Supplemental Table 1. *Safety Endpoints*

		Systemic Safety Endpoints				Treated Site Safety Endpoints		
Participant	**Visit**	**Increased blistering outside of treated areas**	**Circulating – antibodies[a]**	**Recombinant retrovirus [b]**	**Cytotoxic T cells**	**Treat-ment Site infection**	**SCC[c]**	**Tissue bound C7 antibodies[d]**
1	**1 mo.**	- [e]	-	ND	-	Site C	-	Site E: -
	3 mos.	-	-	-	-	-	-	Site D and Z: -
	6 mos.	-	-	-	-	-	-	Site E and Z: -
	12 mos.	-	-	-	-	-	-	Site E: -
	2 yrs.	-	-	-	ND	-	-	Site A and Z: - Site C: Rare IgM positive colloid bodies, negative at BMZ Site E: Rare IgM positive colloid bodies, negative at BMZ
	3 yrs.	-	-	-	ND	-	-	ND
	4 yrs.	-	ND	-	ND	-	-	ND
	5 yrs.	-	-	-	ND	-	-	ND
2	**1 mo.**	-	-	ND	-	Site A	-	Site D: -
	3 mos.	-	-	-	-	-	-	Site A: 1+IgG, 1+IgM, dull IgA Site B: - Site E: 2+IgG, trace IgM, 1+fibrinogen
	6 mos.	-	-	-	-	-	-	Site A, C, and D: -
	12 mos.	-	-	-	-	-	-	Site Z: trace IgA
	2 yrs.	-	-	-	-	-	-	ND
	3 yrs.	-	ND	-	ND	-	-	ND
	4 yrs.	-	-	-	ND	-	-	ND
3	**1 mo.**	-	-	ND[5]	-	-	-	ND
	3 mos.	-	1:320 IgA [f]	-	-	-	-	Site A and C: -
	6 mos.	-	-	-	-	Site Z	-	Site A: trace IgA, trace to 1+ IgM Site B: trace IgM Site D: 1+ IgM
	12 mos.	-	-	-	-	-	-	Site A, B, and C: -
	2 yrs.	-	ND	-	ND	-	-	ND
	3 yrs.	-	ND	-	ND	-	-	ND
	4 yrs.	-	-	-	ND	-	-	ND
4	**1 mo.**	-	1:160 IgG	ND	-	-	-	Site A: -
	3 mos.	-	1:160 IgG	-	-	-	-	Site D: 1-2+ IgG, 1+ IgA, trace IgM, 1+ focal C3 Site E: 1-2+ IgG, 1-2+ IgA, 1+ IgM, 1+ focal C3

							Site Z: 1+ IgG, 1+ IgA, trace IgM, 1+ focal C3
	6 mos.	-	1:40 IgG, 1:80 IgA and 1:40 C3	-	ND	-	-	Site D and E: -
	12 mos.	-	-	-	-	-	-	Site E and Z: -
	2 yrs.	-	-	-	-	-	-	Site E: 2+ IgM, 2+ IgA, trace C3, 2+ IgG
	3 yrs.	-	-	-	ND	-	-	ND
5	**1 mo.**	-	-	ND	-	-	-	ND
	3 mos.	-	-	-	-	-	-	Site E: IB
	6 mos.	-	-	-	-	-	-	Site A and B: -
	12 mos.	-	-	-	-	-	-	Site E: IB
	2 yrs.	-	-	-	ND	-	-	ND
6	**1 mo.**	-	-	ND	ND	-	-	ND
	3 mos.	-	-	-	ND	-	-	Site C and E: ND
	6 mos.	-	-	-	ND	-	-	Site A: 2+IgM, trace C3 Site E: trace IgM
	12 mos.	-	-	-	ND	-	-	Site E: -
	2 yrs.	-	-	-	ND	-	-	ND
7	**1 mo.**	-	-	-	ND	-	-	ND
	3 mos.	-	-	-	ND	-	-	Site B: IB
	6 mos.	-	ND	ND	ND	-	-	Site C: -
	12 mos.	-	-	-	ND	Site F	-	Site C: IB

[a] Assayed by indirect immunofluorescence using patient serum on monkey esophagus to detect antibodies localized to basement membrane zone
[b] Recombinant retrovirus: replication competent retrovirus (RCR) present in blood
[c] Clinical evidence of squamous cell carcinoma (SCC) or other neoplasm on treated sites
[d] Assayed by direct immunofluorescence using patient skin biopsy to detect antibodies localized to basement membrane zone
[e] A (-) indicates a negative result
[f] Circulating antibodies with 1:40 or greater are reported
BMZ: Basement Membrane Zone, IB: incomplete biopsy (includes biopsies where the epidermis is lost or there is inadequate tissue for a full evaluation), ND: not determined either because the test was not completed or results were inconclusive

Supplemental Table 2. Key Adverse Events

Adverse event	Grade 1-2	Grade 3	Grade 4	Death	Relationship to Study Treatment
Wound infection (N=6)	n=10	-	-	-	Probably related (n=2)[a] Not related (n=8)
Pruritus (N =3)	n=5	-	-	-	Probably related (n=1) Possibly related (n=2) Unlikely to be related (n=1) Not related (n=1)
SCC (N =2)	-	n=3	n=1	-	Not related (n=4)
Pain (N=2)	n=2	-	-	-	Probably related (n=1) Not related (n=1)
Wound drainage (N=1)	n=1	-	-	-	Possibly related (n=1)
Post-operative hemorrhage (N=1)	n=1	-	-	-	Probably related (n=1)

[a]Participant 1 (between Day 7 and Day 14) and Participant 3 (Day 9) developed infection of a treated site within 2 weeks of surgery. These were characterized as “probably related.” The remainder of wound infections all occurred 3 months after treatment or later, and were determined not to be related to the treatment.
Grading of adverse events is based on the National Cancer Institute’s Common Terminology Criteria for Adverse Events
n: number of occurrences, N: number of participants, (-) denotes no adverse events, SCC: cutaneous squamous cell carcinoma

Supplemental Figure 1. *CONSORT Diagram*