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## Supplemental information

# Insulin expression and C-peptide in type 1 diabetes subjects implanted with stem cell-derived pancreatic endoderm cells in an encapsulation device

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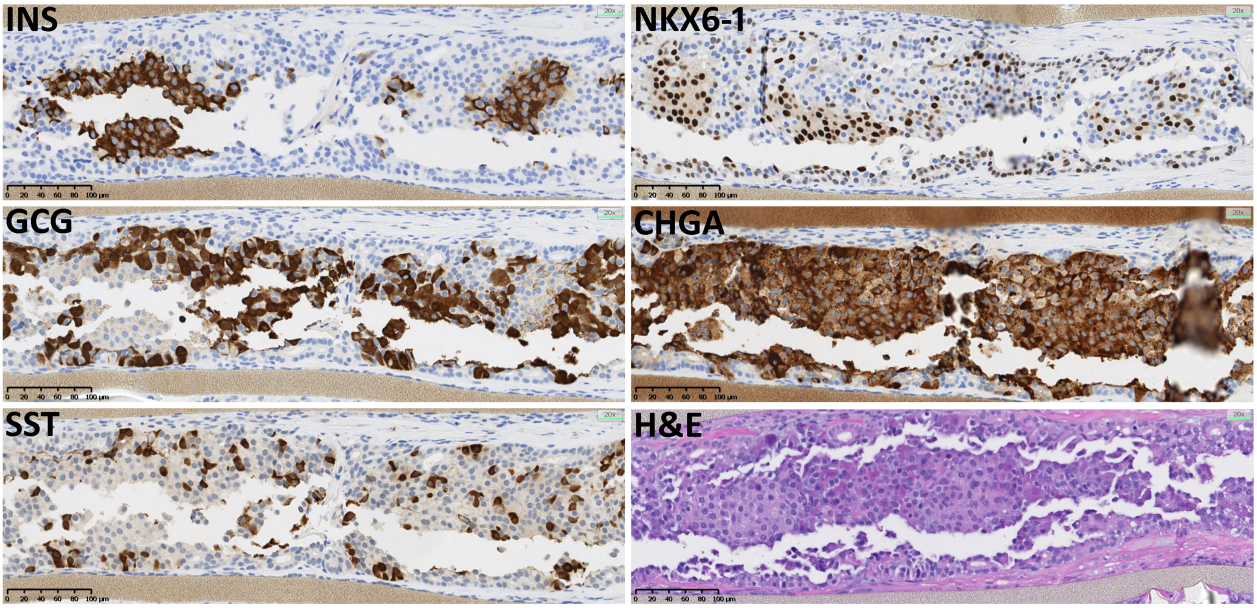
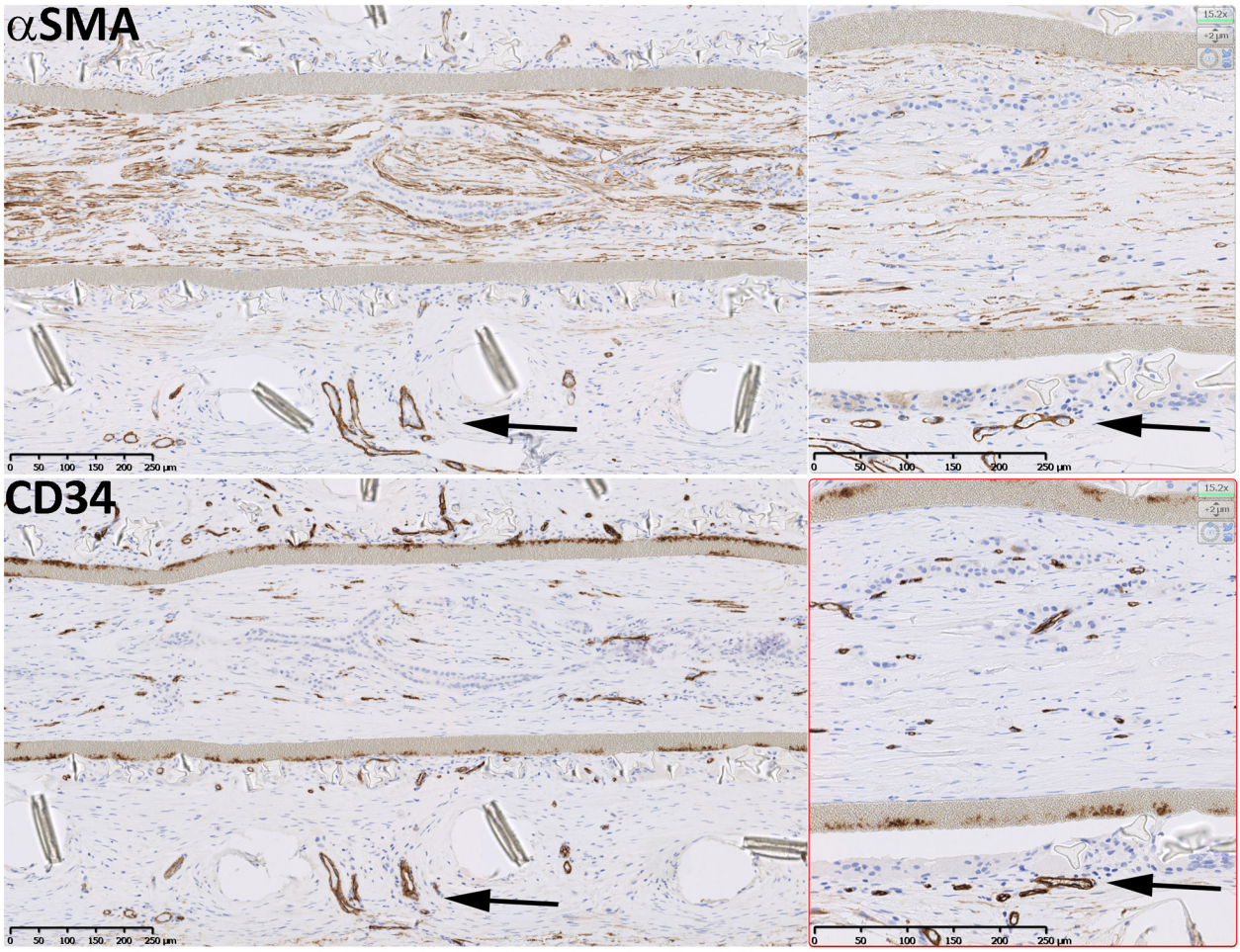
# SUPPLEMENTARY FIGURES




