAS Number: 79-81-2

Date Report Requested: 06/29/2009

Time Report Requested: 16:32:02

First Dose M/F: NA / 06/22/03

Lab: NCTR

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	2	2	3	2	2	3	3	3	3	3	3
	7	3	4	2	1	6	6	6	0	6	6
	2	5	6	8	4	7	7	7	6	7	7

SKH-1 HAIRLESS MICE (NCTR)
MICE FEMALE

ANIMAL ID

PH 7.0 6.75SSLF

	0	0	0	0	0	0	0	0	0	0	0
	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7
	6	6	6	6	7	7	7	7	7	7	7
	6	7	8	9	0	1	2	3	4	5	6

* TOTALS

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 21

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20117 - 02
 Test Type: 1-YEAR
 Route: SKIN APPLICATION
 Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 All-trans-retinyl palmitate
 CAS Number: 79-81-2

Date Report Requested: 06/29/2009
 Time Report Requested: 16:32:02
 First Dose M/F: NA / 06/22/03
 Lab: NCTR

DAY ON TEST	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
	2	1	3	2	3	3	3	2	3	2	3	2	2	2	3	2	2	3	3	3	3	2	2	2	2
	8	6	4	8	6	5	6	5	4	8	4	9	7	7	8	2	4	9	1	1	6	1	4	6	5
	3	7	8	3	2	5	7	6	1	4	8	9	0	7	5	0	2	2	3	3	7	3	2	3	6

SKH-1 HAIRLESS MICE (NCTR) MICE FEMALE ANIMAL ID .1% RP 6.75SSLF	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	
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	0	0
	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	

females
(cont...)

ALIMENTARY SYSTEM
NONE

CARDIOVASCULAR SYSTEM
NONE

ENDOCRINE SYSTEM
NONE

GENERAL BODY SYSTEM
NONE

GENITAL SYSTEM
NONE

HEMATOPOIETIC SYSTEM
NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion					X																			
Hyperplasia, Squamous Atypical, Focal																								

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	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
	2	1	3	2	3	3	3	2	3	2	3	2	2	2	3	2	2	3	3	3	3	2	2	2	2	
	8	6	4	8	6	5	6	5	4	8	4	9	7	7	8	2	4	9	1	1	6	1	4	6	5	
	3	7	8	3	2	5	7	6	1	4	8	9	0	7	5	0	2	2	3	3	7	3	2	3	6	
SKH-1 HAIRLESS MICE (NCTR)	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	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
.1% RP 6.75SSLF	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	
	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	

females (cont...)

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion						X																X			
Hyperplasia, Squamous Atypical, One, Focal																			X						
Hyperplasia, Squamous Atypical, Two, Focal																					X				
Hyperplasia, Squamous Atypical, Three, Focal							X				X	X													
Hyperplasia, Squamous Atypical, Four, Focal								X		X								X						X	
Hyperplasia, Squamous Atypical, Five, Focal													X			X									
Hyperplasia, Squamous Atypical, Greater Than Five, Focal	X		X	X	X	X		X		X			X	X						X	X				
Hyperplasia, Basal Cell																			3						
Hyperplasia, Squamous	3	2	2	3	2	2	2	2		2	2	2	2	3	2	2	2	2	2	1	1	2		2	2
Dermis, Inflammation, Chronic Active	2		1		2	1	2	2		2	2	2	1	2	2		1	2		1	2		1	2	2
Epidermis, Inflammation, Suppurative																									
Epidermis, Necrosis					2								1									2			
Epidermis, Ulcer			4																			2			
Sebaceous Gland, Hyperplasia								3																	

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	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
	2	1	3	2	3	3	3	2	3	2	3	2	2	2	3	2	2	3	3	3	3	2	2	2	2
	8	6	4	8	6	5	6	5	4	8	4	9	7	7	8	2	4	9	1	1	6	1	4	6	5
	3	7	8	3	2	5	7	6	1	4	8	9	0	7	5	0	2	2	3	3	7	3	2	3	6

SKH-1 HAIRLESS MICE (NCTR)
MICE FEMALE

ANIMAL ID

.1% RP 6.75SSLF

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
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8
7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	0	0
7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	

females
(cont...)

