Medical and Behavioral Health Policy
Section: Surgery
Policy Number: IV-09
Effective Date: 04/23/2014

Blue Cross and Blue Shield of Minnesota medical policies do not imply that members should not receive specific services based on the recommendation of their provider. These policies govern coverage and not clinical practice. Providers are responsible for medical advice and treatment of patients. Members with specific health care needs should consult an appropriate health care professional.

ISLET TRANSPLANTATION

Description: Autologous islet transplantation is a technique developed to prevent or delay the onset of diabetes in patients who have undergone total or near-total pancreatectomy for the treatment of chronic pancreatitis. In this procedure, islet cells from the patient’s pancreas are transplanted to the patient’s liver. The pancreas is removed and is sent to a special laboratory for islet preparation. Islet cells are collected, placed in syringes, and transplanted into the patient via the portal vein system. Islets are injected slowly into the portal vein, and portal vein pressure is measured during the infusion. Once in the portal vein, the blood flow and pressure carry the islets to the liver where they encounter small diameter capillaries that can’t be traversed by the islets. The islets become engrafted in the liver.

Policy: Autologous islet transplantation following pancreatectomy may be considered MEDICALLY NECESSARY.

The patient should meet the following criteria for pancreatectomy with autologous islet transplantation:
1. Patient is a candidate for total pancreatectomy or partial pancreatectomy when a completion pancreatectomy might be required in the future
2. Patient has benign disease of the pancreas
3. Patient is non-diabetic at the time of pancreatectomy or, if diabetic, mild with c-peptide present as an indication of beta cell function

Allogeneic islet transplantation is considered INVESTIGATIVE.

Coverage: Blue Cross and Blue Shield of Minnesota medical policies apply generally to all Blue Cross and Blue Plus plans and products. Benefit plans vary in coverage and some plans may not provide coverage for certain services addressed in the medical policies.
Medicaid products and some self-insured plans may have additional policies and prior authorization requirements. Receipt of benefits is subject to all terms and conditions of the member’s summary plan description (SPD). As applicable, review the provisions relating to a specific coverage determination, including exclusions and limitations. Blue Cross reserves the right to revise, update and/or add to its medical policies at any time without notice.

For Medicare NCD and/or Medicare LCD, please consult CMS or National Government Services websites.

Refer to the Pre-Certification/Pre-Authorization section of the Medical Behavioral Health Policy Manual for the full list of services, procedures, prescription drugs, and medical devices that require Pre-certification/Pre-Authorization. Note that services with specific coverage criteria may be reviewed retrospectively to determine if criteria are being met. Retrospective denial of claims may result if criteria are not met.

**Coding:**

The following codes are included below for informational purposes only, and are subject to change without notice. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement.

**CPT:**

48160 Pancreatectomy, total or subtotal, with autologous transplantation of pancreas or pancreatic islet cells

**HCPCS:**

G0341 Percutaneous islet cell transplant, includes portal vein catheterization and infusion  
G0342 Laparoscopy for islet cell transplant, includes portal vein catheterization and infusion  
G0343 Laparotomy for islet cell transplant, includes portal vein catheterization and infusion  
S2102 Islet cell tissue transplant from pancreas; allogeneic

**ICD-9 Procedure:**

52.84 Autotransplantation of cells of islets of Langerhans  
52.85 Allotransplantation of cells of islets of Langerhans  
52.86 Transplantation of cells of islets of Langerhans, not otherwise specified

**ICD-10 Procedure:**

3E033UO Introduction of Autologous Pancreatic Islet Cells into Peripheral Vein, Percutaneous Approach  
3E030U0 Introduction of Autologous Pancreatic Islet Cells into
Peripheral Vein, Open Approach
3E0J3U0 Introduction of Autologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Percutaneous Approach
3E0J7U0 Introduction of Autologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening
3E0J8U0 Introduction of Autologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic
3E030U1 Introduction of Nonautologous Pancreatic Islet Cells into Peripheral Vein, Open Approach
3E033U1 Introduction of Nonautologous Pancreatic Islet Cells into Peripheral Vein, Percutaneous Approach
3E0J3U1 Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Percutaneous Approach
3E0J7U1 Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening
3E0J8U1 Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic

**Deleted Codes:** 0141T, 0142T, 0143T

**Policy History:**
**Developed August 8, 2001**

**Most recent history:**
Reviewed April 13, 2011
Reviewed April 11, 2012
Reviewed April 10, 2013
Reviewed April 9, 2014

**Cross Reference:**
Organ Transplantation, IV-128

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