

Mucosal integration: comparative analyses of two implant surfaces

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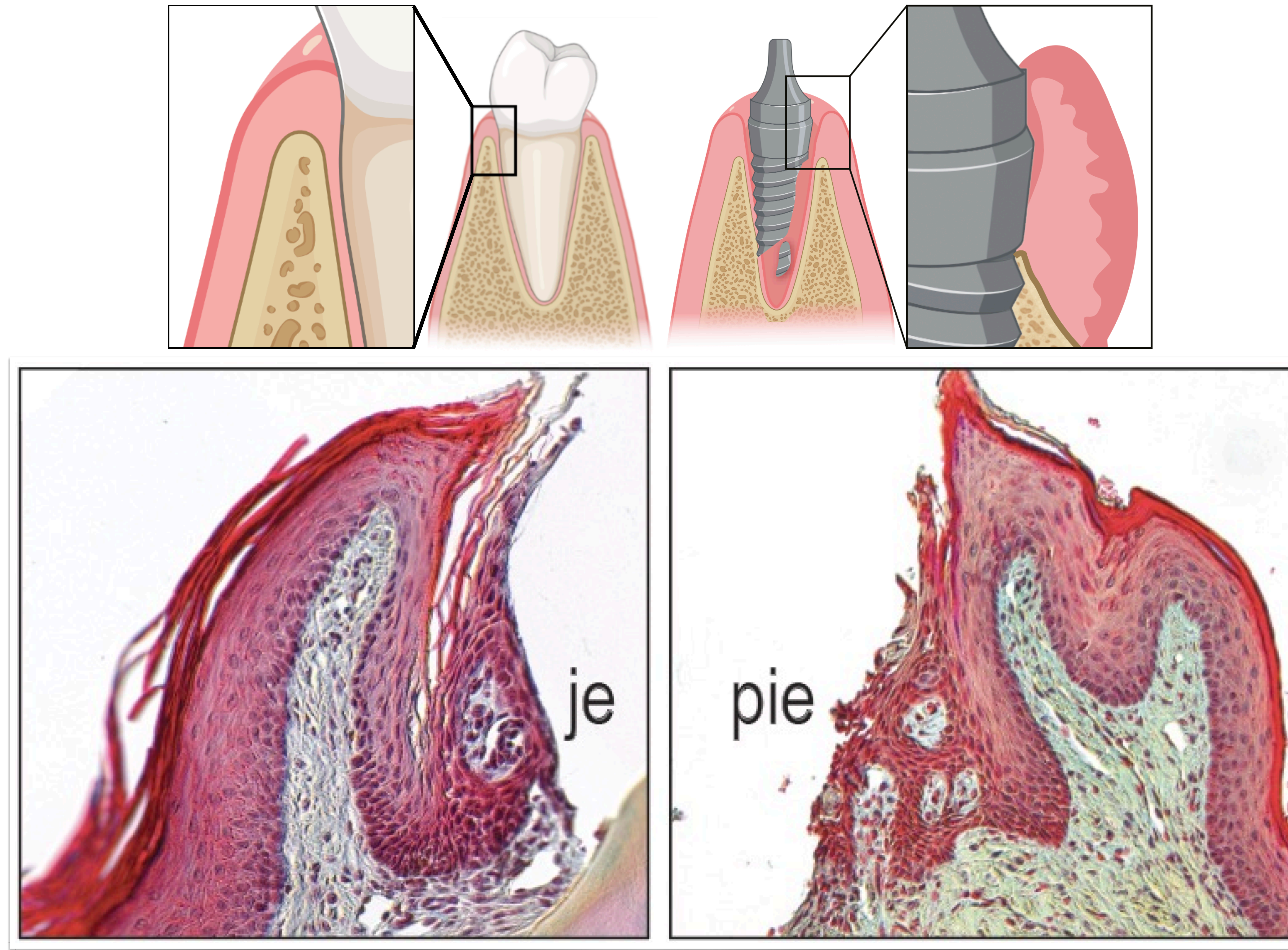
School of Medicine