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	1	3	3	2	2	3	1	3	
	3	7	5	0	0	2	9	4	6	1	6	
	5	7	6	7	6	7	9	9	7	1	7	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
	8	8	8	8	8	8	8	8	8	8	8	
ANIMAL ID	0	0	0	0	0	0	0	0	1	1	1	
.1% RP 6.75SSLF	2	3	4	5	6	7	8	9	0	1	2	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion				X								3
Hyperplasia, Squamous Atypical, Focal								X				1

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	* TOTALS
	2	2	2	1	3	3	2	2	3	1	3	
	3	7	5	0	0	2	9	4	6	1	6	
	5	7	6	7	6	7	9	9	7	1	7	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
.1% RP 6.75SSLF	8	8	8	8	8	8	8	8	8	8	8	
ANIMAL ID	0	0	0	0	0	0	0	0	1	1	1	
	2	3	4	5	6	7	8	9	0	1	2	
Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion		X							X			4
Hyperplasia, Squamous Atypical, One, Focal												1
Hyperplasia, Squamous Atypical, Two, Focal	X					X		X				4
Hyperplasia, Squamous Atypical, Three, Focal												3
Hyperplasia, Squamous Atypical, Four, Focal			X						X			6
Hyperplasia, Squamous Atypical, Five, Focal							X					3
Hyperplasia, Squamous Atypical, Greater Than Five, Focal		X			X					X		14
Hyperplasia, Basal Cell												1 3.0
Hyperplasia, Squamous	2	2	3	2		2	2	2	1	2		32 2.0
Dermis, Inflammation, Chronic Active	2	2	3	2	2	2	2	1		4		28 1.9
Epidermis, Inflammation, Suppurative							1			4		2 2.5
Epidermis, Necrosis							2					4 1.8
Epidermis, Ulcer										4		3 3.3
Sebaceous Gland, Hyperplasia												1 3.0

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20117 - 02

Test Type: 1-YEAR

Route: SKIN APPLICATION

Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

All-trans-retinyl palmitate

CAS Number: 79-81-2

Date Report Requested: 06/29/2009

Time Report Requested: 16:32:02

First Dose M/F: NA / 06/22/03

Lab: NCTR

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	1	3	3	2	2	3	1	3
	3	7	5	0	0	2	9	4	6	1	6
	5	7	6	7	6	7	9	9	7	1	7

SKH-1 HAIRLESS MICE (NCTR)
MICE FEMALE

ANIMAL ID

.1% RP 6.75SSLF

0	0	0	0	0	0	0	0	0	0	0	0
6	6	6	6	6	6	6	6	6	6	6	6
8	8	8	8	8	8	8	8	8	8	8	8
0	0	0	0	0	0	0	0	0	1	1	1
2	3	4	5	6	7	8	9	0	1	2	

* TOTALS

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 27

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	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	
DAY ON TEST	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	4	2	5	6	9	6	4	4	6	5	6	4	7	0	4	4	7	6	8	4	5	6	7	7	6	6	
	7	7	6	9	1	7	0	9	2	6	2	0	0	1	9	9	7	3	3	2	6	3	9	0	3	3	
.....																											
SKH-1 HAIRLESS MICE (NCTR)	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
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
.5% RP 6.75SSLF	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
ANIMAL ID	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3
	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	7	7

females (cont...)

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion																											X
Hyperplasia, Squamous						3				1			1														

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

DAY ON TEST	0																								females (cont...)
	2																								
	4																								
	7																								
SKH-1 HAIRLESS MICE (NCTR)	0																								
MICE FEMALE	6																								
.5% RP 6.75SSLF	8																								
ANIMAL ID	1																								
	3																								

Skin, Site Of Application	+																								
Cyst Epithelial Inclusion																									X
Hyperplasia, Squamous Atypical, One, Focal																									X
Hyperplasia, Squamous Atypical, Two, Focal																									X
Hyperplasia, Squamous Atypical, Three, Focal	X																								X
Hyperplasia, Squamous Atypical, Four, Focal																									X
Hyperplasia, Squamous Atypical, Five, Focal																									X
Hyperplasia, Squamous Atypical, Greater Than Five, Focal	X																								X
Hyperplasia, Squamous Dermis, Inflammation, Chronic Active	3	3	2	2	3	3	4	2	3	3	2	2	3	4	2	3	2	2	2	3	2	2	3	3	2
Epidermis, Inflammation, Suppurative	2																								3
Epidermis, Necrosis	1																								3
Epidermis, Ulcer	2																								4

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	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
	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	4	2	5	6	9	6	4	4	6	5	6	4	7	0	4	4	7	6	8	4	5	6	7	7	6
	7	7	6	9	1	7	0	9	2	6	2	0	0	1	9	9	7	3	3	2	6	3	9	0	3

