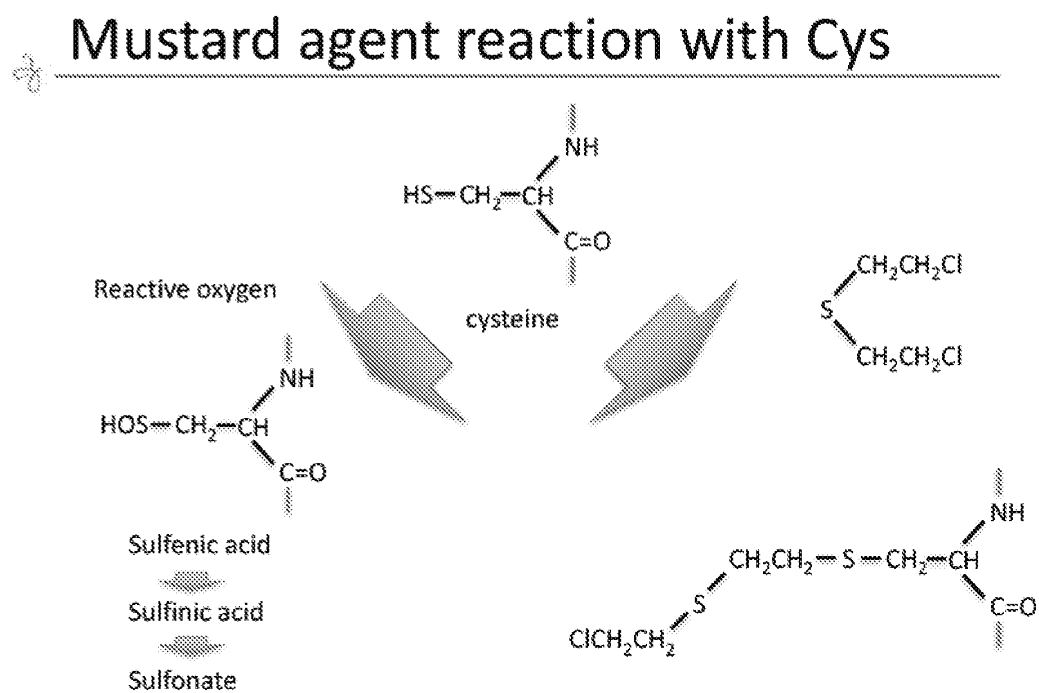
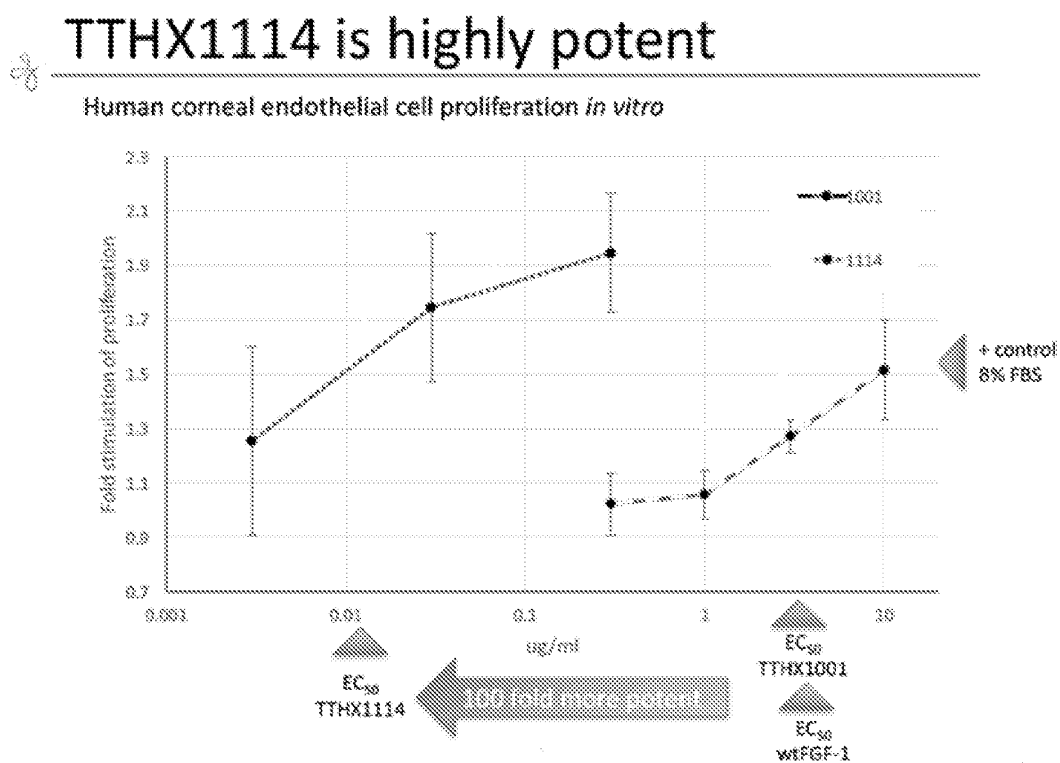