AO 2023 Annual Meeting, Phoenix



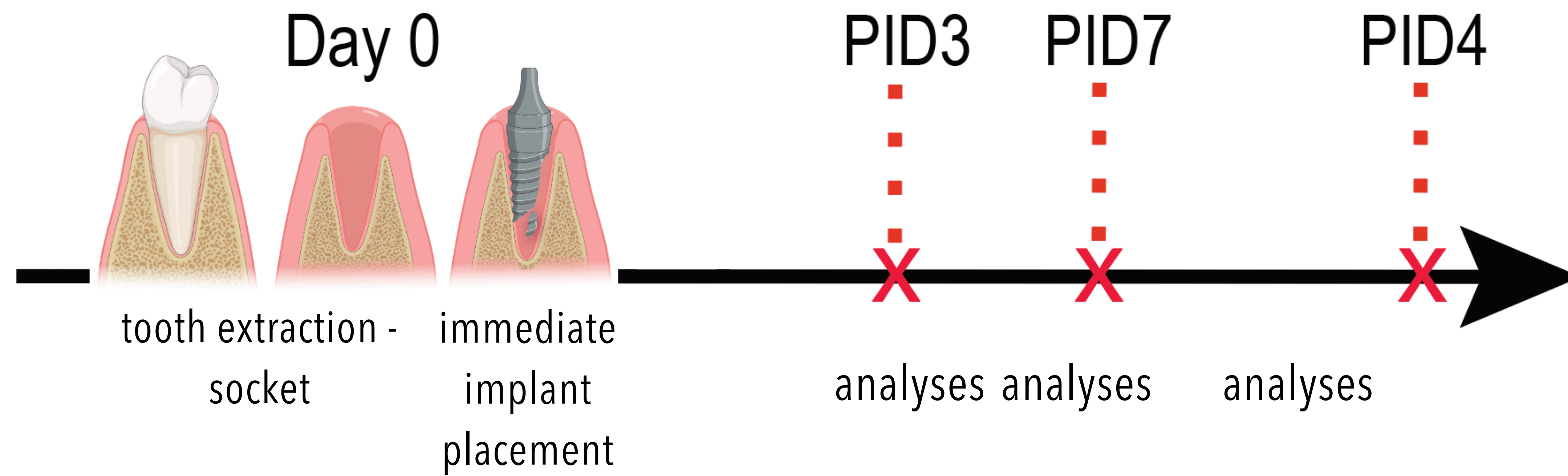
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Compared to the native junctional epithelium, the PIE is a **sub-optimal** barrier