**SKH-1 HAIRLESS MICE (NCTR)
MICE FEMALE**

ANIMAL ID

.5% RP 6.75SSLF

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
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7

**females
(cont...)**

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	0	0	0	0	0	0	0	0	0	0	0	
DAY ON TEST	2	2	2	2	3	2	2	2	2	2	2	
	4	3	5	2	1	6	2	6	3	6	4	
	1	5	6	8	3	5	1	5	4	5	9	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
	8	8	8	8	8	8	8	8	8	8	8	
ANIMAL ID	3	3	4	4	4	4	4	4	4	4	4	
.5% RP 6.75SSLF	8	9	0	1	2	3	4	5	6	7	8	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion												1
Hyperplasia, Squamous												4 1.5

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	3	2	2	2	2	2	2	
	4	3	5	2	1	6	2	6	3	6	4	
	1	5	6	8	3	5	1	5	4	5	9	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
.5% RP 6.75SSLF	8	8	8	8	8	8	8	8	8	8	8	
ANIMAL ID	3	3	4	4	4	4	4	4	4	4	4	
	8	9	0	1	2	3	4	5	6	7	8	* TOTALS
Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion												1
Hyperplasia, Squamous Atypical, One, Focal				X		X		X	X			8
Hyperplasia, Squamous Atypical, Two, Focal		X									X	3
Hyperplasia, Squamous Atypical, Three, Focal												2
Hyperplasia, Squamous Atypical, Four, Focal												2
Hyperplasia, Squamous Atypical, Five, Focal												3
Hyperplasia, Squamous Atypical, Greater Than Five, Focal	X		X		X		X			X		16
Hyperplasia, Squamous	2	1	3	2	3	3	2	3	2	3	2	36 2.5
Dermis, Inflammation, Chronic Active	2	1	2	3	2	2	2	1	2	2	2	36 2.0
Epidermis, Inflammation, Suppurative			2									7 1.9
Epidermis, Necrosis				2						1		7 1.6
Epidermis, Ulcer			2			2						9 2.6

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	0	0	0	0	0	0	0	0	0	0	0	
DAY ON TEST	2	2	2	2	3	2	2	2	2	2	2	
	4	3	5	2	1	6	2	6	3	6	4	
	1	5	6	8	3	5	1	5	4	5	9	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
	8	8	8	8	8	8	8	8	8	8	8	
ANIMAL ID	3	3	4	4	4	4	4	4	4	4	4	
.5% RP 6.75SSLF	8	9	0	1	2	3	4	5	6	7	8	* TOTALS

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20117 - 02
 Test Type: 1-YEAR
 Route: SKIN APPLICATION
 Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

All-trans-retinyl palmitate

CAS Number: 79-81-2

Date Report Requested: 06/29/2009
 Time Report Requested: 16:32:02
 First Dose M/F: NA / 06/22/03
 Lab: NCTR

DAY ON TEST	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
	3	2	2	2	2	2	3	3	3	2	2	2	2	2	3	3	2	0	3	2	3	2	3	2	
	1	9	7	9	6	6	3	2	2	8	8	9	6	9	6	0	2	8	7	6	3	1	6	2	5
	7	9	6	1	9	9	4	0	0	4	4	9	2	2	2	3	0	5	6	7	5	3	3	6	6
SKH-1 HAIRLESS MICE (NCTR)	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
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
NO CREAM13.7SSLF	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
ANIMAL ID	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8
	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1

females (cont...)

Epidermis, Inflammation, Suppurative																								4					
Epidermis, Ulcer																								4					
Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					
Cyst Epithelial Inclusion																								X					
Hyperplasia, Squamous Atypical, One, Focal	X																			X	X	X							
Hyperplasia, Squamous Atypical, Two, Focal	X																							X					
Hyperplasia, Squamous Atypical, Three, Focal	X						X																						
Hyperplasia, Squamous Atypical, Four, Focal														X															
Hyperplasia, Squamous Atypical, Five, Focal															X														
Hyperplasia, Squamous Atypical, Greater Than Five, Focal	X X				X X X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Hyperplasia, Squamous Dermis, Inflammation, Chronic Active	1	3	2	3	1	2	2	1	2	1	1	1	1	2	3	2	1	1	1	2	1	1	1						
Epidermis, Inflammation, Suppurative				2	4	1	1	1																					
Epidermis, Necrosis															2														
Epidermis, Ulcer															2														
							3																						