FIG. 1



2/12

FIG. 2



3/12

FIG. 3

Cornea organ culture – rocker model

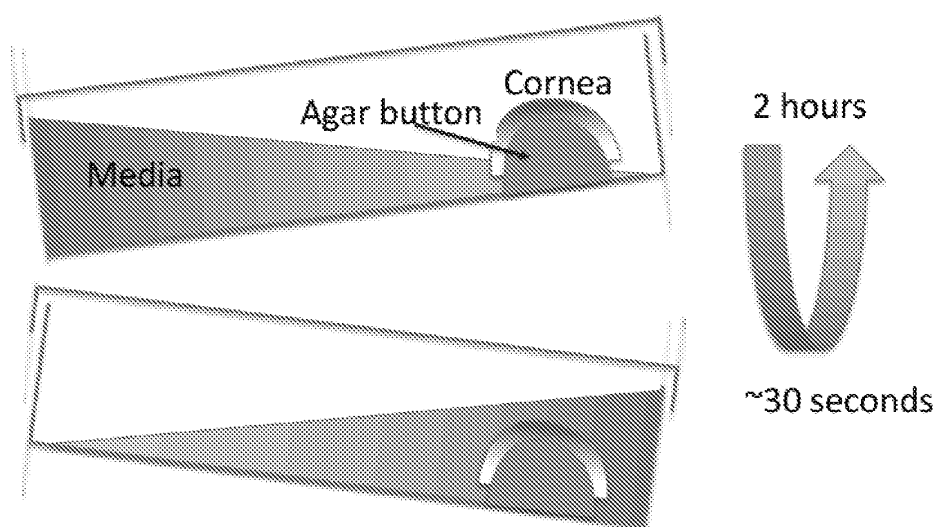


FIG. 4

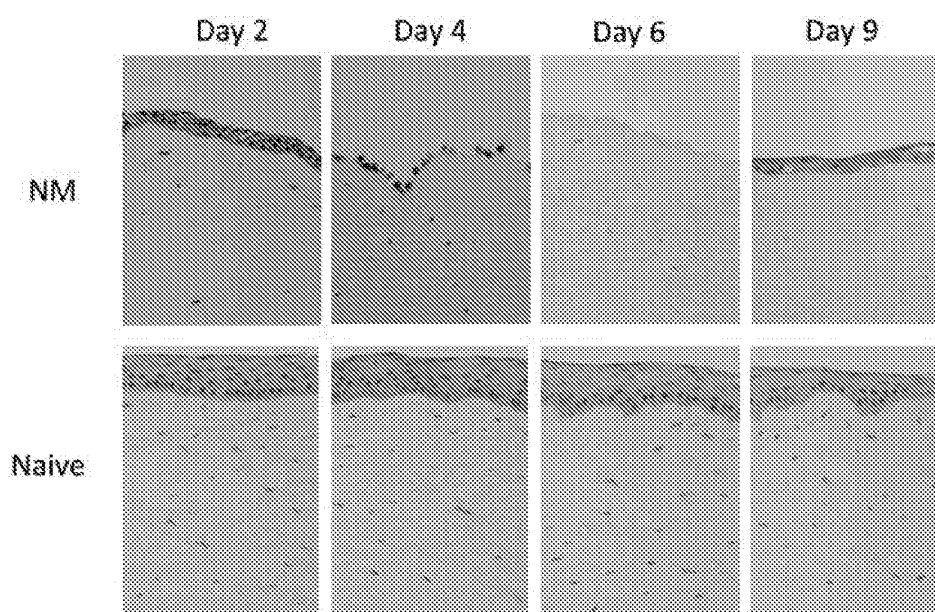
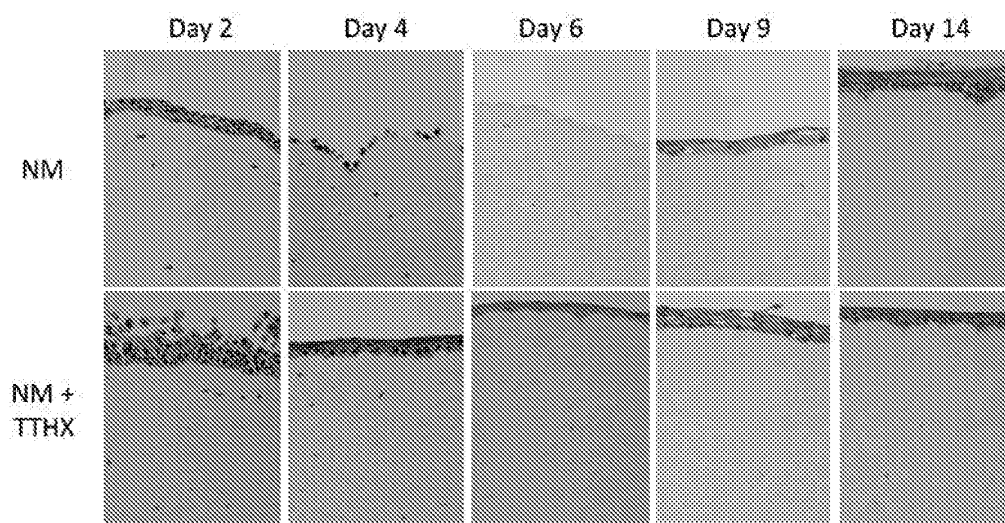


