

Reimbursement Guide

Artemis™ Neuro Evacuation Device

EFFECTIVE JANUARY 2021

Penumbra Reimbursement Hotline (U.S.): 1.866.808.1645 | penumbra@guidehouse.com

For USA only.

The reimbursement information is for illustrative purposes only and does not constitute reimbursement or legal advice. The reimbursement information provided by Penumbra is gathered from third-party sources and is subject to change without notice as a result of complex and frequently changing laws, regulations, rules and policies. The presence of an ICD-10 or CPT® code does not guarantee coverage or payment at a particular level. Insurers have widely varying coverage and payment policies. Accordingly, Penumbra strongly recommends that you consult with the patient's insurer, reimbursement specialist, and/or legal counsel regarding coding, coverage and reimbursement matters. Penumbra makes no representation or warranty regarding the completeness, accuracy, or timeliness of this information or that the use of this information will ensure a specific payment or coverage of the procedure. Physicians and hospitals must use case-specific judgment when selecting codes that appropriately describe the services rendered to a patient. Providers should treat patients in the setting that is clinically appropriate, and without regard to the payment amounts. Providers are responsible for compliance with individual payer billing and reimbursement requirements. Penumbra specifically disclaims liability or responsibility for the results or consequences of any actions taken in reliance on information in this document.

Table of Contents

Artemis Neuro Evacuation Device	1
Facility Coding and Payment	3
Physician Coding and Payment	5

Penumbra Pump MAX™ with Artemis Neuro Evacuation Device



Physician and Outpatient Coding and Payment

Coverage

Medicare carriers issue local coverage decisions (LCDs) listing coverage criteria for certain procedures. Physicians are urged to review their local carrier coverage policies (<http://www.cms.hhs.gov/mcd/search.asp?>) and/or contact their local carrier medical directors (<http://www.cms.hhs.gov/apps/contacts/>).

Facility Coding and Payment

ICD-10-PCS Procedure Codes

00C03ZZ	Extirpation of Matter from Brain, Percutaneous Approach
00C00ZZ	Extirpation of Matter from Brain, Open Approach
00C63ZZ	Extirpation of Matter from Cerebral Ventricle, Percutaneous Approach
00C60ZZ	Extirpation of Matter from Cerebral Ventricle, Open Approach
00C73ZZ	Extirpation of Matter from Cerebral Hemisphere, Percutaneous Approach
00C70ZZ	Extirpation of Matter from Cerebral Hemisphere, Open Approach
00C83ZZ	Extirpation of Matter from Basal Ganglia, Percutaneous Approach
00C80ZZ	Extirpation of Matter from Basal Ganglia, Open Approach
00C93ZZ	Extirpation of Matter from Thalamus, Percutaneous Approach
00C90ZZ	Extirpation of Matter from Thalamus, Open Approach
00H033Z	Insertion of Infusion Device into Brain, Percutaneous Approach

Charge for the Artemis Neuro Evacuation Device may be assigned to the following revenue codes:

0270	Medical/surgical supply
0272	Sterile supply
0279	Other supplies/device

Facility Coding and Payment

DRG and 2021 Payment Rates

Medicare pays hospitals for inpatient services under a prospective payment system using Medicare Severity Diagnosis Related Groups (MS-DRGs). Each MS-DRG is associated with a payment rate; however, the actual payment may vary considerably depending on the specifics of the patient encounter (i.e., patient diagnosis and procedures performed and coded). Medicare's algorithm determines the appropriate MS-DRG assignment that best reflects the charges from a given patient's entire admission. Final MS-DRG payments are adjusted to the specific facility, taking into consideration locality and other adjustments.

Private insurers use a variety of reimbursement algorithms for inpatient hospital services and similarly, payments will vary on a case-by-case basis.

MS-DRG and 2021 Payment Rates

MS-DRG	Description	2021 National DRG Payment*
23	Craniotomy With Major Device Implant Or Acute CNS PDX With MCC Or Chemotherapy Implant Or Epilepsy With Neurostimulator	\$35,603
24	Craniotomy With Major Device Implant Or Acute Complex CNS PDX w/o MCC	\$24,726
25	Craniotomy and Endovascular Intracranial Procedures w/ MCC	\$28,242
26	Craniotomy and Endovascular Intracranial Procedures w/ CC	\$19,228
27	Craniotomy and Endovascular Intracranial Procedures w/o MCC or CC	\$15,793

2021 Inpatient rates in effect from October 1, 2020 – September 30, 2021
 (M)CC = (major) complications and/or comorbidities. Complete list available at: <http://www.cms.hhs.gov/AcuteInpatientPPS>
 *Rates reflect FY 2021 National Medicare payment rates for hospitals submitting quality data and meaningful EHR users.
 Hospitals that do not submit quality data or are not meaningful EHR users may see decreased payment rates.