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 35

DAY ON TEST	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		
	3	2	2	2	2	2	3	3	3	2	2	2	2	2	2	3	3	2	0	3	2	3	2	3	2		
	1	9	7	9	6	6	3	2	2	8	8	9	6	9	6	0	2	8	7	6	3	1	6	2	5		
	7	9	6	1	9	9	4	0	0	4	4	9	2	2	2	3	0	5	6	7	5	3	3	6	6		
<hr/>																											
SKH-1 HAIRLESS MICE (NCTR)	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		
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
NO CREAM13.7SSLF	5	5	5	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	8	8		
	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1		

females (cont...)

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	3	2	2	2	2	2	2	2	2	3	2	
	4	5	6	7	8	5	9	4	6	2	6	
	6	6	4	2	9	6	2	1	5	7	5	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
	9	9	9	9	9	9	9	9	9	9	9	
ANIMAL ID	8	8	8	8	8	8	8	8	9	9	9	
NO CREAM13.7SSLF	2	3	4	5	6	7	8	9	0	1	2	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion											X	1
Hyperplasia, Squamous												1 1.0
Dermis, Inflammation, Chronic Active				4								1 4.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	3	2	2	2	2	2	2	2	2	3	2	
	4	5	6	7	8	5	9	4	6	2	6	
	6	6	4	2	9	6	2	1	5	7	5	
<hr/>												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	9	
	8	8	8	8	8	8	8	8	9	9	9	
NO CREAM13.7SSLF	2	3	4	5	6	7	8	9	0	1	2	
												* TOTALS
Epidermis, Inflammation, Suppurative												1 4.0
Epidermis, Ulcer	4											2 4.0
<hr/>												
Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion	X											2
Hyperplasia, Squamous Atypical, One, Focal												4
Hyperplasia, Squamous Atypical, Two, Focal						X		X				4
Hyperplasia, Squamous Atypical, Three, Focal									X			4
Hyperplasia, Squamous Atypical, Four, Focal	X		X		X							5
Hyperplasia, Squamous Atypical, Five, Focal												3
Hyperplasia, Squamous Atypical, Greater Than Five, Focal		X		X			X			X		13
Hyperplasia, Squamous	1		1	1	1	2	2	1	1			28 1.5
Dermis, Inflammation, Chronic Active			1		1	1						12 1.6
Epidermis, Inflammation, Suppurative												1 2.0
Epidermis, Necrosis												2 1.5
Epidermis, Ulcer												1 3.0

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	3	2	2	2	2	2	2	2	2	3	2	
	4	5	6	7	8	5	9	4	6	2	6	
	6	6	4	2	9	6	2	1	5	7	5	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	6	6	6	6	6	6	6	6	6	6	6	
	9	9	9	9	9	9	9	9	9	9	9	
ANIMAL ID	8	8	8	8	8	8	8	8	9	9	9	
NO CREAM13.7SSLF	2	3	4	5	6	7	8	9	0	1	2	* TOTALS

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20117 - 02
Test Type: 1-YEAR
Route: SKIN APPLICATION
Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
All-trans-retinyl palmitate
CAS Number: 79-81-2

Date Report Requested: 06/29/2009
Time Report Requested: 16:32:02
First Dose M/F: NA / 06/22/03
Lab: NCTR

DAY ON TEST	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
	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	
	2	6	5	6	6	5	4	5	4	7	1	6	3	7	6	7	7	0	6	2	9	6	7	6	7	
	7	3	6	3	1	6	9	6	9	7	9	2	6	0	2	0	0	1	2	0	9	3	0	9	2	
SKH-1 HAIRLESS MICE (NCTR) MICE FEMALE	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	
	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PH 7.0 13.7SSLF	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	

females
(cont...)