**Supplementary Figure 1. Characterization of graft-derived cells from sentinel explant from subject D-002 at 12 weeks, related to the 'Histological analyses' section of the STAR methods.**

Immunohistochemistry staining of near-consecutive explant cross sections reveal the largely endocrine nature of graft-derived cells, through staining with pancreatic hormones insulin (top left), glucagon (center left), somatostatin (bottom left), and pan-endocrine chromogranin A (center right). Staining for beta cell transcription factor NKX6-1 is consistent insulin expressing cells (top right). Scale bar, 100 µm.




**Supplementary Figure 2. Characterization of host-derived fibroblasts and vasculature in sentinel explants from subjects E-002 (responder) and E-003 (non-responder) at 12 weeks, related to the 'Histological analyses' section of the STAR methods and to Figure 2 and Supplementary Table.**

Immunohistochemistry staining for smooth muscle actin (αSMA, top panels) and CD34 (bottom panels) of near-consecutive 12-week explant cross sections from subjects E-003 (left panels) and E-002 (right panels). The prevalence of host-derived αSMA-expressing myofibroblasts in the device lumen obscures the presence of blood vessels also staining for αSMA. Blood vessels within the lumen are recognized through staining for CD34 marking vascular endothelial cells. Note that blood vessels outside of the device lumen are easily recognized by staining for CD34 as well as αSMA since myofibroblasts are less prevalent there.