FIG. 5

TTHX1114 protects against NM



6/12

FIG. 6

Histopathological grading



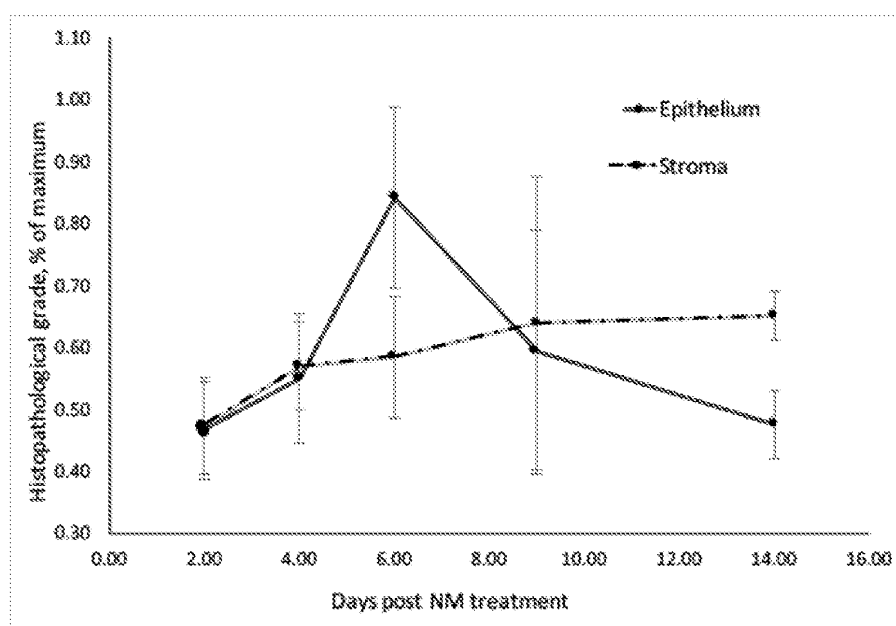
Paraformaldehyde fixed, paraffin embedded, H&E stain