ALIMENTARY SYSTEM
NONE

CARDIOVASCULAR SYSTEM
NONE

ENDOCRINE SYSTEM
NONE

GENERAL BODY SYSTEM
NONE

GENITAL SYSTEM
NONE

HEMATOPOIETIC SYSTEM
NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion																									
Hyperplasia, Squamous Atypical, Focal																									
Hyperplasia, Squamous																									

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

	0	0	0	0	0	0	0	0	0	0	0	
DAY ON TEST	2	2	2	2	2	3	3	2	2	3	3	
	7	6	3	5	7	2	3	6	1	0	2	
	2	3	5	6	2	0	2	5	9	6	0	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	
	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	1	1	2	2	2	2	2	2	2	2	2	
PH 7.0 13.7SSLF	8	9	0	1	2	3	4	5	6	7	8	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion		X			X							4
Hyperplasia, Squamous Atypical, Focal			X									1
Hyperplasia, Squamous												1 2.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	3	3	2	2	3	3
	7	6	3	5	7	2	3	6	1	0	2
	2	3	5	6	2	0	2	5	9	6	0
.....											
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7
	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	1	1	2	2	2	2	2	2	2	2	2
PH 7.0 13.7SSLF	8	9	0	1	2	3	4	5	6	7	8
											* TOTALS

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion				X				X	X	X		9
Hyperplasia, Squamous Atypical, One, Focal											X	5
Hyperplasia, Squamous Atypical, Three, Focal					X							5
Hyperplasia, Squamous Atypical, Four, Focal			X									2
Hyperplasia, Squamous Atypical, Five, Focal												1
Hyperplasia, Squamous Atypical, Greater Than Five, Focal	X	X		X		X		X		X		20
Hyperplasia, Squamous Dermis, Inflammation, Chronic Active	2	3	2	2	2	1	1	2	1	2	2	33 1.9
Epidermis, Inflammation, Suppurative			1	2	2				1	2		18 1.8
Epidermis, Necrosis										1		3 2.0
Epidermis, Ulcer										2		3 1.3
												2 3.0

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20117 - 02

Test Type: 1-YEAR

Route: SKIN APPLICATION

Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

All-trans-retinyl palmitate

CAS Number: 79-81-2

Date Report Requested: 06/29/2009

Time Report Requested: 16:32:02

First Dose M/F: NA / 06/22/03

Lab: NCTR

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	3	3	2	2	3	3
	7	6	3	5	7	2	3	6	1	0	2
	2	3	5	6	2	0	2	5	9	6	0

SKH-1 HAIRLESS MICE (NCTR)
MICE FEMALE

ANIMAL ID

PH 7.0 13.7SSLF

	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7	7
	0	0	0	0	0	0	0	0	0	0	0
	1	1	2	2	2	2	2	2	2	2	2
	8	9	0	1	2	3	4	5	6	7	8

* TOTALS

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	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
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2
	6	0	2	2	1	4	6	6	4	2	5	5	4	0	5	9	3	5	4	4	1	1	4	2	3	
	9	5	2	2	5	7	2	2	3	9	6	6	9	8	5	1	0	5	8	8	5	5	8	9	6	
SKH-1 HAIRLESS MICE (NCTR)	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	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
.1% RP 13.7SSLF	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	
ANIMAL ID	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	5	
	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	

females (cont...)

ALIMENTARY SYSTEM
NONE

CARDIOVASCULAR SYSTEM
NONE

ENDOCRINE SYSTEM
NONE

GENERAL BODY SYSTEM
NONE

GENITAL SYSTEM
NONE

HEMATOPOIETIC SYSTEM
NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion				X																		X			
Dermis, Inflammation, Chronic Active				3																					

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	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
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2
	6	0	2	2	1	4	6	6	4	2	5	5	4	0	5	9	3	5	4	4	1	1	4	2	3
	9	5	2	2	5	7	2	2	3	9	6	6	9	8	5	1	0	5	8	8	5	5	8	9	6
SKH-1 HAIRLESS MICE (NCTR)	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
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
.1% RP 13.7SSLF	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
ANIMAL ID	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	5	5	5
	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3

females (cont...)

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion																									X
Hyperplasia, Squamous Atypical, One, Focal																									
Hyperplasia, Squamous Atypical, Two, Focal																									X
Hyperplasia, Squamous Atypical, Three, Focal	X		X		X									X											
Hyperplasia, Squamous Atypical, Four, Focal										X											X	X			X
Hyperplasia, Squamous Atypical, Five, Focal															X										
Hyperplasia, Squamous Atypical, Greater Than Five, Focal			X		X		X		X	X	X			X	X	X	X	X	X				X		X
Hyperplasia, Squamous Dermis, Inflammation, Chronic Active	2	2	3	3	3	2	2	3	2	3	2	2	3	2	2	4	3	3		3	3	3	2		
Epidermis, Inflammation, Suppurative	2	3	1	2	2	2	2	4	1	1	2	2	3	2	1	2	2	1		2	2	2	1		
Epidermis, Necrosis								4					3												
Epidermis, Ulcer								4					2	2		2									

