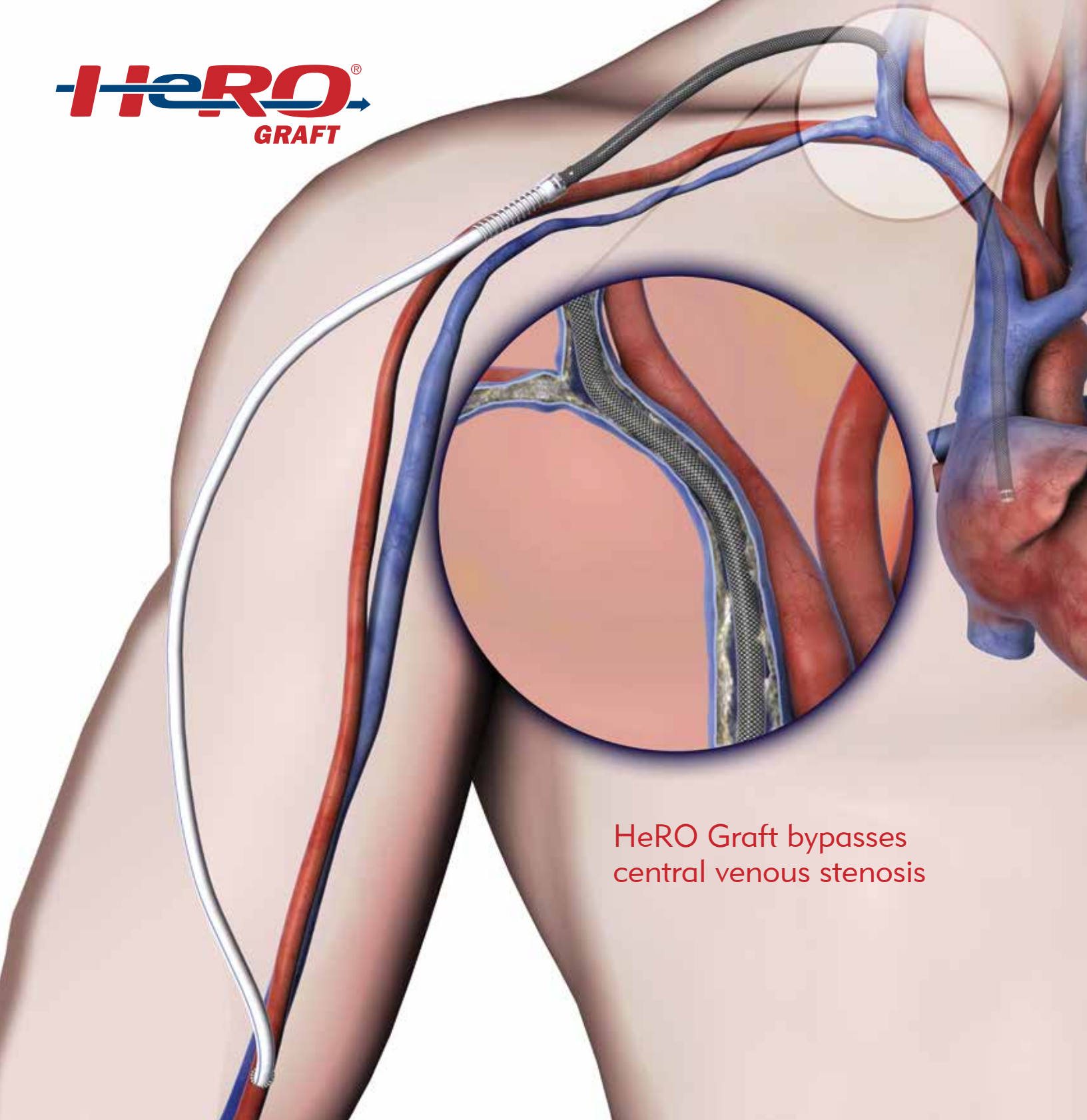


HeRO[®]
GRAFT



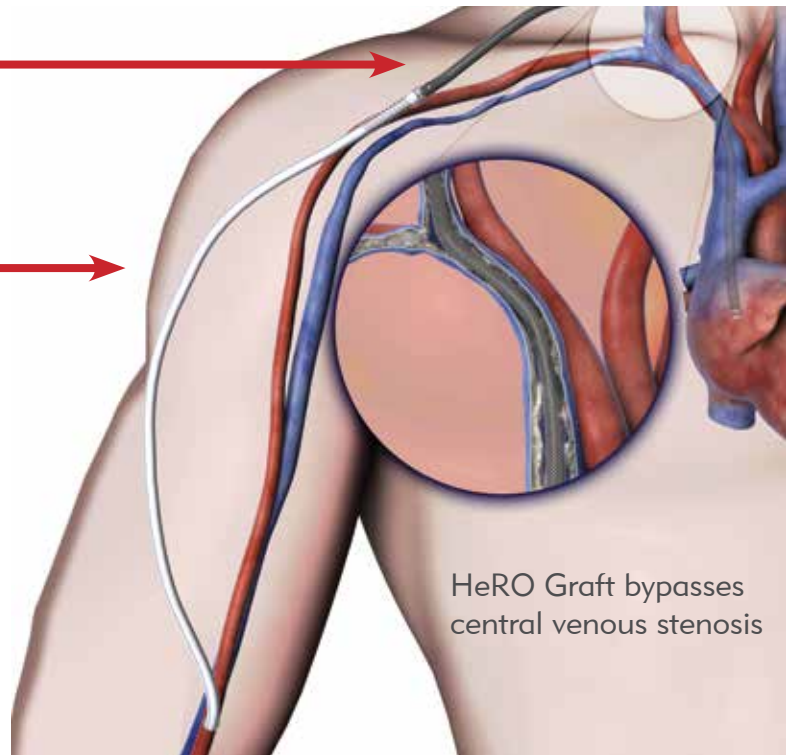
HeRO Graft bypasses
central venous stenosis

Potential 2017 Reimbursements
Implant Procedure

 **MERTMEDICAL**[®]

VENOUS OUTFLOW COMPONENT
(HERO 1001);
CPT Code 36558* w/C 1750

ARTERIAL GRAFT COMPONENT
(HERO 1002);
CPT Code 36830*



HeRO (Hemodialysis Reliable Outflow) Graft is the **ONLY** fully subcutaneous AV access solution clinically proven to maintain long-term access for hemodialysis patients with central venous stenosis.

Cost Benefits

- 23% average savings per year with the HeRO Graft compared with catheters
- Reduces device-related infections compared to catheters,^{4,5} that can result in hospital admissions projected at \$23k to \$56k per stay^{2,3}
- Lowers interventions and associated costs by more than 50% compared to catheters^{4,5}

ACCESSORY COMPONENT KIT (HERO 1003, not pictured) contains disposable tools used to facilitate placement of the Venous Outflow Component.

| Product Code | Component | Diameter (ID) | Length |
|------------------|--------------------------|------------------------------------|-----------------------|
| HeRO 1001 | Venous Outflow Component | 5mm | 40cm (customizable) |
| HeRO 1002 | Arterial Graft Component | 6mm (ePTFE); 6mm - 5mm (connector) | 53cm (connector: 3cm) |
| HeRO 1003 | Accessory Component Kit | N/A | N/A |

HeRO Graft Potential Outpatient Codes (If Temporary Bridging Catheter)

| CPT® Code | Abbreviated Description | Product | Procedure – To – Device Edit |
|-----------|--|-------------------|---|
| 36830 | Creation of arteriovenous fistula by other than direct arteriovenous anastomosis | HERO 1002 | None Required |
| 36558 | Insertion of tunneled centrally inserted central venous catheter | HERO 1001 | C 1750 Required [Catheter, Hemodialysis, Long-Term] |
| 36558 | Insertion of tunneled centrally inserted central venous catheter | Bridging Catheter | C 1752 Required [Catheter, Hemodialysis, Short-Term] |

*CPT® 36830 and 36558 should be reported together to represent complete HeRO Graft implantation.

