Captions for Nature Comms encapsulation article

**When using the images please credit: “*Pham et al., Nature Communications*”**

**Images are included here just to ID the caption. Please use full quality images.**

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1. Link to [image](https://www.persistabio.com/wp-content/uploads/2025/08/Figure-1_300-rev.jpg)

A diagram of a cell

AI-generated content may be incorrect.

1: In this system, an electrochemical oxygen generator (iEOG) uses moisture in the surrounding tissue to create the oxygen that nourishes the cells. The cell encapsulation’s tubular pouch protects the cells from the immune system and allows nutrients in and insulin to go out into the bloodstream to regulate blood sugar.

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5D.  Link to [image](https://www.persistabio.com/wp-content/uploads/2025/08/Figure-5D_300.jpg)

A collage of images of green and red dots

AI-generated content may be incorrect.

5D:  **The research showed that cell clusters survived in the oxygenated encapsulation system, with the live cell clusters shown in green**. In the top image where oxygen is not supplemented, the clusters were not able to survive (dead cell clusters show as red).

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6E: link to [image](https://www.persistabio.com/wp-content/uploads/2025/08/Figure-6E_300.jpg)

A collage of images of different colors

AI-generated content may be incorrect.

**6e:  The oxygenated system showed healthy cells, indicated here by typical hormonal staining.**  Human pancreatic islets encapsulated in this oxygenated system showed presence of the key hormone, insulin (in red) even in a low oxygen environment (image 3 and 4).  The encapsulation without the supplemental oxygen (image 2), showed little hormone staining, just the nuclear proteins (blue). Image 1 is a positive control of human islets in normal incubator conditions.

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