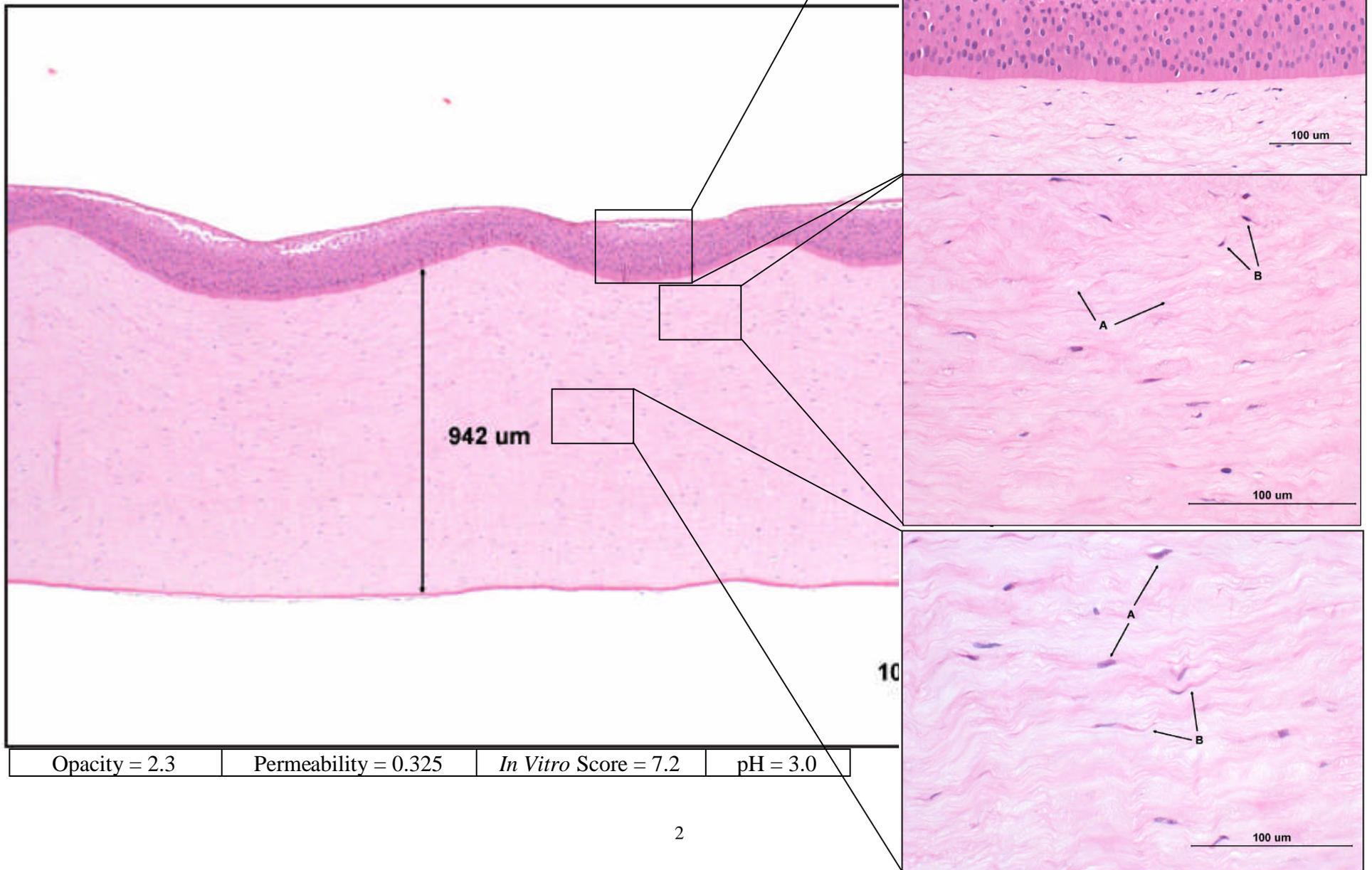
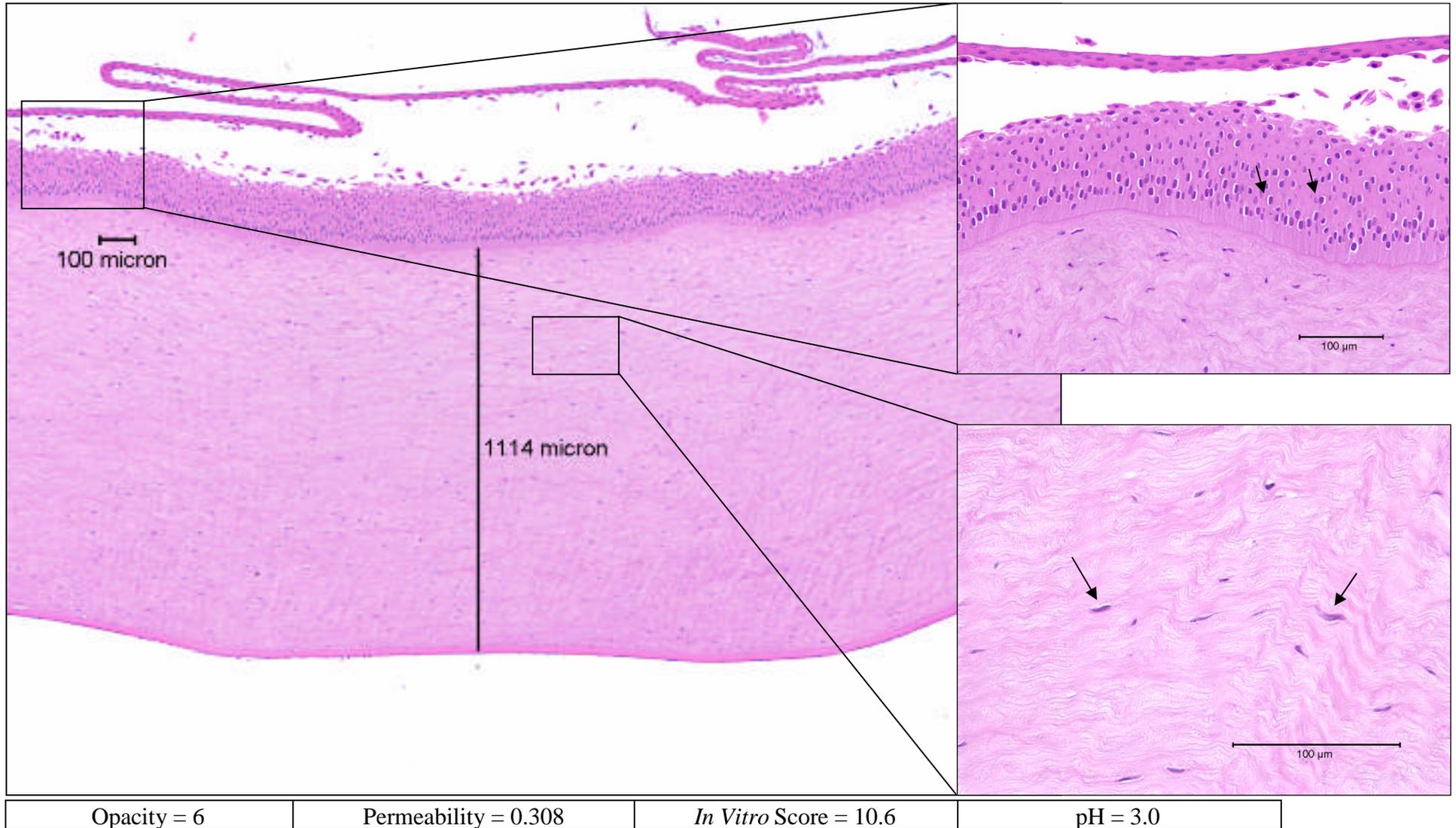


# **REACTIVE CHEMISTRIES**

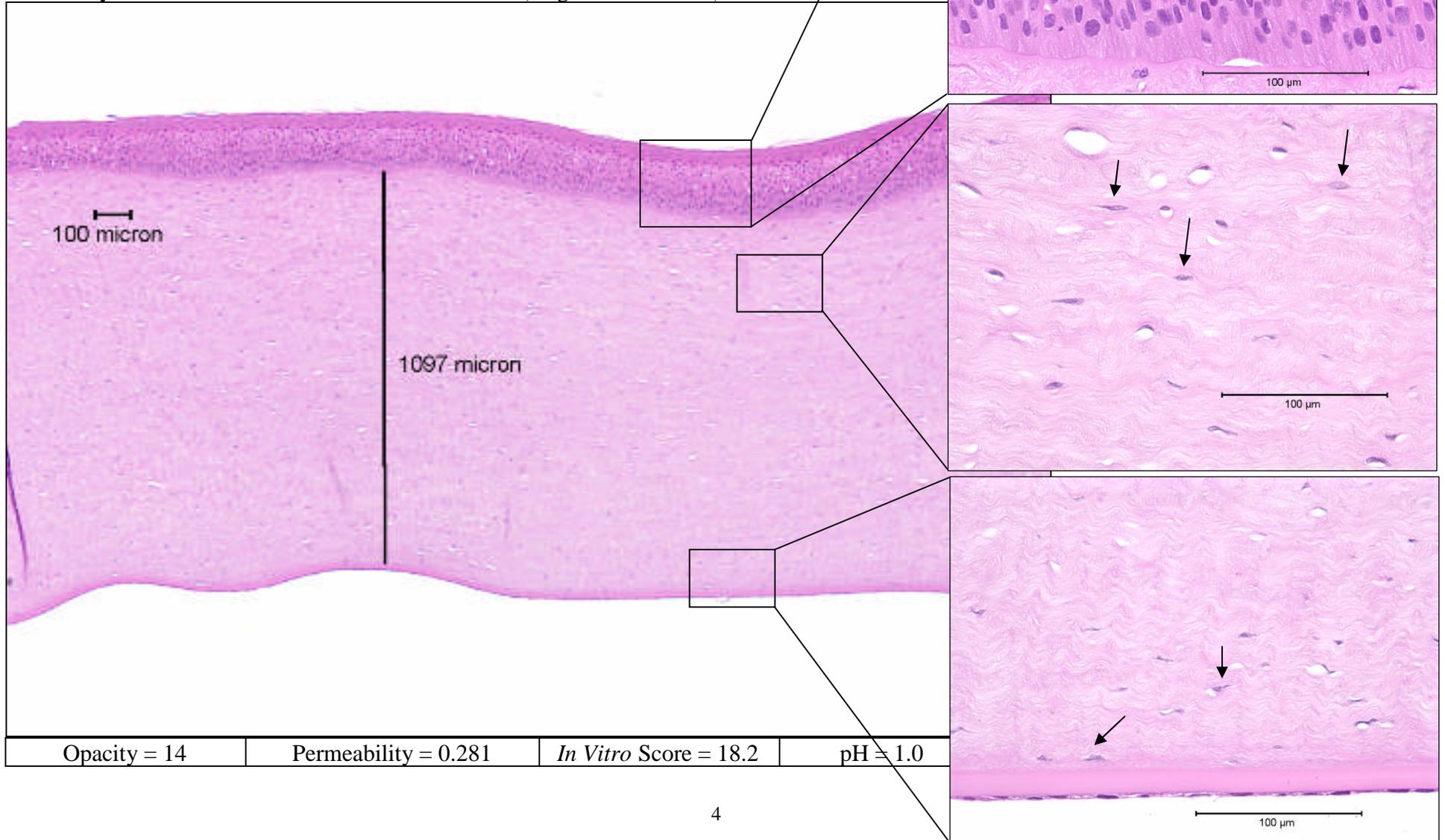
06AB76 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (3/29/06) – Full thickness (magnification 4X). Upper right – Epithelium with sloughing of the squamous layer (magnification 20X). Middle right – Upper stroma with expansion of the collagen matrix (A) and pyknotic keratocyte nuclei (B) (magnification 40X). Lower right – Mid stroma with vacuolated keratocyte nuclei (A) and eosinophilic cytoplasm (B) (magnification 40X).



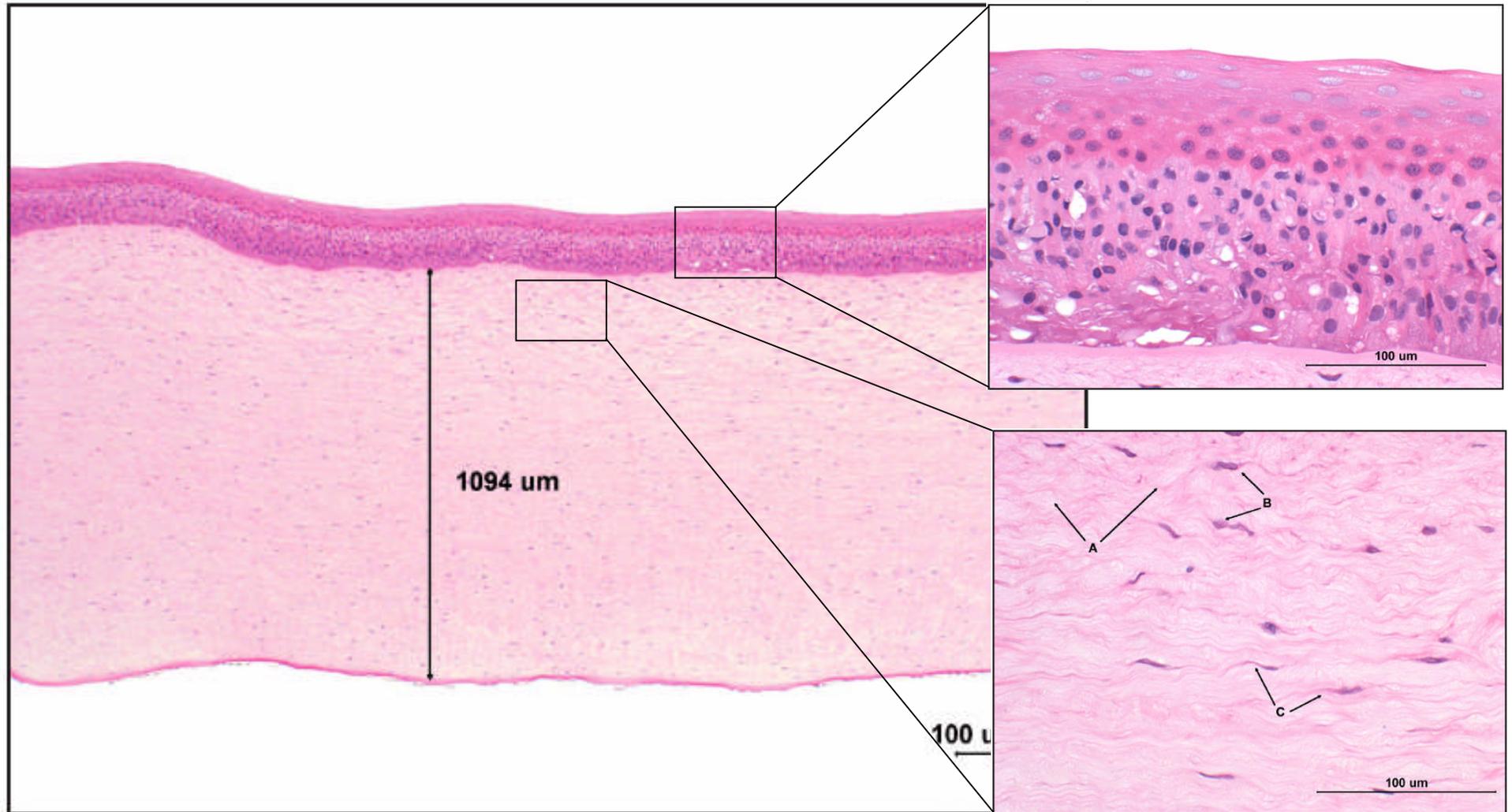
05AG43 (5-10% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (11/02/05) - Full thickness (magnification 48x). Upper right - Epithelium (note the presence of nuclear halos) (magnification 237x). Middle right - Stroma at 20% depth showing moderate collagen matrix vacuolization and a slight increase in keratocytes with larger nuclei (magnification 475x).



05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (09/08/05) - Full thickness (magnification 48x). Upper right - Epithelium showing coagulation of the squamous cells, nuclear condensation and cytoplasmic vacuolization in the upper wing cells and cytoplasmic vacuolization in the basal cells (magnification 475x). Middle right - Stroma at 20% depth showing moderate collagen matrix vacuolization and a marked increase in keratocytes with abnormal chromatin condensation (magnification 475x). Lower right - Stroma at just above Descemet's Membrane showing slight to moderate collagen matrix vacuolization and an increase in keratocytes with abnormal chromatin condensation (magnification 475x).

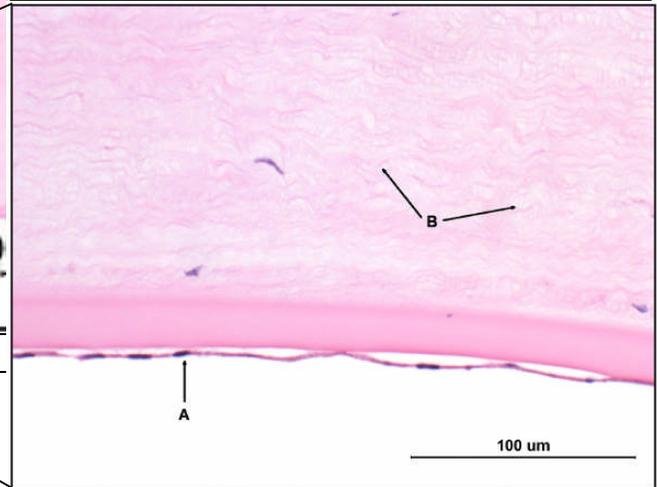
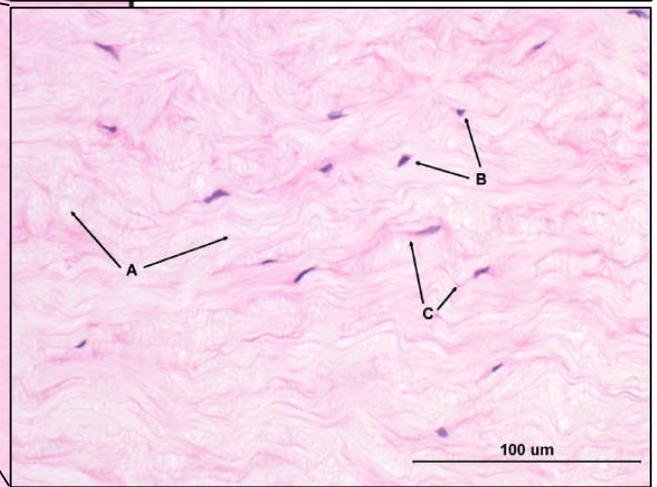
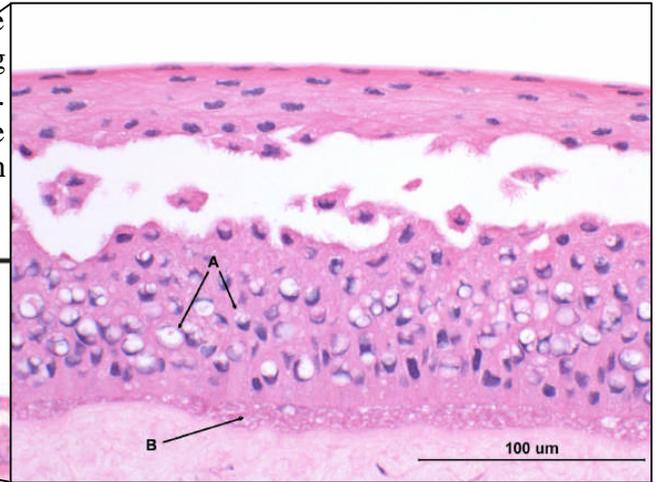
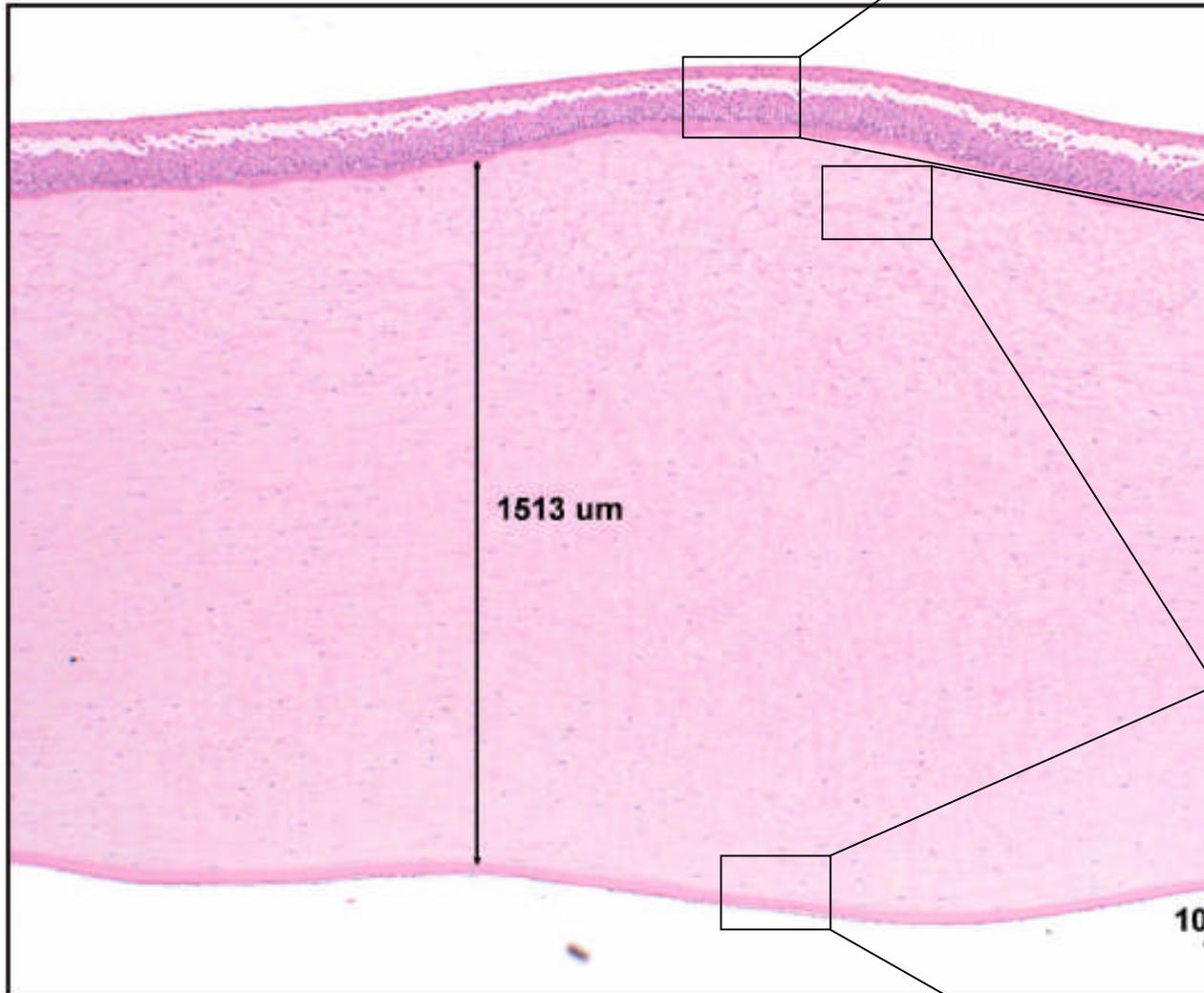


05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (3/29/06) – Full thickness (magnification 4X). Upper right – Epithelium with full thickness necrosis (magnification 40X). Lower right – Upper stroma with expansion of the collagen matrix (A), vacuolation of keratocyte nuclei (B), and eosinophilic cytoplasm (C) (magnification 40X).



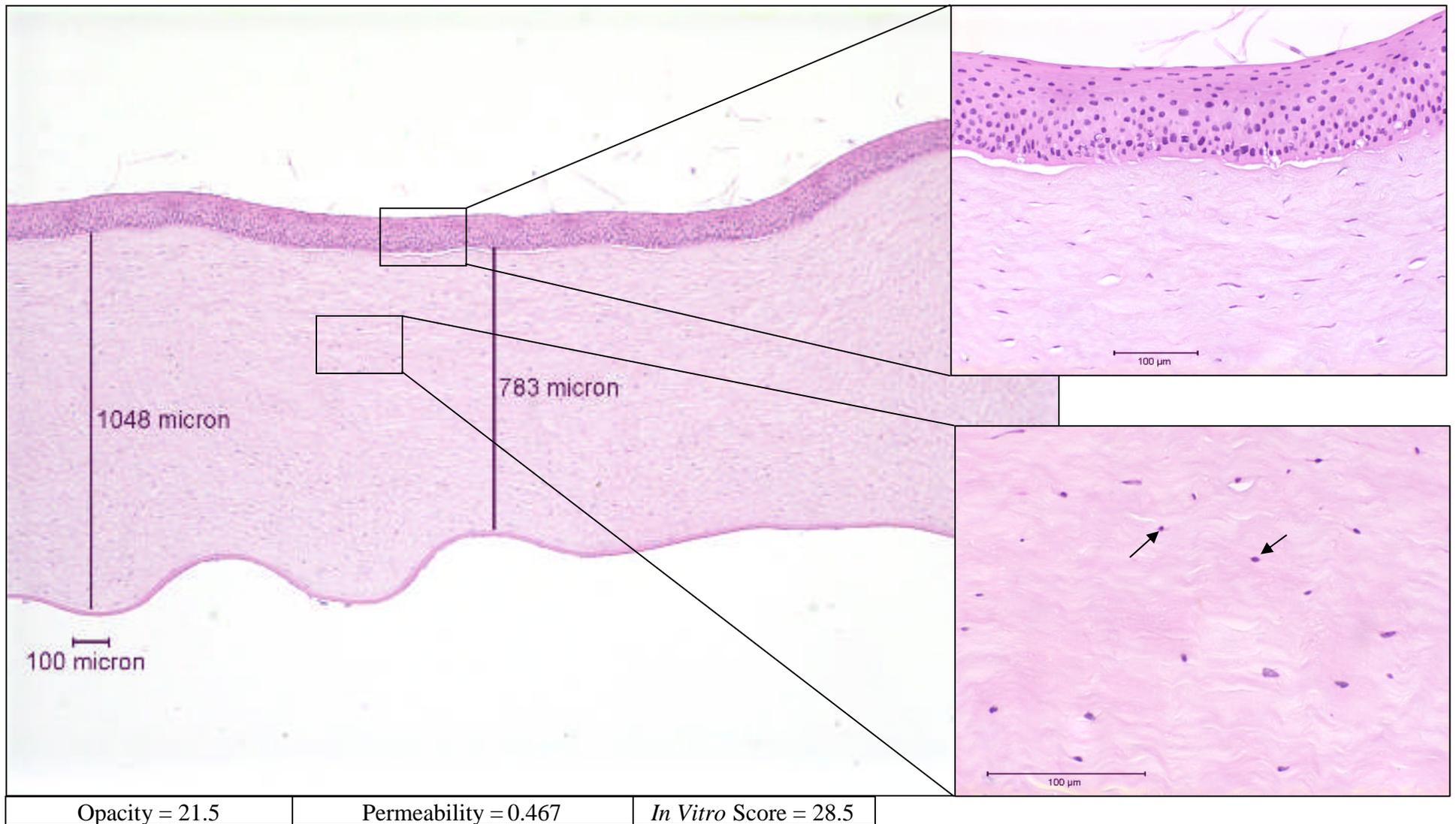
Opacity = 16.7	Permeability = 0.333	<i>In Vitro</i> Score = 21.7	pH = 1.0
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06AB76 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Full thickness (magnification 4X). Upper right – Epithelium with vacuolation of wing and basal cells (A) and separation of basal layer from basal lamina (B) (magnification 40X). Middle right – Upper stroma with vacuolation of the collagen matrix (A), pyknotic keratocyte nuclei (B), and eosinophilic cytoplasm (C) (magnification 40X). Lower right – Endothelium with enlarge hyperchromatic nuclei (A) and expanded lower stroma (B) (magnification 40X).

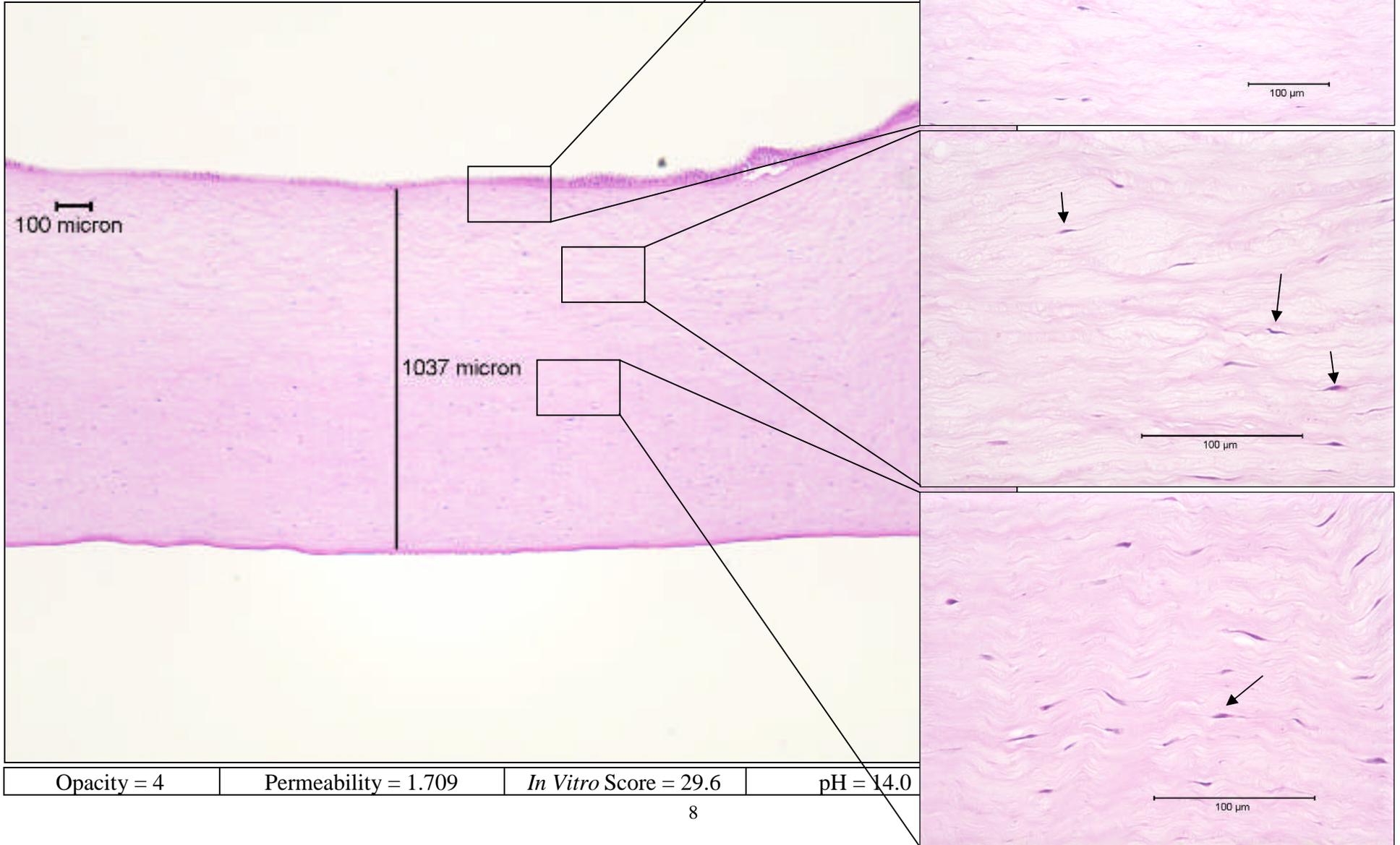


Opacity = 7.2	Permeability = 0.994	<i>In Vitro</i> Score = 22.1	pH = 3.0
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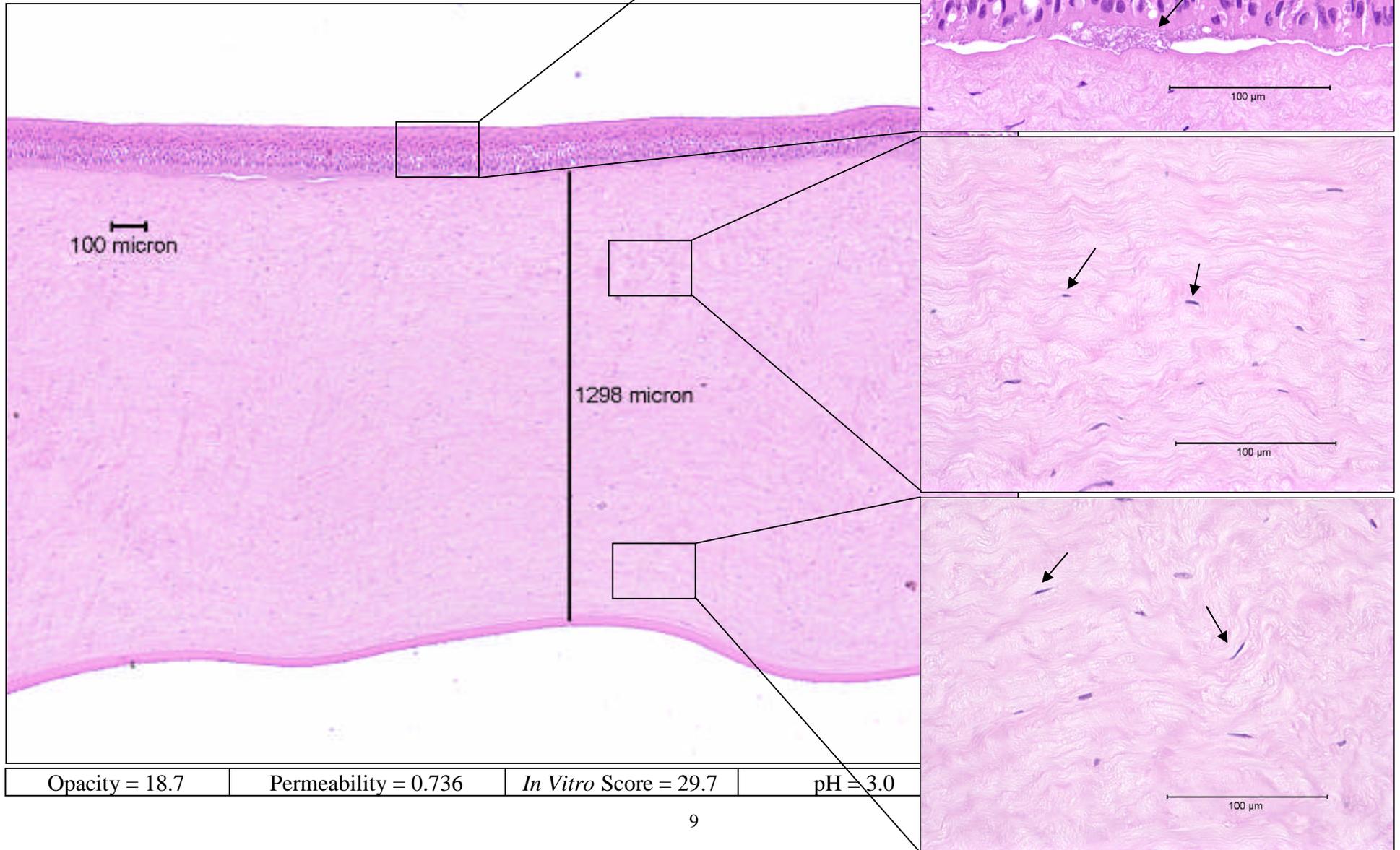
Parafluoroanaline, neat, 10-min exposure, 20-hour post-exposure (11/25/98) – Full thickness (magnification 48x). Upper right - Increasing separation of basal cells from basal lamina, and death of keratocytes with increasing incubation (magnification 237x). Lower right - Stroma at 30% depth showing moderate collagen matrix vacuolization and keratocyte nuclear changes (magnification 475x).