Epidermal Layer	Stromal Layer
Total Epidermal Differentiation	Stroma
1 Normal 3 layer, good differentiation 2 Disruption in differentiation 3 Single layer only 4 Single layer, partial coverage 5 No epidermis present	1 No disruption/vacuoles present 2 Vacuoles around some keratocytes 3 Vacuoles around most keratocytes 4 Generalized disruption to stroma
Basal Layer	Keratocytes
1 Columnar formation proper orientation 2 Columnar and rounded with some orientation 3 Rounded, erratic orientation 4 Rounded, erratic orientation, partial coverage 5 No BL present	1 Increased number of keratocytes 2 Present, in normal alignment to EPI 3 Abnormal number, shape (mild) 4 Abnormal number, shape (moderate) 5 Loss of keratocytes
Epithelial Intracellular Adhesion (EIA)	
1 No breaks in EIA 2 Mild breaks in EIA 3 Moderate breaks in EIA 4 No EIA – cells separated 5 No epithelium present	

7/12

FIG. 7

NM damage to epithelia and stroma

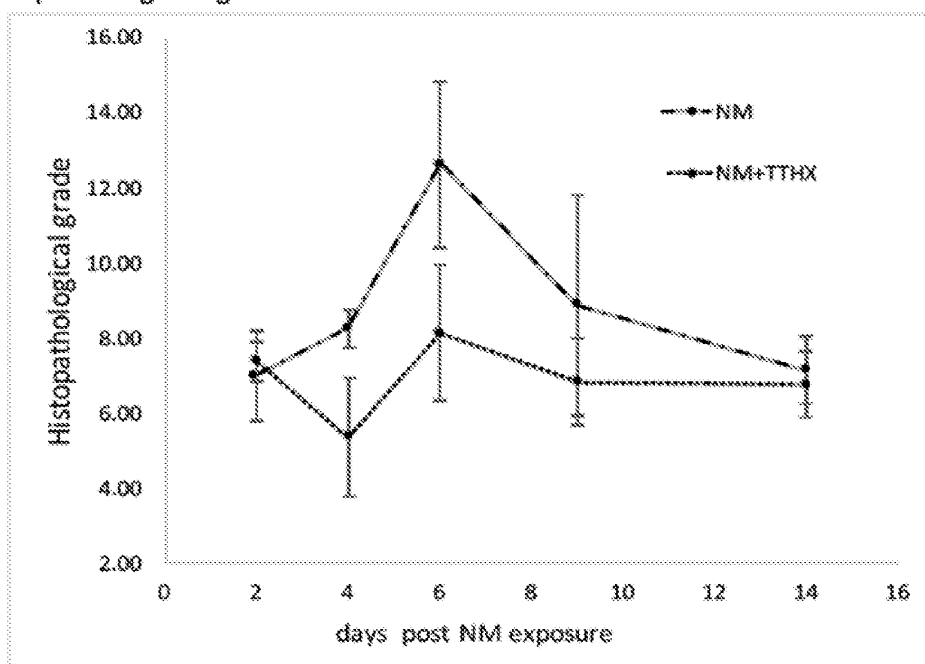


8/12

FIG. 8

TTHX1114 protects against NM injury

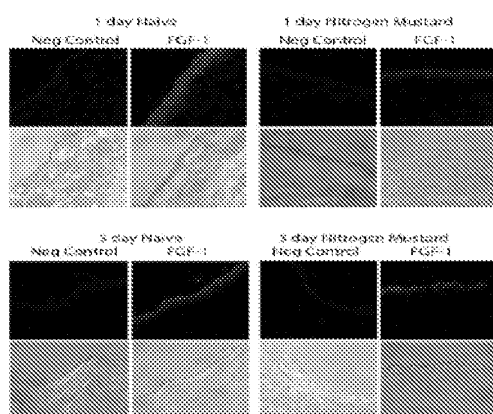
Epithelial grading



9/12

FIG. 9

3/8 FGF-1 levels reduced by nitrogen mustard



10/12

FIG. 10A

Naive

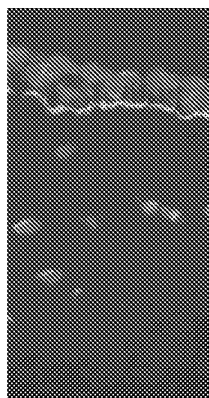
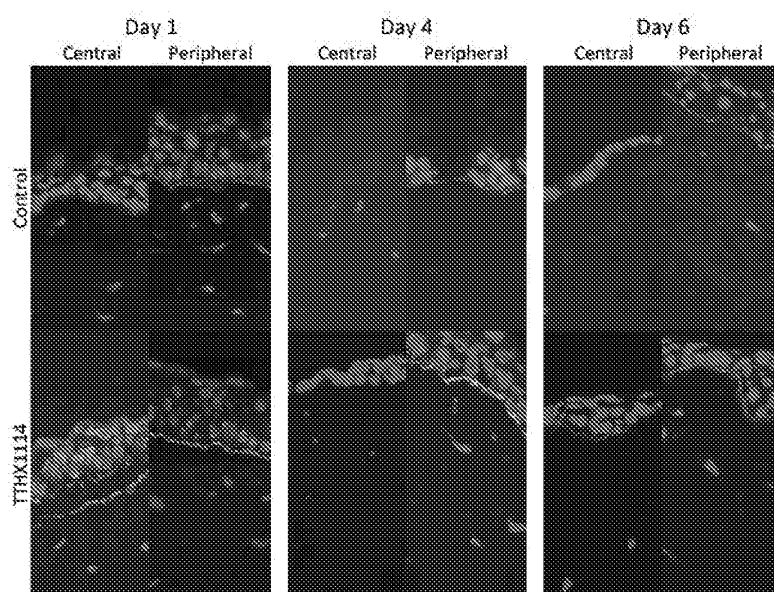
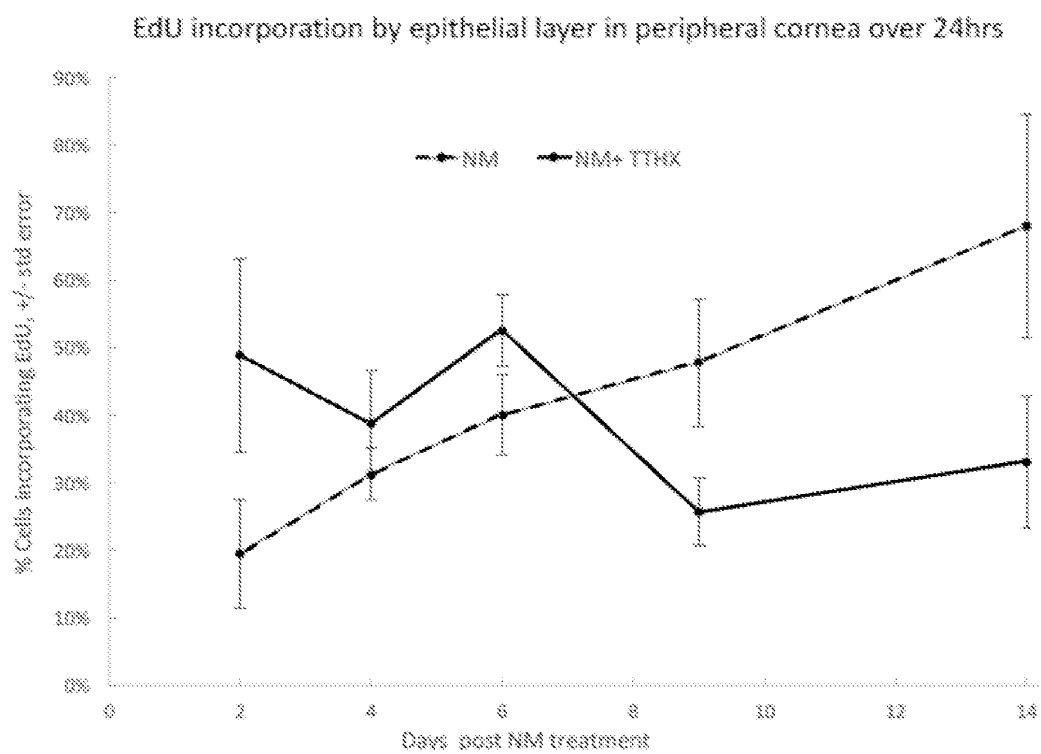


FIG. 10B



11/12

FIG. 11



12/12

FIG. 12

