2022 CODING AND REIMBURSEMENT GUIDE
SURGICAL ENCOUNTER

Vivistim® SYSTEM

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Overview

This guide provides *hospital* and *physician* coding and reimbursement information for procedures associated with placement of the Vivistim® Paired VNS™ System (i.e. implant encounter) and device analysis and programming services.

The Vivistim® Paired VNS™ System is a PMA-approved (P210007), FDA Breakthrough Device (Q210050) intended to be used to stimulate the vagus nerve during rehabilitation therapy to reduce upper extremity motor deficits and improve motor function in chronic ischemic stroke patients with moderate to severe arm impairment.

MicroTransponder For questions about reimbursement please contact the MicroTransponder Reimbursement Hotline at reimbursement@microtransponder.com**.**

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Vivistim® Paired VNS™ Therapy Overview

The Vivistim® Paired VNS™ System is intended to be used to stimulate the vagus nerve during rehabilitation therapy to reduce upper extremity motor deficits and improve motor function in chronic ischemic stroke patients with moderate to severe arm impairment. The Vivistim® Paired VNS™ System when used as intended, provides a drug-free way to treat upper extremity motor deficits associated with a stroke by pairing rehabilitation movements with Vagus Nerve Stimulation.

Vivistim® Paired VNS™ System Implantable Components

The implantable components of the Vivistim® Paired VNS™ System consist of an Implantable Pulse Generator (IPG) and an Implantable Stimulation Lead.

Model 1001 Paired VNS™ Implantable Pulse Generator

Size: 48 mm wide x 62 mm tall x 12 mm thick
Weight: Less than 70g
Power Source: Li CfX – Lithium/Carbon Monofluoride
Output Current: 0 to 3.5 mA
Frequency: 1 to 30 Hz
Pulse Width: 10 µs to 1000 µs
Output: Bipolar output

Model 3000 Paired VNS™ Lead

Total Length: 43 cm
Outer Material (Insulation): Silicone
Lead Body Diameter: 2mm
Resistance: 100 - 250 Ohms
Cuff Diameter: 2mm or 3mm

Implant Procedure

The implantation of the Vivistim® Paired VNS™ System is a 45 to 65-minute procedure to insert the implantable pulse generator and stimulation lead. The lead electrodes are attached to the left vagus nerve in the neck. The lead is then tunneled from the neck to the chest, where it is connected to the IPG, and the IPG is placed subcutaneously (or sub-muscularly) in the pectoral region. Patients are typically discharged on the same day.

Post Implant Paired VNS™ Therapy

After the implant procedure, the patient is referred to a rehabilitation specialist to begin in-clinic therapy, where a clinician will actively pair vagus nerve stimulation with rehabilitation. In-clinic therapy consists of approximately 25-30 hours of upper limb rehabilitation over 6-8 weeks. After the patient has completed the in-clinic therapy, they can continue to use the Vivistim® Paired VNS™ System at home as directed by a physician.

Implant Encounter

ICD-10-CM Diagnosis Codes

The Vivistim® Paired VNS™ System is used to treat chronic moderate to severe upper limb deficit in ischemic stroke patients. Monoplegia describes a deficit affecting a single limb and hemiplegia describes a deficit affecting one side of the body. Code selection for monoplegia and hemiplegia in ICD-10-CM requires the specification of limb dominance and the affected limb in the 6th digit.

The following ICD-10-CM diagnosis codes are used to report upper limb deficit in patients who may be eligible to receive treatment with the Vivistim® Paired VNS™ System.

ICD-10-CM Code[3]	ICD-10-CM Description[3]
I69.33	**Monoplegia of upper limb following cerebral infarction**
I69.331	Monoplegia of upper limb following cerebral infarction affecting right dominant side
I69.332	Monoplegia of upper limb following cerebral infarction affecting left dominant side
I69.333	Monoplegia of upper limb following cerebral infarction affecting right non-dominant side
I69.334	Monoplegia of upper limb following cerebral infarction affecting left non-dominant side
I69.339	Monoplegia of upper limb following cerebral infarction affecting unspecified side
I69.35	**Hemiplegia and hemiparesis following cerebral infarction**
I69.351	Hemiplegia and hemiparesis following cerebral infarction affecting right dominant side
I69.352	Hemiplegia and hemiparesis following cerebral infarction affecting left dominant side
I69.353	Hemiplegia and hemiparesis following cerebral infarction affecting right non-dominant side
I69.354	Hemiplegia and hemiparesis following cerebral infarction affecting left non-dominant side
I69.359	Hemiplegia and hemiparesis following cerebral infarction affecting unspecified side

Procedure Reporting

The following procedure code may be used to report the insertion of the Vivistim® Paired VNS™ System implantable pulse generator and stimulation lead in the hospital setting. For device revision, removal, or replacement procedures, see the *Revision, Removal or Replacement Procedures* section.