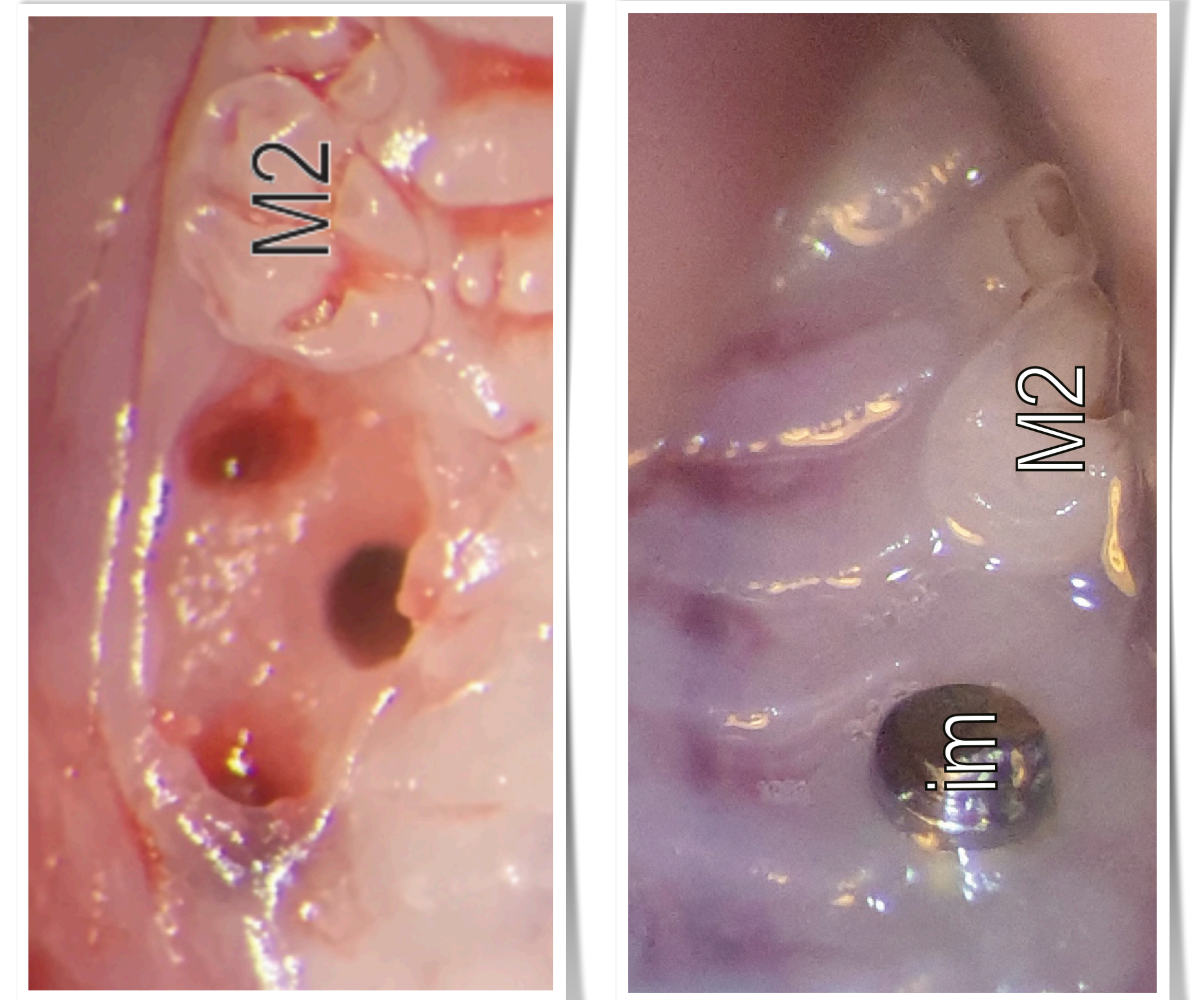
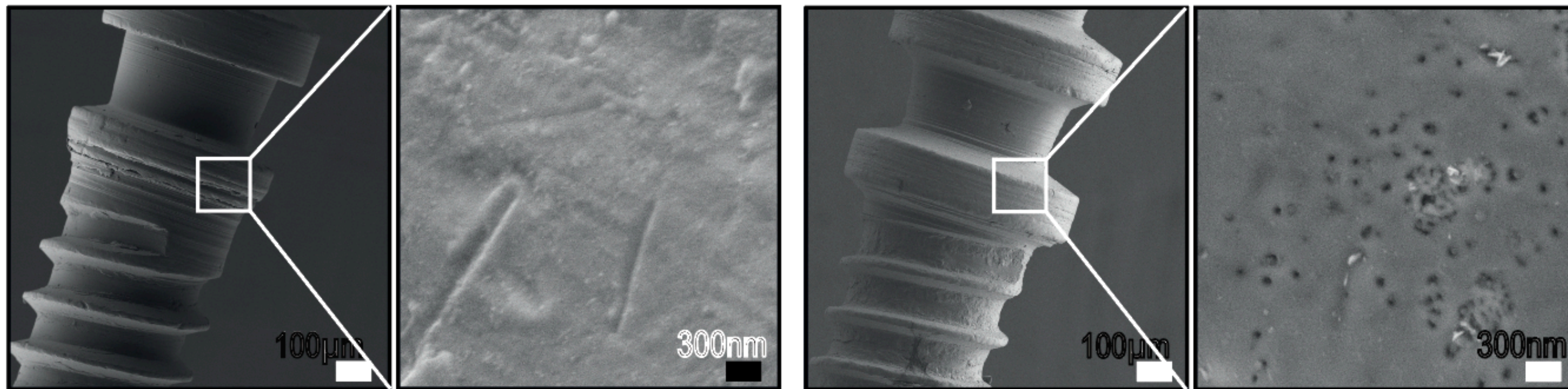