References & Sources

- HIPPS (Inpatient) Federal Register / Vol. 85, No. 182 / Friday, September 18, 2020.
- ICD-10-CM 2021 ICD-10-CM Complete Official Codebook. American Medical Association. Copyright ©2021 Optum360, LLC.
- ICD-10-PCS 2021 ICD-10-PCS Complete Official Codebook. American Medical Association. Copyright ©2021 Optum360, LLC.

Physician Coding and Payment

Physician Payment

- Based on RBRVS relative weights per CPT® code × \$ conversion factor
- Payments vary based on geographic location

CPT Code	Code Descriptor	2021 National Average Payment ^a	Work RVU ^a
61105	Twist drill hole for subdural or ventricular puncture	\$476.99	5.45
61108	Twist drill hole(s) for subdural, intracerebral, or ventricular puncture; for evacuation and/or drainage of subdural hematoma	\$929.20	11.64
61150	Burr hole(s) or trephine; with drainage of brain abscess or cyst	\$1,391.19	18.90
61151	Burr hole(s) or trephine; with subsequent tapping (aspiration) of intracranial abscess or cyst	\$1,024.11	13.49
61154	Burr hole(s) with evacuation and/or drainage of hematoma, extradural or subdural	\$1,314.42	17.07
61156	Burr hole(s); with aspiration of hematoma or cyst, intracerebral	\$1,280.23	17.45
61312	Craniectomy or craniotomy for evacuation of hematoma, supratentorial; extradural or subdural	\$2,130.92	30.17
61313	Craniectomy or craniotomy for evacuation of hematoma, supratentorial; intracerebral	\$2,039.85	28.09
61314	Craniectomy or craniotomy for evacuation of hematoma, infratentorial; extradural or subdural	\$1,883.18	25.90
61315	Craniectomy or craniotomy for evacuation of hematoma, infratentorial; intracerebellar	\$2,125.69	29.65
61781	Stereotactic computer-assisted (navigational) procedure; cranial, intradural (List separately in addition to code for primary procedure)	\$241.81	3.75

a. The 2021 physician payment rates are reflective of the Calendar Year 2021 Medicare Physician Fee Schedule (MPFS) Final Rule, which was published in Federal Register, Vol. 85, No. 248, Monday, December 28, 2020. Payments listed are national unadjusted fee schedule rates and are subject to change due to CMS' quarterly fee schedule updates and correction notices. Actual payments to physicians may also vary based on locality.

This list may not be comprehensive or complete. These procedures may be subject to the CMS multiple procedure reduction rule. When applicable, a payment reduction of 50% is applied to all payment amounts except the procedure with the greatest RVUs, which is paid at 100% unless exempt by CPT instructions or payer policy.

HCPCS Codes

Product	Suggested HCPCS Code
Artemis Neuro Evacuation Device	A4649 , Surgical supply; miscellaneous
Aspiration Tubing	A7002 , Tubing, used with suction pump, each
Collection Canister	A7000 , Canister, disposable, used with suction pump, each

HCPCS Codes are not separately reimbursed for hospital inpatient procedures. However, they may be used for tracking or other administration processes.

References & Sources

- CPT All Current Procedural Terminology (CPT) five-digit number codes, descriptions, number modifiers, instructions, guidelines, and other material are copyright 2021 American Medical Association. All rights reserved.
Current Procedural Terminology (CPT) is copyright 2021 American Medical Association. All rights reserved. No fee schedules, basic units, relative values, or related listings are included in CPT. The AMA assumes no liability for the data contained herein. Applicable FARS/DFARS restrictions apply to government use.
CPT is a trademark of the American Medical Association.

Physician Coding and Payment

Modifier 62 – Two Surgeons, Different Specialties

Under Medicare, modifier 62 is used to identify when two surgeons (each in a different specialty) are required to perform a specific procedure. Each surgeon bills the same CPT procedure code, and both surgeons must append the CPT procedure code with modifier 62 to report they both operated on the same case. This modifier can be used only when the co-surgeons have different specialties and are working simultaneously. Reimbursement will be 125% of the established fee, divided equally between the co-surgeons (payment for each of two co-surgeons is 62.5% of the global surgery fee).

Claims including modifier 62 for surgical procedure codes must include an operative report that supports the need for co-surgeons. If the surgical procedures performed by each physician can be clearly identified, and each surgeon's role is explicitly described within the operative report, only one operative report is necessary.

Commercial payer policies on co-surgeons vary, and payment rates will depend on contractual agreements. Providers should contact individual payers to confirm.

References & Sources

- Modifier 62 MLN Matters, SE 1322, <http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/SE1322.pdf>. Released: June 27, 2013. Accessed: February 2, 2021.