CPT® Code[1]	Description	OPPS APC[2]	OPPS Status Indicator[2]	2022 Medicare Hospital Payment[2]
64568	Incision for implantation of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator	5465	J1	$30,063.48

Device Reporting

The following HCPCS Level II codes may be used to report the implantable pulse generator, stimulation lead and external controller of the Vivistim® Paired VNS™ System. The HCPCS Level II C-codes are typically reported to Medicare and some commercial insurers. The L-codes are used for specific commercial insurance plans and you should verify each payers' coding requirements prior to claim submission.

HCPCS Code[4]	Description	Device
C1767	Generator, neurostimulator (implantable), non-rechargeable	*Generator Only*
C1778	Lead, neurostimulator (implantable)	*Stimulation Lead Only*
C1787	Patient programmer, neurostimulator	*Replacement Programmer*
L8688	Implantable neurostimulator pulse generator, dual array, non-rechargeable, includes extension	*Generator Only*
L8680	Implantable neurostimulator electrode, each	*Stimulation Lead Only*
L8681	Patient programmer (external) for use with implantable programmable neurostimulator pulse generator, replacement only	*Replacement Programmer*

Hospital Inpatient Coding and Reimbursement

Hospital inpatient coding requires the use of appropriate ICD-10-PCS procedure codes in addition to the diagnosis codes, CPT® procedure codes and HCPCS Level II device codes described above. Medicare and some other insurers use ICD-10-PCS codes and ICD-10-CM diagnosis codes to determine the appropriate diagnosis related group (DRG) assignment for admissions.

ICD-10-PCS Procedure Coding

The following ICD-10-PCS codes may be reported to describe admissions involving the insertion of the Vivistim® Paired VNS™ System.

ICD-10-PCS Procedure Code[5]	ICD-10-PCS Code Description	Device Component
0JH60BZ	Insertion of single array stimulator generator into chest subcutaneous tissue and fascia, open approach	Generator
00HE0MZ	Insertion of neurostimulator lead into cranial nerve, open approach	Stimulation Lead

MS-DRG Assignment

The following MS-DRGs are assigned to ICD-10-PCS 0JH60BZ, 00HE0MZ. Note that a concomitant diagnosis which qualifies as either a comorbidity or complication (CC) or a major comorbidity of complication (MCC) may affect final MS-DRG assignment.

MS-DRG[6]	MS-DRG Description
040	Peripheral/Cranial Nerve and Other Nervous System Procedures W/MCC
041	Peripheral/Cranial Nerve and Other Nervous System Procedures W/CC or Peripheral Neurostimulator
042	Peripheral/Cranial Nerve and Other Nervous System Procedures WO/CC or MCC

Device Interrogation and Programming

ICD-10-CM Diagnosis Codes

The following ICD-10-CM diagnosis codes are used to report upper limb deficit in patients who may be eligible to receive treatment with the Vivistim® Paired VNS™ System. A secondary diagnosis code of Z45.42 (see below) should be reported for encounters for the purpose of interrogating or programming of the Vivistim® Paired VNS™ System.

ICD-10-CM Code[3]	ICD-10-CM Description[3]
Primary Diagnosis Code	
I69.33	**Monoplegia of upper limb following cerebral infarction**
I69.331	Monoplegia of upper limb following cerebral infarction affecting right dominant side
I69.332	Monoplegia of upper limb following cerebral infarction affecting left dominant side
I69.333	Monoplegia of upper limb following cerebral infarction affecting right non-dominant side
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I69.354	Hemiplegia and hemiparesis following cerebral infarction affecting left non-dominant side
I69.359	Hemiplegia and hemiparesis following cerebral infarction affecting unspecified side
Secondary Diagnosis Code	
Z45.42	Encounter for adjustment and management of neuropacemaker (brain) (peripheral nerve) (spinal cord)

Procedure Reporting

The following procedures may be used to describe device analysis and programming. It is not appropriate to report these services during the operative encounter. Device analysis and programming services are reportable only after (e.g., subsequent to) the implant procedure.

Device programming is described as either simple (95976) or complex (95977). Simple programming describes the adjustment of 3 or fewer device parameters. Complex programming describes the adjustment 4 or more device parameters.[1]

CPT® Code[1]	Code Description	OPPS APC[2]	OPPS Status Indicator[2]	2022 Medicare Hospital Payment[2]
Device Interrogation				
95970	Electronic analysis of implanted neurostimulator pulse generator/transmitter (e.g., contact group(s), interleaving, amplitude, pulse width, frequency (Hz), on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with brain, cranial nerve, spinal cord, peripheral nerve, or sacral nerve neurostimulator pulse generator/transmitter, without programming	5734	Q1	$115.16
Device Programming				
95976	Electronic analysis of implanted neurostimulator pulse generator/transmitter (e.g., contact group(s), interleaving, amplitude, pulse width, frequency (Hz), on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with simple cranial nerve neurostimulator pulse generator/ transmitter programming by physician or other qualified health care professional.	5741	S	$38.03
95977	Electronic analysis of implanted neurostimulator pulse generator/transmitter (e.g., contact group(s), interleaving, amplitude, pulse width, frequency (Hz), on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with complex cranial nerve neurostimulator pulse generator/ transmitter programming by physician or other qualified health care professional.	5742	S	$102.53

[1] CPT Coding Update: Neurostimulator Analysis & Programming. Jul 2016 (7).