Potential Outpatient Reimbursement Codes APC and Physician Average Payments

| Common Diagnosis Codes | |
|--------------------------|--|
| ICD-10-CM Diagnosis Code | ICD-10-CM Diagnostic Description |
| E10.22 | Type 1 diabetes mellitus with diabetic chronic kidney disease |
| E10.29 | Type 1 diabetes mellitus with other diabetic kidney complication |
| E11.22 | Type 2 diabetes mellitus with diabetic chronic kidney disease |
| E11.29 | Type 2 diabetes mellitus with other diabetic kidney complication |
| N03.0 | Chronic nephritic syndrome with minor glomerular abnormality |
| N03.1 | Chronic nephritic syndrome with focal and segmental glomerular lesions |
| N03.2 | Chronic nephritic syndrome with diffuse membranous glomerulonephritis |
| N03.3 | Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis |
| N03.4 | Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis |
| N03.5 | Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis |
| N03.6 | Chronic nephritic syndrome with dense deposit disease |
| N03.7 | Chronic nephritic syndrome with diffuse crescentic glomerulonephritis |
| N03.8 | Chronic nephritic syndrome with other morphologic changes |
| N03.9 | Chronic nephritic syndrome with unspecified morphologic changes |



| Potential Outpatient Procedure Codes | | | Avg Payments | |
|--------------------------------------|------|--|--------------|-------------------|
| CPT® Code | APC | CPT® / Code Description | APC Payment | Physician Payment |
| 36830* | 5183 | Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft (eg, biological collagen, thermoplastic graft) | \$3,923 | \$702 |
| 36558* | 5182 | Insertion of tunneled centrally inserted central venous catheter, without subcutaneous port or pump; age 5 years or older | \$2,340 | \$274 |
| 36581 | 5182 | Replacement, complete, of a tunneled centrally inserted central venous catheter, without subcutaneous port or pump, through same venous access | \$2,340 | \$191 |
| 36589 | 5301 | Removal of tunneled central venous catheter, without subcutaneous port or pump | \$672 | \$142 |
| 36902** | 5192 | Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty. | \$4,823 | \$225 |
| 36905** | 5193 | Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s), with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty. | \$9,748 | \$445 |
| 36005 | NA | Injection procedure for extremity venography (including introduction of needle or intracatheter) | NA | \$50 |
| 36901 | 5181 | Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report. | \$684 | \$151 |
| 36597 | 5181 | Repositioning of previously placed central venous catheter under fluoroscopic guidance | \$684 | \$64 |
| 75827 | 5181 | Venography, caval, superior, with serialography, radiological supervision and interpretation | \$684 | \$57 (-26) |
| 76937 | NA | Ultrasound guidance for vascular access requiring ultrasound evaluation of potential access sites, documentation of selected vessel patency, concurrent realtime ultrasound visualization of vascular needle entry, with permanent recording and reporting | Packaged | \$15 (-26) |
| 77001 | NA | Fluoroscopic guidance for central venous access device placement, replacement (catheter only or complete), or removal (includes fluoroscopic guidance for vascular access and catheter manipulation, and necessary contrast injections through access site or catheter with related venography radiologic supervision and interpretation, and radiographic documentation of final catheter position) | Packaged | \$19 (-26) |
| 76080 | NA | Radiologic examination, abscess, fistula or sinus tract study, radiological supervision and interpretation | Packaged | \$27 (-26) |
| 93930 | 5523 | Duplex scan of upper extremity arteries or arterial bypass grafts; complete bilateral study | \$219 | \$41 (-41) |
| 93931 | 5522 | Duplex scan of upper extremity arteries or arterial bypass grafts; unilateral or limited study | \$117 | \$25 (-26) |

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Outpatient APC payments based on Medicare and Medicaid Programs: Hospital Outpatient Prospective Payment and Ambulatory Surgical Center Payment Systems and Quality Reporting Programs; Final Rule for Calendar Year 2017 (Federal Register, November 14, 2016). Physician payments based on Medicare and Medicaid Programs: Revisions to Payment Policies under the Physician Fee Schedule (Federal Register, November 18, 2016).