MUSCULOSKELETAL SYSTEM
NONE

NERVOUS SYSTEM
NONE

RESPIRATORY SYSTEM
NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	2	2	2	2	2	2	2	
	4	0	4	4	2	2	3	2	2	2	3	
	1	8	1	1	2	8	4	1	8	8	4	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	
	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	5	5	5	5	5	5	6	6	6	6	6	
.1% RP 13.7SSLF	4	5	6	7	8	9	0	1	2	3	4	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion												2
Dermis, Inflammation, Chronic Active												1 3.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	2	2	2	2	2	2	2	
	4	0	4	4	2	2	3	2	2	2	3	
	1	8	1	1	2	8	4	1	8	8	4	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	
	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	5	5	5	5	5	5	6	6	6	6	6	
.1% RP 13.7SSLF	4	5	6	7	8	9	0	1	2	3	4	
												* TOTALS
Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36
Cyst Epithelial Inclusion												1
Hyperplasia, Squamous Atypical, One, Focal	X											1
Hyperplasia, Squamous Atypical, Two, Focal												1
Hyperplasia, Squamous Atypical, Three, Focal			X	X								6
Hyperplasia, Squamous Atypical, Four, Focal												4
Hyperplasia, Squamous Atypical, Five, Focal		X				X		X		X		5
Hyperplasia, Squamous Atypical, Greater Than Five, Focal					X		X	X		X		19
Hyperplasia, Squamous	2	3	2		2	2	2	2		2	2	31 2.5
Dermis, Inflammation, Chronic Active	2	3	2		2	2	1	1		2	2	31 1.9
Epidermis, Inflammation, Suppurative		4										3 3.7
Epidermis, Necrosis		2									2	5 2.0
Epidermis, Ulcer		4										3 3.7

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 50

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20117 - 02

Test Type: 1-YEAR

Route: SKIN APPLICATION

Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

All-trans-retinyl palmitate

CAS Number: 79-81-2

Date Report Requested: 06/29/2009

Time Report Requested: 16:32:02

First Dose M/F: NA / 06/22/03

Lab: NCTR

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	2	2
	4	0	4	4	2	2	3	2	2	2	3
	1	8	1	1	2	8	4	1	8	8	4

SKH-1 HAIRLESS MICE (NCTR)
MICE FEMALE

ANIMAL ID

.1% RP 13.7SSLF

	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7	7
	0	0	0	0	0	0	0	0	0	0	0
	5	5	5	5	5	5	6	6	6	6	6
	4	5	6	7	8	9	0	1	2	3	4

* TOTALS

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

+

1

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	2	2	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	2	2	2	2	5	2	3	0	5	1	2	0	4	0	0	1	0	0	0	0	2	3	0	3	
	2	2	2	2	0	2	4	3	9	5	2	8	8	8	1	2	1	8	8	1	5	6	5	1	5

SKH-1 HAIRLESS MICE (NCTR) MICE FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
.5% RP 13.7SSLF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	6	6	6	6	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	
ANIMAL ID	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9

**females
(cont...)**

ALIMENTARY SYSTEM
 NONE

CARDIOVASCULAR SYSTEM
 NONE

ENDOCRINE SYSTEM
 NONE

GENERAL BODY SYSTEM
 NONE

GENITAL SYSTEM
 NONE

HEMATOPOIETIC SYSTEM
 NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Edema																					4				
Hyperplasia, Squamous							1	1										1				1	3		
Dermis, Inflammation, Suppurative																		3							

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20117 - 02
 Test Type: 1-YEAR
 Route: SKIN APPLICATION
 Species/Strain: MICE/SKH-1/NCTR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 All-trans-retinyl palmitate
 CAS Number: 79-81-2

Date Report Requested: 06/29/2009
 Time Report Requested: 16:32:02
 First Dose M/F: NA / 06/22/03
 Lab: NCTR

DAY ON TEST	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
	2	2	2	2	2	2	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	5	2	3	0	5	1	2	0	4	0	0	1	0	0	0	0	0	2	3	0	3			
	2	2	2	2	0	2	4	3	9	5	2	8	8	8	1	2	1	8	8	1	5	6	5	1	5			
SKH-1 HAIRLESS MICE (NCTR)	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
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
.5% RP 13.7SSLF	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
ANIMAL ID	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8
	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9			

females (cont...)