Revision, Removal and Replacement Procedures

In certain circumstances it may be necessary to perform a revision, removal or replacement of the Vivistim® Paired VNS™ System implantable pulse generator or stimulation lead. These procedures are separately reportable and are provided below.

CPT® Code[1]	Description	Procedure Type *Device Component*
61885	Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array	Insertion or Replacement *Generator Only*
61888	Revision or removal of cranial neurostimulator pulse generator or receiver	Revision or Removal *Generator Only*
64569	Revision or replacement of cranial nerve (e.g., vagus nerve) neurostimulator electrode array, including connection to existing pulse generator	Revision or Replacement *Lead Only*
64570	Removal of cranial nerve neurostimulator electrode array and pulse generator	Removal Only *Generator and Lead*
64585	Revision or removal of peripheral neurostimulator electrode array	Revision or Removal *Lead Only*

Physician Coding and Reimbursement

The following procedure codes may be used to report the insertion, analysis and programming of the Vivistim® Paired VNS™ System. Medicare Physician Fee Schedule Status Indicators (SI), Relative Value Units (RVU) and Medicare payment amounts for the implant procedure are based upon hospital outpatient values, whereas device analysis and programming procedures are based upon a freestanding office site of service.

CPT® Code[1]	Description	MPFS SI[7]	MPFS Total RVU[7]	2021 Medicare Physician Payment[7]
Surgical Encounter (Hospital Outpatient)				
64568	Incision for implantation of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator	A	18.14	$609.47
Device Analysis & Programming (Freestanding Office)				
95970	Electronic analysis of implanted neurostimulator pulse generator/transmitter, without programming	A	0.56	$18.82
97976	Electronic analysis of implanted neurostimulator pulse generator/transmitter, with simple programming	A	1.19	$39.98
95977	Electronic analysis of implanted neurostimulator pulse generator/transmitter, with complex programming	A	1.57	$52.75

Pre-Service Clearance/Prior Authorization

Prior authorization is typically required for commercial insurances and some Medicare Advantage plans for the implantation of the Vivistim® Paired VNS™ System. MicroTransponder, Inc. provides prior authorization support services to physicians' groups and hospitals.

Please contact the MicroTransponder Reimbursement Hotline at reimbursement@microtransponder.com for assistance.

Billing and Claims Submission

Billing and claim submission requirements vary by payer and by State. Medicare billing guidelines require hospitals to accurately report costs for implantable devices. Charges for the Vivistim® Paired VNS™ System implantable components should reflect the hospital's implantable device charging policies and/or applicable Medicare cost to charge ratio. Implantable devices are reported under revenue code 0278.

Commercial Insurance/Medicare Advantage Claims Submission

Prior authorization is typically required for commercial insurances and Medicare Advantage plans for the implantation of the Vivistim® Paired VNS™ System. Please remember to include the Prior Authorization number on all claims submitted to avoid unnecessary claim denials.

Physician Claim Form (i.e., CMS-1500):

- Paper Claims: Box 23 – Prior Authorization Number
- Electronic Claims: 837P Loop 2300, Segment REF02 (if REF01 is G1)

Hospital Claim Form (i.e., UB-04, CMS-1450):

- Paper Claims: Box 63 (A, B, C) – Treatment Authorization Code(s)
- Electronic Claims: 837I Loop 2300, Segment REF02 (if REF01 is G1)

IMPORTANT:

If you experience a denied claim, underpayment, or receive a remittance advice or explanation of benefits that does not show a fully adjudicated claim, **please contact the MicroTransponder Reimbursement Hotline at reimbursement@microtransponder.com for assistance.**

References

1. CPT® code reporting must be supported by medical record documentation
2. CMS-1753-FC - CY 2022 OPPS Final Rule with Comment Period (NFRM). Addendum B.
3. CMS 1752-F, CMS 1752-CN - FY 2022 IPPS Final Rule ICD-10-CM Diagnosis Tabular Index
4. CMS CY 2022 HCPCS Alphanumeric Index
5. CMS 1752-F, CMS 1752-CN - FY 2022 IPPS Final Rule ICD-10-PCS Tabular Index
6. CMS 1752-F, CMS 1752-CN - FY 2022 IPPS Final Rule Table 5 MS-DRG
7. CMS 1751-F – CY 2022 MPFS Final Rule Addendum B RBRVS with MPFS CY 2022 final rule conversion factor ($33.5983).