ARTEMIS™ Neuro Evacuation Device – Indication for Use

The ARTEMIS Neuro Evacuation Device is used for the controlled aspiration of tissue and/or fluid during surgery of the Ventricular System or Cerebrum in conjunction with a Penumbra Aspiration Pump. **Penumbra Aspiration Pump:** The Penumbra Aspiration Pump is indicated as a vacuum source for the Penumbra Aspiration Systems. **Contraindications:**

- The ARTEMIS Neuro Evacuation Device is not recommended during surgery of the brainstem, cerebellum, epidural subdural spaces.
- Do not use fibrinolytic therapy during the procedure.
- Do not use the ARTEMIS Neuro Evacuation Device with a non-Penumbra recommended Aspiration Pump. The safety and effectiveness of its use with a non-Penumbra recommended Aspiration Pump has not been established and can lead to patient injury or death.

Warnings: The ARTEMIS Neuro Evacuation Device should only be used by physicians who have received appropriate training to perform image-guided neurosurgical procedures. **Precautions:**

- The ARTEMIS Neuro Evacuation Device is intended for single use only. Do not resterilize or reuse. Resterilization or reuse could lead to infection or ineffective removal of tissue and/or fluid.
- Do not use kinked or damaged devices. Do not use open or damaged packages. Return damaged devices and packaging to the manufacturer/distributor.
- Use prior to the "Use By" date.
- Use the ARTEMIS Neuro Evacuation Device in conjunction with intraprocedural image-guidance.
- Do not use in an oxygen rich environment.
- Do not advance or use the ARTEMIS Neuro Evacuation Device against resistance without careful visual assessment of the cause. If the cause cannot be determined, withdraw the device. Unrestrained torqueing or forced insertion of the device against resistance may result in damage to the device, which may lead to tissue damage and/or device breakage.

Potential Adverse Events: Possible complications include, but are not limited to, the following: hematoma expansion, fever, headaches, vomiting, hyperglycemia, edema, re-bleeding, death, bleeding, increased blood pressure, infections, seizures, intraventricular hemorrhage, hydrocephalus, thromboembolic events, decreased consciousness, craniotomy, unintended removal of tissue leading to neurological and/or sensory deficit.

Penumbra Pump MAX™ – Indication for Use

The Penumbra Pump MAX is indicated as a vacuum source for the Penumbra Aspiration Systems. **Contraindications:** There are no contraindications. **Warnings/Precautions:**

- The canister/tubing is intended for single use only. Do not reuse. Reuse may result in canister cracking or tubing blockages, which may result in the inability to aspirate.
- Do not block bottom or back air vents. Unit may overheat and shut off or fail to restart if run for extended periods of time without airflow.
- To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.
- Do not position the pump so that it is difficult to operate the power cord disconnection device.
- Remove and service the pump if liquids or solids have been drawn into the vacuum pump.
- Do not use in the presence of a flammable anaesthetic mixture with air or nitrous oxide.
- Do not use in oxygen rich environment.
- To prevent fire or shock hazard, use replacement fuses of equal size and rating.
- To prevent fire or shock hazard, use a replacement power cord of equal rating.
- Do not re-infuse blood or fluid from the canister back into patient.
- Do not use petroleum base compounds, acids, caustics, or chlorinated solvents to clean or lubricate any parts. It will reduce the service life of the pump. Use only water-base solvents for cleaning.
- Federal (USA) law restricts this device to sale by or on the order of a physician.
- No modification of this equipment is allowed.

Penumbra Reimbursement Hotline (U.S.): 1.866.808.1645 | penumbra@guidehouse.com

For USA only.

The reimbursement information is for illustrative purposes only and does not constitute reimbursement or legal advice. The reimbursement information provided by Penumbra is gathered from third-party sources and is subject to change without notice as a result of complex and frequently changing laws, regulations, rules and policies. The presence of an ICD-10 or CPT® code does not guarantee coverage or payment at a particular level. Insurers have widely varying coverage and payment policies. Accordingly, Penumbra strongly recommends that you consult with the patient's insurer, reimbursement specialist, and/or legal counsel regarding coding, coverage and reimbursement matters. Penumbra makes no representation or warranty regarding the completeness, accuracy, or timeliness of this information or that the use of this information will ensure a specific payment or coverage of the procedure. Physicians and hospitals must use case-specific judgment when selecting codes that appropriately describe the services rendered to a patient. Providers should treat patients in the setting that is clinically appropriate, and without regard to the payment amounts. Providers are responsible for compliance with individual payer billing and reimbursement requirements. Penumbra specifically disclaims liability or responsibility for the results or consequences of any actions taken in reliance on information in this document.

Caution: Federal (USA) law restricts these devices to sale by or on the order of a physician. Prior to use, please refer to the Instructions for Use for complete product indications, contraindications, warnings, precautions, potential adverse events, and detailed instructions for use.

Copyright ©2017–2021 Penumbra, Inc. All rights reserved. The Penumbra P Logos, Artemis, and MAX are registered trademarks or trademarks of Penumbra, Inc. in the USA and other countries. All other trademarks are the property of their respective owners. 12630, Rev. H 01/21 USA



www.penumbrainc.com