Dermis, Inflammation, Chronic Active																												3
Epidermis, Necrosis																												2
Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia, Squamous Atypical, One, Focal		X							X				X															
Hyperplasia, Squamous Atypical, Two, Focal																	X									X		
Hyperplasia, Squamous Atypical, Three, Focal										X																		
Hyperplasia, Squamous Atypical, Four, Focal			X																								X	
Hyperplasia, Squamous Atypical, Five, Focal																												
Hyperplasia, Squamous Atypical, Greater Than Five, Focal				X	X	X				X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Hyperplasia, Squamous	4	3	4	4	3	3	2	1	4	4	3	4	3	2	4	2	3	4		3	2	2	3	4	2		2	
Dermis, Inflammation, Chronic Active	3	3	4	3	3		2		2	3	2	3	3	2	2	2	2	4		3	3	2	1	3	2			
Epidermis, Inflammation, Suppurative			2	3	2							4	2		1													
Epidermis, Necrosis			2	2	3				1	2				3			2		1	3							2	
Epidermis, Ulcer			3	4	2							4	2															

MUSCULOSKELETAL SYSTEM
 NONE

NERVOUS SYSTEM
 NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

	DAY ON TEST																								
	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
	2	2	2	2	2	2	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	2	2	2	2	5	2	3	0	5	1	2	0	4	0	0	1	0	0	0	0	0	2	3	0	3
	2	2	2	2	0	2	4	3	9	5	2	8	8	8	1	2	1	8	8	1	5	6	5	1	5
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	
.5% RP 13.7SSLF	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9

females (cont...)

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	2	2	1	1	1	2	2	2	2	1	2	
	3	0	1	8	9	0	1	3	0	8	2	
	5	8	5	7	8	1	2	4	1	7	8	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	
	0	0	0	0	0	0	0	0	0	0	1	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	0	
.5% RP 13.7SSLF	0	1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Edema												1 4.0
Hyperplasia, Squamous										1		6 1.3
Dermis, Inflammation, Suppurative												1 3.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	2	2	1	1	1	2	2	2	2	1	2
	3	0	1	8	9	0	1	3	0	8	2
	5	8	5	7	8	1	2	4	1	7	8
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7
.5% RP 13.7SSLF	0	0	0	0	0	0	0	0	0	0	1
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	0
	0	1	2	3	4	5	6	7	8	9	0
											* TOTALS

Dermis, Inflammation, Chronic Active											1	2 2.0			
Epidermis, Necrosis												1 2.0			
.....															
Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36			
Hyperplasia, Squamous Atypical, One, Focal												3			
Hyperplasia, Squamous Atypical, Two, Focal											X	3			
Hyperplasia, Squamous Atypical, Three, Focal	X												2		
Hyperplasia, Squamous Atypical, Four, Focal											X	X	4		
Hyperplasia, Squamous Atypical, Five, Focal	X												X	X	4
Hyperplasia, Squamous Atypical, Greater Than Five, Focal											X	X	14		
Hyperplasia, Squamous	2	3	2	3	4	3	3	2	3	2	3	35 2.9			
Dermis, Inflammation, Chronic Active	2	3	2	2	3	1	2	2	2	2	2	33 2.4			
Epidermis, Inflammation, Suppurative											2	9 2.3			
Epidermis, Necrosis	2												3	14 2.1	
Epidermis, Ulcer											2	6 3.2			

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 56

	0	0	0	0	0	0	0	0	0	0	0
DAY ON TEST	2	2	1	1	1	2	2	2	2	1	2
	3	0	1	8	9	0	1	3	0	8	2
	5	8	5	7	8	1	2	4	1	7	8
.....											
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7
	0	0	0	0	0	0	0	0	0	0	1
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	0
.5% RP 13.7SSLF	0	1	2	3	4	5	6	7	8	9	0
											* TOTALS

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	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
	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	6	6	2	4	2	1	4	4	2	5	5	4	4	2	3	1	3	1	2	4	4	4	4	4	0
	3	6	9	7	9	5	3	0	2	6	6	3	9	3	3	5	6	5	9	2	2	8	2	2	9
SKH-1 HAIRLESS MICE (NCTR)	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
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
NOCREAMF20.55SSL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
ANIMAL ID	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3
	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3

females (cont...)