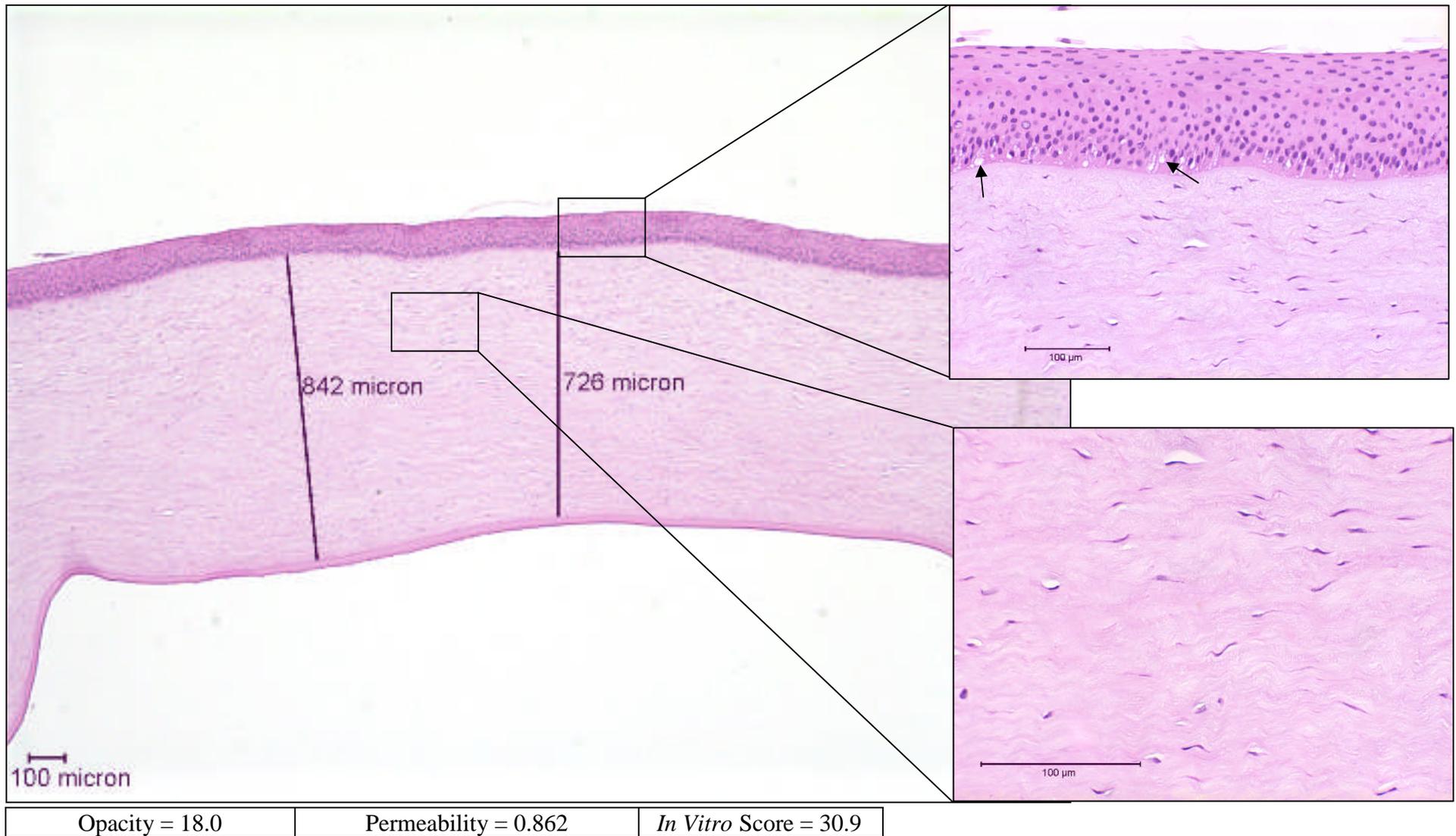
05AD99 (1-5% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Full thickness (magnification 48x). Upper right - Epithelium (largely lost) (magnification 237x). Middle right - Stroma at 20% depth showing marked collagen matrix vacuolization and a marked/moderate frequency of keratocytes with nuclear condensation and slight cytoplasmic eosinophilia (magnification 475x). Lower right - Stroma at mid depth showing more moderate collagen matrix vacuolization and keratocytes with larger nuclei and cytoplasmic eosinophilia (mag 475x).



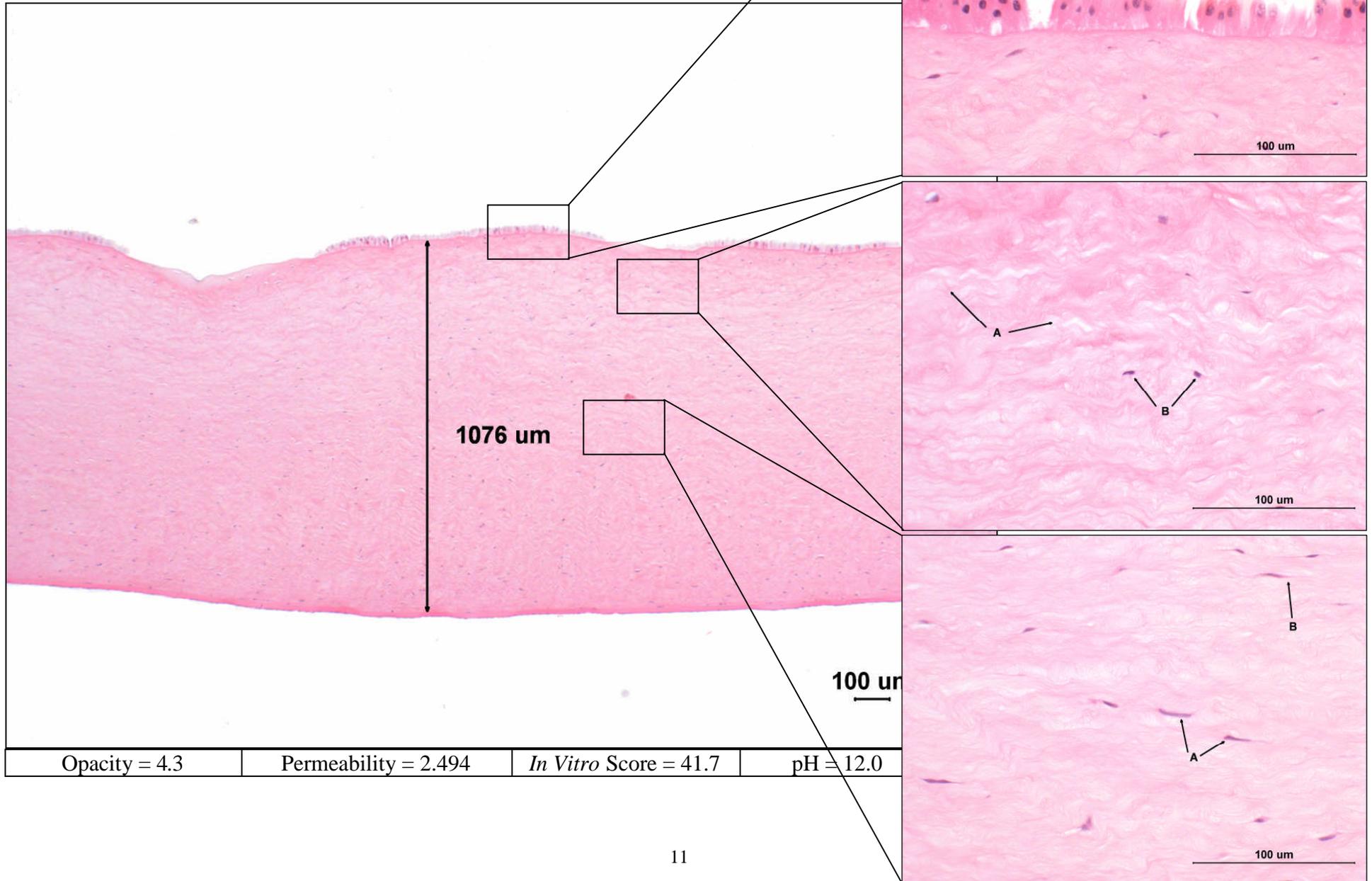
05AG43 (5-10% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (11/02/05) - Full thickness (mag 48x). Upper right - Epithelium showing coagulation of all three cell layers and precipitate between the basal cells and Bowman's Layer (mag 475x). Middle right - Stroma at 20% depth showing moderate to marked collagen matrix vacuolization and a marked increase in the frequency of keratocytes with hyper-condensed nuclei (mag 475x). Lower right - Stroma below mid depth showing moderate to marked collagen matrix vacuolization and a marked increase in the frequency of keratocytes with hyper-condensed nuclei (mag 475x).



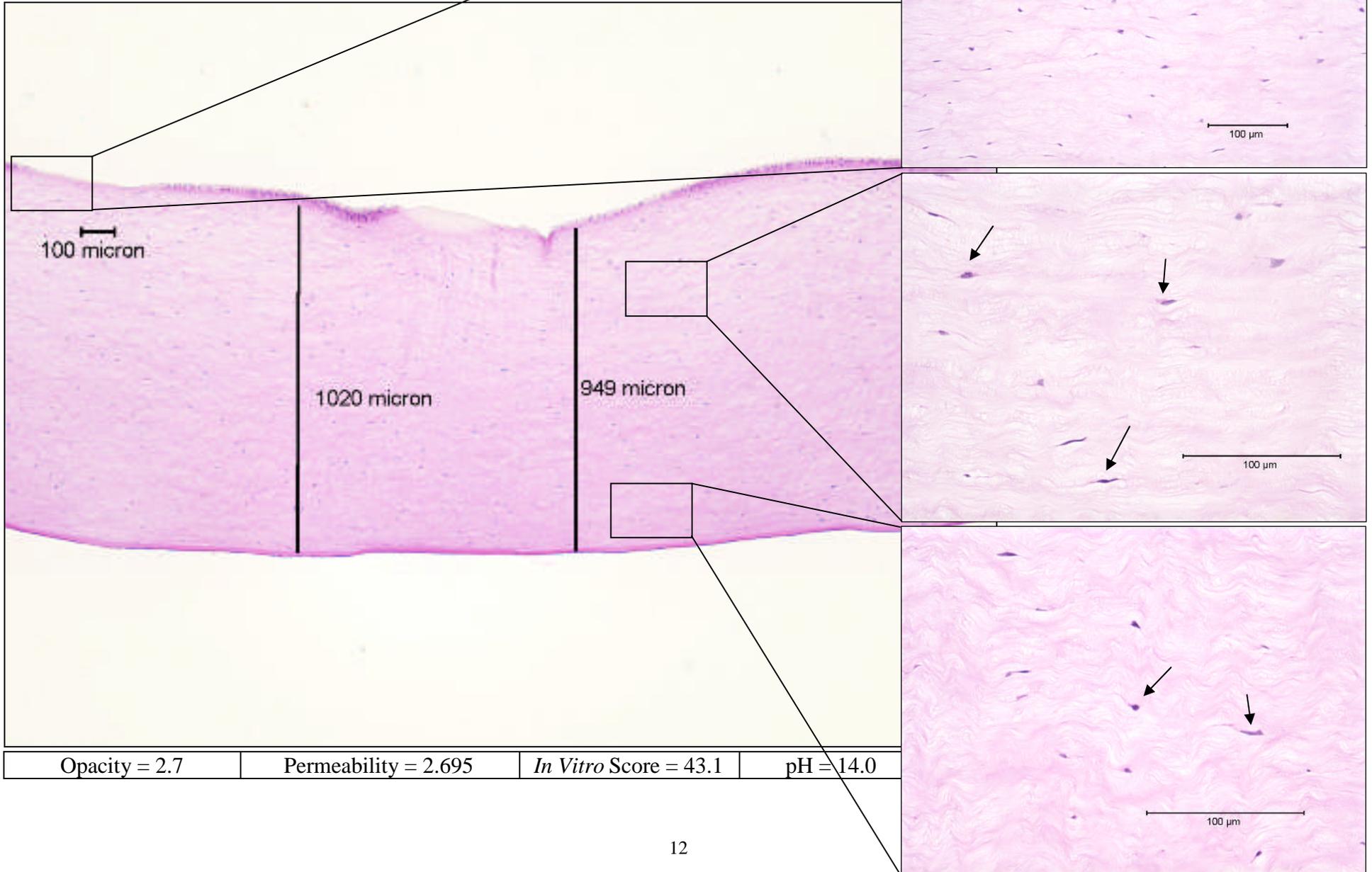
Parafluoroanaline, neat, 10-min exposure, 2-hour post-exposure (11/25/98) – Full thickness (magnification 48x). Upper right - Increasing separation of basal cells from basal lamina (magnification 237x). Lower right - Stroma at 20-30% depth showing keratocyte nuclear pyknosis and cytoplasmic eosinophilia (also moderate collagen matrix vacuolation) (magnification 475x).



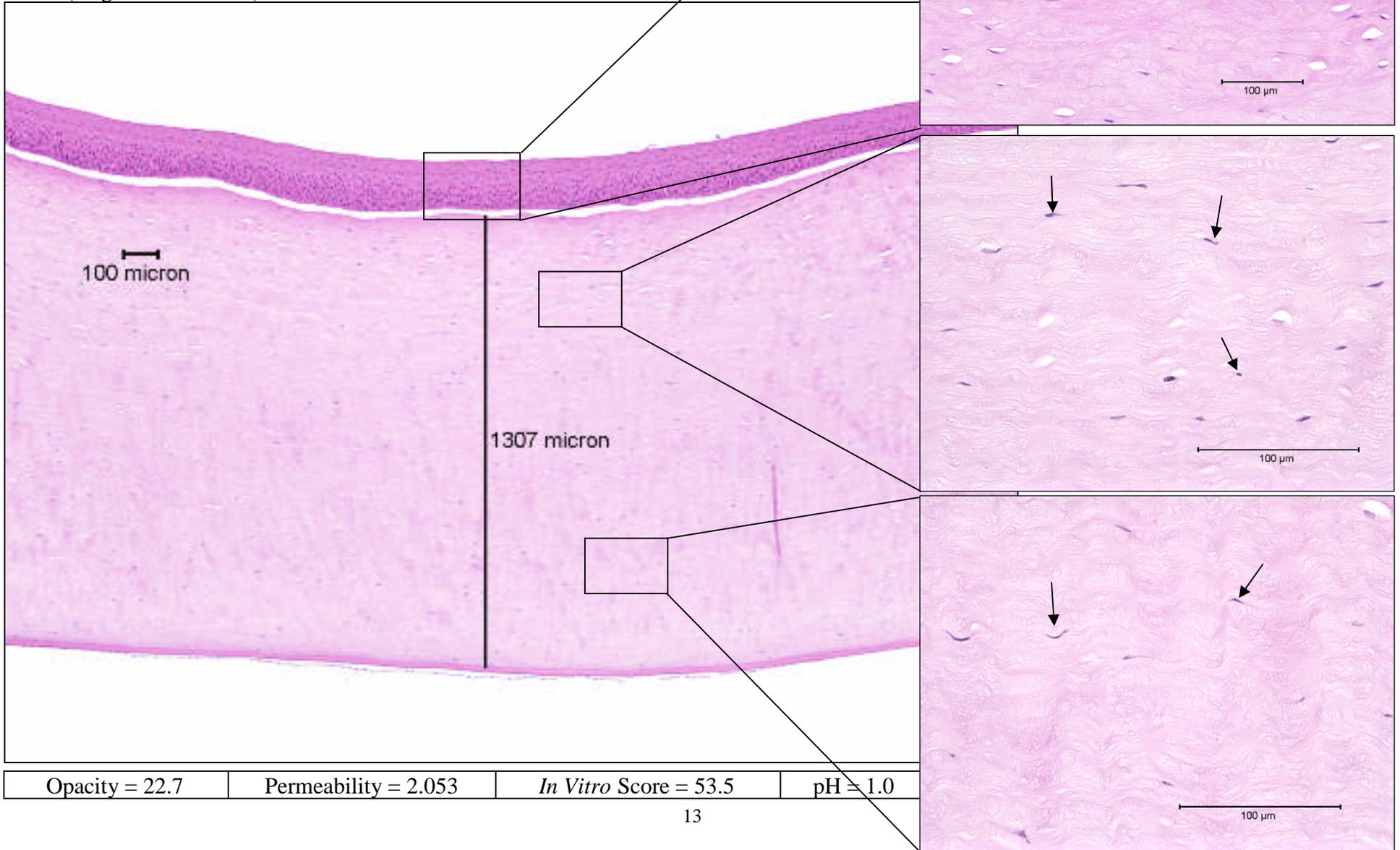
06AA45 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Full thickness (magnification 4X). Upper right – Necrotic epithelial remnants (magnification 40X). Middle right – Upper stroma with expansion of the collagen matrix (A) and pyknotic nuclei (B) (magnification 40X). Lower right – Mid stroma with vacuolated keratocyte nuclei (A) and hyper eosinophilic cytoplasm (B) (magnification 40X).



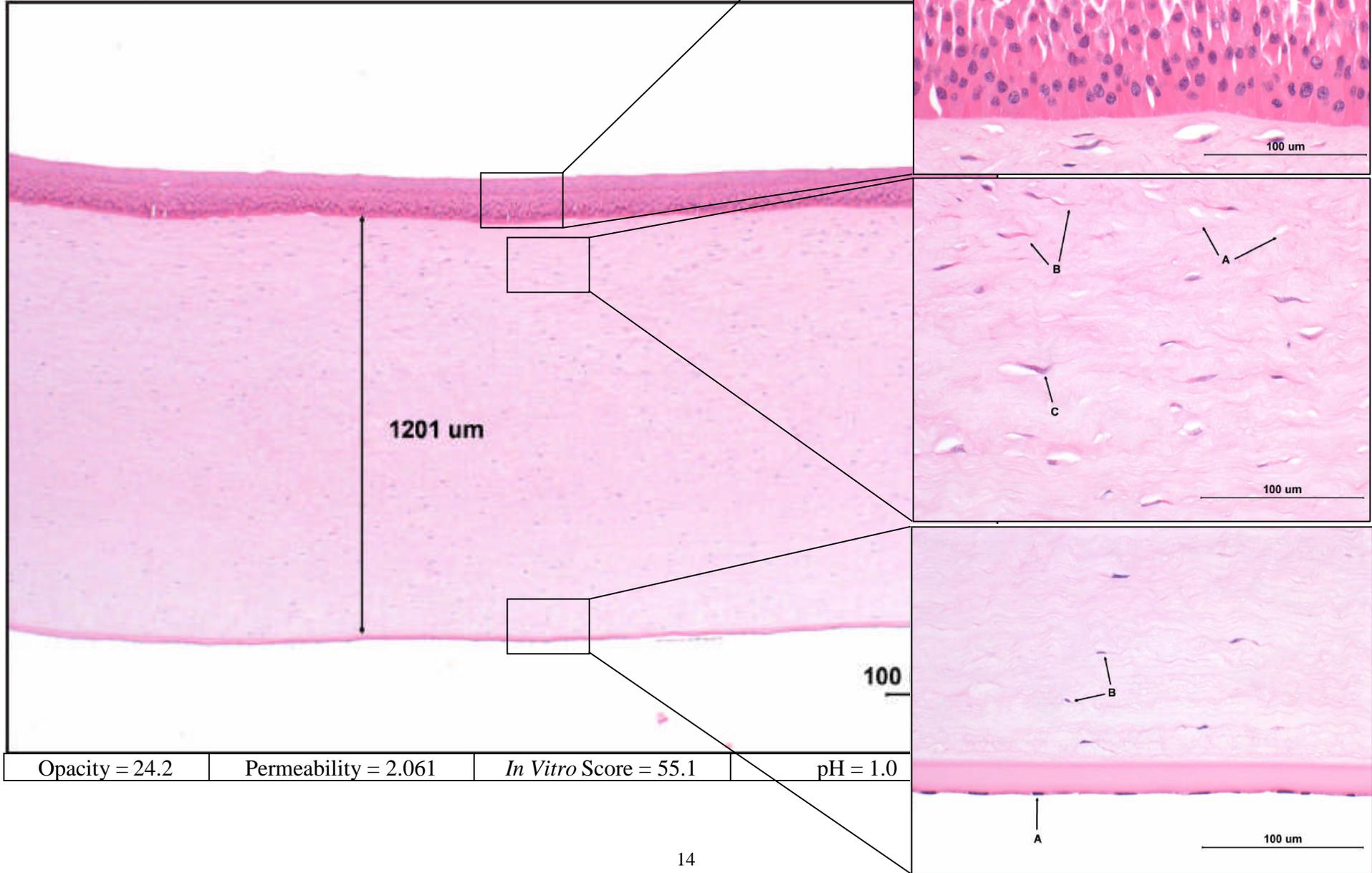
05AD99 (1-5% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Full thickness (magnification 48x). Upper right - Epithelium (largely lost) (magnification 237x). Middle right - Stroma at 20% depth showing marked collagen matrix vacuolization and a marked/moderate frequency of keratocytes with nuclear condensation and slight cytoplasmic eosinophilia (magnification 475x). Lower right - Deep stroma showing keratocytes with nuclear enlargement and cytoplasmic eosinophilia (magnification 475x).



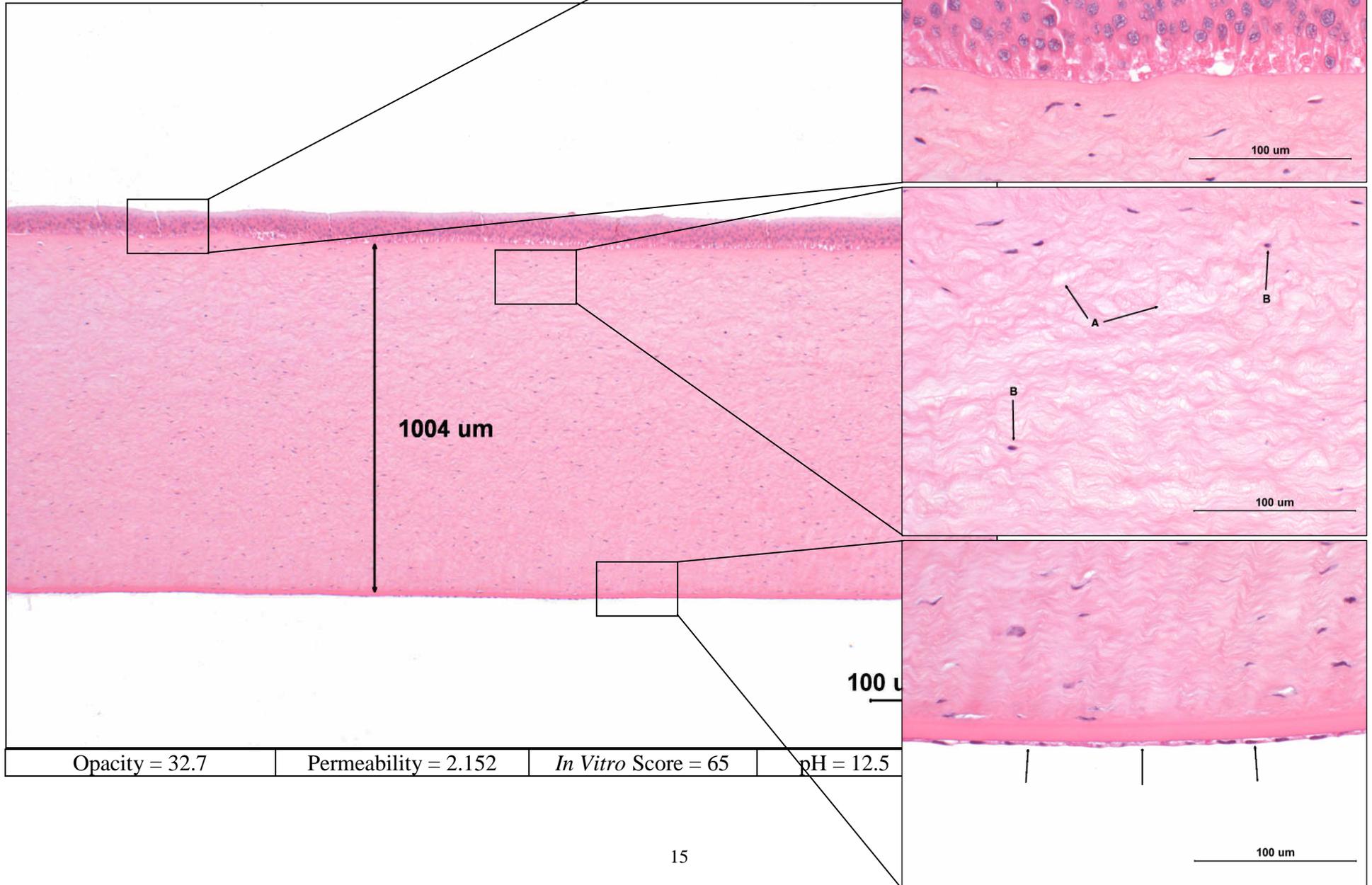
05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (09/08/05) - Full thickness (magnification 48x). Upper right - Epithelium (nonviable at the time of fixation) (magnification 237x). Middle right - Stroma at 20% depth showing moderate collagen matrix vacuolization and a marked increase in keratocytes with hyper-condensed nuclei (magnification 475x). Lower right - Stroma below mid depth showing moderate collagen matrix vacuolization and a marked increase in keratocytes with hyper-condensed nuclei (magnification 475x).



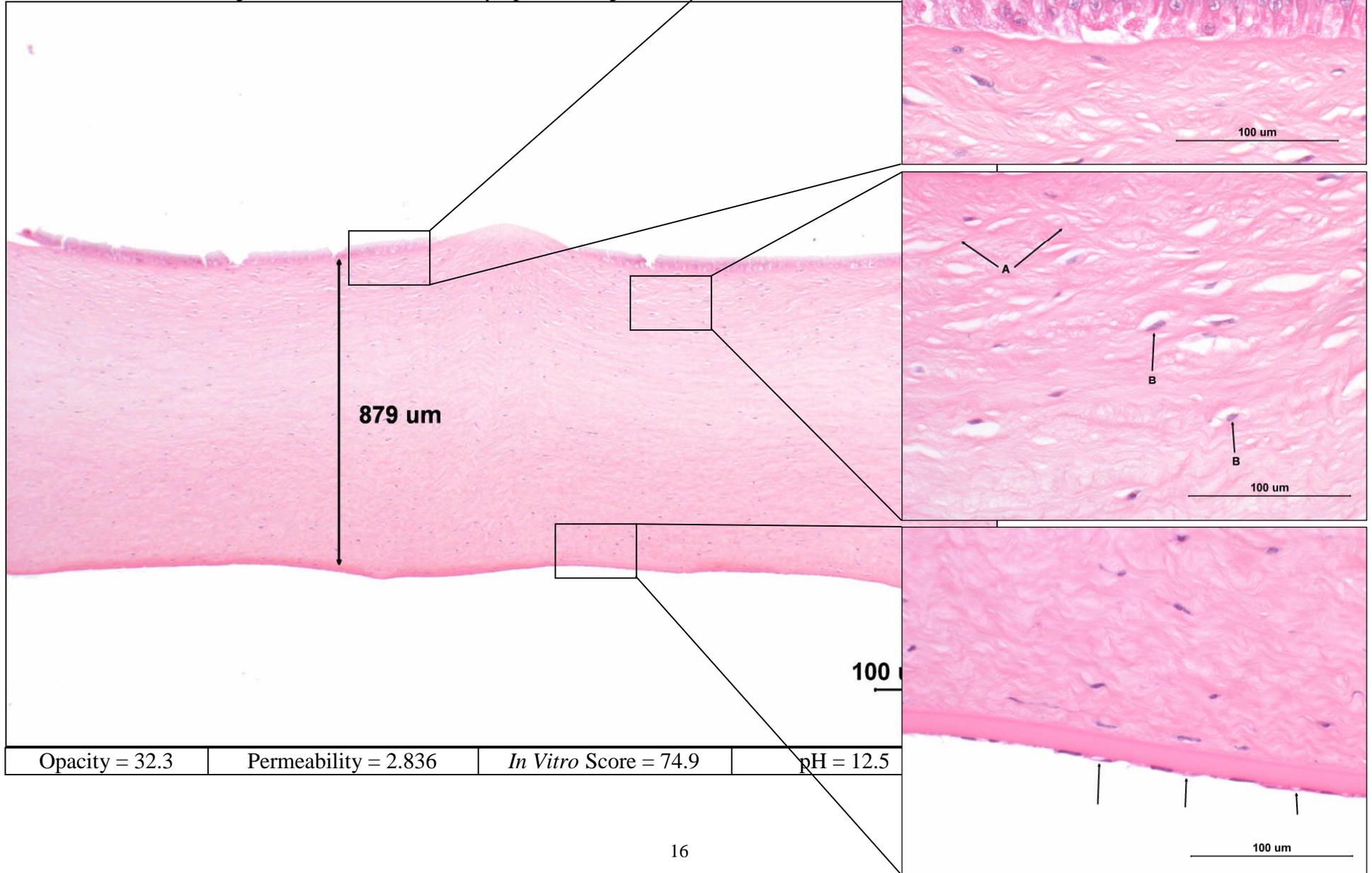
05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Full thickness (magnification 4X). Upper right – Epithelium full thickness necrosis (magnification 40X). Middle right – Upper stroma with vacuolation of the collagen matrix (A), eosinophilic cytoplasm (B), and vacuolated keratocyte nuclei (C) (magnification 40X). Lower right – Endothelium with hyperchromatic nuclei (A) and pyknotic nuclei within expanded lower stroma (B) (magnification 40X).



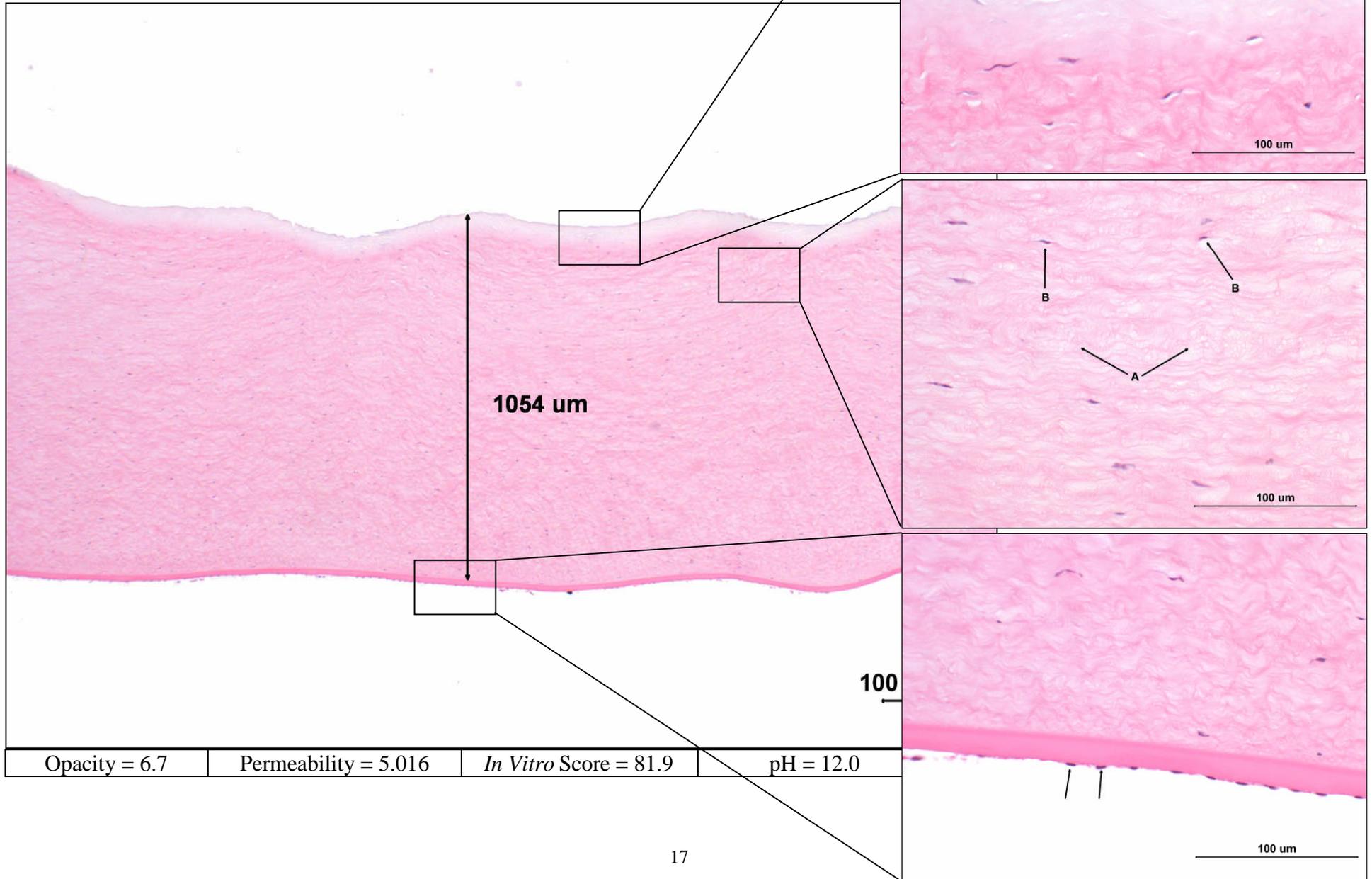
06AA46 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) - Full thickness (magnification 4X). Upper right - Epithelium with loss of squamous layers, surface blanching, and full thickness necrosis (magnification 40X). Middle right - Upper stroma with expansion of the collagen matrix (A) and pyknotic keratocyte nuclei (B) (magnification 40X). Lower right - Endothelium with enlarged nuclei and vacuolated cytoplasm (magnification 40X).