H: barrier functions of the PIE can be **improved** by modifying the surface characteristics of a titanium implant.

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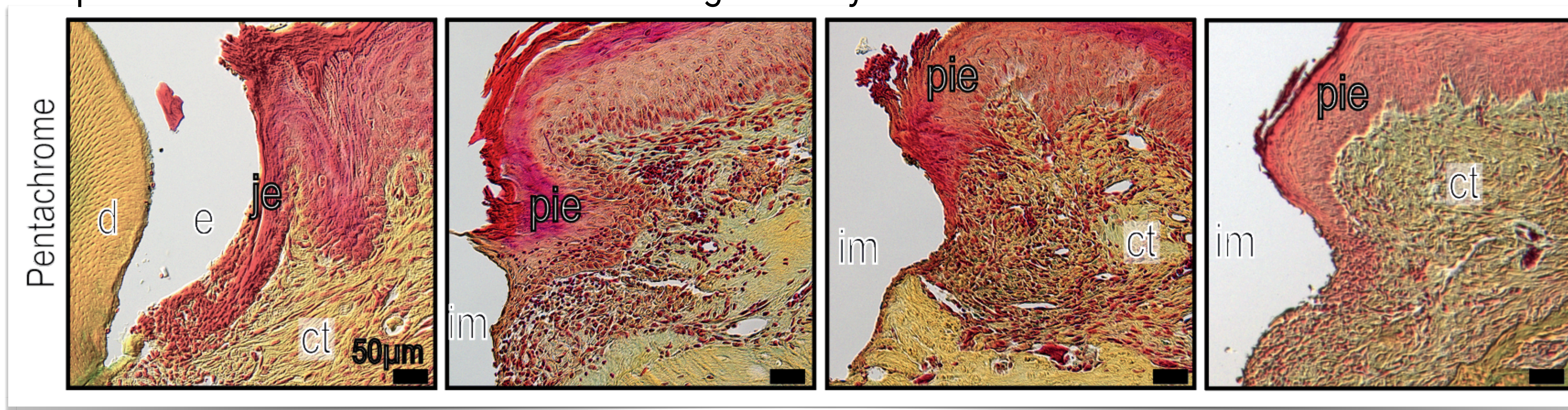
Machined Titanium **vs** Anodized



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Compared to a JE...

...the PIE gradually matures over the course of two weeks



Compared to a JE attachment...