*CPT® 36830 and 36558 should be reported together to represent complete HeRO Graft implantation. Payment for 36830 is expected to be less than the full payment due to the recommended use of the -52 reduced services modifier. Payers will base payment on supporting documentation describing the actual amount of work performed. When 36558 is used in conjunction with 36830 to describe the HeRO Graft implantation, it is also subject to the multiple procedure reduction. See Potential Implant Scenario as an example.

** Code has a J1 status indicator and its use will result in the assignment of procedure to a comprehensive APC (C-APC) by Medicare. Even though it is possible that separate APC payments may be determined to be appropriate where more than one procedure is performed during the same outpatient visit, many APCs are subject to reduced payment when multiple procedures are performed on the same day. Some comprehensive APCs in 2017 package payments for items and service rather than separate multiple payments for each individual service. Comprehensive APCs will reimburse a single all-inclusive payment for the primary service with no additional reimbursement for additional adjunctive services and supplies used during the delivery of the primary procedure and applies to percutaneous interventions.

| Modifier | Description |
|----------|--|
| -26 | Professional component only. Technical fee not included. |
| -51 | Multiple procedure. |
| -52 | Reduced services. |
| -59 | Distinct procedure. |

Potential Outpatient Implant Scenario

- Existing tunneled cuffed catheter removed
- HeRO Graft implanted
- Temporary bridging catheter placed in new venous site

| Modifier | Description |
|----------|--|
| -26 | Professional component only. Technical fee not included. |
| -51 | Multiple procedure. |
| -52 | Reduced services. |
| -59 | Distinct procedure. |



| CPT® Code | APC | Abbreviated Description | APC Modified Payment | Physician Modified Payment |
|---------------|-------------|---|----------------------|----------------------------|
| 36589 | 5301 | Removal of tunneled central venous catheter | \$672 | \$71 (-51) |
| 36830* | 5183 | Creation of arteriovenous fistula by other than direct arteriovenous anastomosis | \$1,961 | <\$351 (-51,-52) |
| 36558* | 5182 | Insertion of tunneled centrally inserted central venous catheter | \$1,170 | \$137 (-51) |
| 36558 | 5182 | Insertion of tunneled centrally inserted central venous catheter | \$1,170 | \$137 (-51,-59) |
| 76937 | NA | Ultrasound guidance for vascular access | Packaged | \$15 (-26) |
| 77001 | NA | Fluoroscopic guidance for central venous access device placement | Packaged | \$19 (-26) |

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Potential Inpatient Reimbursement Codes