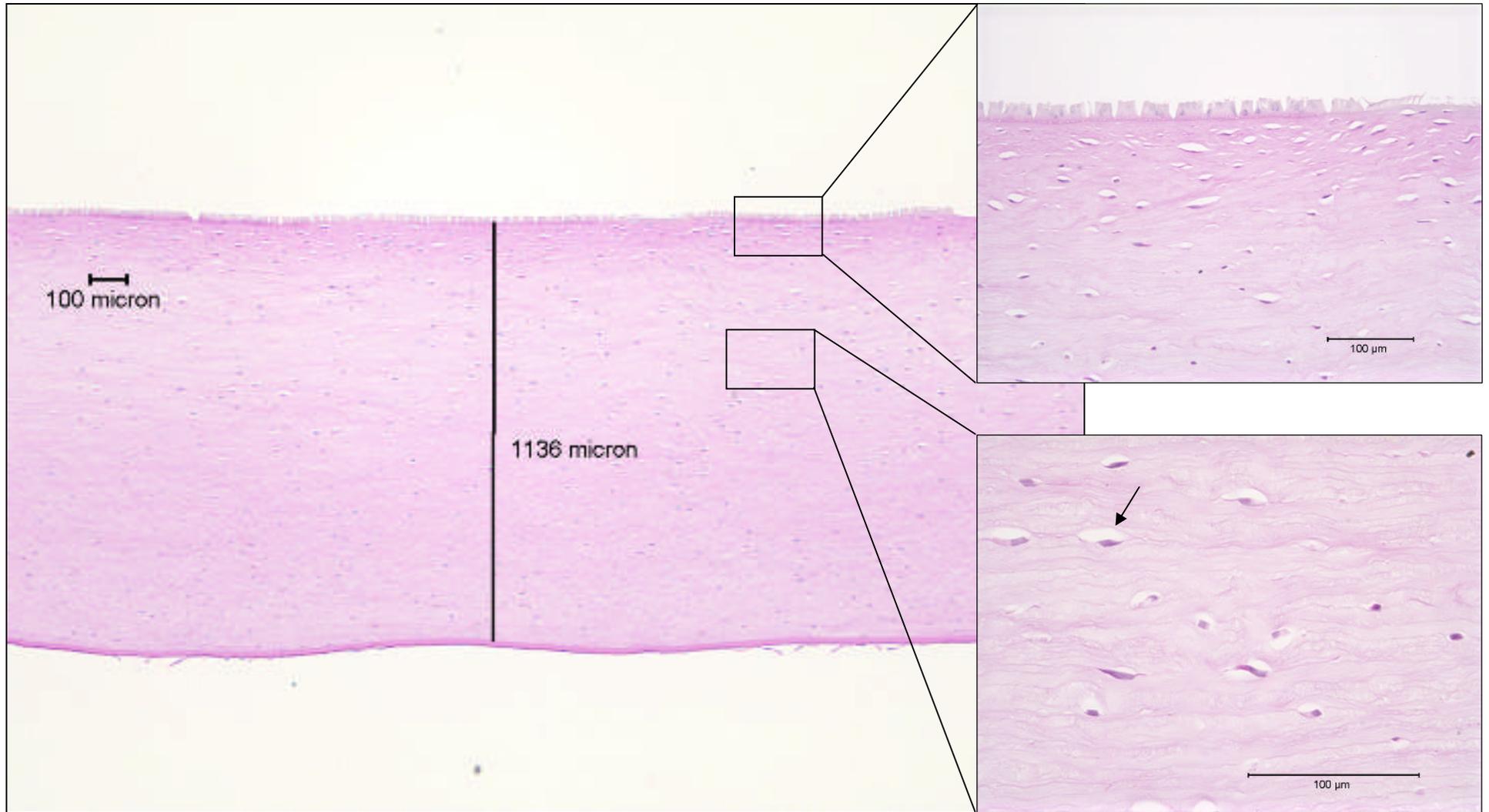
06AA46 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06) – Full thickness (magnification 4X). Upper right – Epithelium with loss of squamous and wing layers, linear surface blanching, and full thickness necrosis (magnification 40X). Middle right – Upper stroma with expansion of the collagen matrix (A) and vacuolated keratocyte nuclei (B) (magnification 40X). Lower right – Endothelium with enlarged nuclei and vacuolated cytoplasm (mag 40X).



06AA45 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06)  
 – Full thickness (magnification 4X). Upper right - Loss of epithelium and superficial stroma (magnification 40X). Middle right – Upper stroma with expansion of the collagen matrix (A) and pyknotic keratocyte nuclei (B) (magnification 40X). Lower right – Endothelium with enlarged nuclei and vacuolated cytoplasm (magnification 40X).

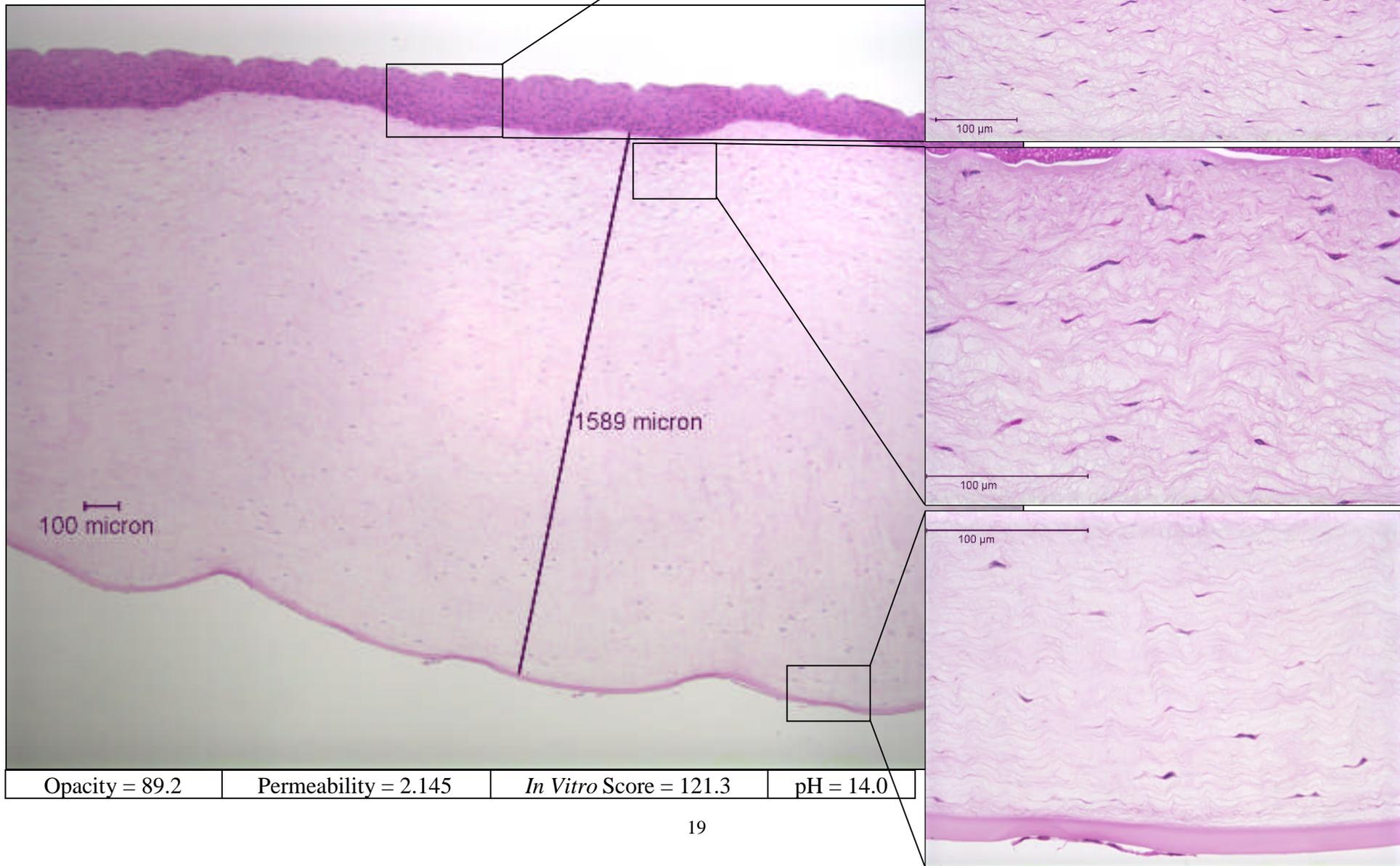


05AD98 (5-10% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Full thickness (magnification 48x). Upper right - Epithelial area (lost) (magnification 237x). Lower right - Stroma at 20% depth showing moderate collagen matrix vacuolization and a marked increase in the frequency of keratocytes with nuclear granularization (magnification 475x).

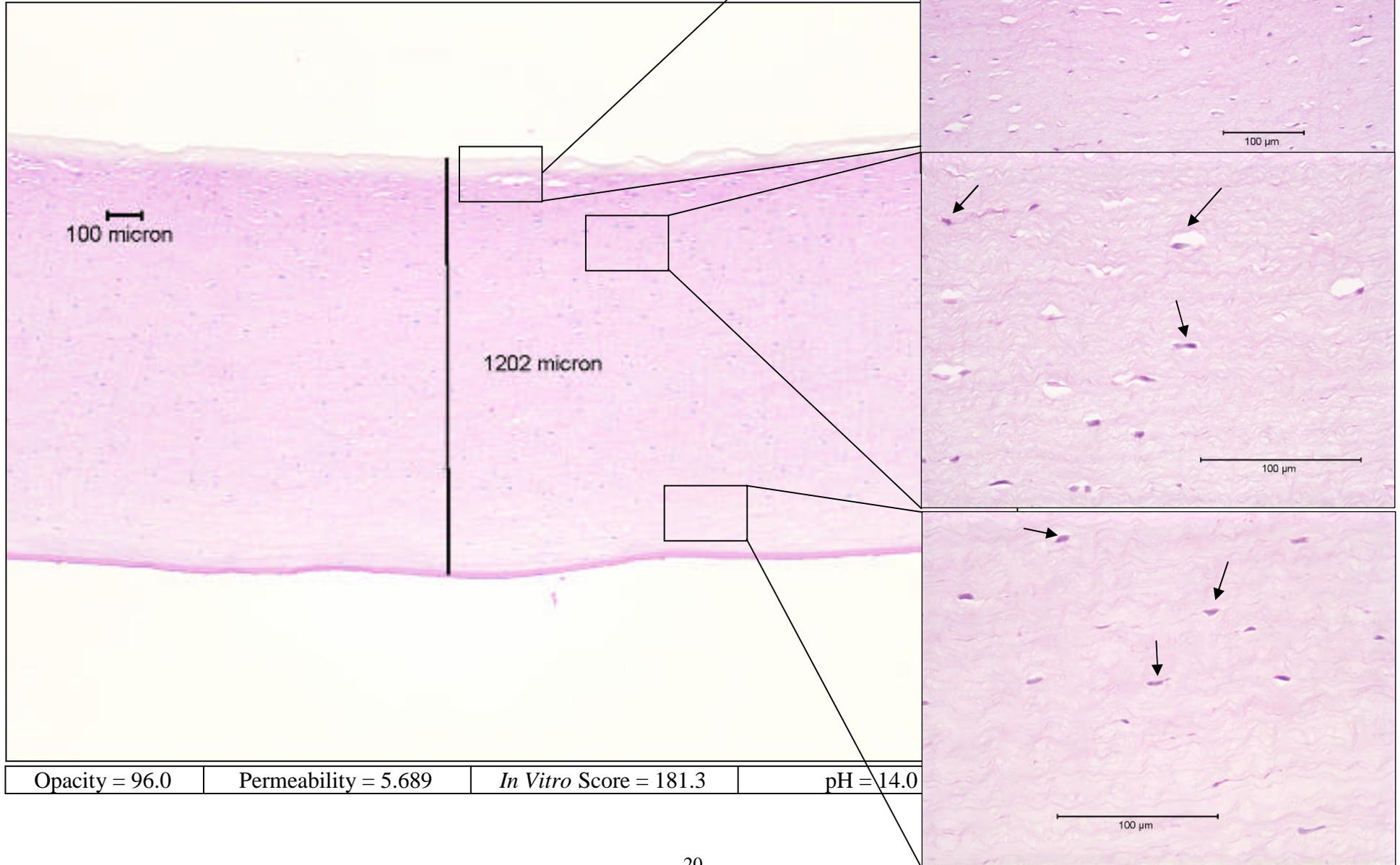


Opacity = 33.0	Permeability = 3.542	<i>In Vitro</i> Score = 86.1	pH = 14.0
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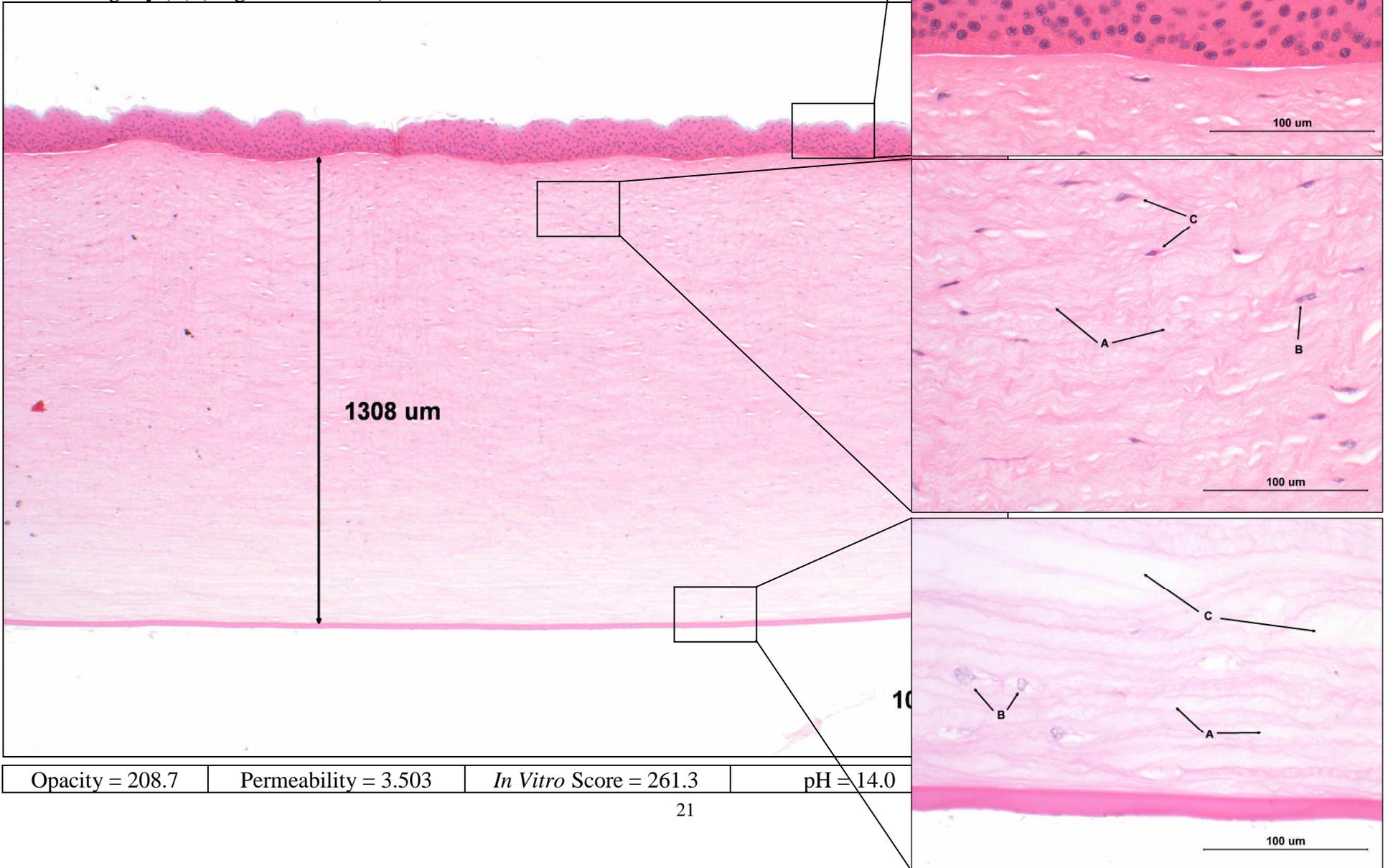
06AH39 (10-24% Sodium Tripolyphosphate), neat, 3-minute exposure, 120-minute post-exposure (5/23/07) - Full thickness (magnification 48x). Upper right - Epithelium showing microvacuolation of cellular structure and cytoplasm (magnification 237x). Middle right - Upper stroma directly beneath Bowman's layer showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475x). Lower right - Lower stroma showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475x).



05AD98 (5-10% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Full thickness (magnification 48x). Upper right - Epithelium (lost) (magnification 237x). Middle right - Stroma at 20% depth showing only moderate vacuolization of the collagen matrix and degeneration of the keratocytes (magnification 475x). Lower right - Stroma above Descemet's Membrane showing marked collagen matrix vacuolization and marked damage to the keratocytes (magnification 475x).

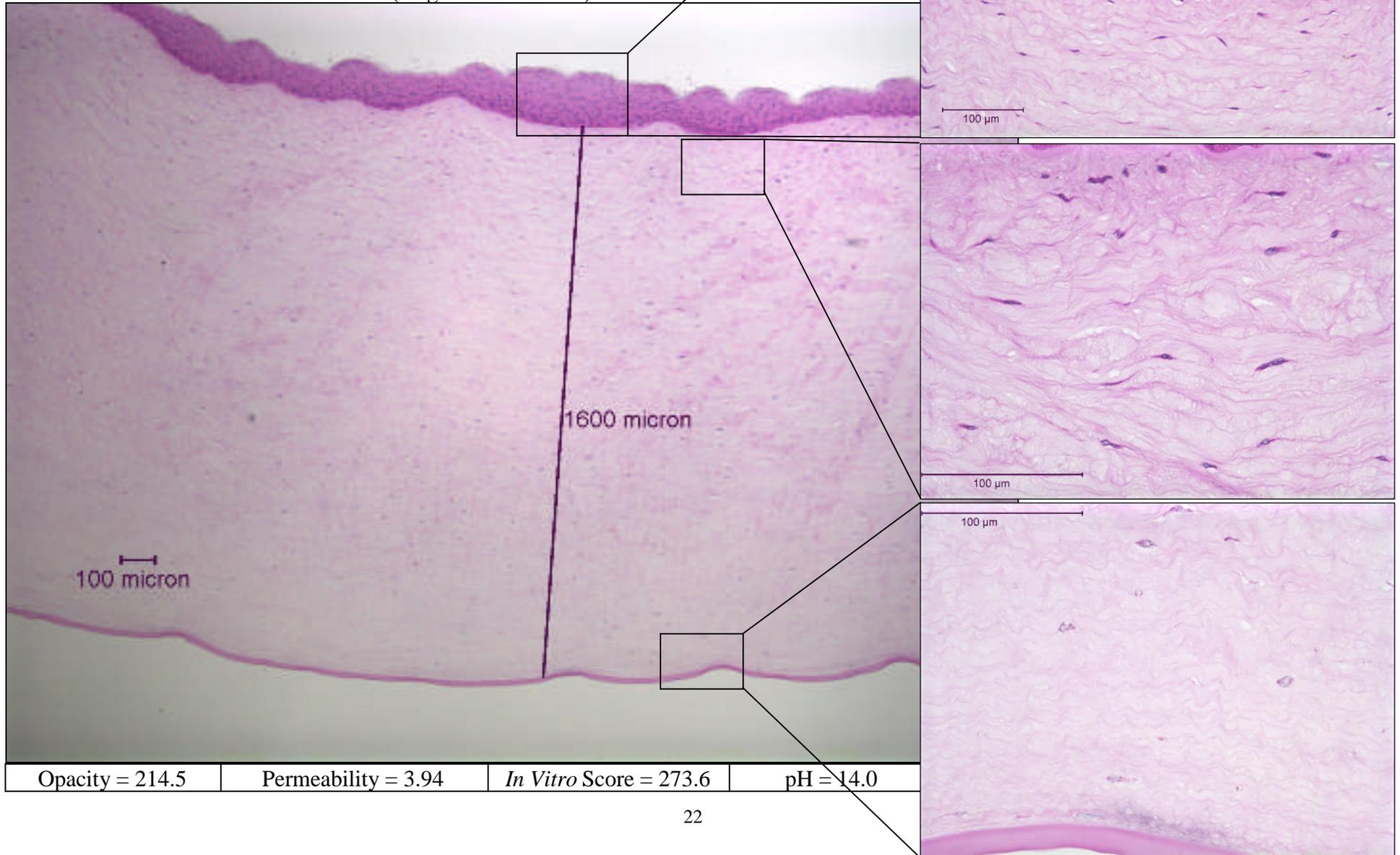


06AH39 (10-24% Sodium Tripolyphosphate), neat, 10-minute exposure, 1200-minute post-exposure (10/17/06) – Full thickness (magnification 4X). Upper right – Epithelium with blanching squamous layer, hypereosinophilic and vacuolated wing and basal layers, and diffuse loss of basal cell adhesion (magnification 40X). Middle right – Upper stroma with expansion of the collagen matrix (A), vacuolated keratocyte nuclei (B), and keratocytes with eosinophilic cytoplasm (C) (magnification 40X). Lower right – Lower stroma with expansion of the collagen matrix (A), vacuolated keratocyte nuclei (B), and artifactual tearing of the stroma due to tissue fragility (C) (magnification 40X).

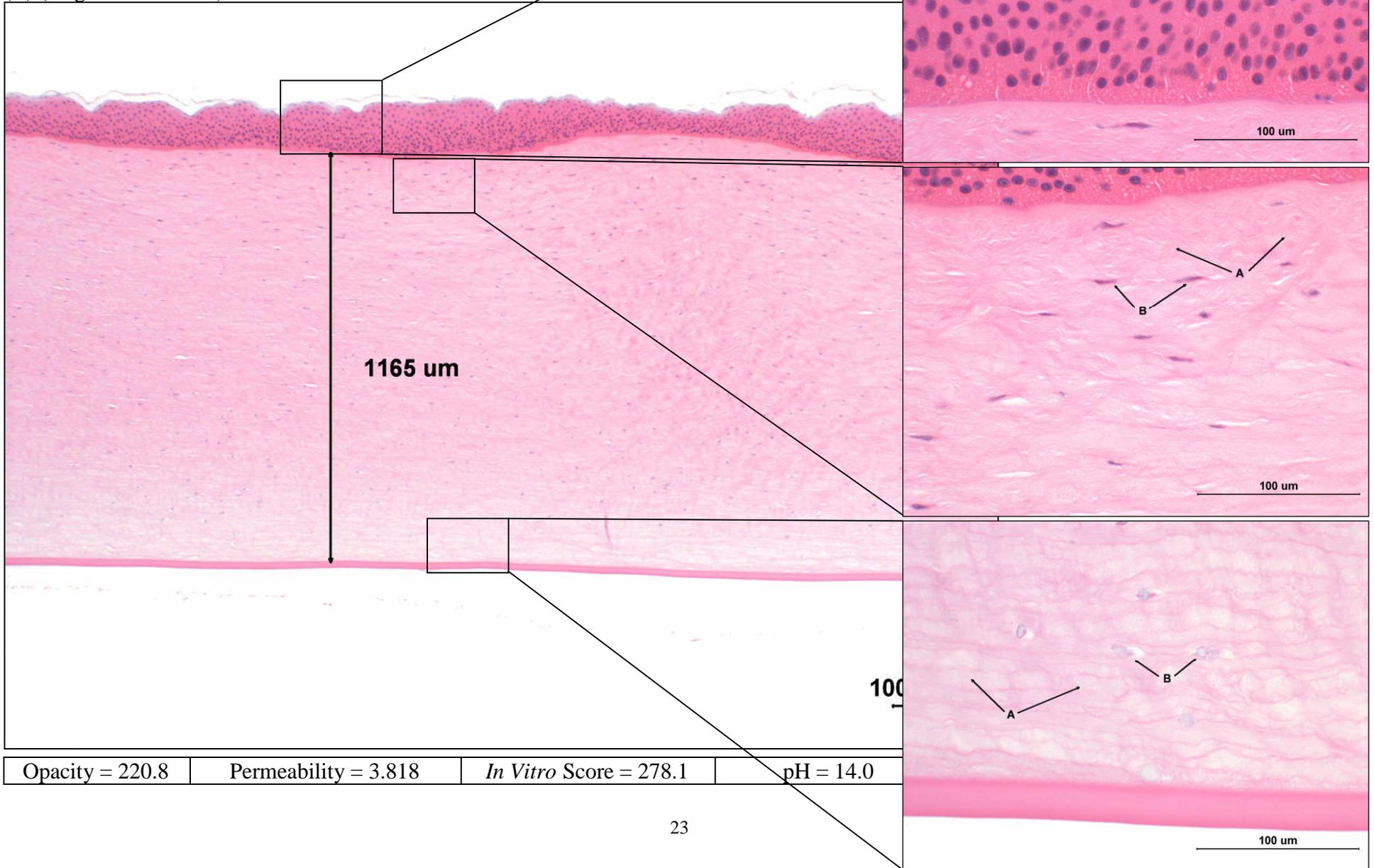


Opacity = 208.7	Permeability = 3.503	<i>In Vitro</i> Score = 261.3	pH = 14.0
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06AH39 (10-24% Sodium Tripolyphosphate), neat, 10-minute exposure, 120-minute post-exposure (5/23/07) - Full thickness (magnification 48 x). Upper right - Epithelium showing microvacuolation of cellular structure and cytoplasm (magnification 237 x). Middle right - Upper stroma directly beneath Bowman's layer showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475x). Lower right - Lower stroma showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475 x).



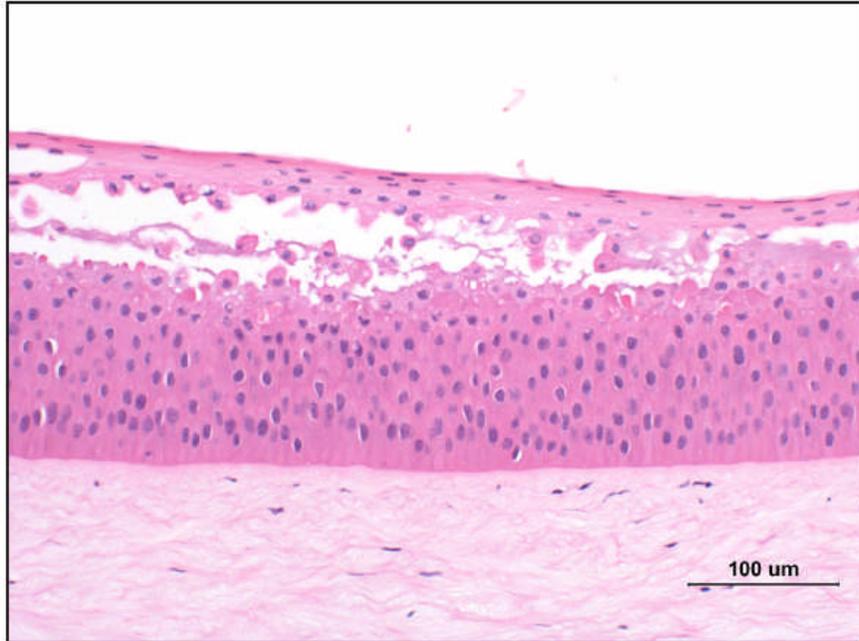
06AH39 (10-24% Sodium Tripolyphosphate), neat, 10-minute exposure, 240-minute post-exposure (10/17/06) – Full thickness (magnification 4X). Upper right – Upper stroma with expansion of the collagen matrix (A), vacuolated keratocyte nuclei (B), keratocytes with eosinophilic cytoplasm (magnification 40X). Middle right – Epithelium with blanched squamous layer, and hypereosinophilic and vacuolated wing and basal layers (magnification 40X). Lower right – Lower stroma with expansion of the collagen matrix (A) and vacuolated keratocyte nuclei (B) (magnification 40X).



## Reactive Chemistries

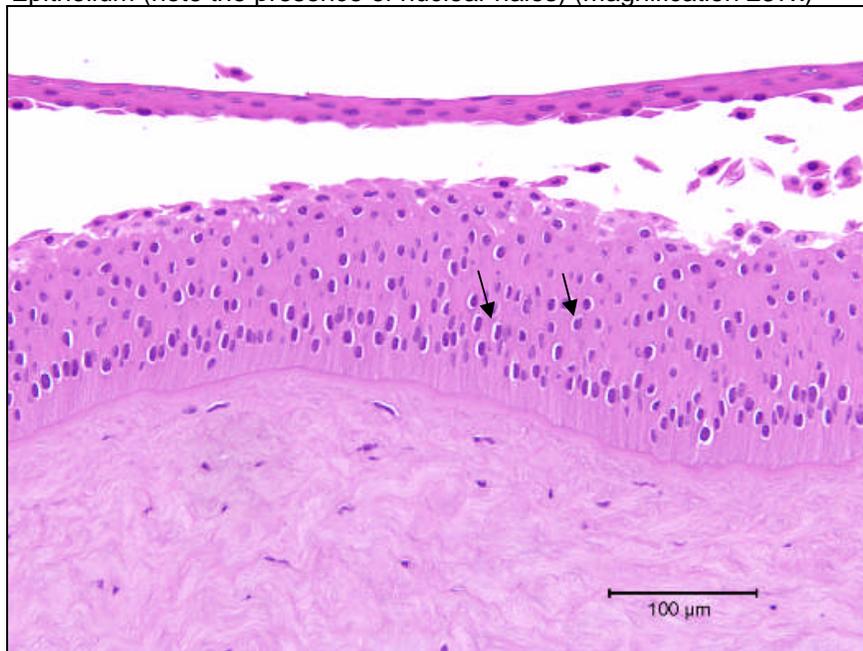
### Epithelium

06AB76 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (3/29/06) – Epithelium with sloughing of the squamous layer (magnification 20X)



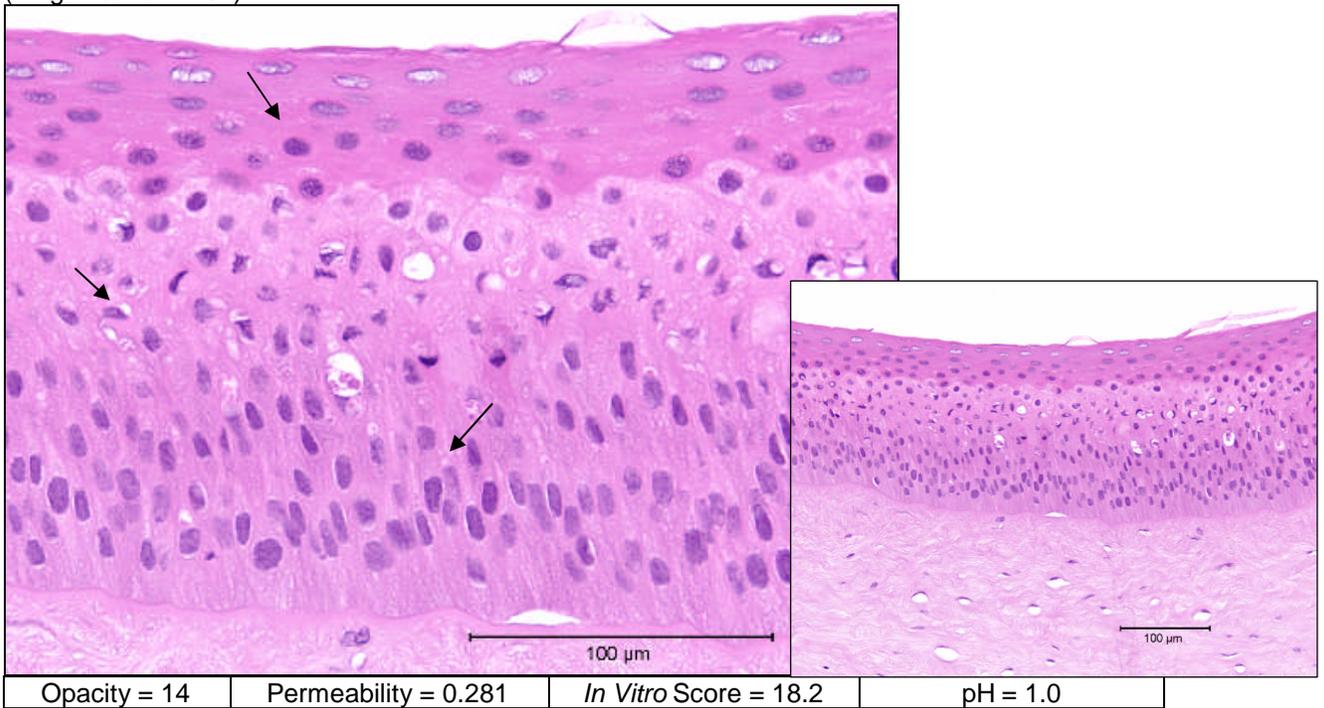
Opacity = 2.3	Permeability = 0.325	<i>In Vitro</i> Score = 7.2	pH = 3.0
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05AG43 (5-10% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (11/02/05) - Epithelium (note the presence of nuclear halos) (magnification 237x)



Opacity = 6	Permeability = 0.308	<i>In Vitro</i> Score = 10.6	pH = 3.0
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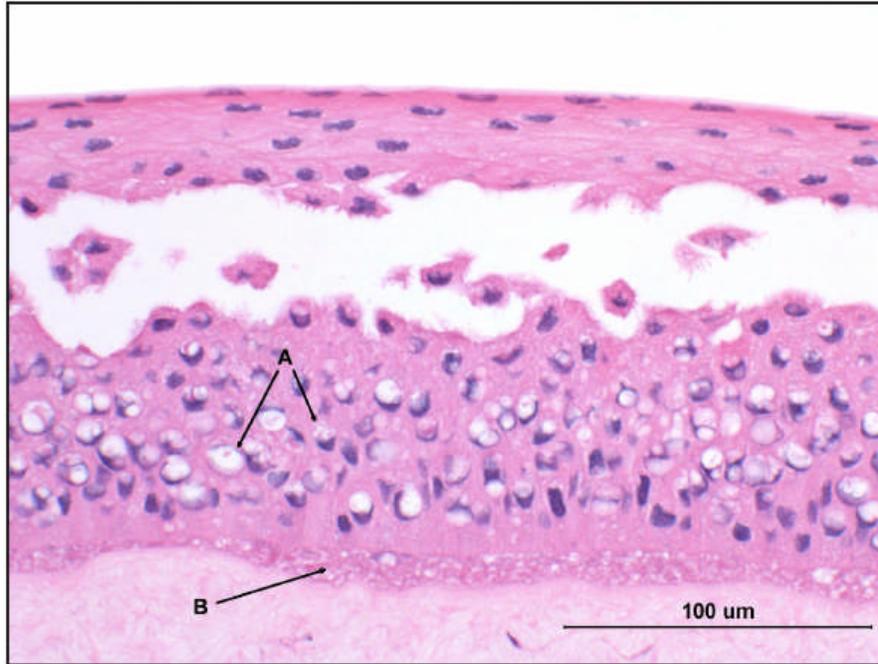
05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (09/08/05) - Epithelium showing coagulation of the squamous cells, nuclear condensation and cytoplasmic vacuolization in the upper wing cells and cytoplasmic vacuolization in the basal cells (magnification 475x)



05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (3/29/06) – Epithelium with full thickness necrosis (magnification 40X)

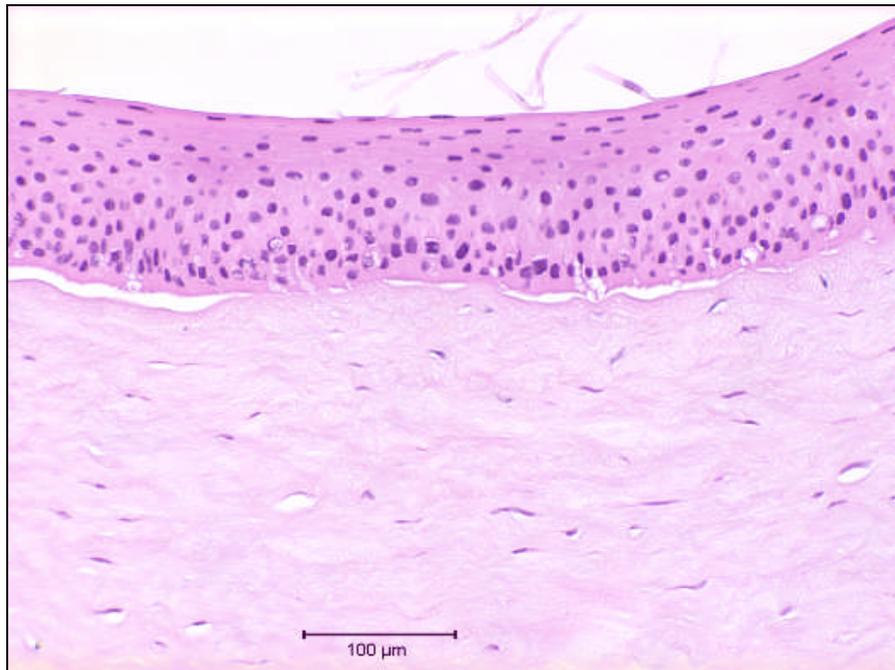


06AB76 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Epithelium with vacuolation of wing and basal cells (A) and separation of basal layer from basal lamina (B) (magnification 40X)



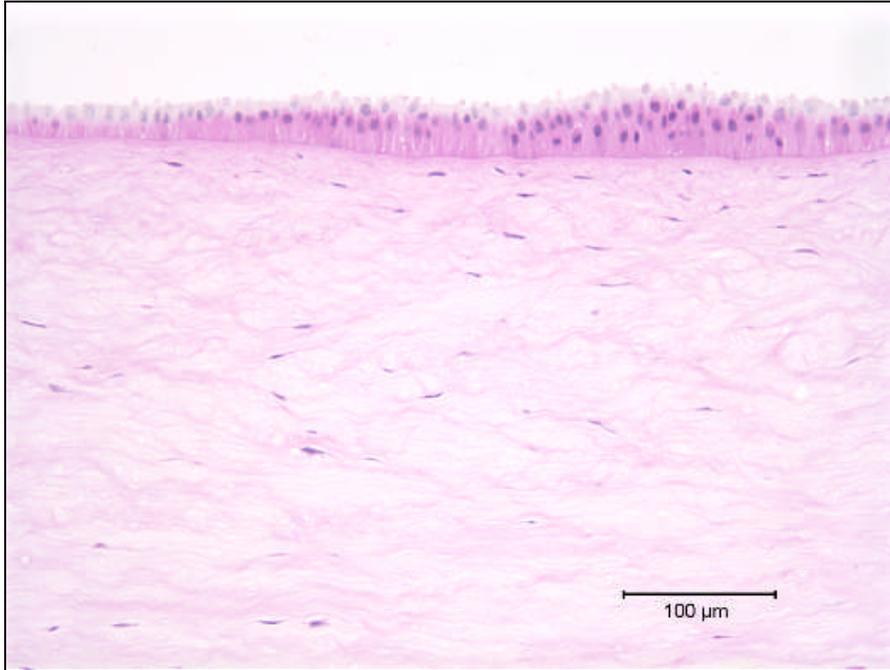
Opacity = 7.2	Permeability = 0.994	<i>In Vitro</i> Score = 22.1	pH = 3.0
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Paraffluoroanaline, neat, 10-min exposure, 20-hour post-exposure (11/25/98) – Epithelium showing increasing separation of basal cells from basal lamina, and death of keratocytes with increasing incubation (magnification 237x).