a machined Ti surface

or an anodized surface

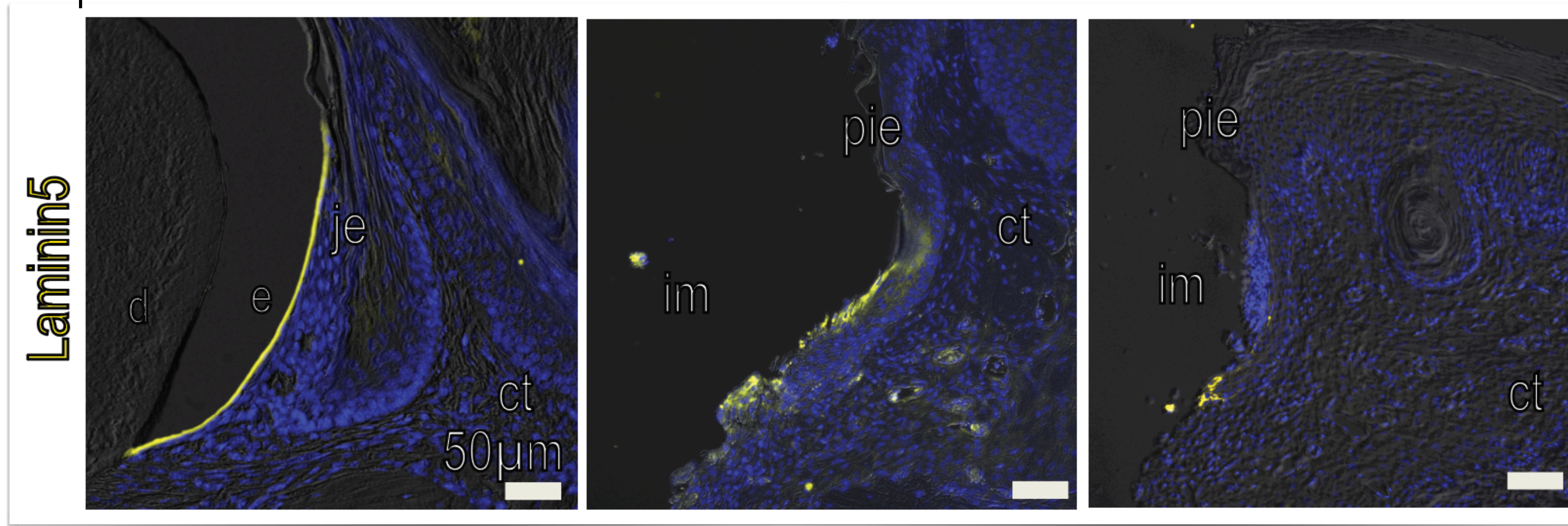
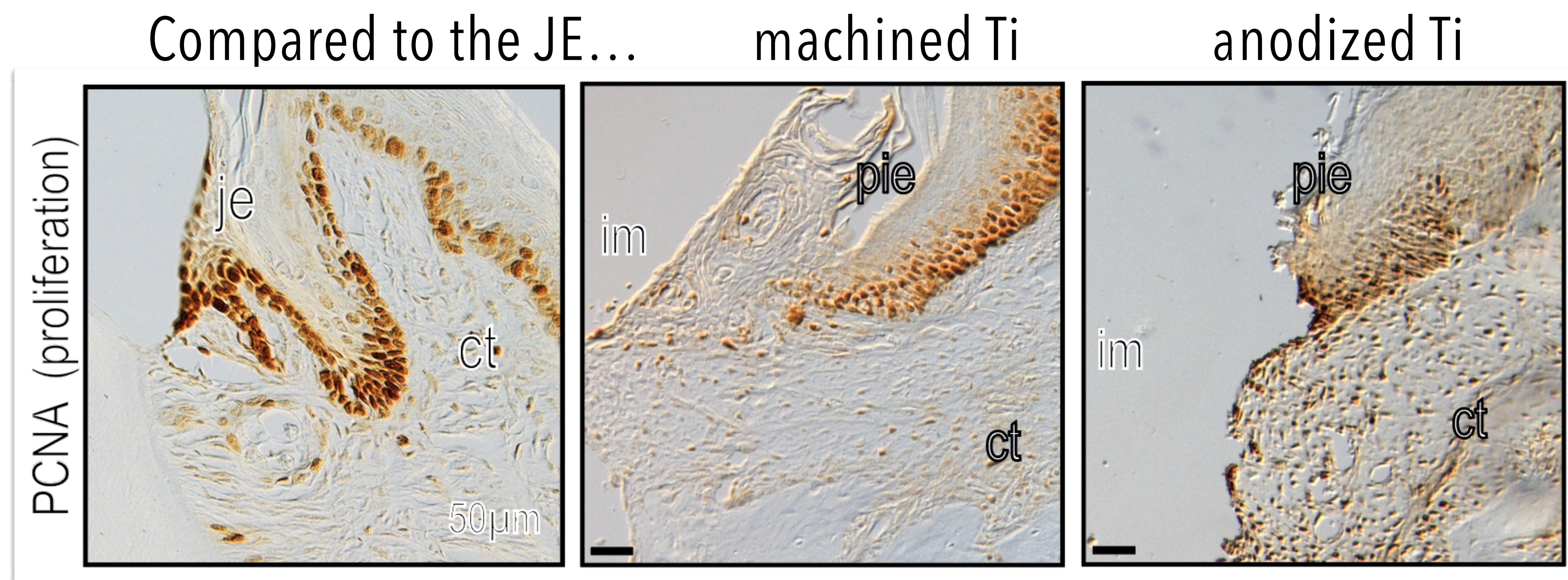
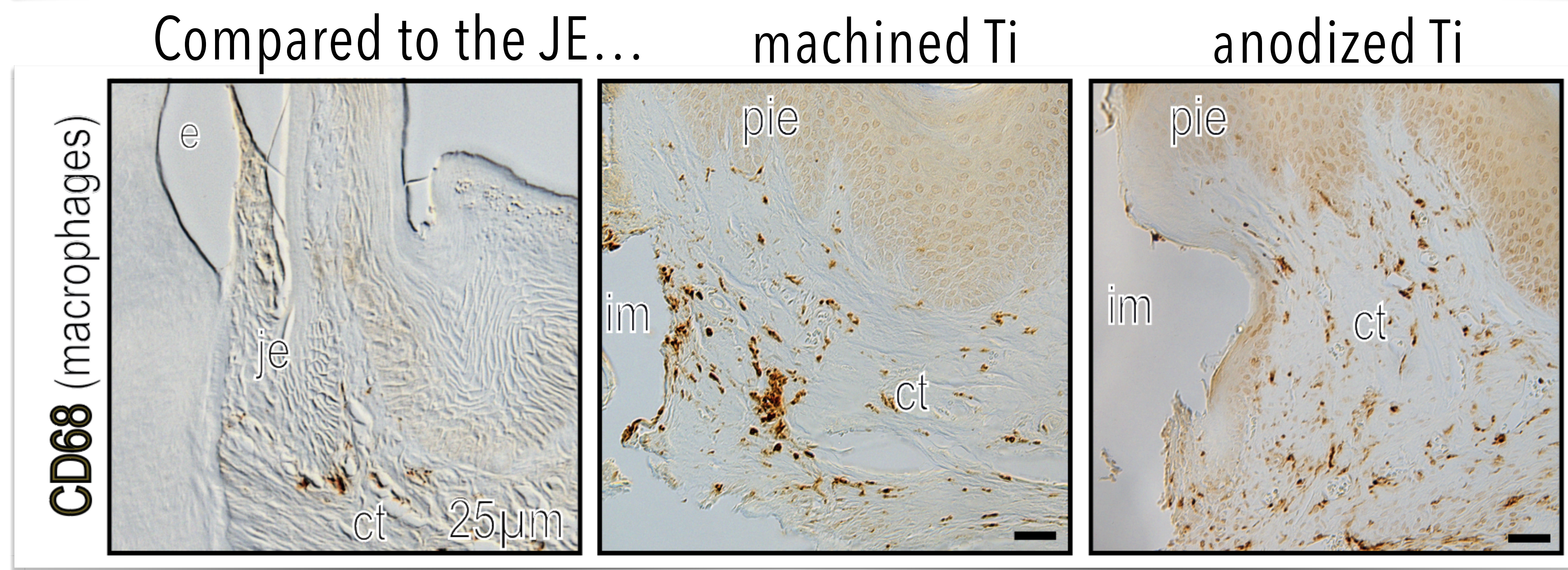