| ICD-10-CM Diagnosis Code | ICD-10-CM Diagnosis Description | ICD-10-PCS Code | Description | MS-DRG | MS-DRG Description | MS-DRG Payment |
|--------------------------|--|-----------------|---|--------|---|----------------|
| E10.22 | Type 1 diabetes mellitus with diabetic chronic kidney disease | 03130ZD | Bypass Right Subclavian Artery to Upper Arm Vein, Open Approach | 252 | Other Vascular Procedures with MCC | \$18,032 |
| E10.29 | Type 1 diabetes mellitus with other diabetic kidney complication | 03140ZD | Bypass Left Subclavian Artery to Upper Arm Vein, Open Approach | 253 | Other Vascular Procedures with CC | \$14,393 |
| E11.22 | Type 2 diabetes mellitus with diabetic chronic kidney disease | 03150ZD | Bypass Right Axillary Artery to Upper Arm Vein, Open Approach | 254 | Other Vascular Procedures without MCC or CC | \$9,670 |
| E11.29 | Type 2 diabetes mellitus with other diabetic kidney complication | 03160ZD | Bypass Left Axillary Artery to Upper Arm Vein, Open Approach | 673 | Other Kidney and Urinary Tract Procedures with MCC | \$18,196 |
| N03.0 | Chronic nephritic syndrome with minor glomerular abnormality | 03170ZD | Bypass Right Brachial Artery to Upper Arm Vein, Open Approach | 674 | Other Kidney and Urinary Tract Procedures with CC | \$12,274 |
| N03.1 | Chronic nephritic syndrome with focal and segmental glomerular lesions | 03180ZD | Bypass Left Brachial Artery to Upper Arm Vein, Open Approach | 675 | Other Kidney and Urinary Tract Procedures without MCC or CC | \$8,425 |
| N03.2 | Chronic nephritic syndrome with diffuse membranous glomerulonephritis | 03190ZF | Bypass Right Ulnar Artery to Lower Arm Vein, Open Approach | | | |
| N03.3 | Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis | 031A0ZF | Bypass Left Ulnar Artery to Lower Arm Vein, Open Approach | | | |
| N03.4 | Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis | 031B0ZF | Bypass Right Radial Artery to Lower Arm Vein, Open Approach | | | |
| N03.5 | Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis | 031C0ZF | Bypass Left Radial Artery to Lower Arm Vein, Open Approach | | | |
| N03.6 | Chronic nephritic syndrome with dense deposit disease | 02H633Z | Insertion of infusion device into right atrium, percutaneous approach | | | |
| N03.7 | Chronic nephritic syndrome with diffuse crescentic glomerulonephritis | | | | | |
| N03.8 | Chronic nephritic syndrome with other morphologic changes | | | | | |
| N03.9 | Chronic nephritic syndrome with unspecified morphologic changes | | | | | |

The tables throughout this document list the national average Medicare payments for certain vascular access related procedures and interventions. To accurately report a vascular access related procedure or intervention, multiple code combinations may be needed. Unless otherwise noted, amounts shown represent Medicare national average payment for the full amount without any multiple procedure reduction applied. Providers should select the most appropriate HCPCS/CPT® code(s) with the highest level of detail to describe the service(s) rendered to the patient as well as the most appropriate ICD-9CM diagnosis code(s) to describe the patient's condition. Any questions should be directed to the pertinent local payer. Inpatient MS-DRG payments based on The Centers for Medicare and Medicaid Services Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long Term Care Hospital Prospective Payment System Policy Changes and Fiscal Year 2017 Rates (Federal Register, August 16, 2016).
 DISCLAIMER: The information in this brochure is provided with the intent to assist in obtaining appropriate reimbursement for medical devices and services. It is NOT intended as legal advice. Seek legal counsel or a reimbursement specialist for further questions or clarifications. The provider makes all decisions concerning completion of reimbursement claim forms, including code selection and billing amounts. This document is for information purposes only and represents no statement, promise, or guarantee by Merit concerning levels of reimbursement, payment or charges. This coding information may include codes for procedures for which Merit currently offers no cleared or approved products. The coding options listed within this guide are commonly used codes and are NOT intended to be an all-inclusive list. See page 3 for further details about uses and limitations of this document.

*CPT® 36830 and 36558 should be reported together to represent complete HeRO Graft implantation.
 References: 1) Dageforde et al., JSR 2012. 2) Ramanathan et al., Infect Control Hosp Epidemiol 2007. 3) O'Grady et al., Pediatrics 2002. 4) Katzman et al., J Vasc Surg 2009. 5) Gage et al., EJVES 2012.

Before using refer to Instructions for Use for indications, contraindications as well as warnings and precautions.



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