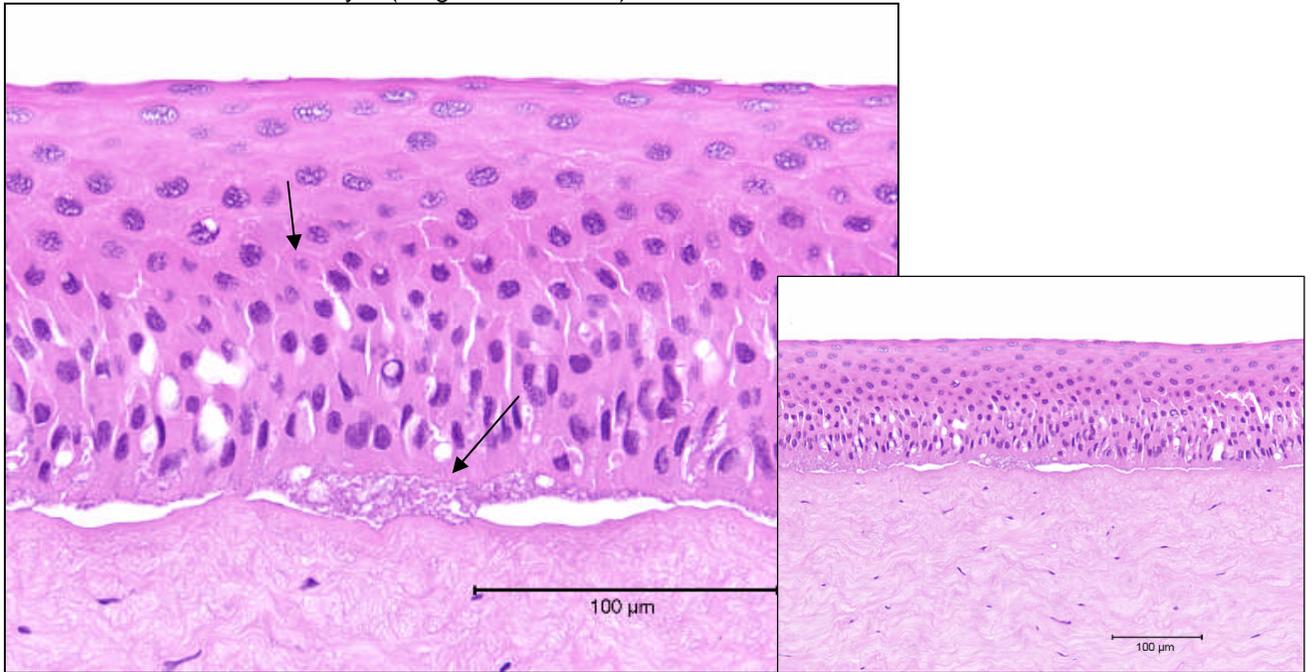
Opacity = 21.5	Permeability = 0.467	<i>In Vitro</i> Score = 28.5
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05AD99 (1-5% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Epithelium (largely lost) (magnification 237x)



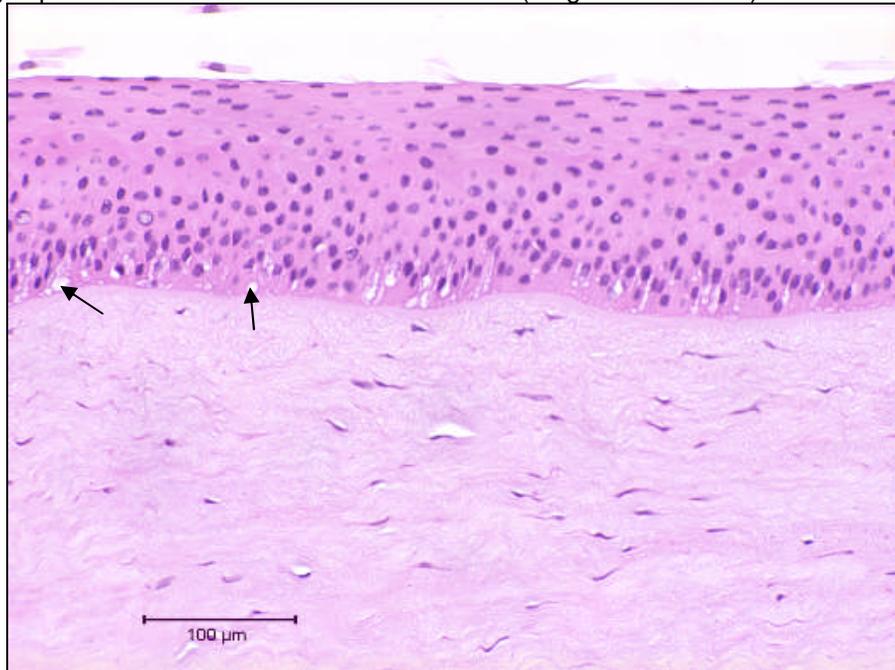
Opacity = 4	Permeability = 1.709	<i>In Vitro</i> Score = 29.6	pH = 14.0
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05AG43 (5-10% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (11/02/05) - Epithelium showing coagulation of all three cell layers and precipitate between the basal cells and Bowman's Layer (magnification 475x)



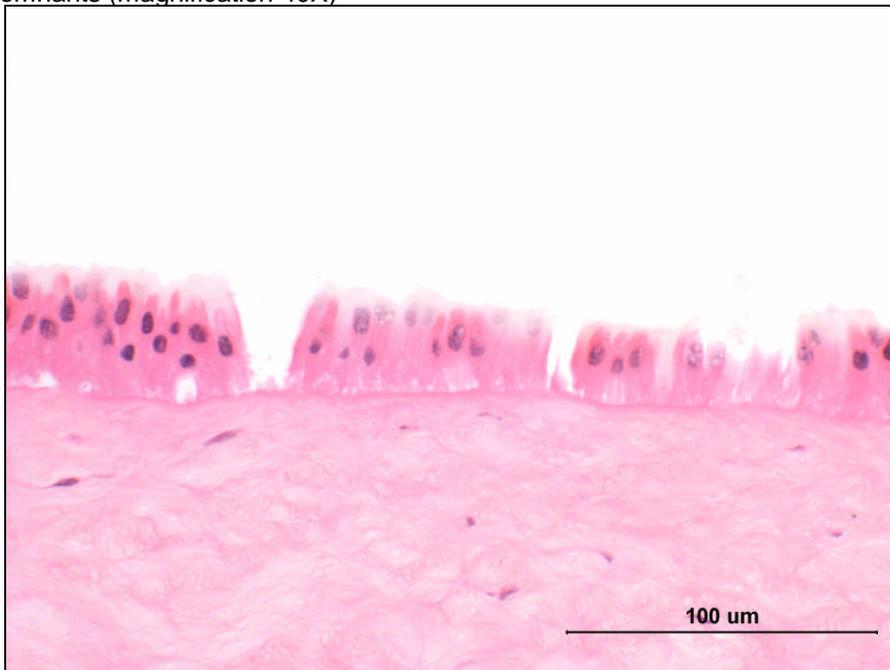
Opacity = 18.7	Permeability = 0.736	<i>In Vitro</i> Score = 29.7	pH = 3.0
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Parafluoroanaline, neat, 10-min exposure, 2-hour post-exposure (11/25/98) – Epithelium showing increasing separation of basal cells from basal lamina (magnification 237x).



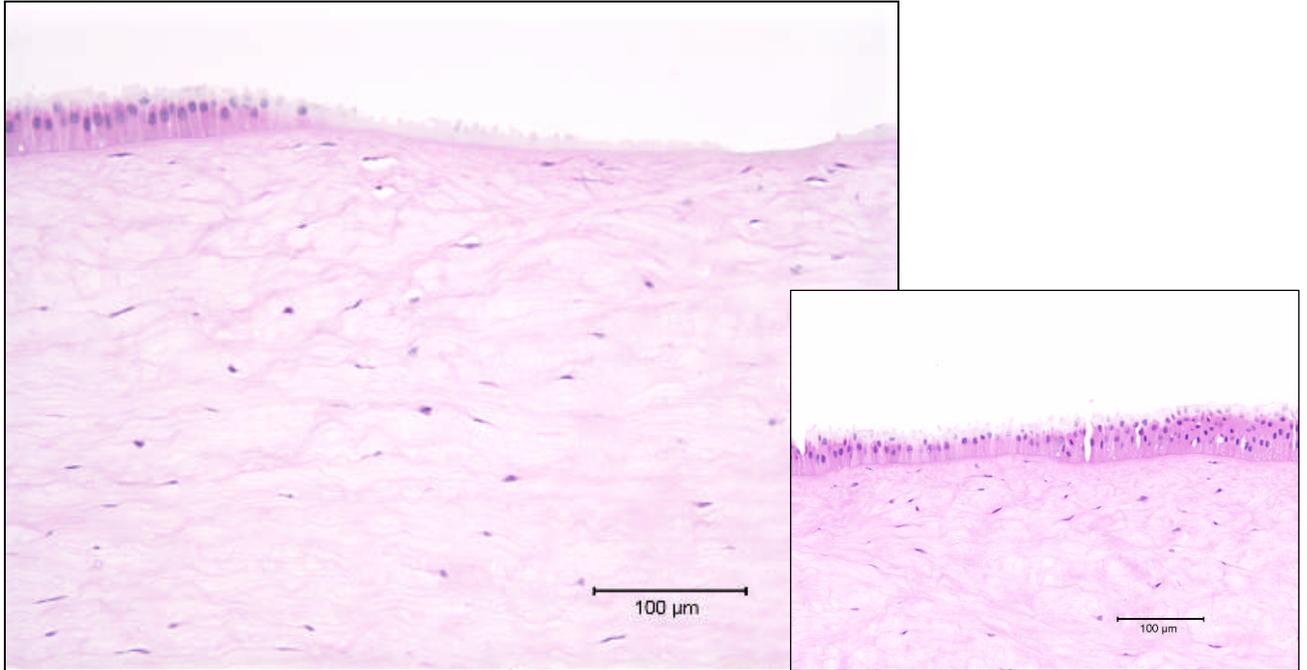
Opacity = 18.0	Permeability = 0.862	<i>In Vitro</i> Score = 30.9
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06AA45 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Necrotic epithelial remnants (magnification 40X)



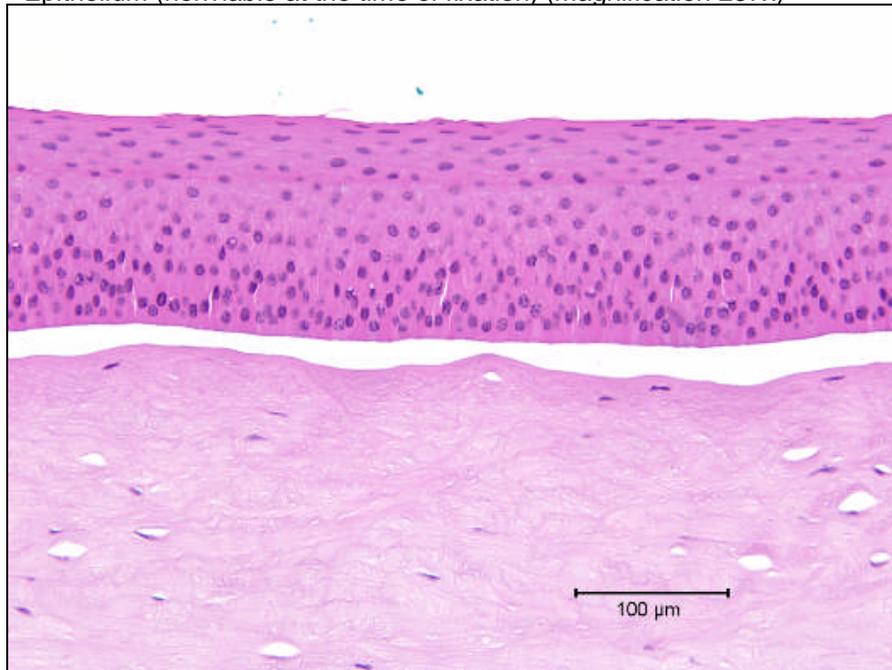
Opacity = 4.3	Permeability = 2.494	<i>In Vitro</i> Score = 41.7	pH = 12.0
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05AD99 (1-5% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Epithelium (largely lost) (magnification 237x)



Opacity = 2.7	Permeability = 2.695	<i>In Vitro</i> Score = 43.1	pH = 14.0
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05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (09/08/05) - Epithelium (nonviable at the time of fixation) (magnification 237x)



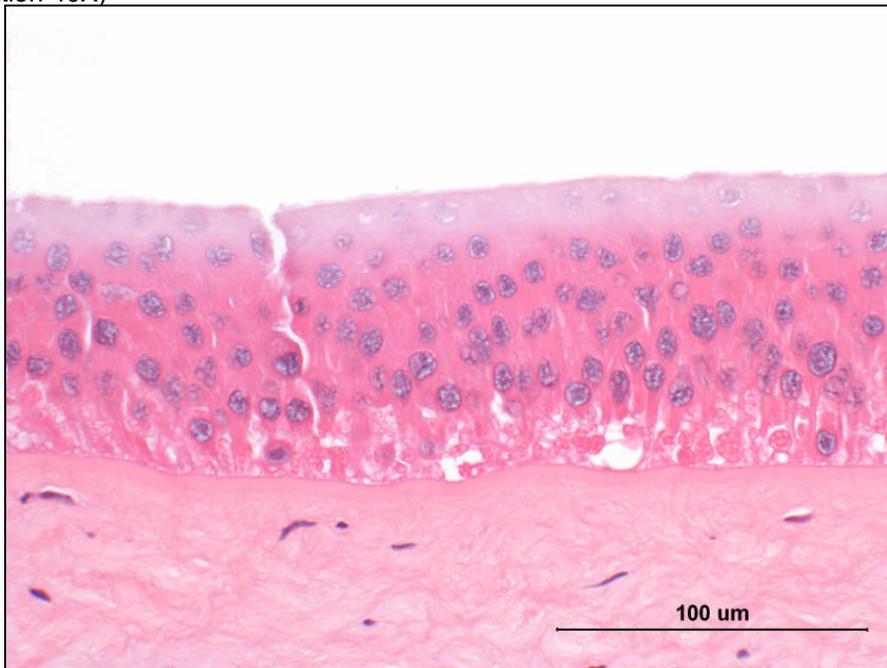
Opacity = 22.7	Permeability = 2.053	<i>In Vitro</i> Score = 53.5	pH = 1.0
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05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Epithelium full thickness necrosis (magnification 40X)



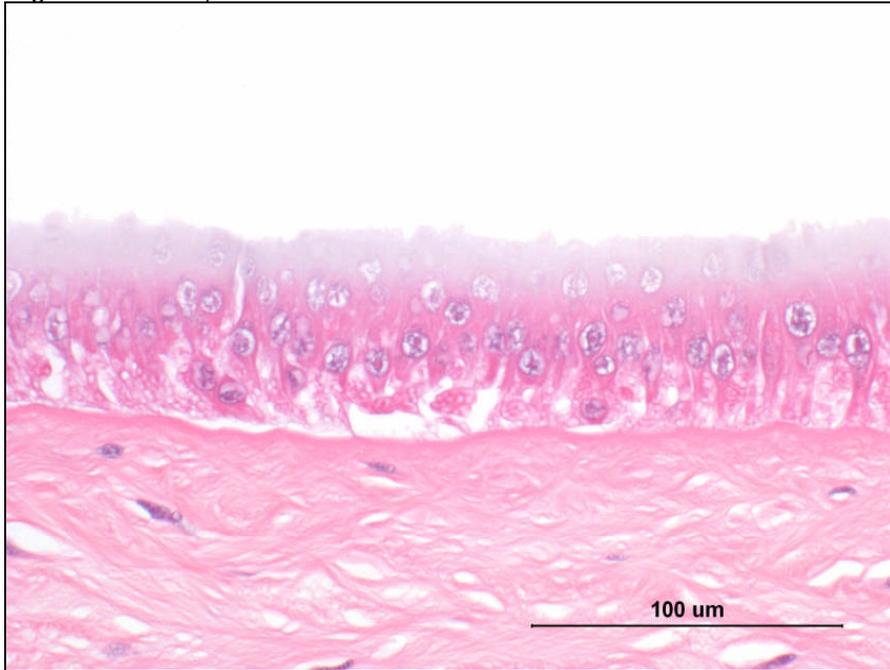
Opacity = 24.2	Permeability = 2.061	<i>In Vitro</i> Score = 55.1	pH = 1.0
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06AA46 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Epithelium with loss of squamous layers, surface blanching, and full thickness necrosis (magnification 40X)



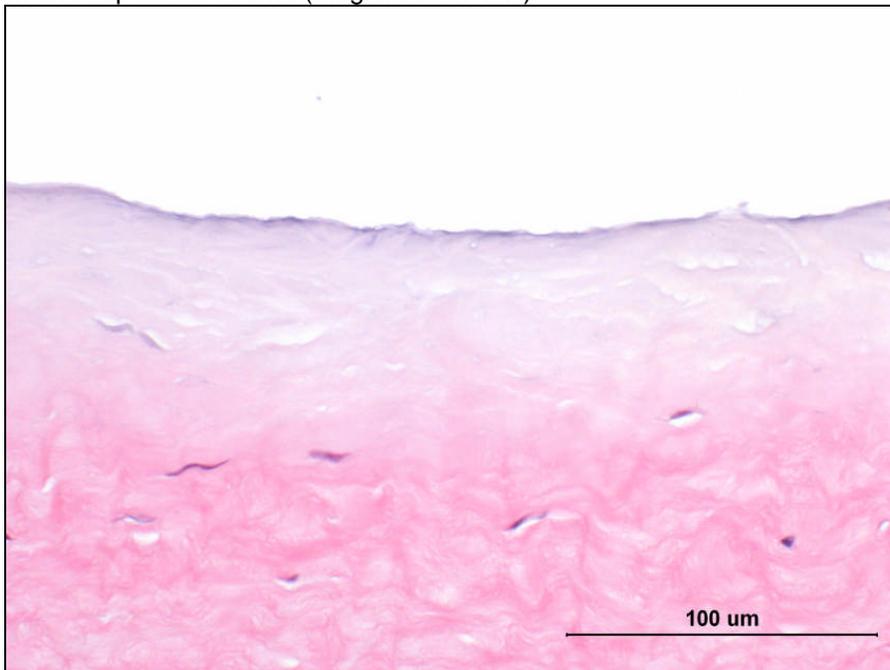
Opacity = 32.7	Permeability = 2.152	<i>In Vitro</i> Score = 65	pH = 12.5
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06AA46 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06) – Epithelium with loss of squamous and wing layers, linear surface blanching, and full thickness necrosis (magnification 40X)



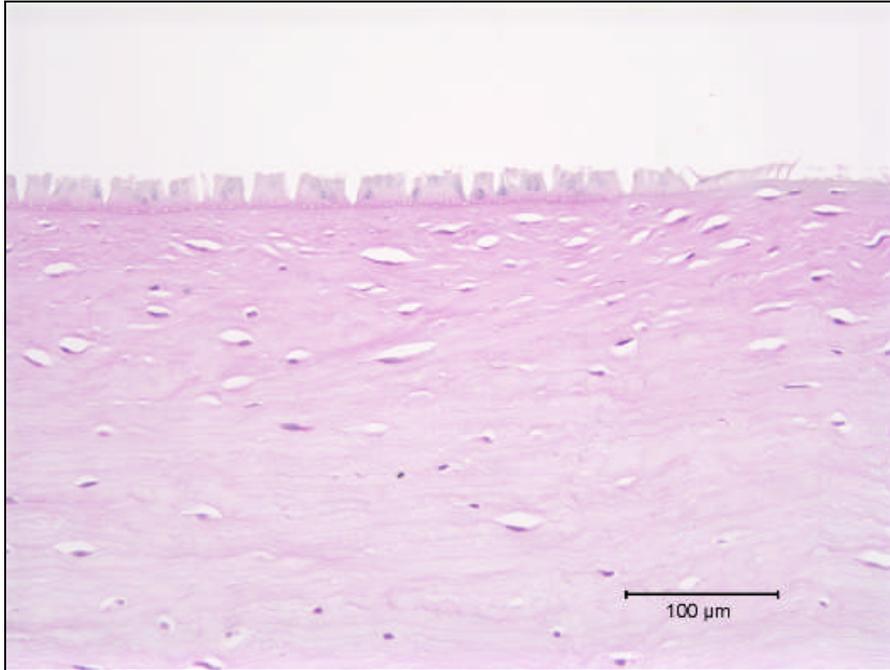
Opacity = 32.3	Permeability = 2.836	<i>In Vitro</i> Score = 74.9	pH = 12.5
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06AA45 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06) – Loss of epithelium and superficial stroma (magnification 40X)



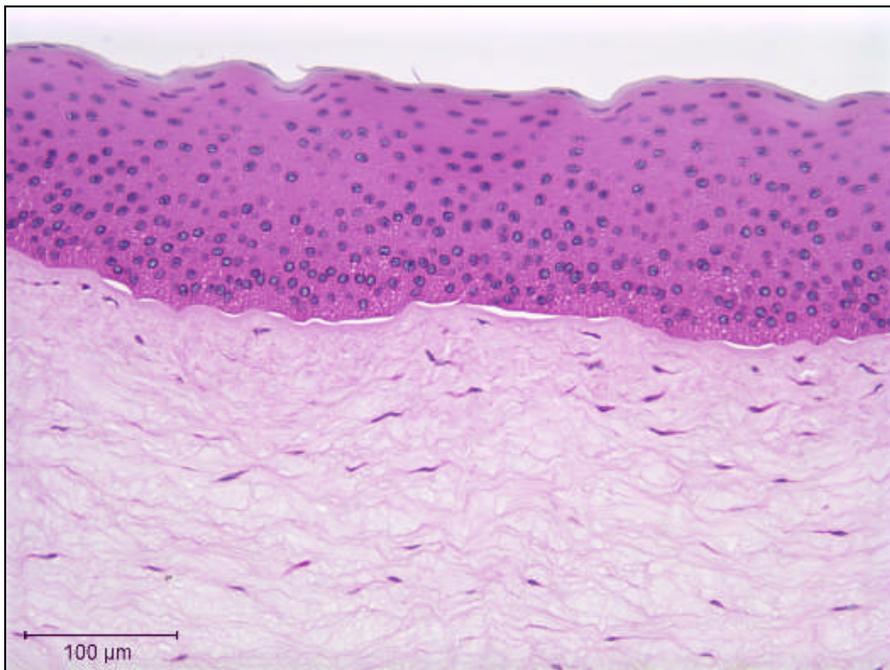
Opacity = 6.7	Permeability = 5.016	<i>In Vitro</i> Score = 81.9	pH = 12.0
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05AD98 (5-10% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Epithelial area (lost) (magnification 237x)



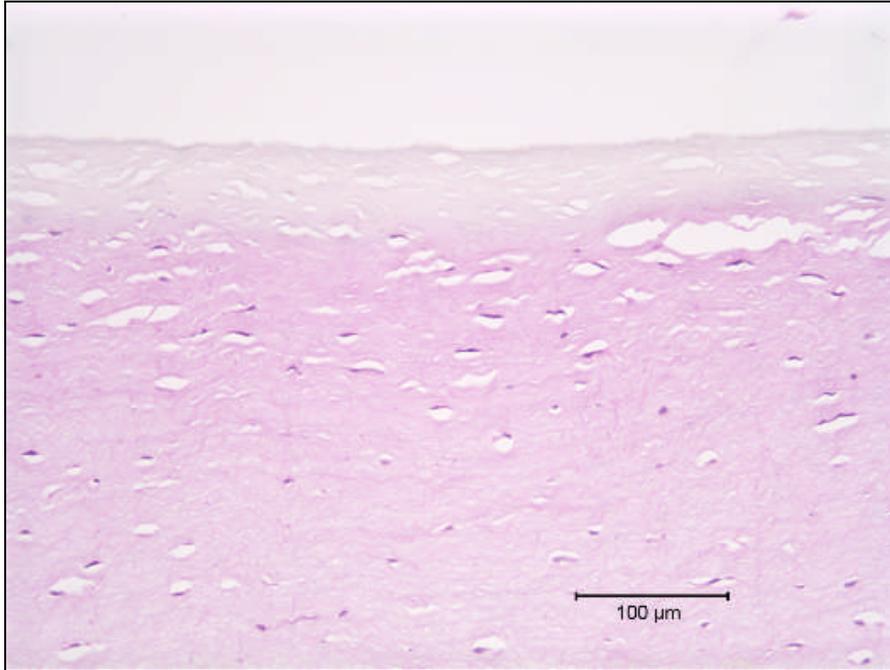
Opacity = 33.0	Permeability = 3.542	<i>In Vitro</i> Score = 86.1	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 3-minute exposure, 120-minute post-exposure (5/23/07) - Epithelium showing microvacuolation of cellular structure and cytoplasm (magnification 237x)



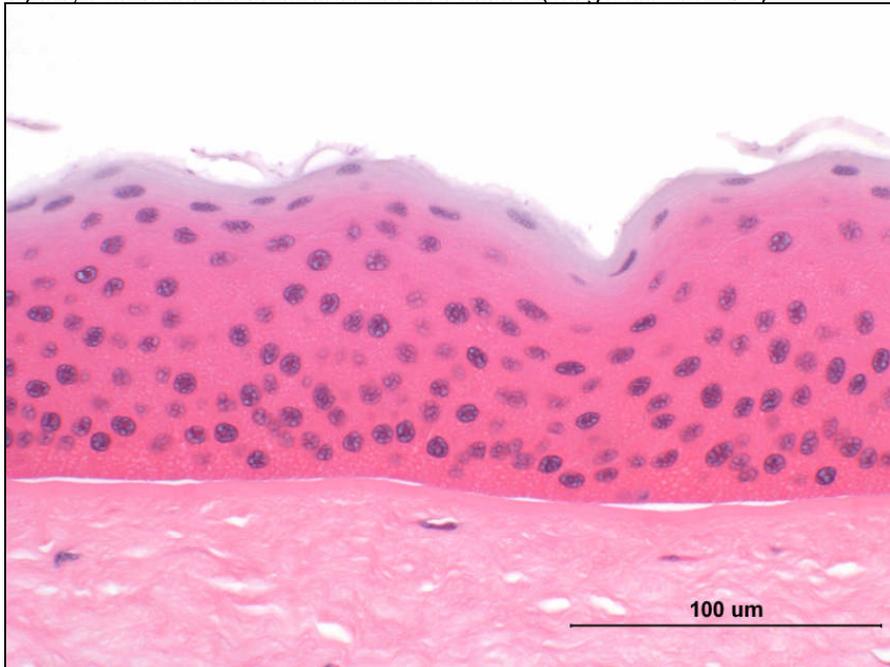
Opacity = 89.2	Permeability = 2.145	<i>In Vitro</i> Score = 121.3	pH = 14.0
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05AD98 (5-10% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Epithelium (lost) (magnification 237x)



Opacity = 96.0	Permeability = 5.689	<i>In Vitro</i> Score = 181.3	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 1200-minute post-exposure (10/17/06) – Epithelium with blanched squamous layer, hypereosinophilic and vacuolated wing and basal layers, and diffuse loss of basal cell adhesion (magnification 40X)



Opacity = 208.7	Permeability = 3.503	<i>In Vitro</i> Score = 261.3	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 120-minute post-exposure (5/23/07) - Epithelium showing microvacuolation of cellular structure and cytoplasm (magnification 237 x)



Opacity = 214.5	Permeability = 3.94	<i>In Vitro</i> Score = 273.6	pH = 14.0
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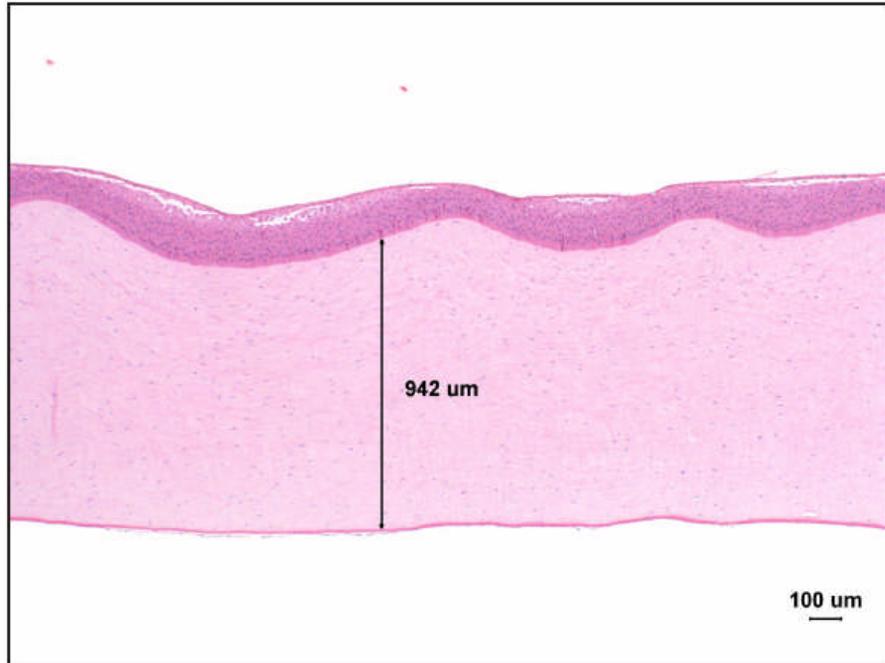
06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 240-minute post-exposure (10/17/06) - Epithelium with blanched squamous layer, and hyper eosinophilic and vacuolated wing and basal layers (magnification 40X)



Opacity = 220.8	Permeability = 3.818	<i>In Vitro</i> Score = 278.1	pH = 14.0
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## Full Thickness

06AB76 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (3/29/06) – Full thickness (magnification 4X)



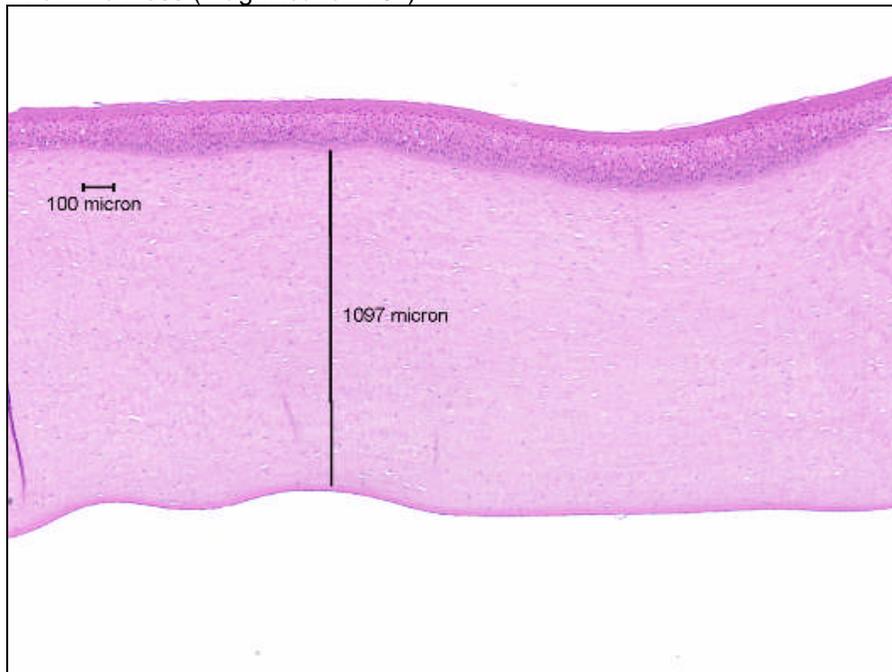
Opacity = 2.3	Permeability = 0.325	<i>In Vitro</i> Score = 7.2	pH = 3.0
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05AG43 (5-10% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (11/02/05) - Full thickness (magnification 48x)



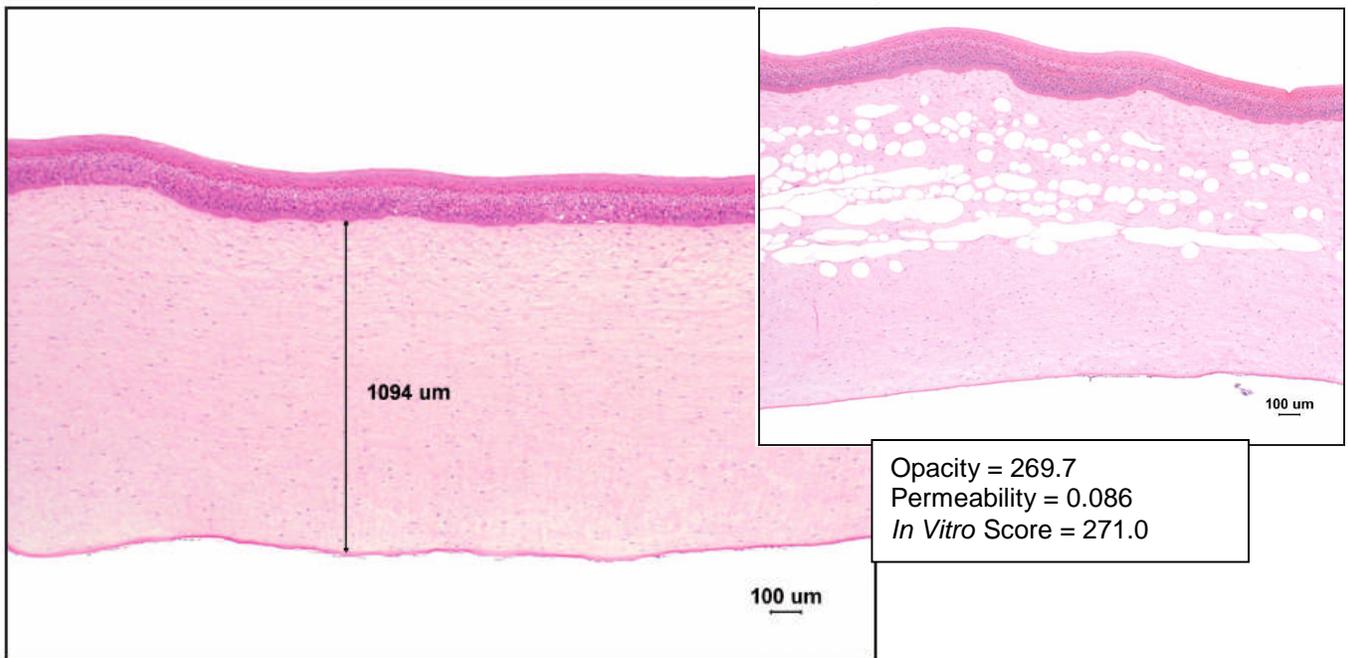
Opacity = 6	Permeability = 0.308	<i>In Vitro</i> Score = 10.6	pH = 3.0
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05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (09/08/05) - Full thickness (magnification 48x)



Opacity = 14	Permeability = 0.281	<i>In Vitro</i> Score = 18.2	pH = 1.0
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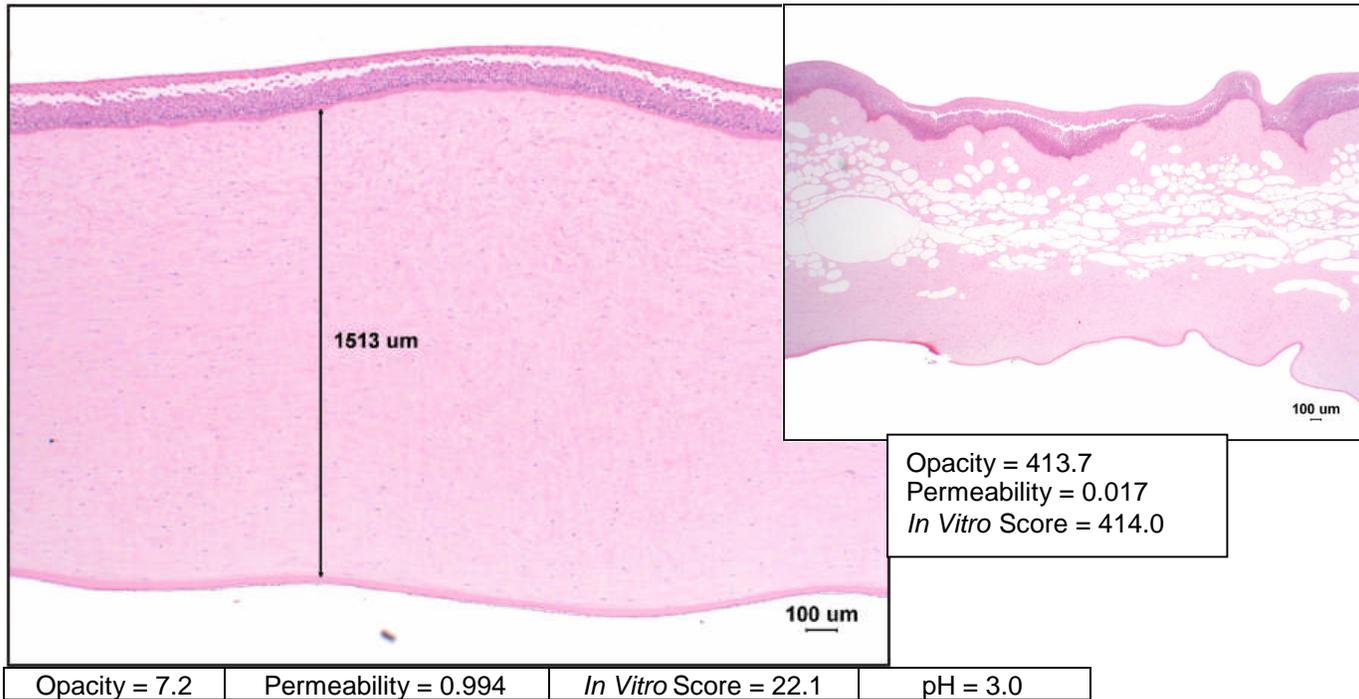
05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (3/29/06) – Full thickness (magnification 4X).



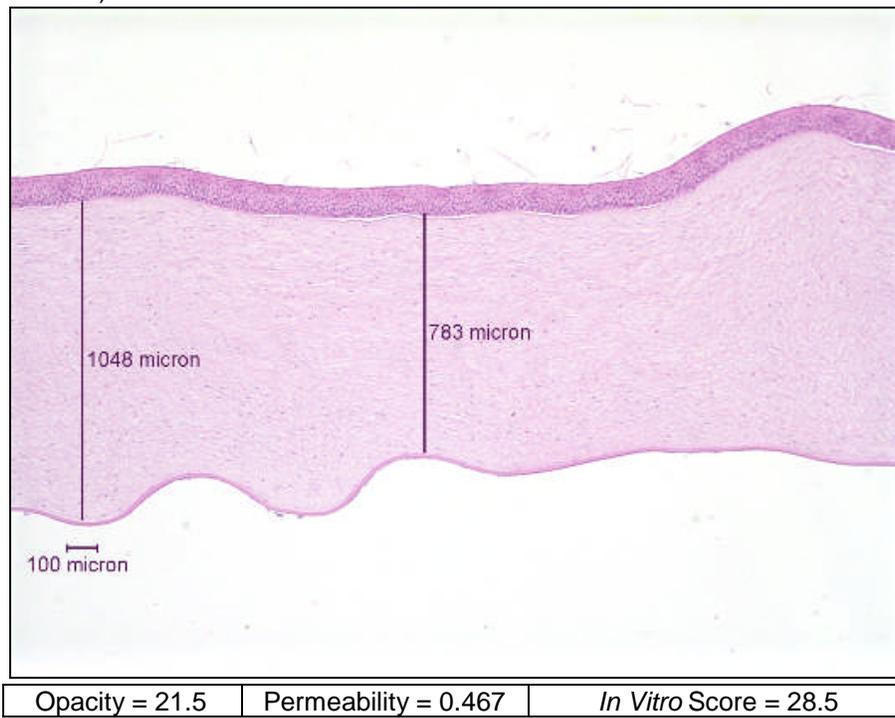
Opacity = 269.7  
Permeability = 0.086  
*In Vitro* Score = 271.0

Opacity = 16.7	Permeability = 0.333	<i>In Vitro</i> Score = 21.7	pH = 1.0
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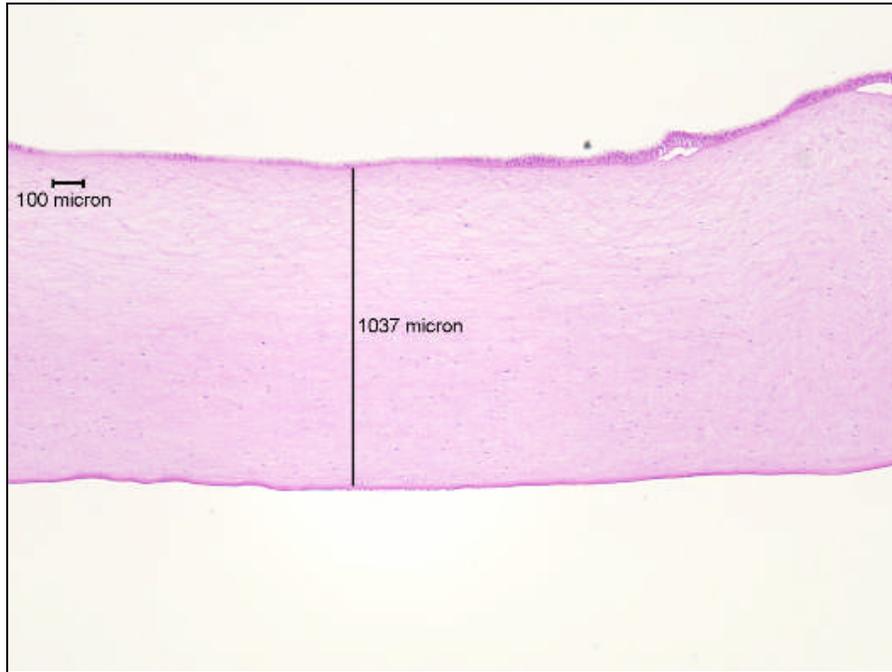
06AB76 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Full thickness (magnification 4X)



Paraffluoroanaline, neat, 10-min exposure, 20-hour post-exposure (11/25/98) – Full thickness (magnification 48x)



05AD99 (1-5% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Full thickness (magnification 48x)



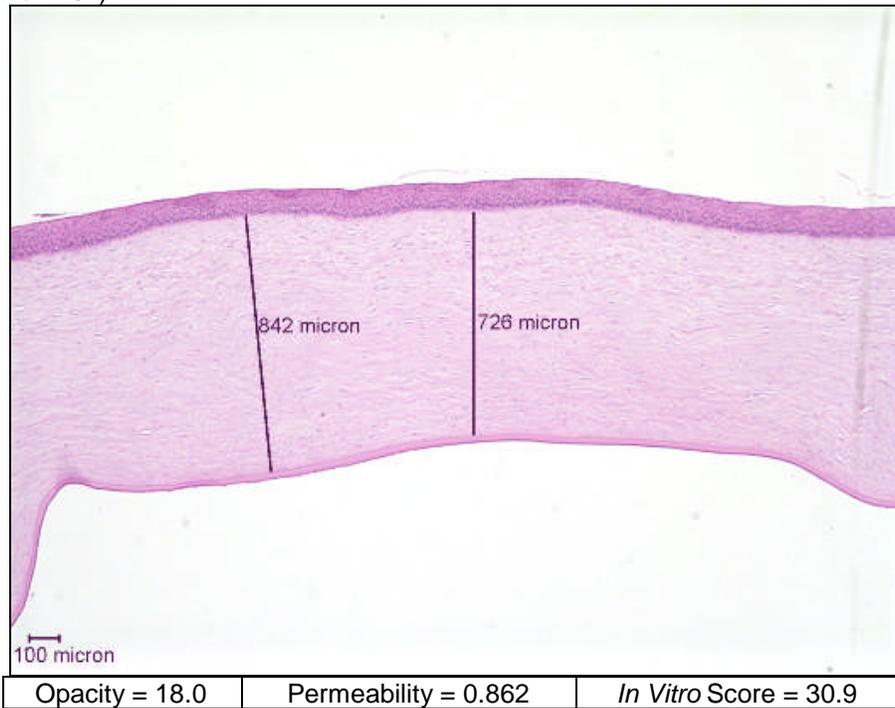
Opacity = 4	Permeability = 1.709	<i>In Vitro</i> Score = 29.6	pH = 14.0
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05AG43 (5-10% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (11/02/05) - Full thickness (magnification 48x)

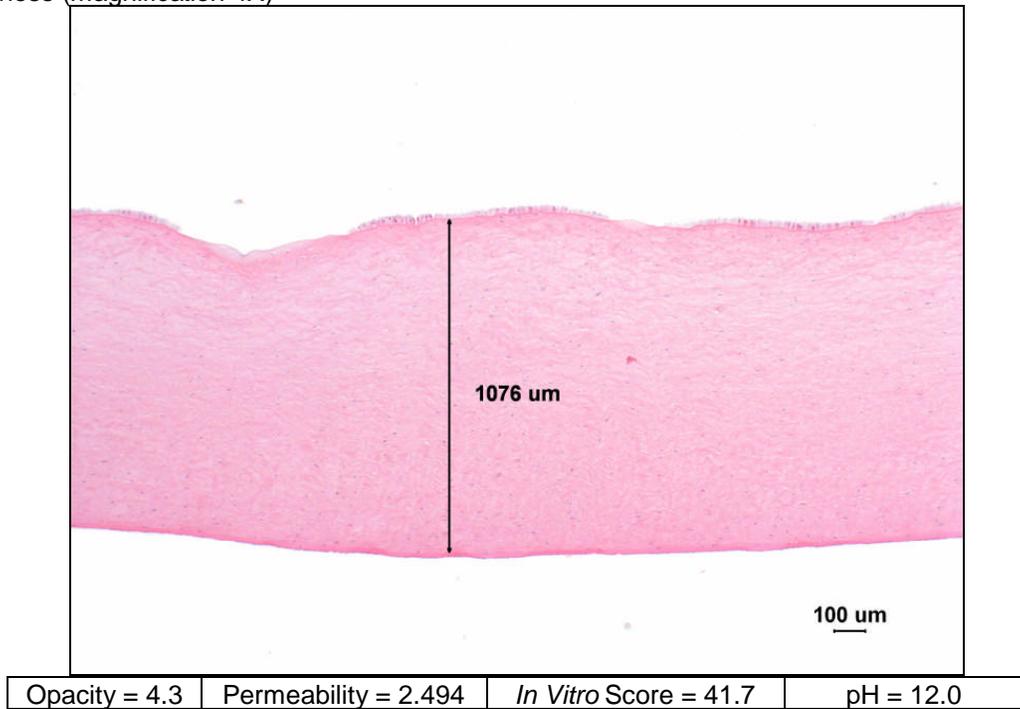


Opacity = 18.7	Permeability = 0.736	<i>In Vitro</i> Score = 29.7	pH = 3.0
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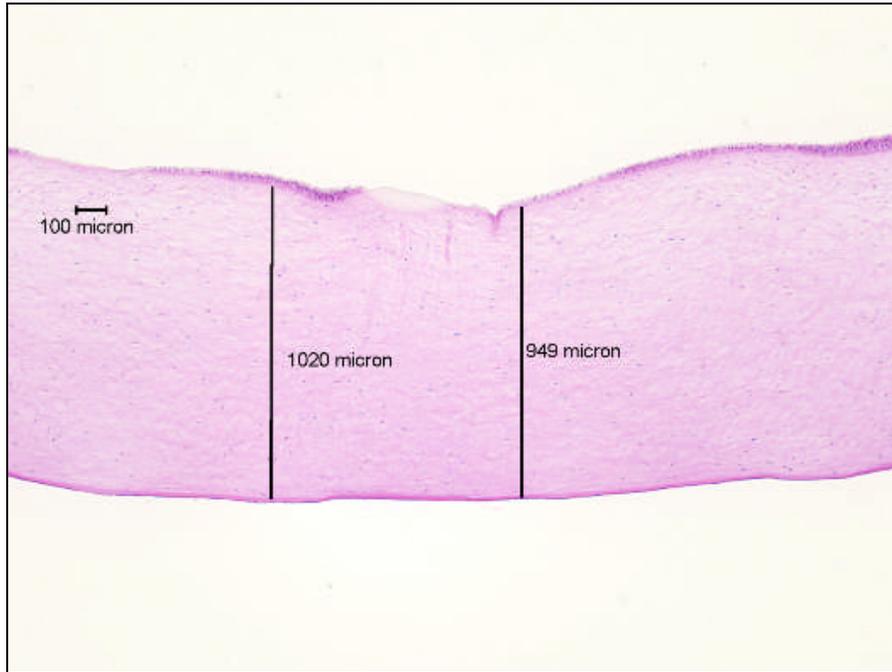
Parafluoroanaline, neat, 10-min exposure, 2-hour post-exposure (11/25/98) – Full thickness (magnification 48x).



06AA45 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Full thickness (magnification 4X)

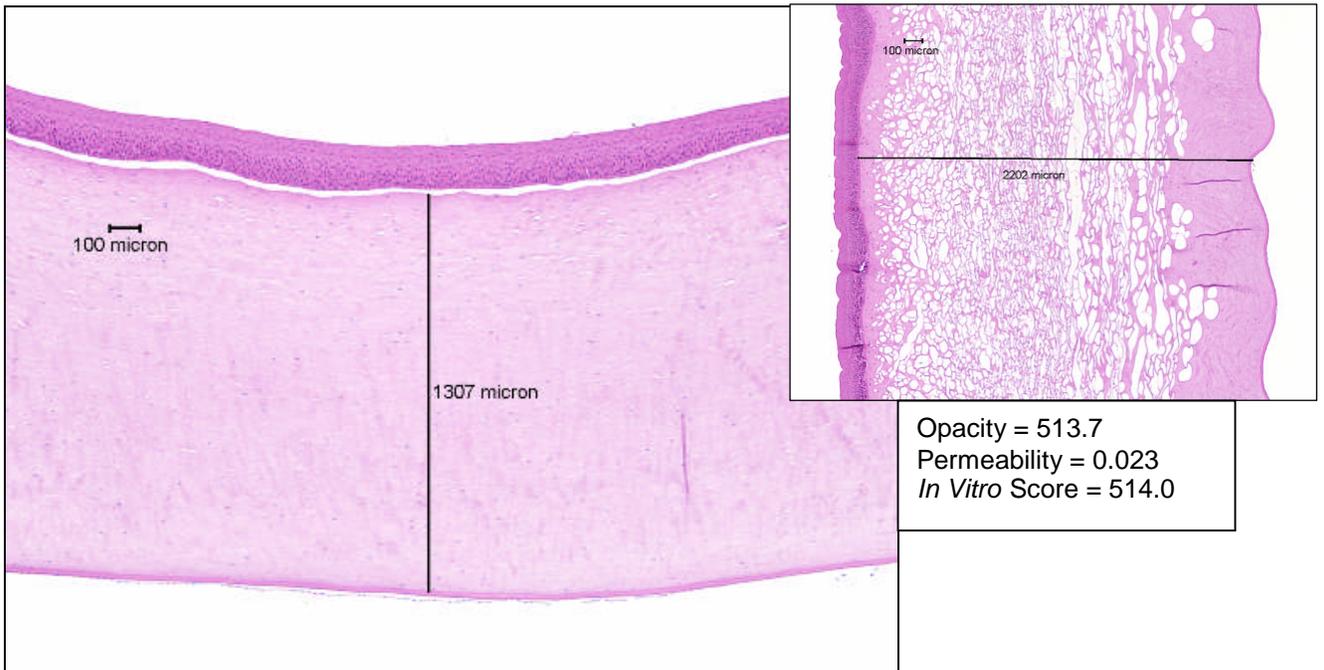


05AD99 (1-5% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Full thickness (magnification 48x)



Opacity = 2.7	Permeability = 2.695	<i>In Vitro</i> Score = 43.1	pH = 14.0
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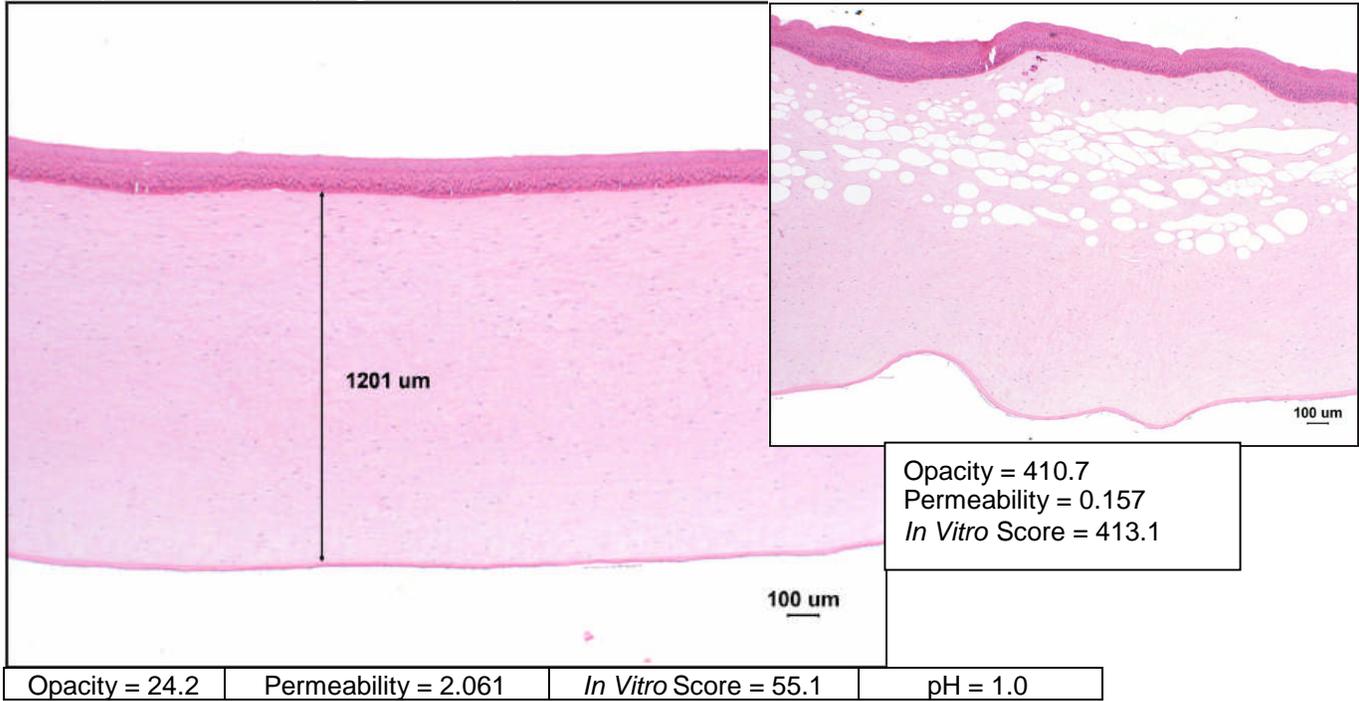
05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (09/08/05) - Full thickness (magnification 48x)



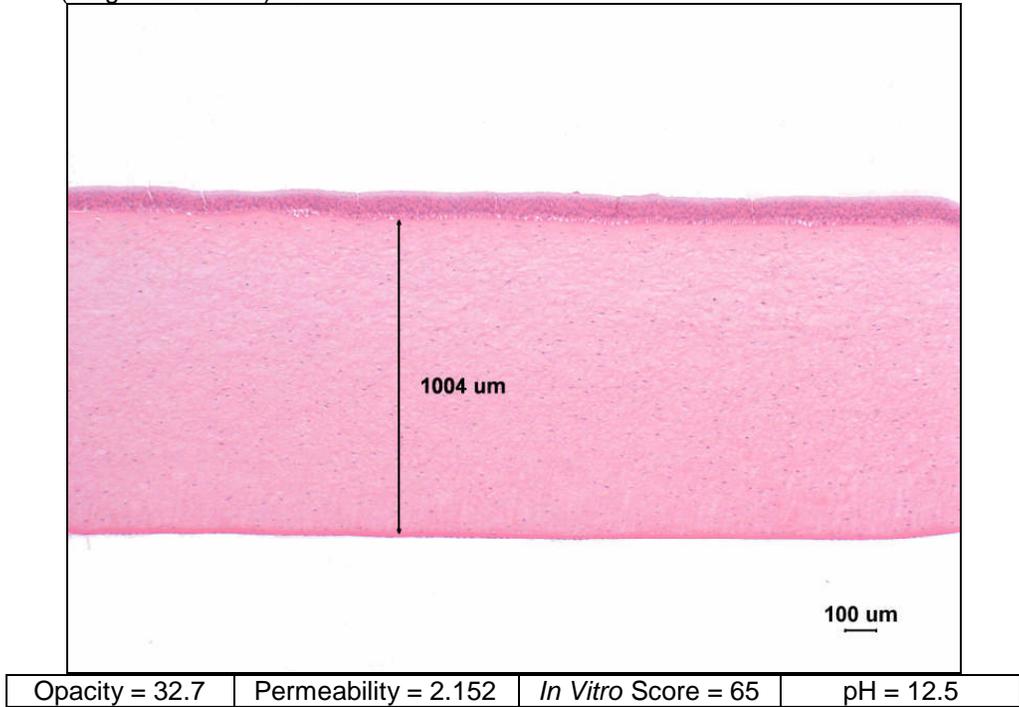
Opacity = 513.7	Permeability = 0.023	<i>In Vitro</i> Score = 514.0
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Opacity = 22.7	Permeability = 2.053	<i>In Vitro</i> Score = 53.5	pH = 1.0
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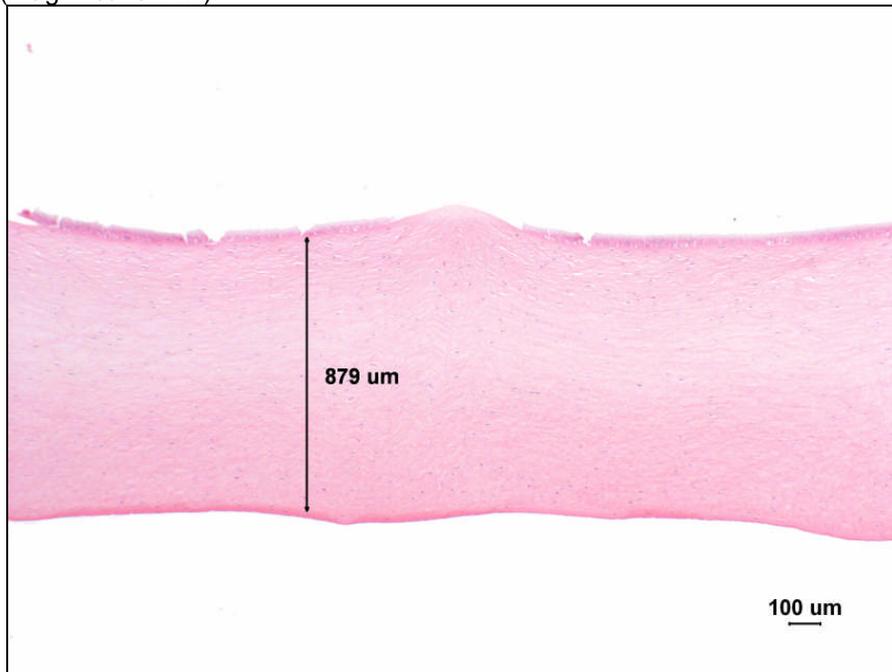
05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Full thickness (magnification 4X)



06AA46 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Full thickness (magnification 4X)

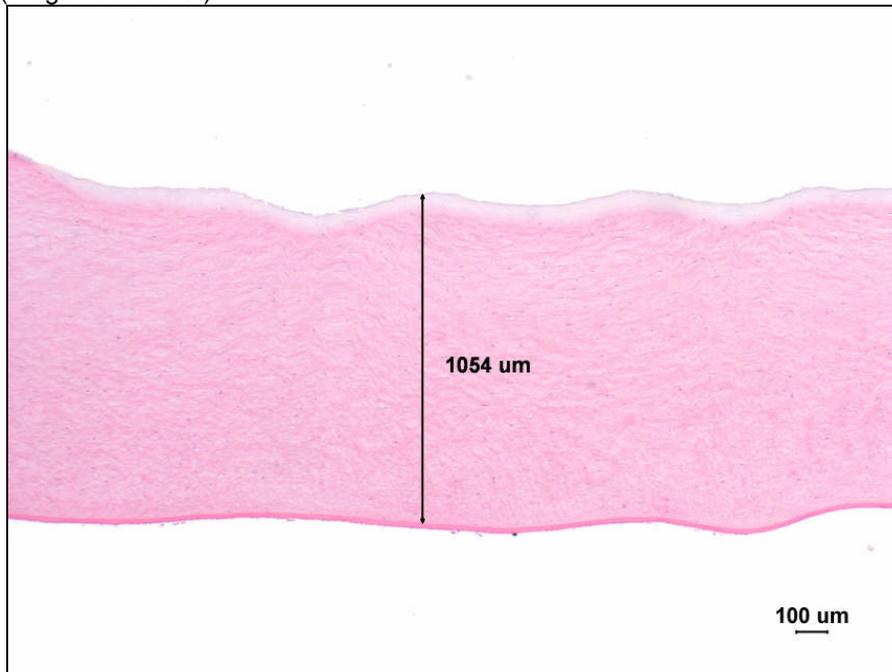


06AA46 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06) – Full thickness (magnification 4X)



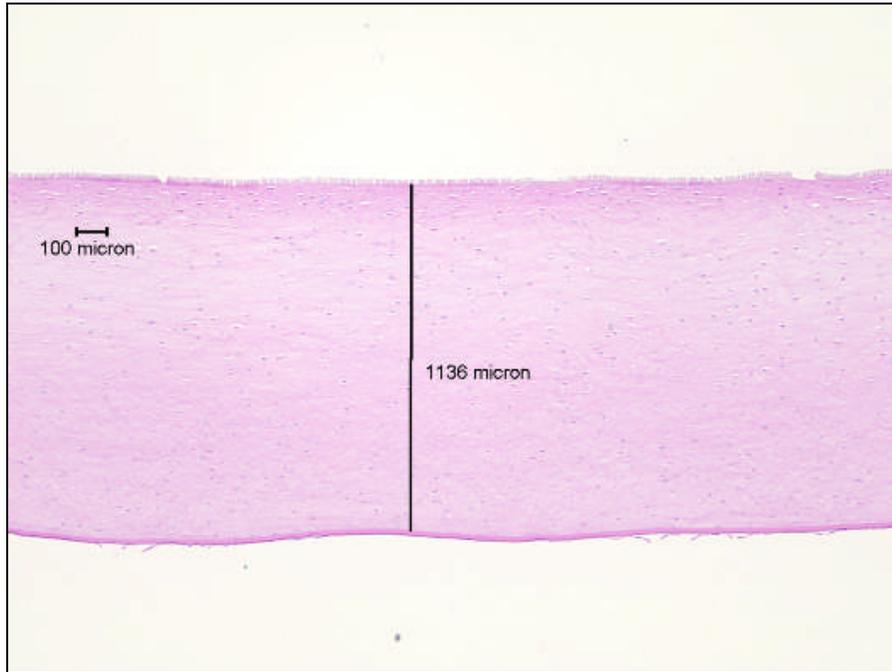
Opacity = 32.3	Permeability = 2.836	<i>In Vitro</i> Score = 74.9	pH = 12.5
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06AA45 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06) – Full thickness (magnification 4X)



Opacity = 6.7	Permeability = 5.016	<i>In Vitro</i> Score = 81.9	pH = 12.0
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05AD98 (5-10% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Full thickness (magnification 48x)



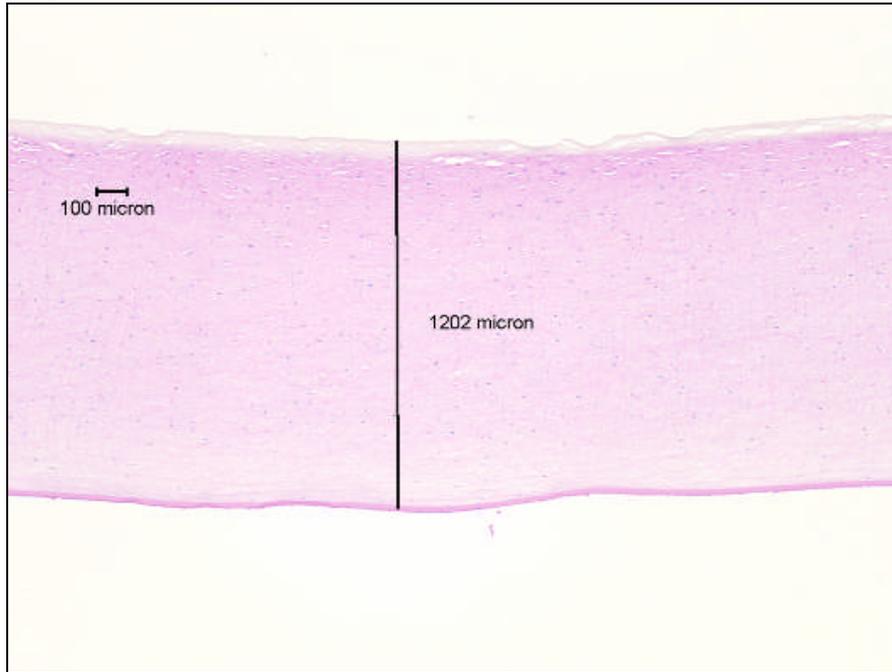
Opacity = 33.0	Permeability = 3.542	<i>In Vitro</i> Score = 86.1	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 3-minute exposure, 120-minute post-exposure (5/23/07) - Full thickness (magnification 48x)



Opacity = 89.2	Permeability = 2.145	<i>In Vitro</i> Score = 121.3	pH = 14.0
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05AD98 (5-10% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Full thickness (magnification 48x)



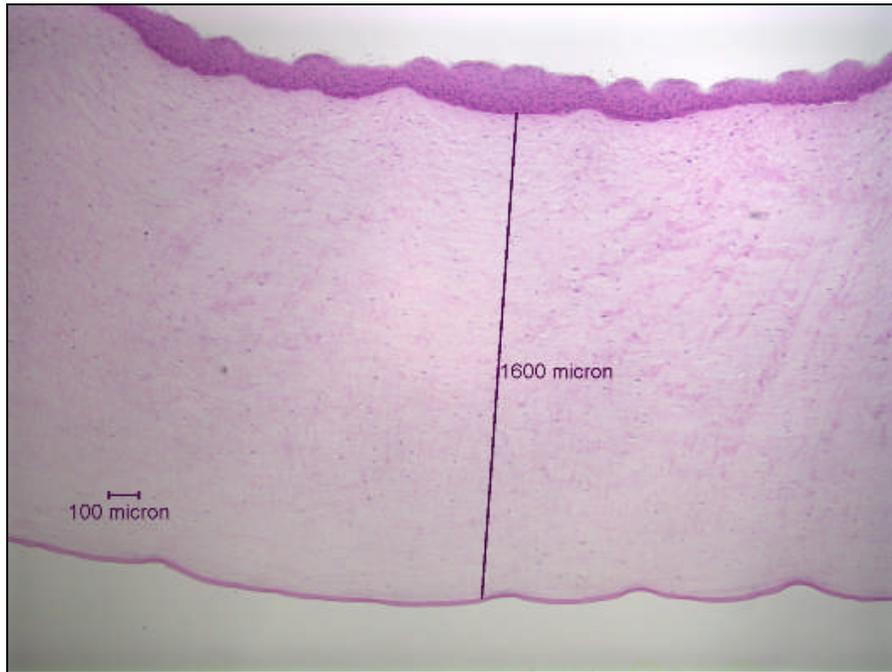
Opacity = 96.0	Permeability = 5.689	<i>In Vitro</i> Score = 181.3	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 1200-minute post-exposure (10/17/06) - Full thickness (magnification 4X)



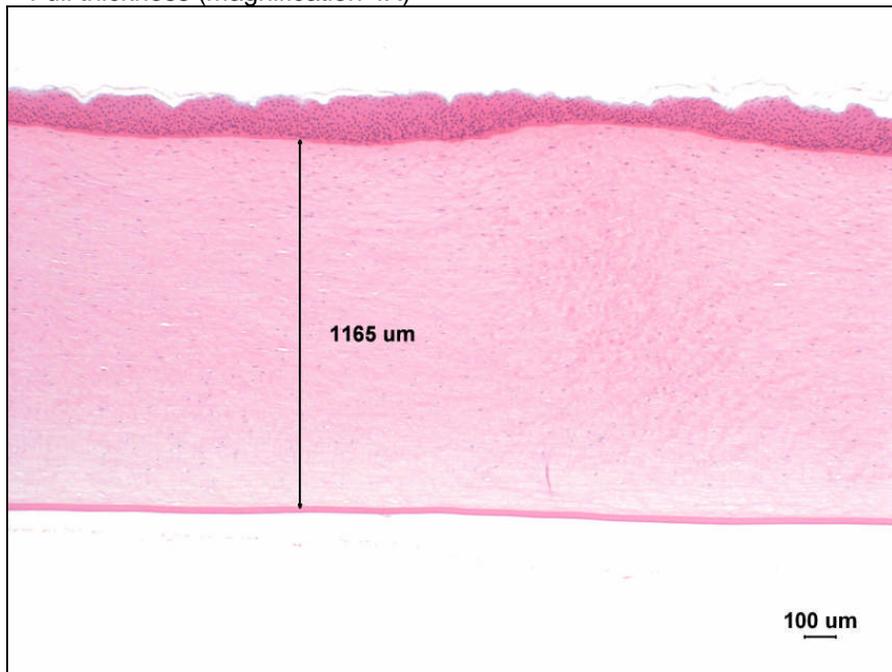
Opacity = 208.7	Permeability = 3.503	<i>In Vitro</i> Score = 261.3	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 120-minute post-exposure (5/23/07) - Full thickness (magnification 48 x)



Opacity = 214.5	Permeability = 3.94	<i>In Vitro</i> Score = 273.6	pH = 14.0
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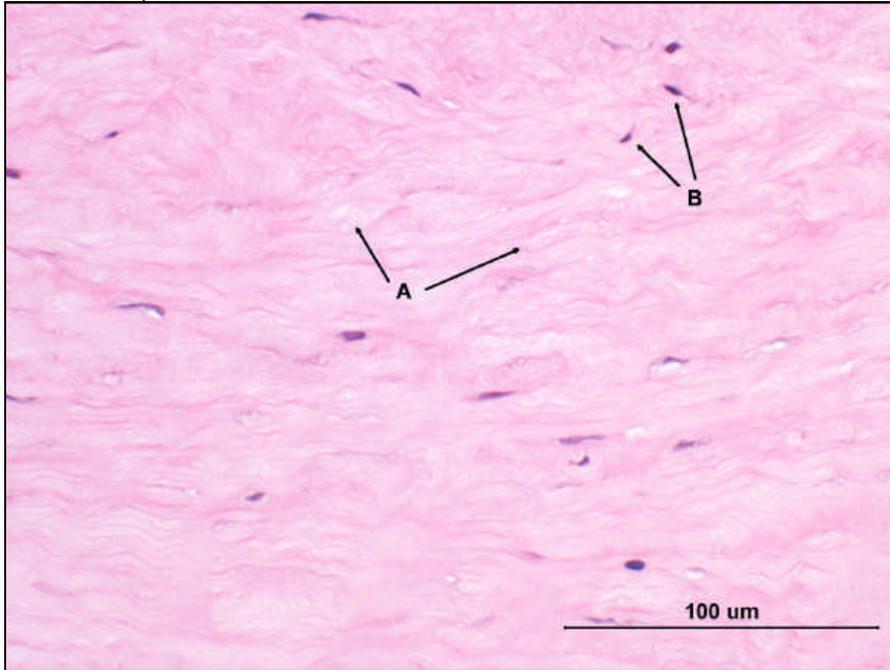
06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 240-minute post-exposure (10/17/06) - Full thickness (magnification 4X)



Opacity = 220.8	Permeability = 3.818	<i>In Vitro</i> Score = 278.1	pH = 14.0
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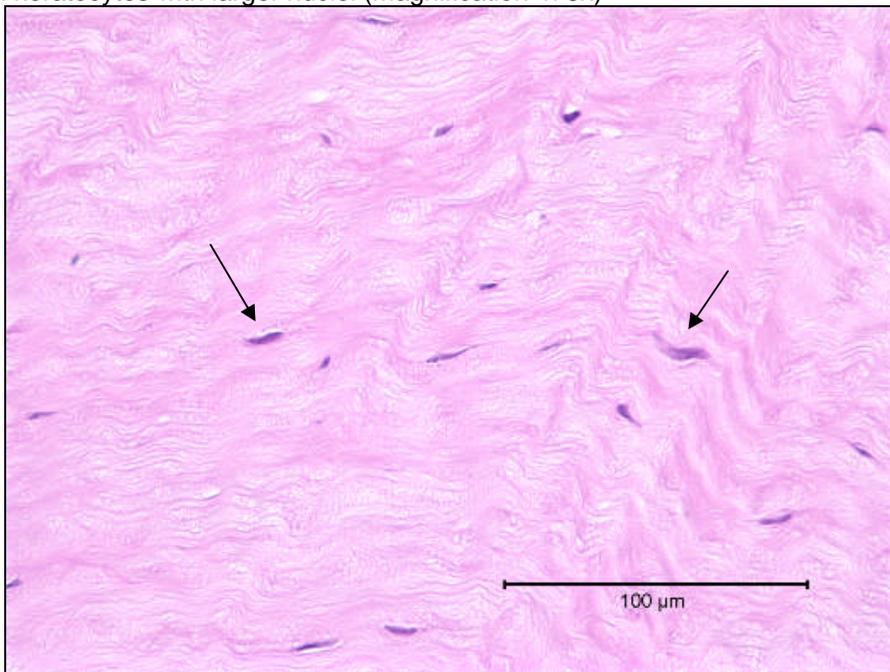
## Upper Stroma

06AB76 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (3/29/06) – Upper stroma with expansion of the collagen matrix (A) and pyknotic keratocyte nuclei (B) (magnification 40X)



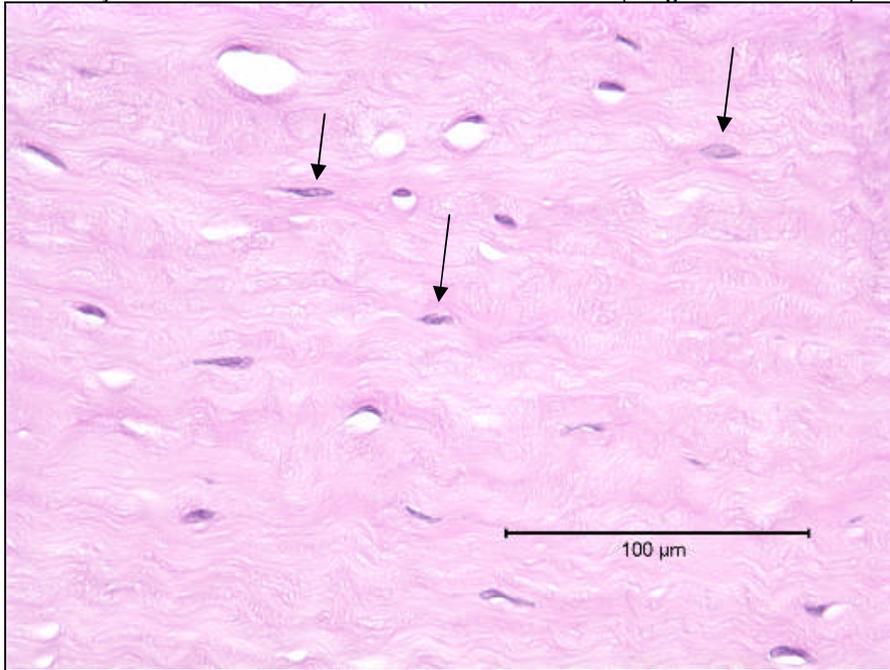
Opacity = 2.3	Permeability = 0.325	<i>In Vitro</i> Score = 7.2	pH = 3.0
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05AG43 (5-10% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (11/02/05) - Stroma at 20% depth showing moderate collagen matrix vacuolization and a slight increase in keratocytes with larger nuclei (magnification 475x)



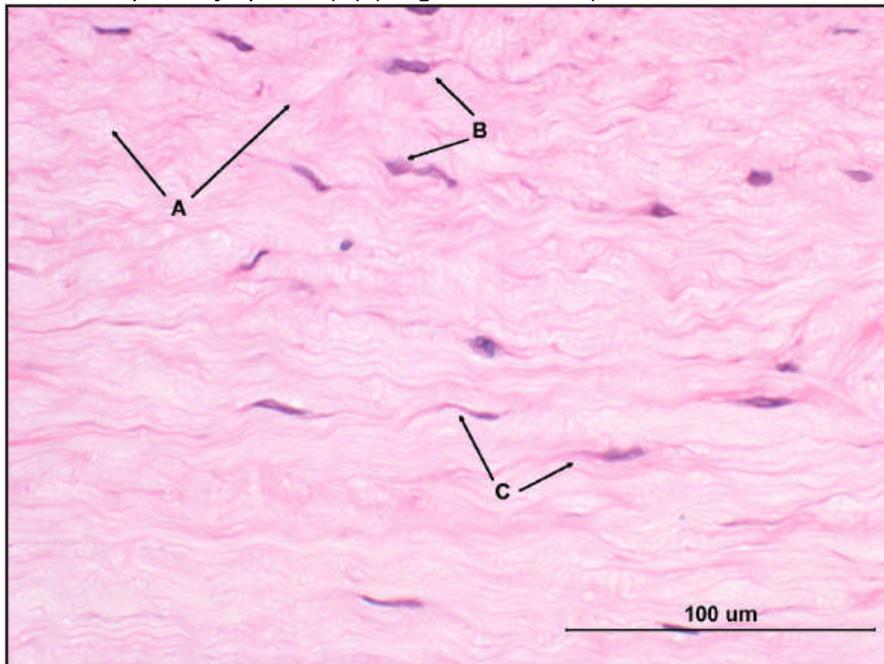
Opacity = 6	Permeability = 0.308	<i>In Vitro</i> Score = 10.6	pH = 3.0
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05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (09/08/05) - Stroma at 20% depth showing moderate collagen matrix vacuolization and a marked increase in keratocytes with abnormal chromatin condensation (magnification 475x)



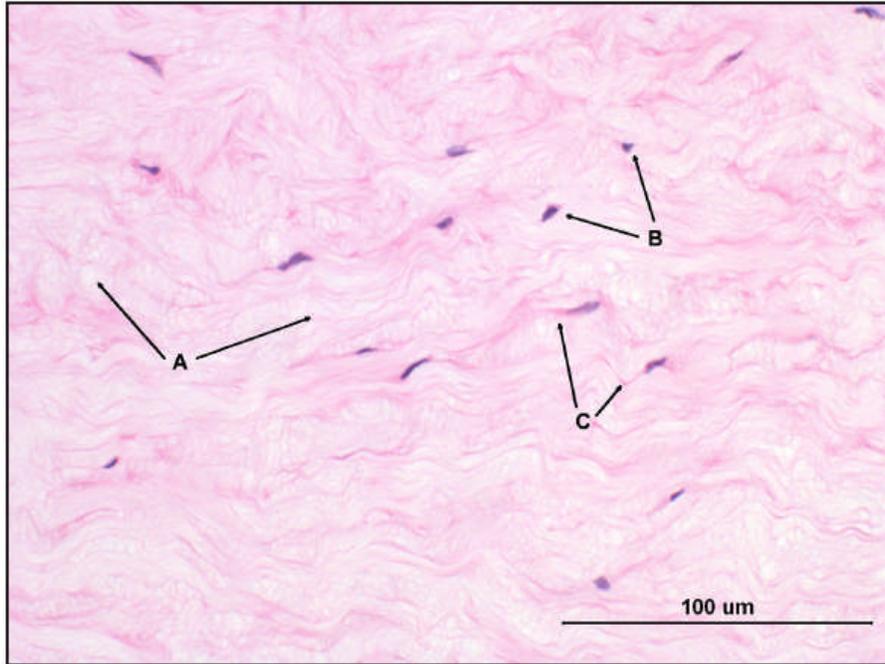
Opacity = 14	Permeability = 0.281	<i>In Vitro</i> Score = 18.2	pH = 1.0
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05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (3/29/06) – Upper stroma with expansion of the collagen matrix (A), vacuolation of keratocyte nuclei (B), and eosinophilic cytoplasm (C) (magnification 40X)



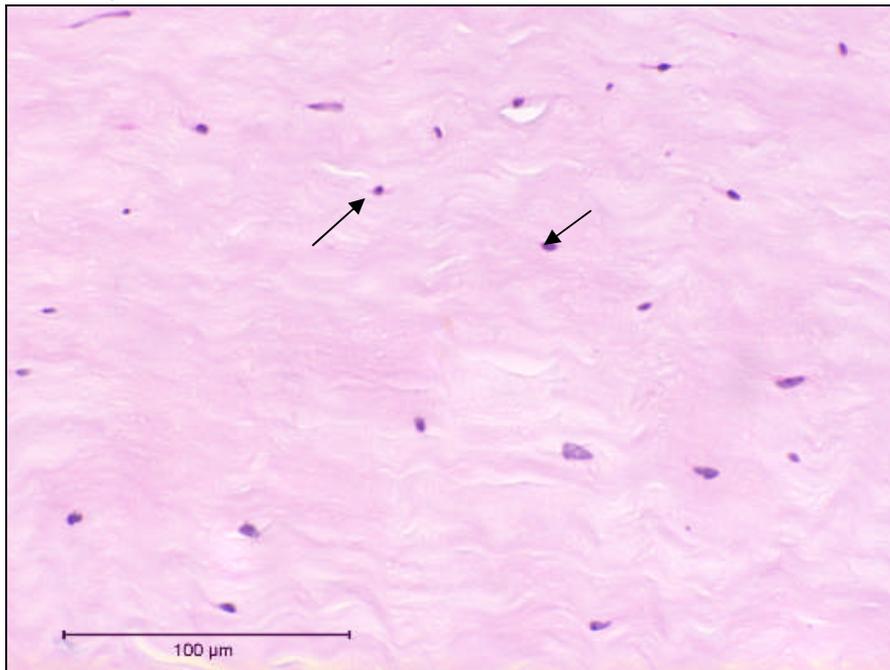
Opacity = 16.7	Permeability = 0.333	<i>In Vitro</i> Score = 21.7	pH = 1.0
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06AB76 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Upper stroma with vacuolation of the collagen matrix (A), pyknotic keratocyte nuclei (B), and eosinophilic cytoplasm (C) (magnification 40X)



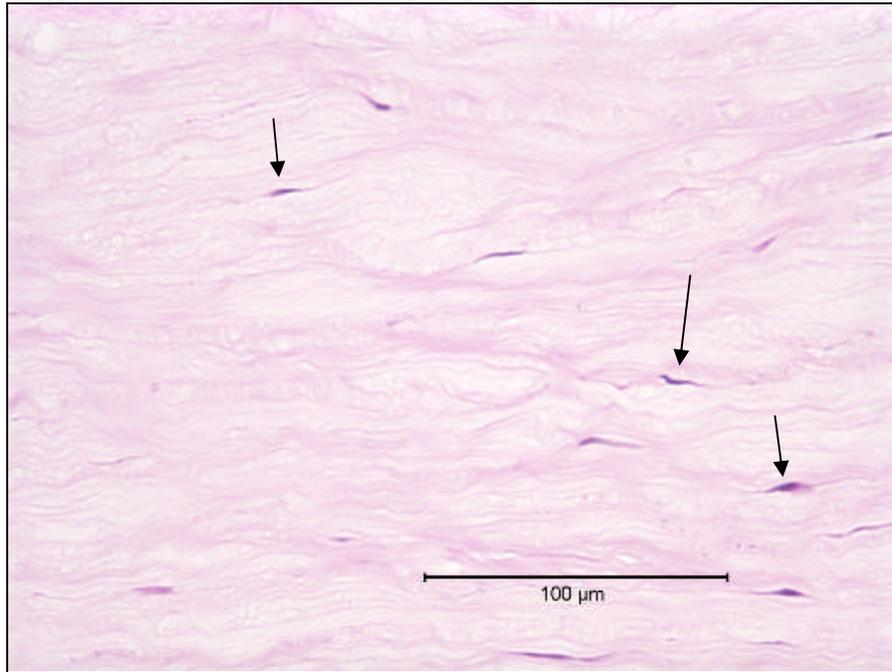
Opacity = 7.2	Permeability = 0.994	<i>In Vitro</i> Score = 22.1	pH = 3.0
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Parafluoroaniline, neat, 10-min exposure, 20-hour post-exposure (11/25/98) – Stroma at 30% depth showing moderate collagen matrix vacuolization and keratocyte nuclear changes (magnification 475x).



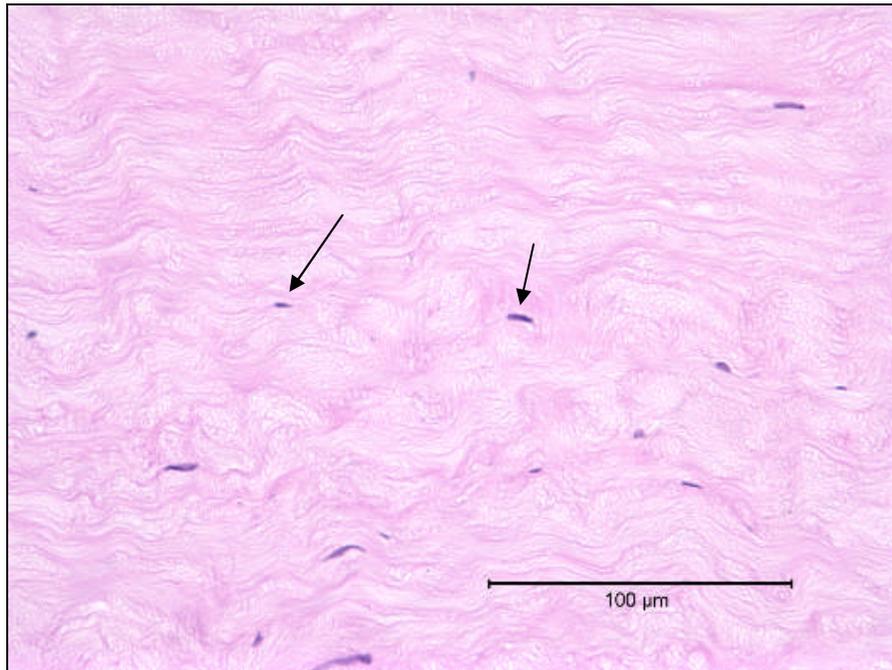
Opacity = 21.5	Permeability = 0.467	<i>In Vitro</i> Score = 28.5
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05AD99 (1-5% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Stroma at 20% depth showing marked collagen matrix vacuolization and a marked/moderate frequency of keratocytes with nuclear condensation and slight cytoplasmic eosinophilia (magnification 475x)



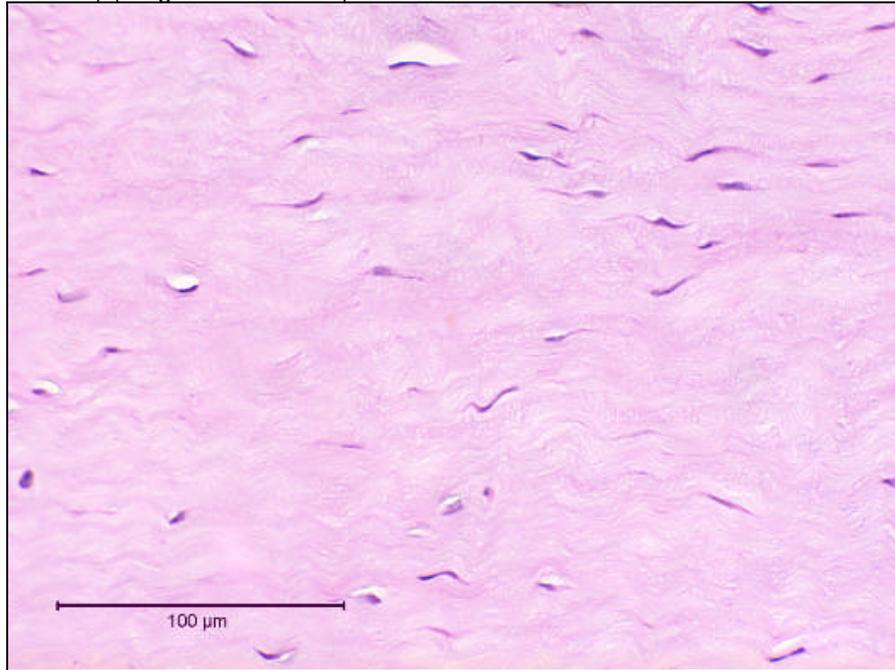
Opacity = 4	Permeability = 1.709	<i>In Vitro</i> Score = 29.6	pH = 14.0
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05AG43 (5-10% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (11/02/05) - Stroma at 20% depth showing moderate to marked collagen matrix vacuolization and a marked increase in the frequency of keratocytes with hyper-condensed nuclei (magnification 475x)



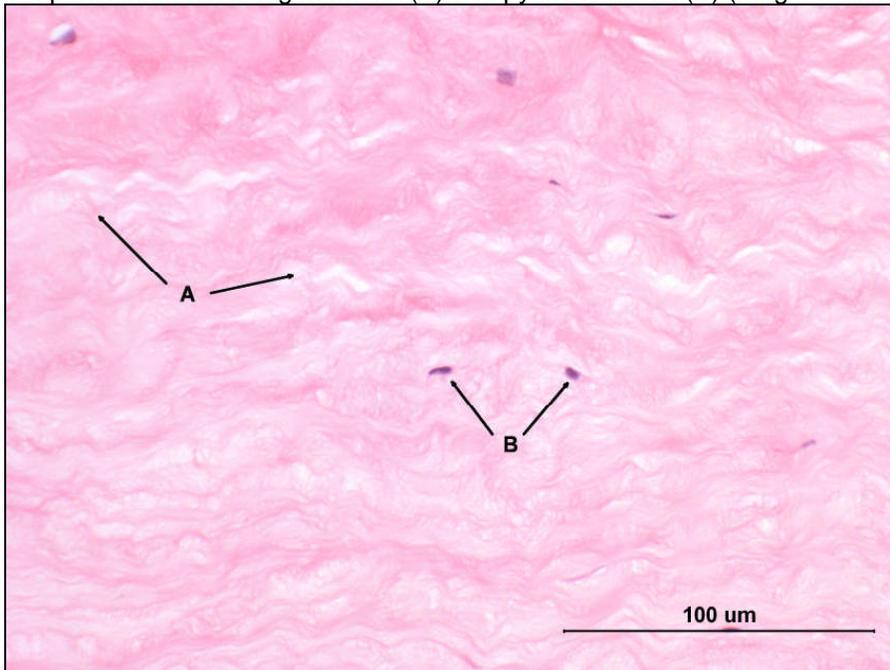
Opacity = 18.7	Permeability = 0.736	<i>In Vitro</i> Score = 29.7	pH = 3.0
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Parafluoroaniline, neat, 10-min exposure, 2-hour post-exposure (11/25/98) – Stroma at 20-30% depth showing keratocyte nuclear pyknosis and cytoplasmic eosinophilia (also moderate collagen matrix vacuolation) (magnification 475x)



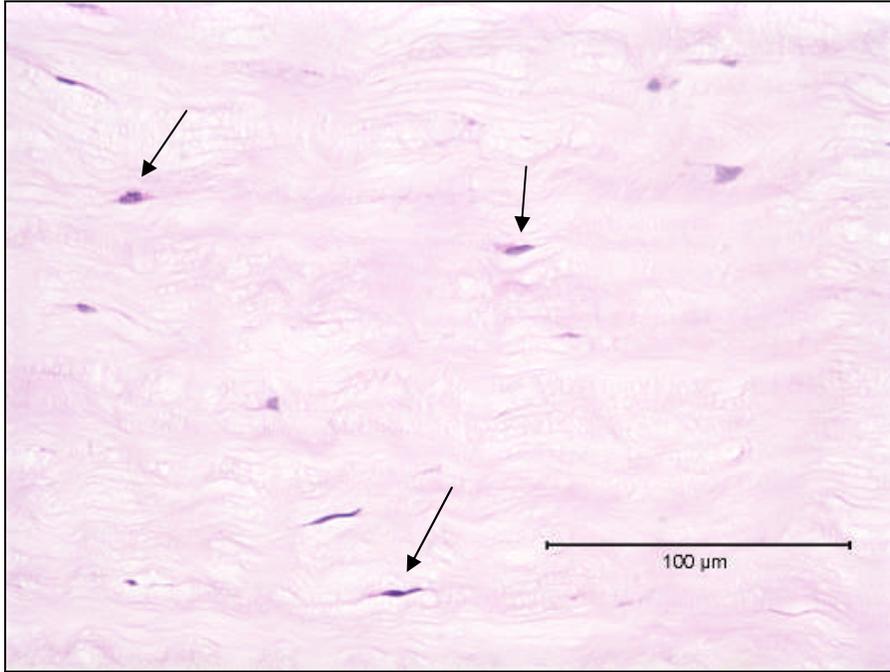
Opacity = 18.0	Permeability = 0.862	<i>In Vitro</i> Score = 30.9
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06AA45 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Upper stroma with expansion of the collagen matrix (A) and pyknotic nuclei (B) (magnification 40X)



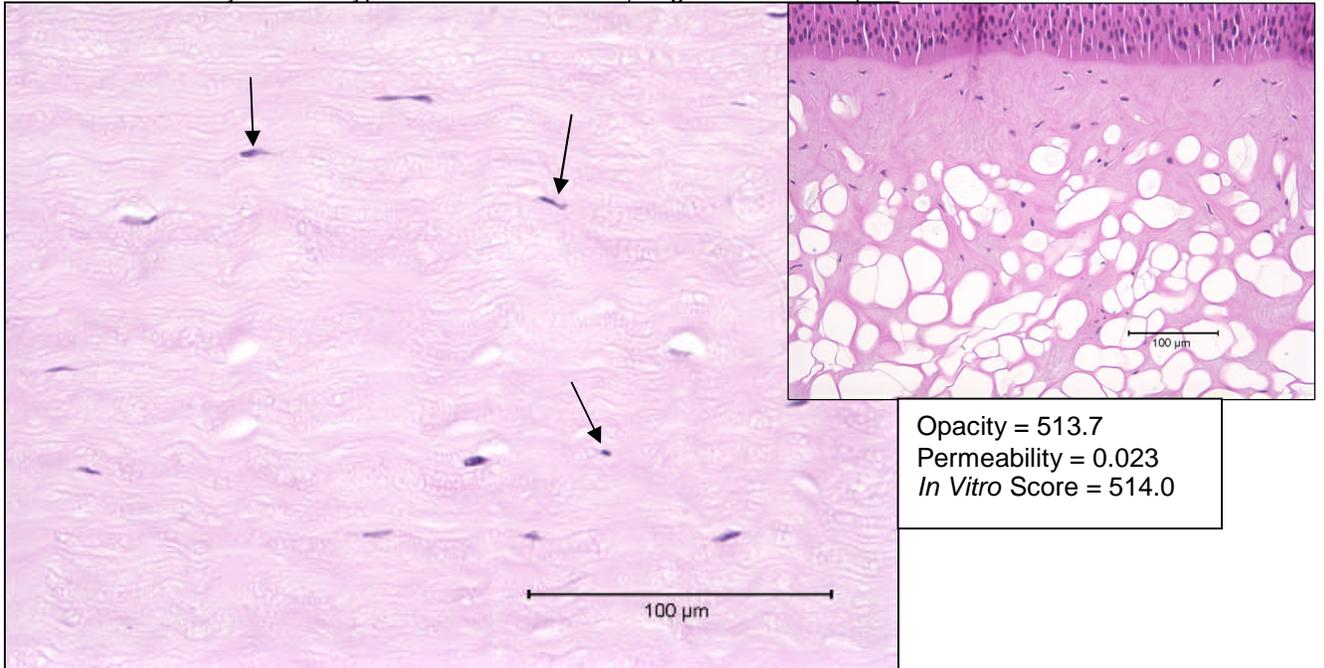
Opacity = 4.3	Permeability = 2.494	<i>In Vitro</i> Score = 41.7	pH = 12.0
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05AD99(1-5% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Stroma at 20% depth showing marked collagen matrix vacuolization and a marked/moderate frequency of keratocytes with nuclear condensation and slight cytoplasmic eosinophilia (magnification 475x)



Opacity = 2.7	Permeability = 2.695	<i>In Vitro</i> Score = 43.1	pH = 14.0
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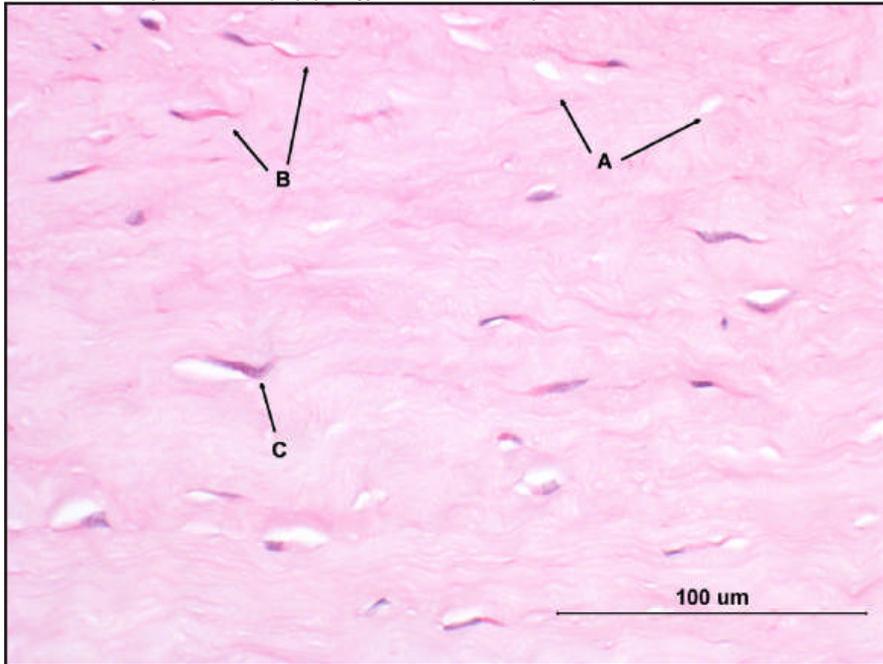
05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (09/08/05) - Stroma at 20% depth showing moderate collagen matrix vacuolization and a marked increase in keratocytes with hyper-condensed nuclei (magnification 475x)



Opacity = 513.7	Permeability = 0.023	<i>In Vitro</i> Score = 514.0
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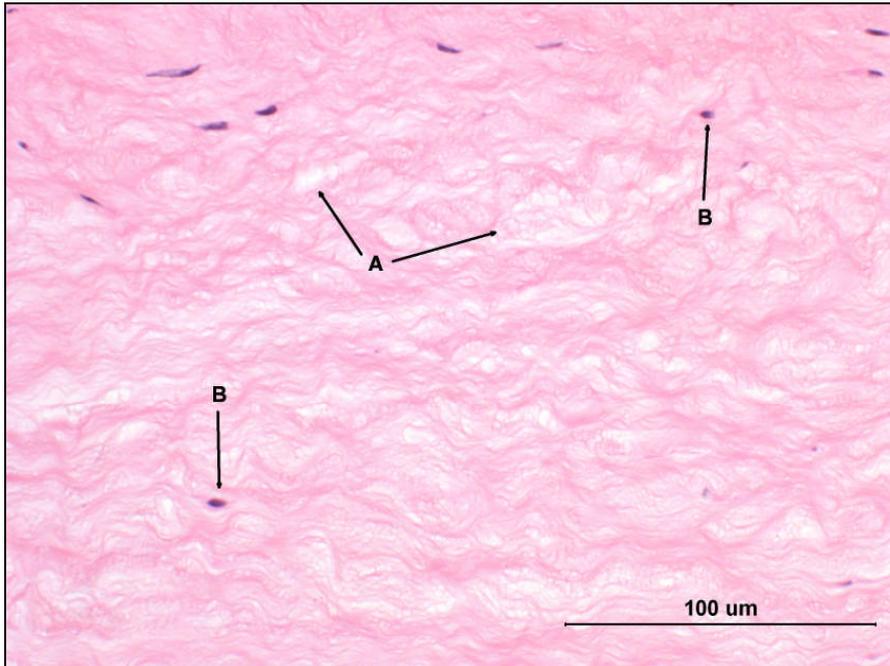
Opacity = 22.7	Permeability = 2.053	<i>In Vitro</i> Score = 53.5	pH = 1.0
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05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Upper stroma with vacuolation of the collagen matrix (A), eosinophilic cytoplasm (B), and vacuolated keratocyte nuclei (C) (magnification 40X)



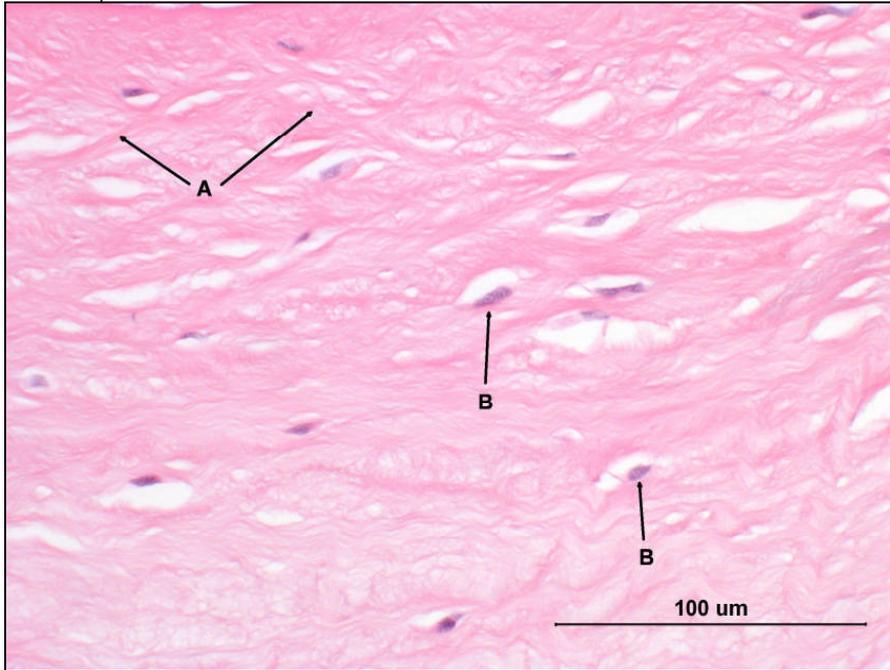
Opacity = 24.2	Permeability = 2.061	<i>In Vitro</i> Score = 55.1	pH = 1.0
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06AA46 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Upper stroma with expansion of the collagen matrix (A) and pyknotic keratocyte nuclei (B) (magnification 40X)



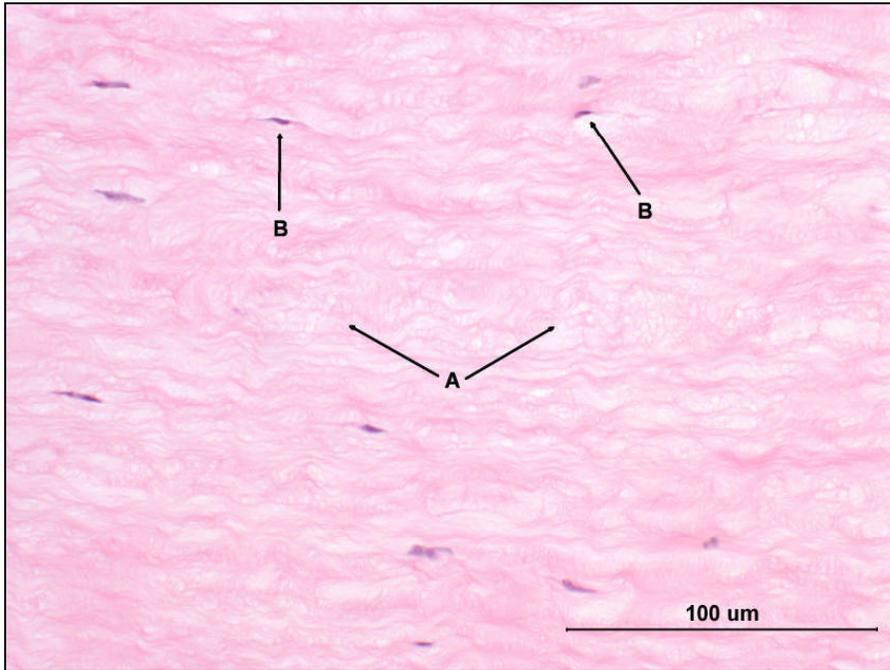
Opacity = 32.7	Permeability = 2.152	<i>In Vitro</i> Score = 65	pH = 12.5
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06AA46 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06) – Upper stroma with expansion of the collagen matrix (A) and vacuolated keratocyte nuclei (B) (magnification 40X)



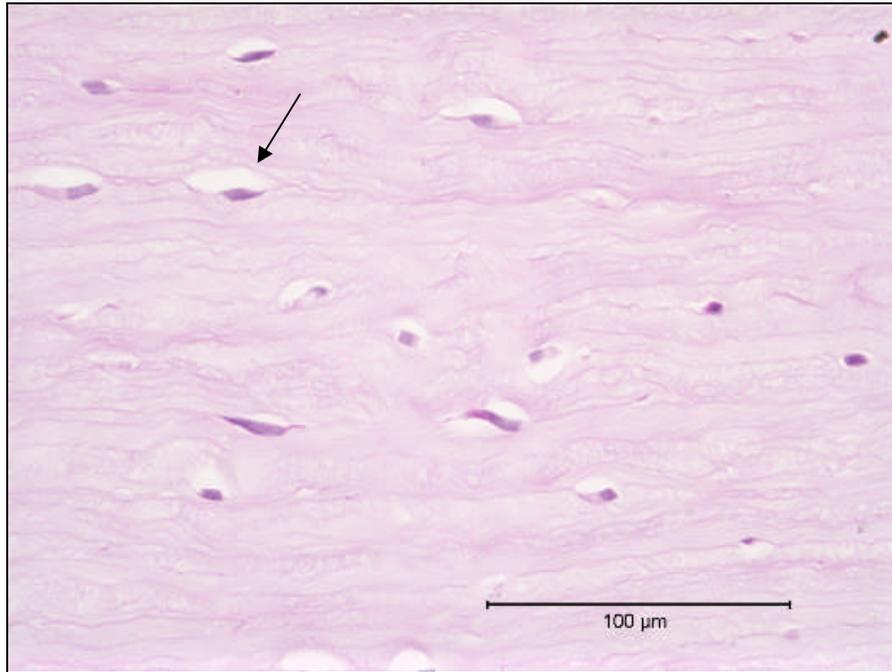
Opacity = 32.3	Permeability = 2.836	<i>In Vitro</i> Score = 74.9	pH = 12.5
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06AA45 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06) – Upper stroma with expansion of the collagen matrix (A) and pyknotic keratocyte nuclei (B) (magnification 40X)



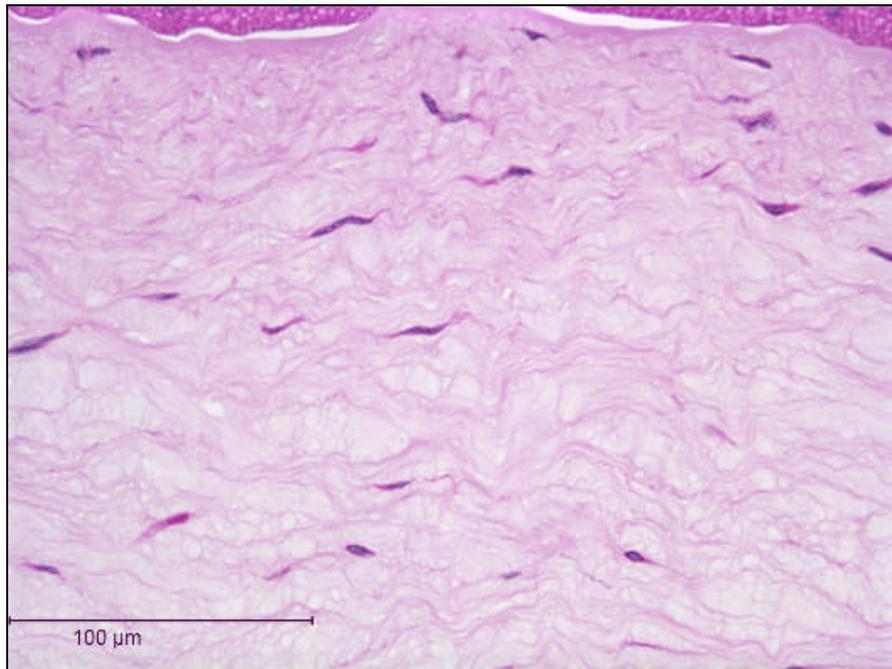
Opacity = 6.7	Permeability = 5.016	<i>In Vitro</i> Score = 81.9	pH = 12.0
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05AD98 (5-10% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Stroma at 20% depth showing moderate collagen matrix vacuolization and a marked increase in the frequency of keratocytes with nuclear granularization (magnification 475x)



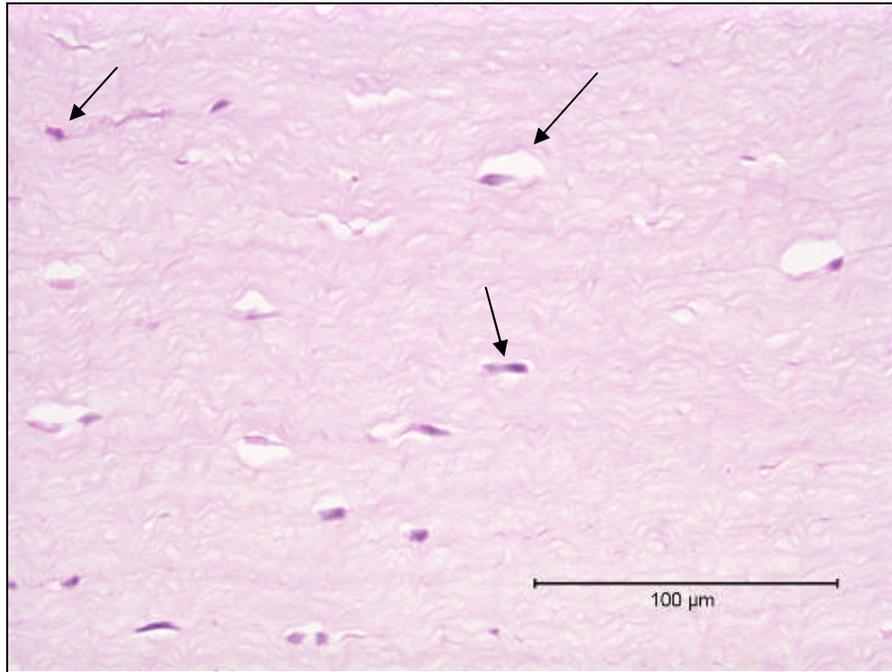
Opacity = 33.0	Permeability = 3.542	<i>In Vitro</i> Score = 86.1	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 3-minute exposure, 120-minute post-exposure (5/23/07) - Upper stroma directly beneath Bowman's layer showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475 x)



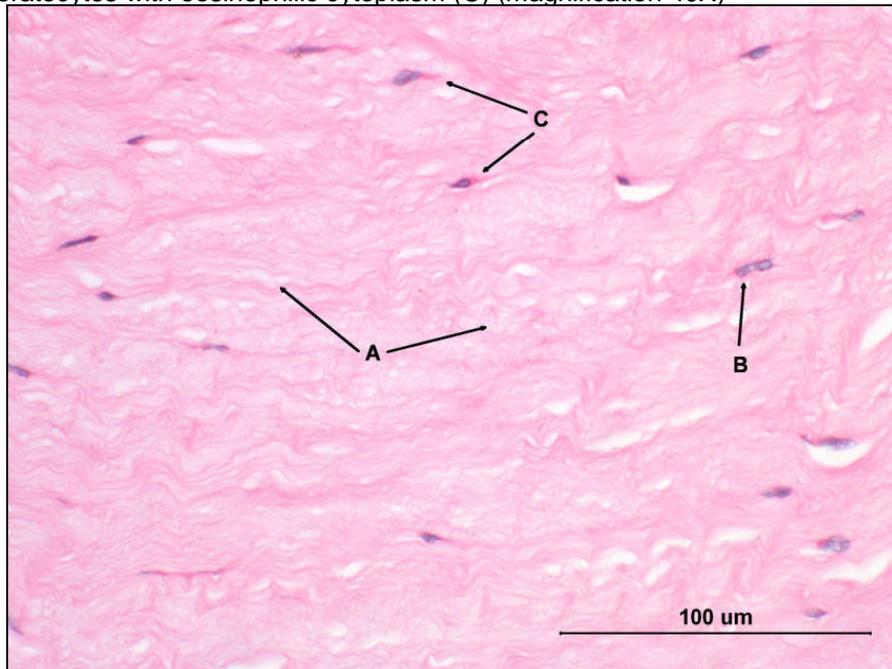
Opacity = 89.2	Permeability = 2.145	<i>In Vitro</i> Score = 121.3	pH = 14.0
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05AD98 (5-10% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Stroma at 20% depth showing only moderate vacuolization of the collagen matrix and degeneration of the keratocytes (magnification 475x)



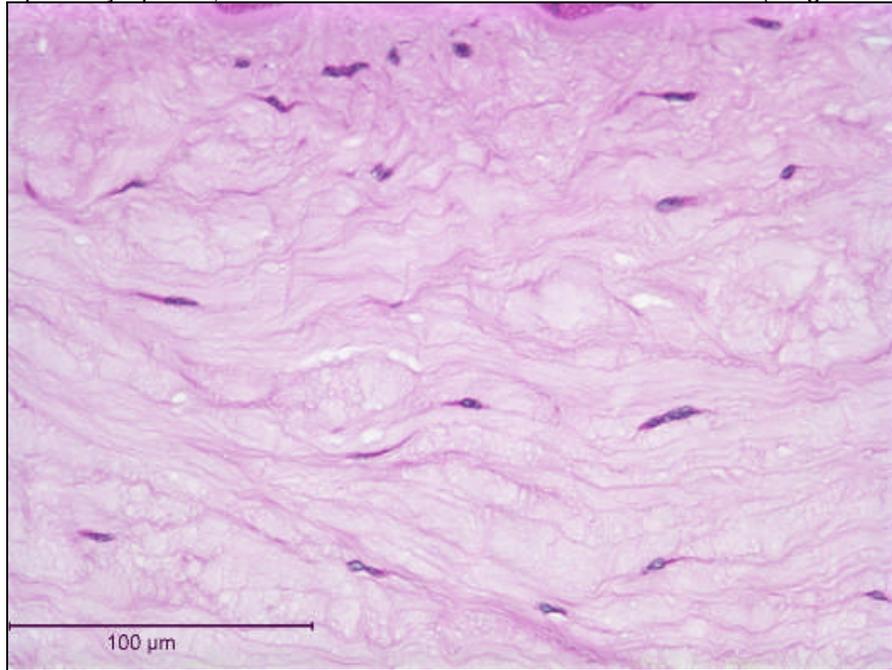
Opacity = 96.0	Permeability = 5.689	<i>In Vitro</i> Score = 181.3	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 1200-minute post-exposure (10/17/06) – Upper stroma with expansion of the collagen matrix (A), vacuolated keratocyte nuclei (B), and keratocytes with eosinophilic cytoplasm (C) (magnification 40X)



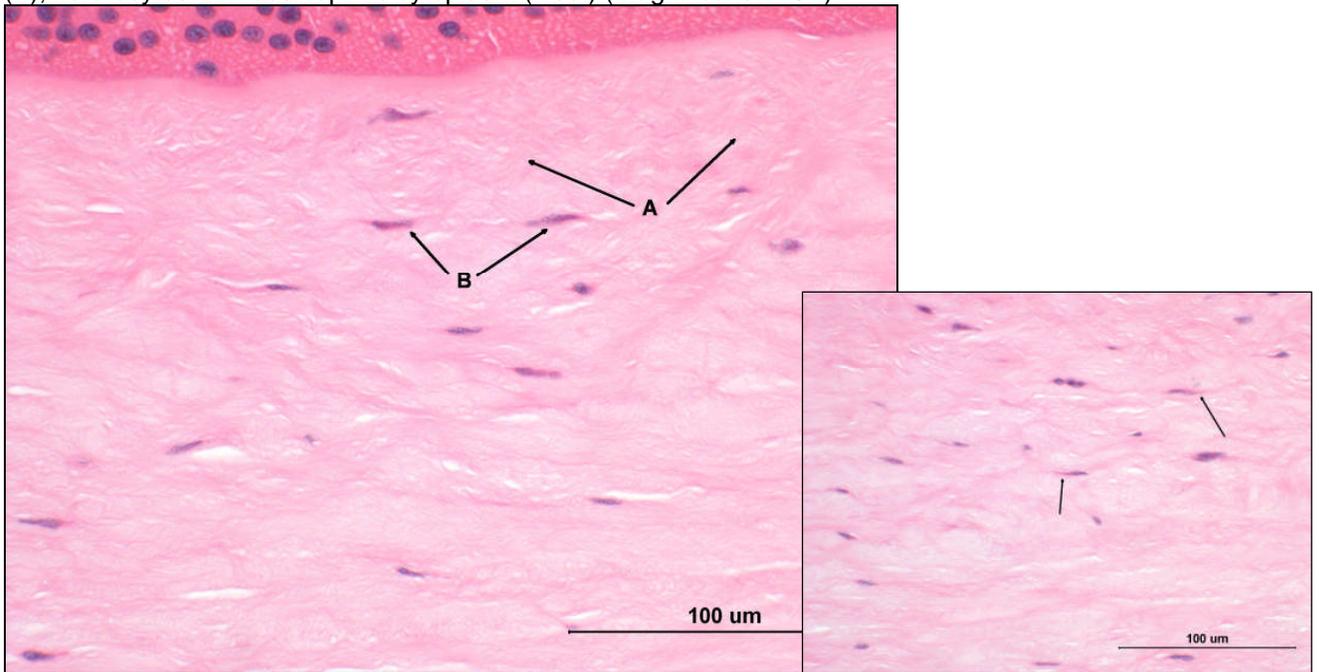
Opacity = 208.7	Permeability = 3.503	<i>In Vitro</i> Score = 261.3	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 120-minute post-exposure (5/23/07) - Upper stroma directly beneath Bowman's layer showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475x)



Opacity = 214.5	Permeability = 3.94	<i>In Vitro</i> Score = 273.6	pH = 14.0
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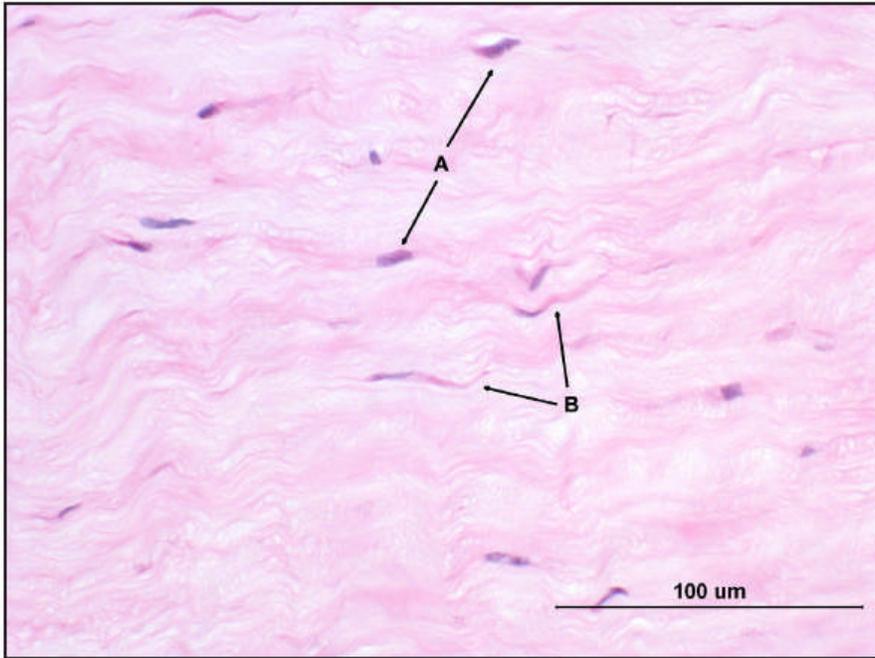
06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 240-minute post-exposure (10/17/06) – Upper stroma with expansion of the collagen matrix (A), vacuolated keratocyte nuclei (B), keratocytes with eosinophilic cytoplasm (inset) (magnification 40X)



Opacity = 220.8	Permeability = 3.818	<i>In Vitro</i> Score = 278.1	pH = 14.0
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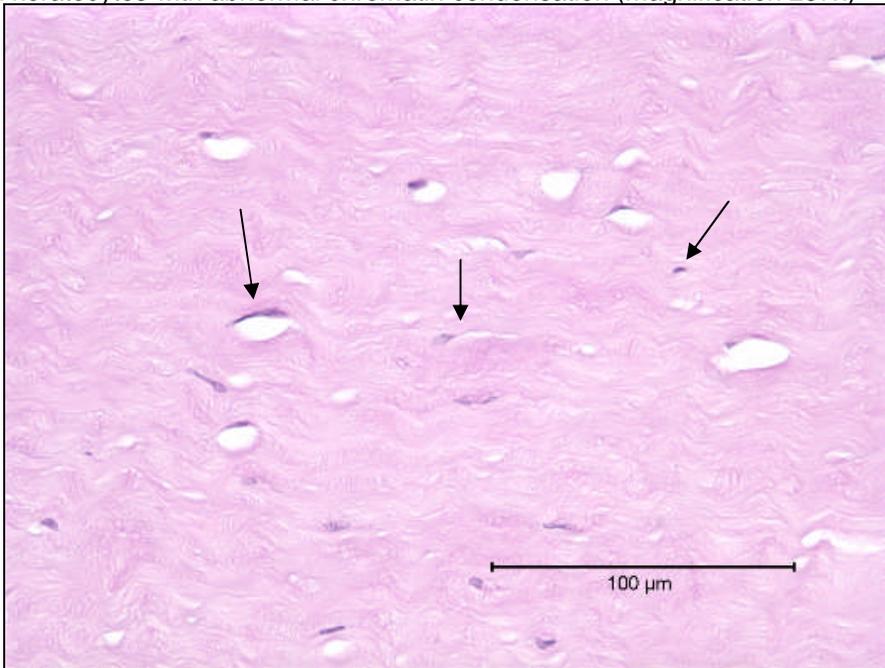
## Mid Stroma

06AB76 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (3/29/06) – Mid stroma with vacuolated keratocyte nuclei (A) and eosinophilic cytoplasm (B) (magnification 40X)



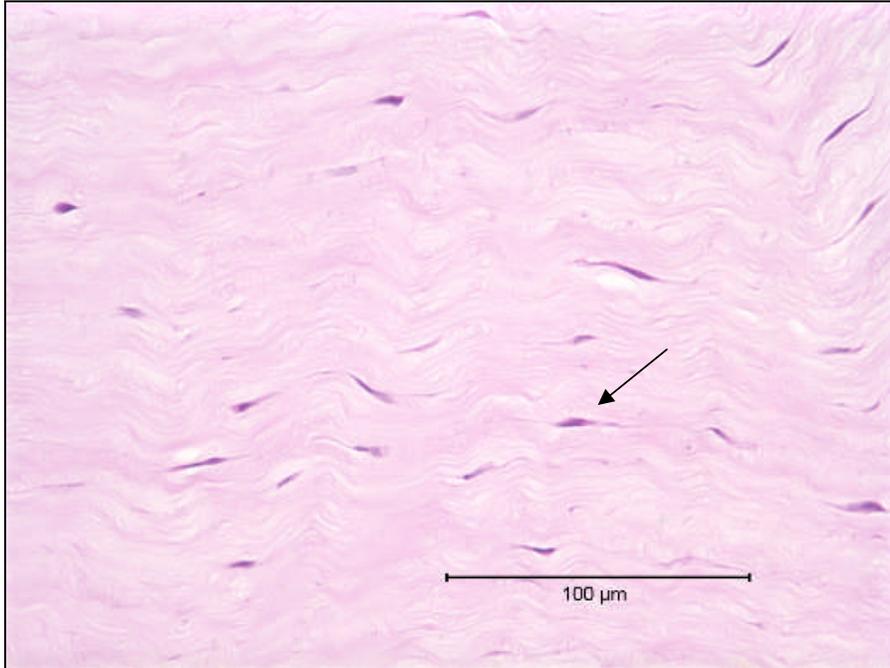
Opacity = 2.3	Permeability = 0.325	<i>In Vitro</i> Score = 7.2	pH = 3.0
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05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (09/08/05) - Stroma at mid depth showing moderate collagen matrix vacuolization and a marked increase in keratocytes with abnormal chromatin condensation (magnification 237x)



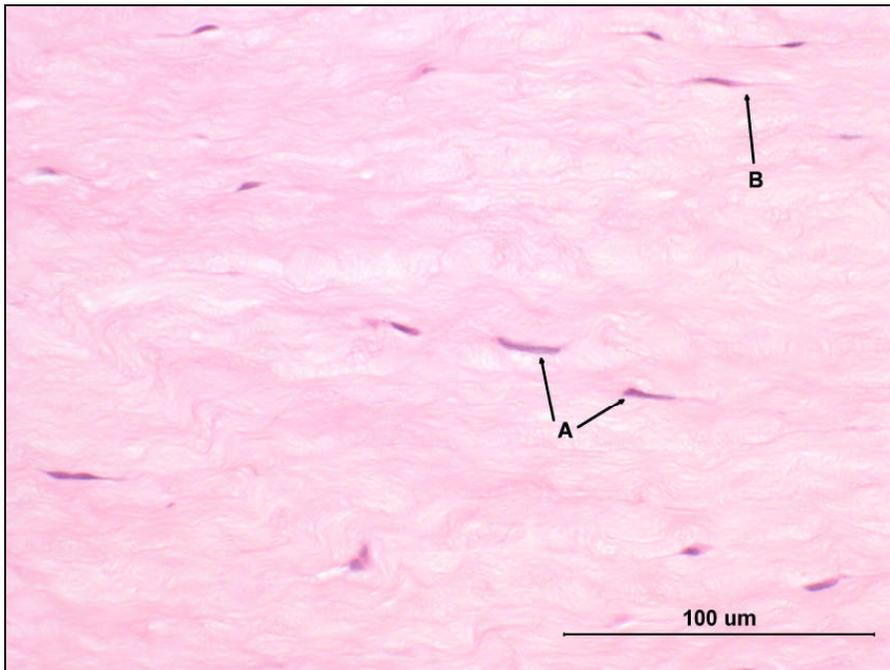
Opacity = 14	Permeability = 0.281	<i>In Vitro</i> Score = 18.2	pH = 1.0
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05AD99 (1-5% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Stroma at mid depth showing more moderate collagen matrix vacuolization and keratocytes with larger nuclei and cytoplasmic eosinophilia (magnification 475x)



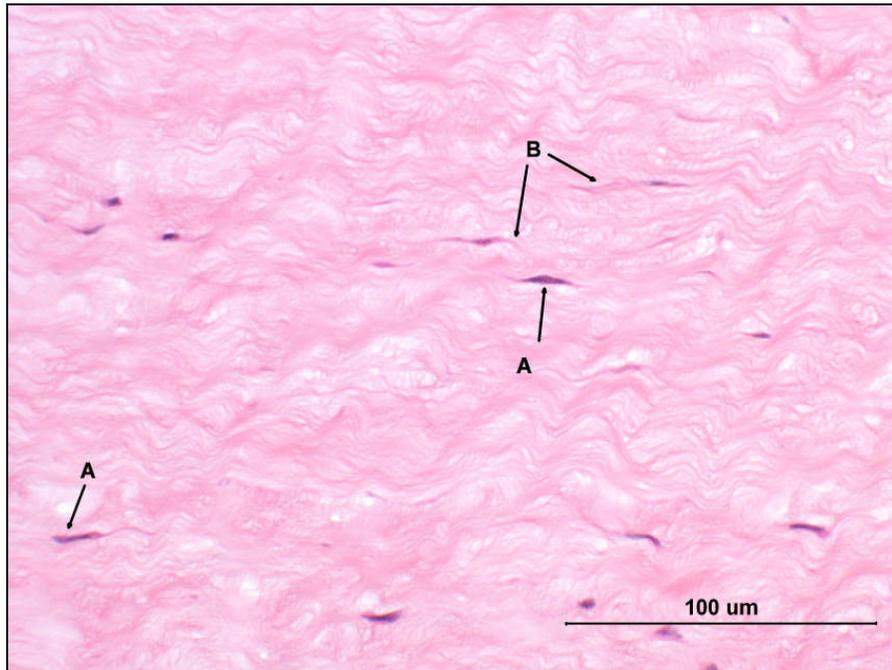
Opacity = 4	Permeability = 1.709	<i>In Vitro</i> Score = 29.6	pH = 14.0
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06AA45 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Mid stroma with vacuolated keratocyte nuclei (A) and hypereosinophilic cytoplasm (B) (magnification 40X)



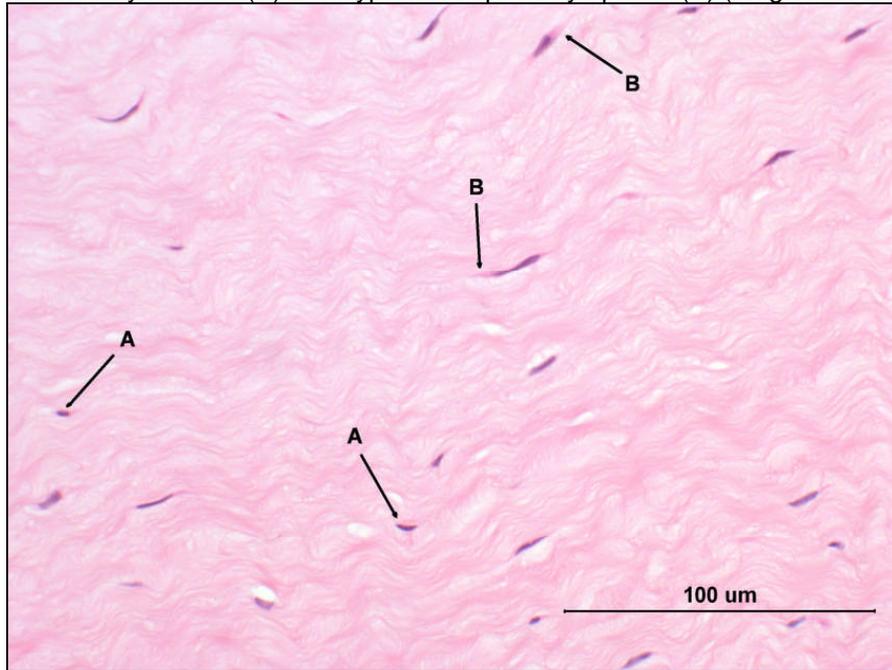
Opacity = 4.3	Permeability = 2.494	<i>In Vitro</i> Score = 41.7	pH = 12.0
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06AA46 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Mid stroma with vacuolated keratocyte nuclei (A) and hyper eosinophilic cytoplasm (B) (magnification 40X)



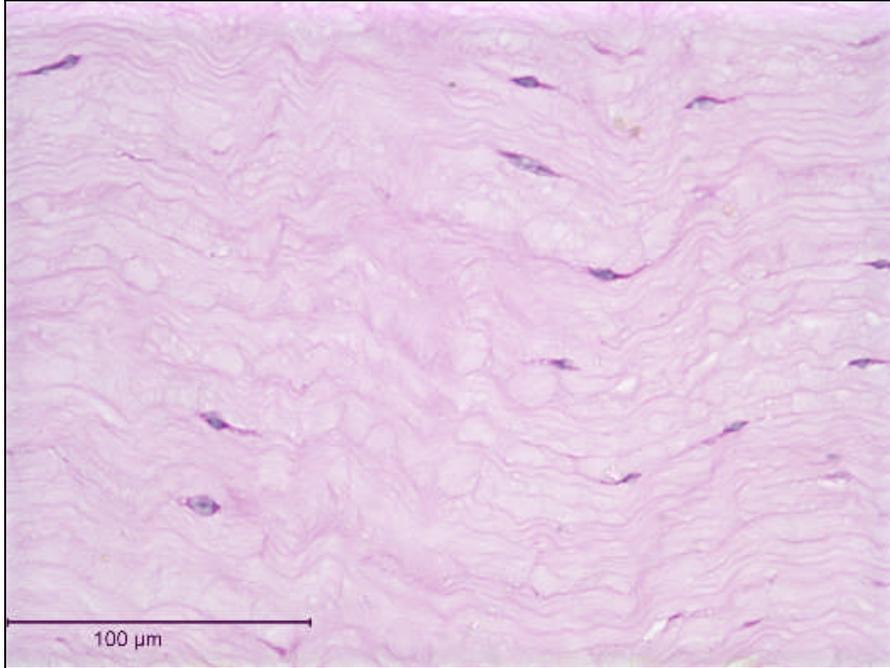
Opacity = 32.7	Permeability = 2.152	<i>In Vitro</i> Score = 65	pH = 12.5
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06AA46 (Bleach Mixture), 10-minute exposure, 120-minute post-exposure (2/7/06) – Mid stroma with pyknotic keratocyte nuclei (A) and hyper eosinophilic cytoplasm (B) (magnification 40X)



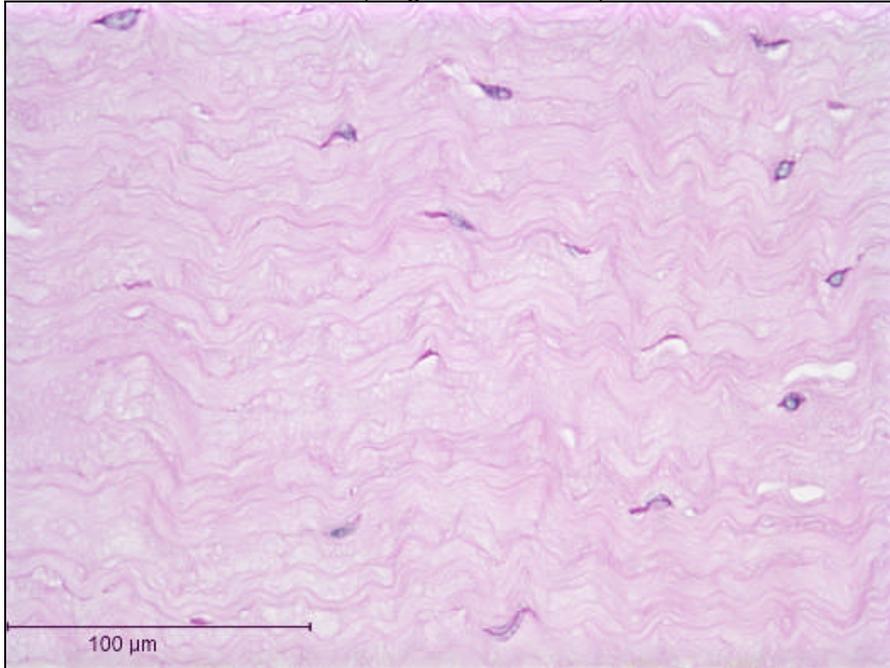
Opacity = 32.3	Permeability = 2.836	<i>In Vitro</i> Score = 74.9	pH = 12.5
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06AH39 (10-24% Tripolyphosphate), neat, 3-minute exposure, 120-minute post-exposure (5/23/07) - Mid stroma showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475 x)



Opacity = 89.2	Permeability = 2.145	<i>In Vitro</i> Score = 121.3	pH = 14.0
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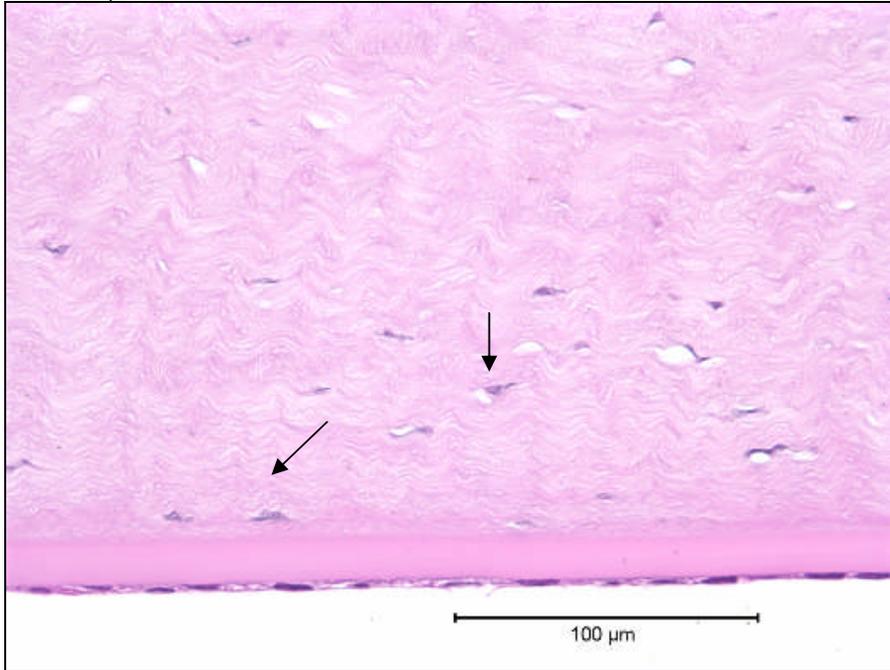
06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 120-minute post-exposure (5/23/07) - Mid stroma showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475 x)



Opacity = 214.5	Permeability = 3.94	<i>In Vitro</i> Score = 273.6	pH = 14.0
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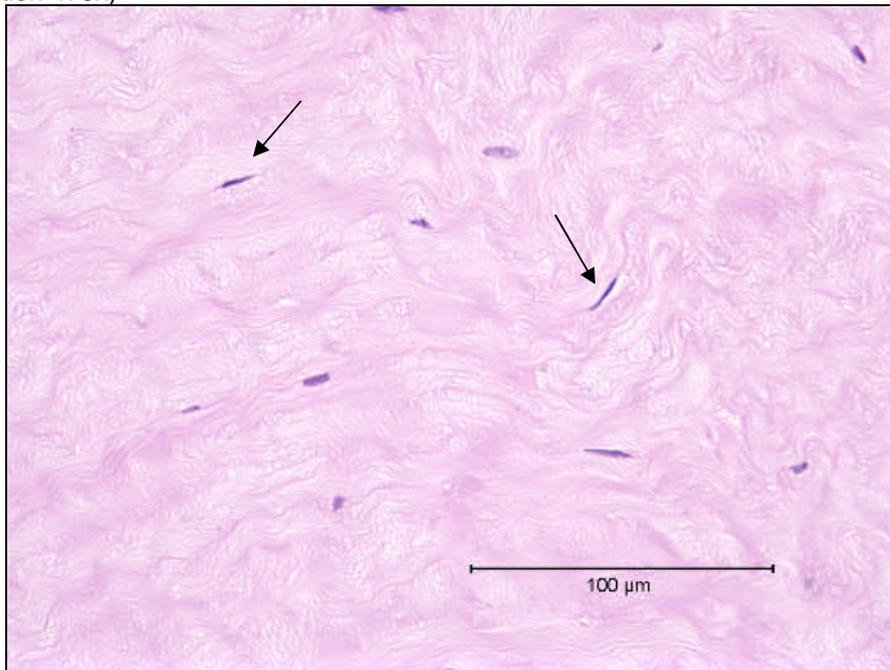
## Lower Stroma

05AE47 (1-5% Hydrogen Peroxide), neat, 3-minute exposure, 120-minute post-exposure (09/08/05) - Stroma at just above Descemet's Membrane showing slight to moderate collagen matrix vacuolization and an increase in keratocytes with abnormal chromatin condensation (magnification 475x)



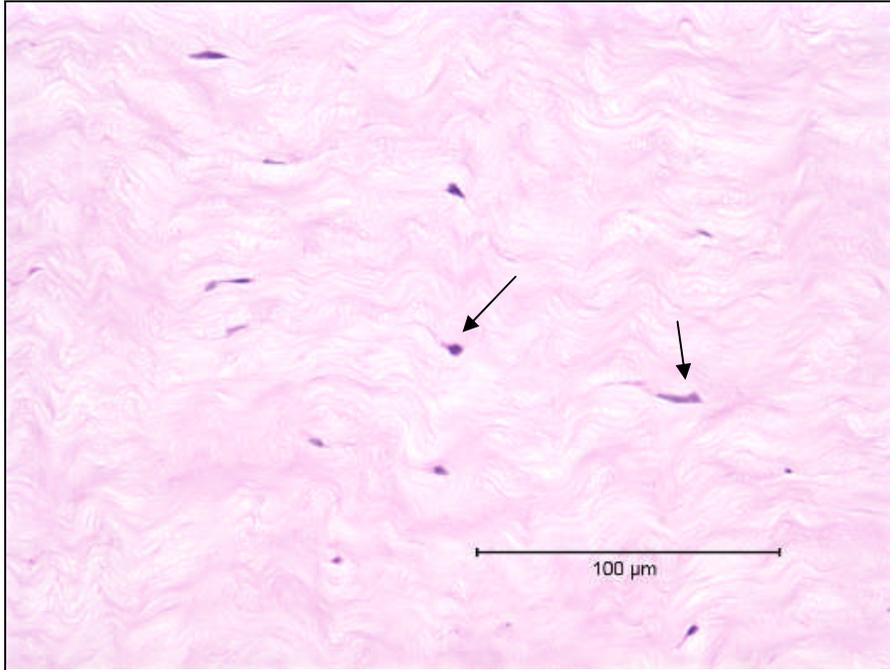
Opacity = 14	Permeability = 0.281	<i>In Vitro</i> Score = 18.2	pH = 1.0
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05AG43 (5-10% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (11/02/05) - Stroma below mid depth showing moderate to marked collagen matrix vacuolization and a marked increase in the frequency of keratocytes with hyper-condensed nuclei (magnification 475x)



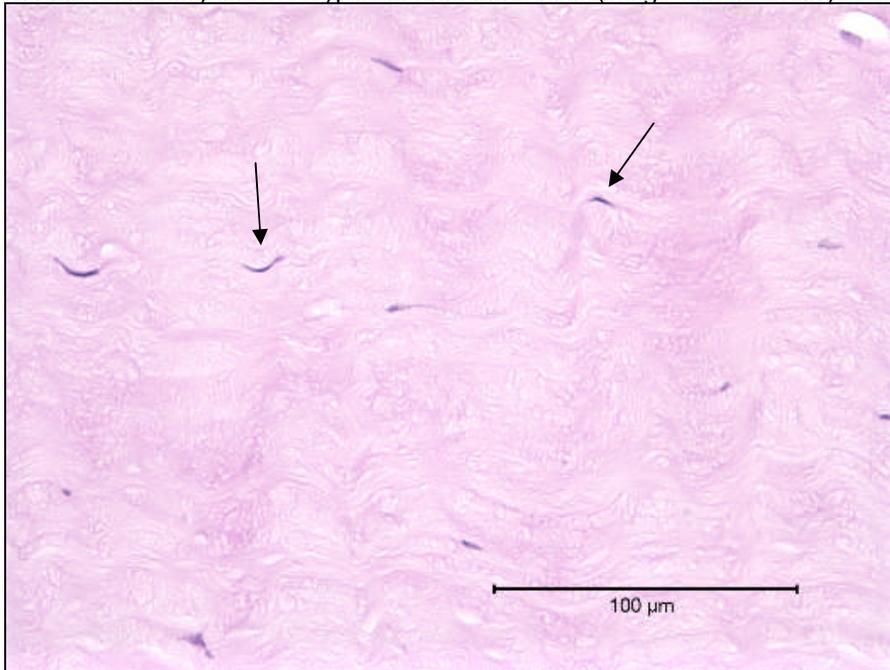
Opacity = 18.7	Permeability = 0.736	<i>In Vitro</i> Score = 29.7	pH = 3.0
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05AD99 (1-5% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Deep stroma showing keratocytes with nuclear enlargement and cytoplasmic eosinophilia (magnification 475x)



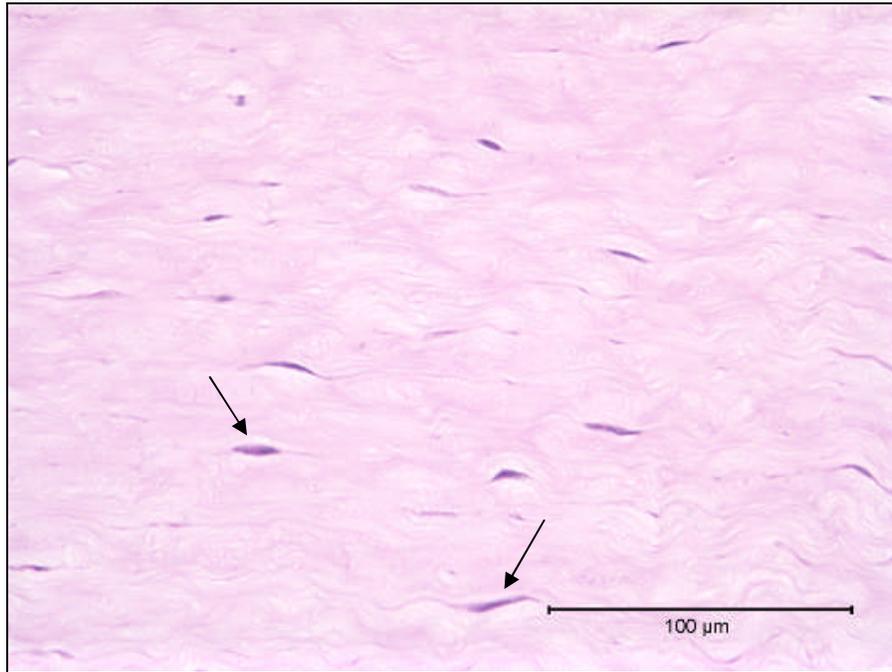
Opacity = 2.7	Permeability = 2.695	<i>In Vitro</i> Score = 43.1	pH = 14.0
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05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (09/08/05) - Stroma below mid depth showing moderate collagen matrix vacuolization and a marked increase in keratocytes with hyper-condensed nuclei (magnification 475x)



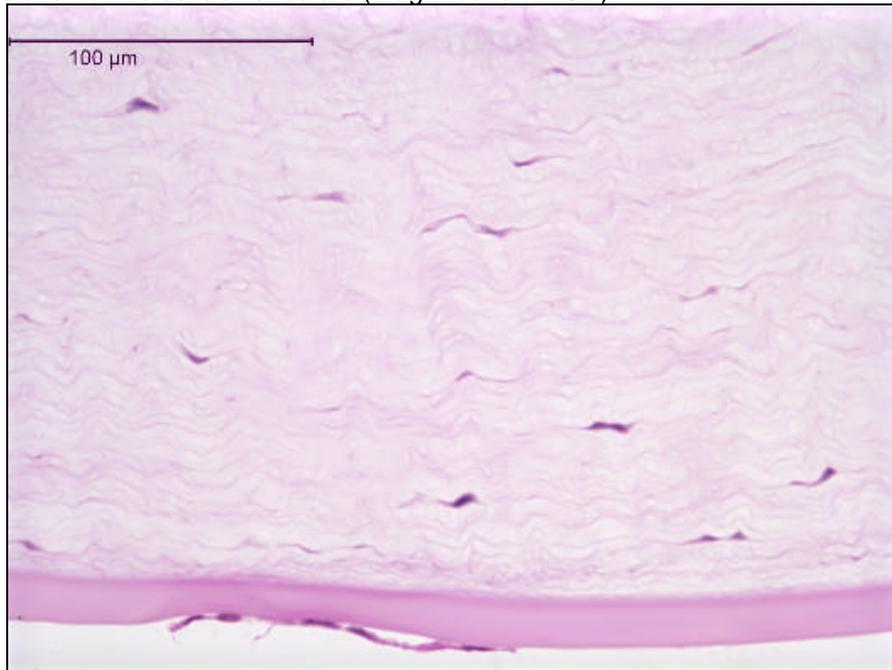
Opacity = 22.7	Permeability = 2.053	<i>In Vitro</i> Score = 53.5	pH = 1.0
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05AD98 (5-10% Bleach), neat, 3-minute exposure, 120-minute post-exposure (07/18/05) - Stroma above Descemet's Membrane showing a moderate increase in keratocytes with enlarged nuclei and cytoplasmic eosinophilia (magnification 475x)



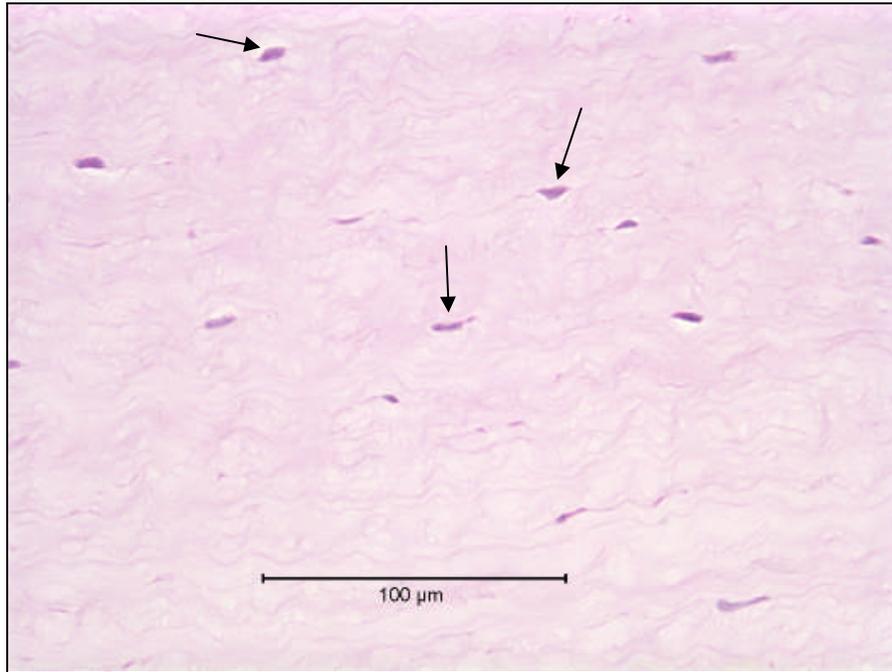
Opacity = 33.0	Permeability = 3.542	<i>In Vitro</i> Score = 86.1	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 3-minute exposure, 120-minute post-exposure (5/23/07) - Lower stroma showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475 x)



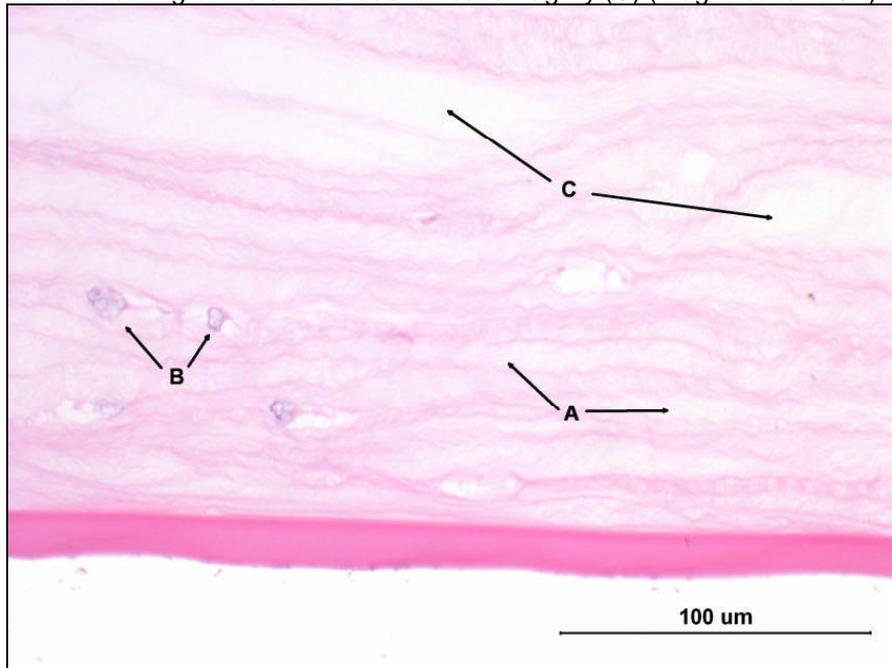
Opacity = 89.2	Permeability = 2.145	<i>In Vitro</i> Score = 121.3	pH = 14.0
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05AD98 (5-10% Bleach), neat, 10-minute exposure, 120-minute post-exposure (07/18/05) - Stroma above Descemet's Membrane showing marked collagen matrix vacuolization and marked damage to the keratocytes (magnification 475x)



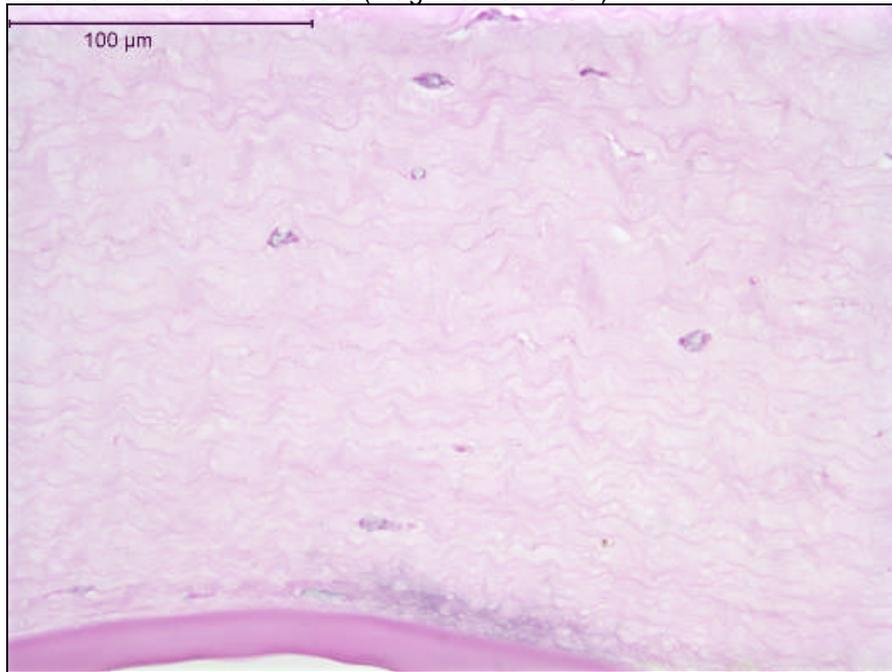
Opacity = 96.0	Permeability = 5.689	<i>In Vitro</i> Score = 181.3	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 1200-minute post-exposure (10/17/06) – Lower stroma with expansion of the collagen matrix (A), vacuolated keratocyte nuclei (B), and artifactual tearing of the stroma due to tissue fragility (C) (magnification 40X)



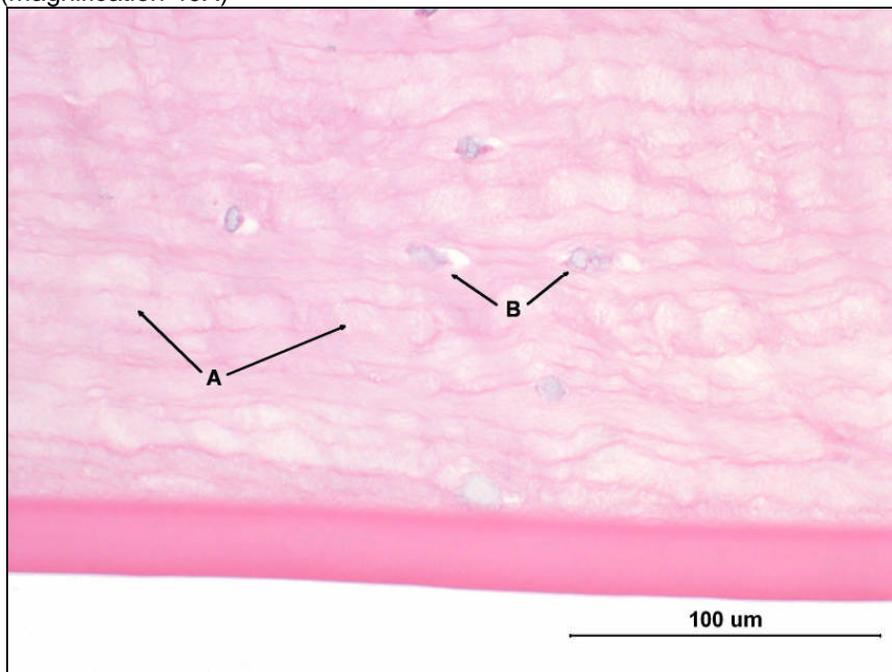
Opacity = 208.7	Permeability = 3.503	<i>In Vitro</i> Score = 261.3	pH = 14.0
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06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 120-minute post-exposure (5/23/07) - Lower stroma showing collagen matrix vacuolation, hypereosinophilic cytoplasm, and microvacuolation of the cellular structure (magnification 475 x)



Opacity = 214.5	Permeability = 3.94	<i>In Vitro</i> Score = 273.6	pH = 14.0
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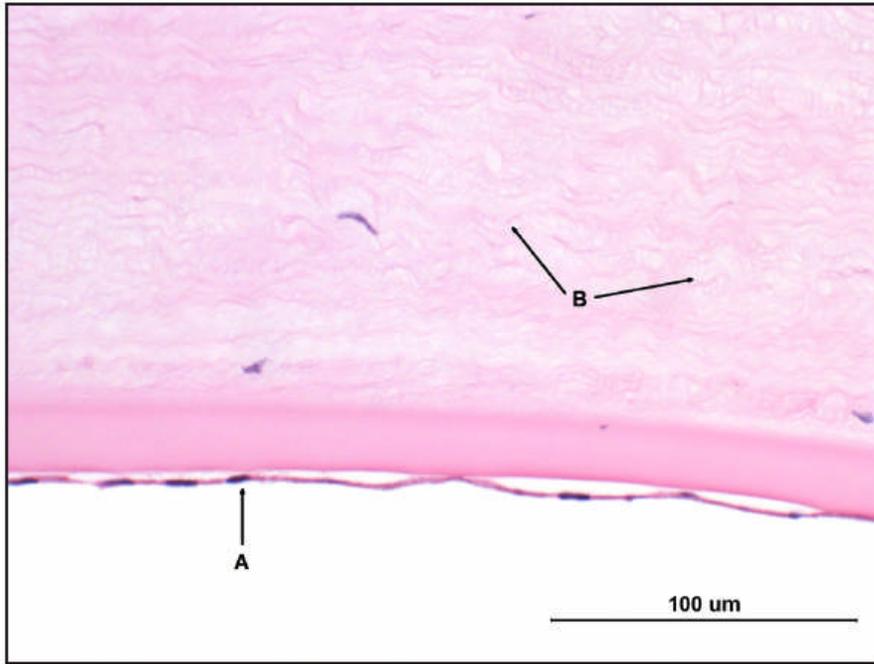
06AH39 (10-24% Tripolyphosphate), neat, 10-minute exposure, 240-minute post-exposure (10/17/06) - Lower stroma with expansion of the collagen matrix (A) and vacuolated keratocyte nuclei (B) (magnification 40X)



Opacity = 220.8	Permeability = 3.818	<i>In Vitro</i> Score = 278.1	pH = 14.0
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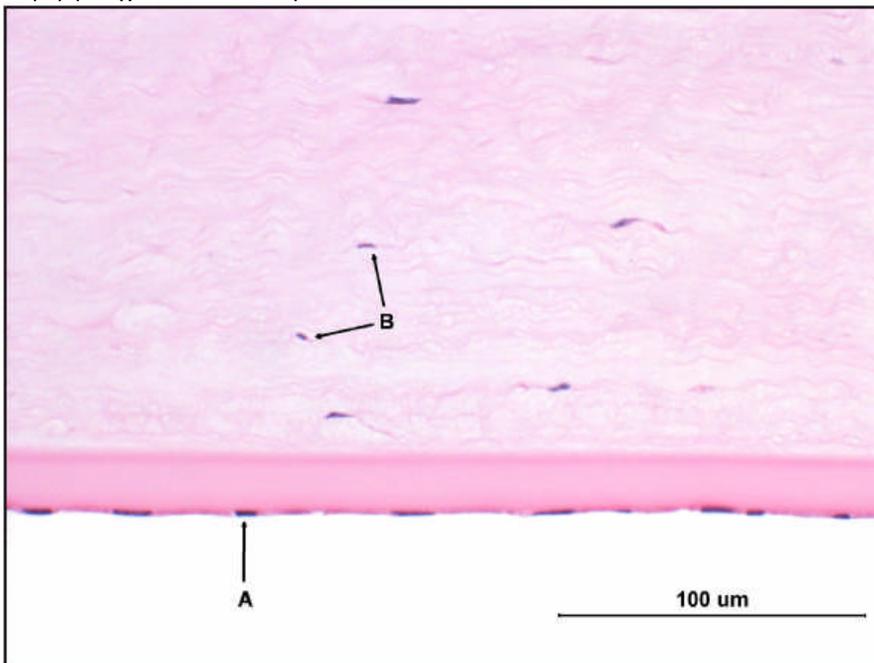
## Endothelium

06AB76 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Endothelium with enlarge hyperchromatic nuclei (A) and expanded lower stroma (B) (magnification 40X)



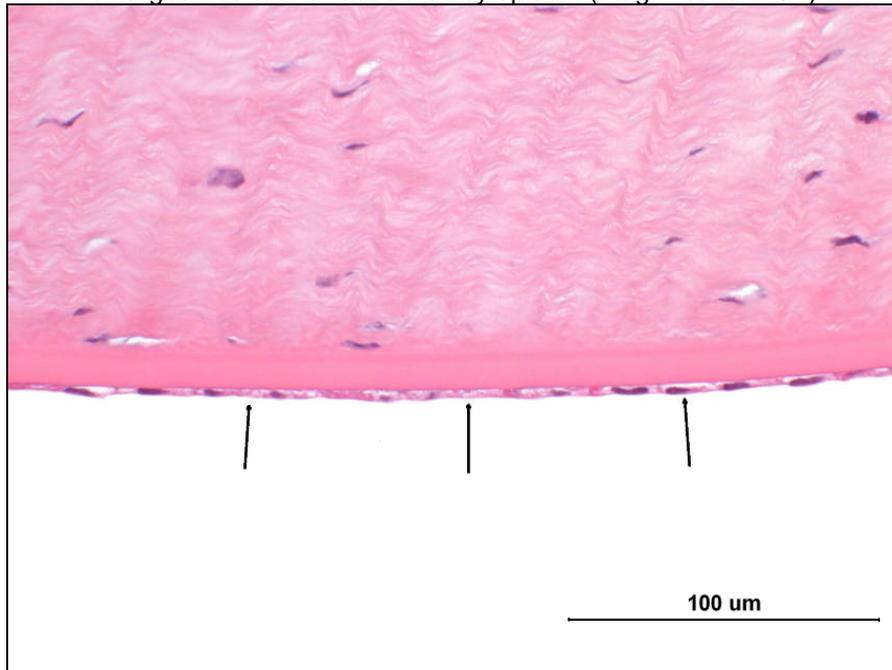
Opacity = 7.2	Permeability = 0.994	<i>In Vitro</i> Score = 22.1	pH = 3.0
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05AE47 (1-5% Hydrogen Peroxide), neat, 10-minute exposure, 120-minute post-exposure (3/29/06) – Endothelium with hyperchromatic nuclei (A) and pyknotic nuclei within expanded lower stroma (B) (magnification 40X)



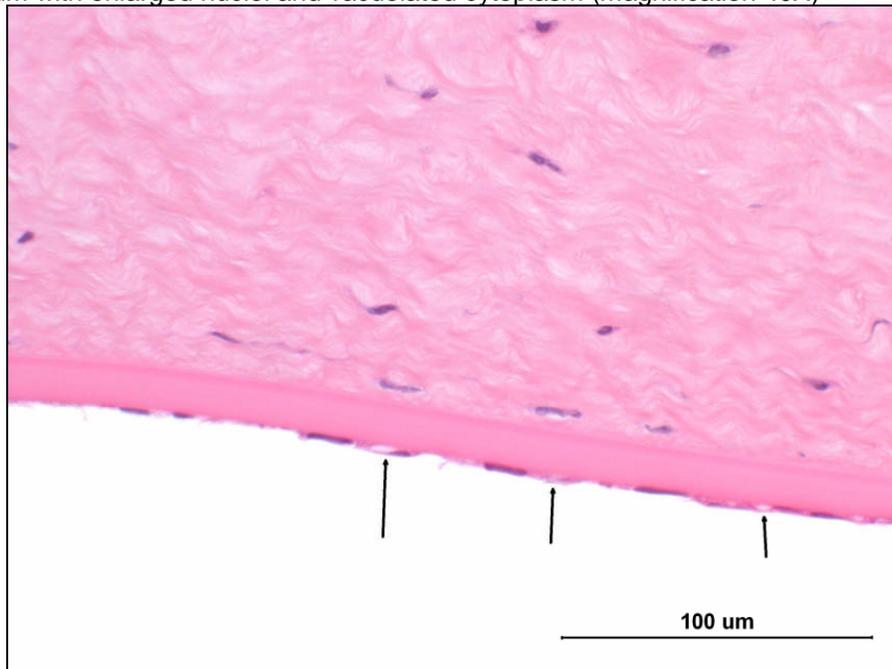
Opacity = 24.2	Permeability = 2.061	<i>In Vitro</i> Score = 55.1	pH = 1.0
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06AA46 (Bleach Mixture), neat, 3-minute exposure, 120-minute post-exposure (2/7/06) – Endothelium with enlarged nuclei and vacuolated cytoplasm (magnification 40X)



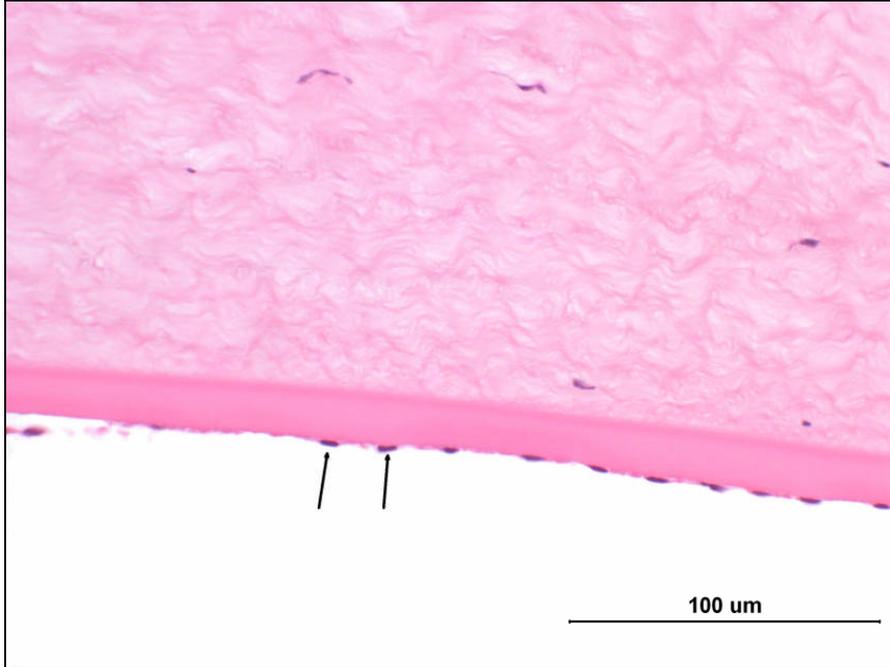
Opacity = 32.7	Permeability = 2.152	<i>In Vitro</i> Score = 65	pH = 12.5
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06AA46 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06) – Endothelium with enlarged nuclei and vacuolated cytoplasm (magnification 40X)



Opacity = 32.3	Permeability = 2.836	<i>In Vitro</i> Score = 74.9	pH = 12.5
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06AA45 (Bleach Mixture), neat, 10-minute exposure, 120-minute post-exposure (2/7/06) – Endothelium with enlarged nuclei and vacuolated cytoplasm (magnification 40X)



Opacity = 6.7	Permeability = 5.016	<i>In Vitro</i> Score = 81.9	pH = 12.0
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