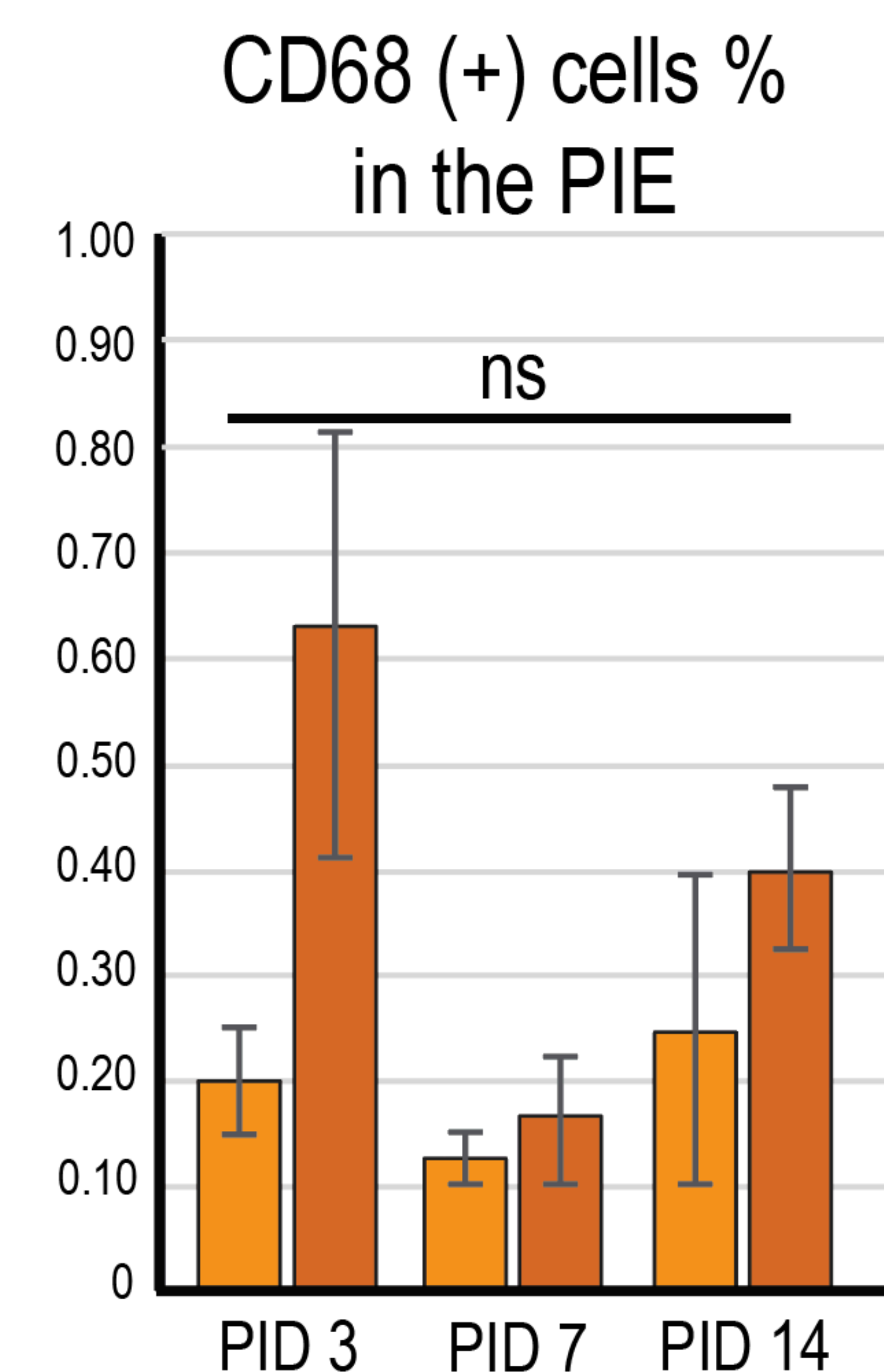


exhibit a weak attachment

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show equivalent mitotic activity



both have more
macrophage invasion

C:

Our analyses demonstrate no significant differences between machined and anodized Ti implants. Other surface modifications may influence implant mucosal integration.