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Abscess					4																				
Cyst Epithelial Inclusion				X				X					X												
Hyperplasia, Squamous																							2		

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	6	6	2	4	2	1	4	4	2	5	5	4	4	2	3	1	3	1	2	4	4	4	4	0	
	3	6	9	7	9	5	3	0	2	6	6	3	9	3	3	5	6	5	9	2	2	8	2	9	
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
NOCREAMF20.55SSL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
ANIMAL ID	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3

females (cont...)

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Abscess																								3
Cyst Epithelial Inclusion																								X
Hyperplasia, Squamous Atypical, One, Focal		X						X																
Hyperplasia, Squamous Atypical, Two, Focal	X						X		X					X	X				X			X		X
Hyperplasia, Squamous Atypical, Three, Focal					X	X						X						X						X
Hyperplasia, Squamous Atypical, Four, Focal			X	X						X							X					X		
Hyperplasia, Squamous Atypical, Five, Focal													X	X										
Hyperplasia, Squamous Atypical, Greater Than Five, Focal									X	X														
Hyperplasia, Squamous	2	4		2			1	2	1	2	2	2		2	1	2	2	2	2	2	1	2	1	
Dermis, Inflammation, Chronic Active	2	2	4	1				2		2	2	2		2			4	1			4	2		
Epidermis, Inflammation, Suppurative				2													2					4		
Epidermis, Necrosis		2																						
Epidermis, Ulcer			4										2				4					4		

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	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		
	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
	6	6	2	4	2	1	4	4	2	5	5	4	4	2	3	1	3	1	2	4	4	4	4	4	0		
	3	6	9	7	9	5	3	0	2	6	6	3	9	3	3	5	6	5	9	2	2	8	2	2	9		
.....																											
SKH-1 HAIRLESS MICE (NCTR)	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	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
NOCREAMF20.55SSL	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	
	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3		

females (cont...)

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	2	2	1	2	2	2	2	2	2	2	2	
	2	4	8	3	3	2	3	2	3	3	2	
	8	1	7	5	5	1	4	8	4	4	8	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	2	2	2	2	2	2	2	2	2	2	2	
NOCREAMF20.55SSL	3	3	3	3	3	3	4	4	4	4	4	
	4	5	6	7	8	9	0	1	2	3	4	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

Skin, Control	+	+	+	+	+	+	+	+	+	+	+	36
Abscess												1 4.0
Cyst Epithelial Inclusion		X										4
Hyperplasia, Squamous												1 2.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	2	2	1	2	2	2	2	2	2	2	2
	2	4	8	3	3	2	3	2	3	3	2
	8	1	7	5	5	1	4	8	4	4	8
.....											
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7
	2	2	2	2	2	2	2	2	2	2	2
ANIMAL ID	3	3	3	3	3	3	4	4	4	4	4
NOCREAMF20.55SSL	4	5	6	7	8	9	0	1	2	3	4
											* TOTALS

Skin, Site Of Application	+	+	+	+	+	+	+	+	+	+	+	36	
Abscess													1 3.0
Cyst Epithelial Inclusion				X									2
Hyperplasia, Squamous Atypical, One, Focal						X	X						4
Hyperplasia, Squamous Atypical, Two, Focal											X		9
Hyperplasia, Squamous Atypical, Three, Focal			X						X				7
Hyperplasia, Squamous Atypical, Four, Focal				X						X			7
Hyperplasia, Squamous Atypical, Five, Focal					X			X					4
Hyperplasia, Squamous Atypical, Greater Than Five, Focal	X	X											4
Hyperplasia, Squamous	2	2		1		2	2	1	1	2	2		28 1.8
Dermis, Inflammation, Chronic Active	2			1		1	1	1	1	1	1		21 1.9
Epidermis, Inflammation, Suppurative													3 2.7
Epidermis, Necrosis													1 2.0
Epidermis, Ulcer													4 3.5

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 62

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	2	2	1	2	2	2	2	2	2	2	2	
	2	4	8	3	3	2	3	2	3	3	2	
	8	1	7	5	5	1	4	8	4	4	8	
.....												
SKH-1 HAIRLESS MICE (NCTR)	0	0	0	0	0	0	0	0	0	0	0	
MICE FEMALE	7	7	7	7	7	7	7	7	7	7	7	
	2	2	2	2	2	2	2	2	2	2	2	
ANIMAL ID	3	3	3	3	3	3	4	4	4	4	4	
NOCREAMF20.55SSL	4	5	6	7	8	9	0	1	2	3	4	* TOTALS

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

*** END OF REPORT ***

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked