ERRATA for
Diagnostic & Interventional Cardiovascular Coding Reference
2021 Edition

Text deletions are ~~crossed out~~. Corrected text is **blue and bolded**. Ordered by appearance in text.

Page 21, Middle of page

~~2020~~ **2021** RVU File:

Page 329, Code Table

Right ovarian venography **arising off right renal vein**	~~36011~~ **36012**	N/A	~~4.61~~ **5.07**	75831	5183	1.52
Right ovarian venography arising off IVC	**36011**	**N/A**	**4.61**	**76496**	**5521**	**0.00**

Page 366, Coding Instructions

34. ~~Do not~~ **R**eport HCPCS Level II code C9759 for injection of drugs directly into the wall of an artery (to prevent intimal hyperplasia or recurrent stenosis) using specialized balloon technologies. This is considered a microinfusion. This code is effective July 1, 2020, for hospital billing. Physicians report unlisted code 37799. Do report the associated angioplasty done at the same session.

Page 411, Code Table

~~Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal angioplasty~~	~~37220~~	~~5192~~	~~11.74~~	~~N/A~~
~~Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal angioplasty~~	~~37224~~	~~5192~~	~~13.01~~	~~N/A~~
~~Revascularization, endovascular, open or percutaneous, any vessel(s); with intravascular lithotripsy, includes angioplasty within the same vessel(s), when performed~~	~~C9764~~	~~5192~~	~~N/A~~	~~N/A~~

Page 414, Coding Instructions

14. ~~Do not code angioplasty to treat a segment of the same vessel that has been treated with a lithoplasty balloon for hospital billing. When only lithoplasty and angioplasty are performed in lower extremity arteries, report HCPCS Level II code C9764, beginning July 1, 2020.~~

15. ~~As of the date of printing, there remains little guidance for intravascular lithotripsy codes C9764-C9767. The procedure is only FDA approved for use in lower extremity arteries. This procedure is in clinical trials for coronary arteries, and is investigational for use in disrupting calcific valves.~~

16. ~~Do not report lithoplasty codes C9764-C9767 in coronary arteries (or any non-lower extremity arteries).~~

17. ~~Only report one intravascular lithotripsy code per lower extremity vascular territory (iliac, femoral/popliteal, tibial/peronal), as the code descriptions state "vessel(s)".~~

18. ~~IVUS codes 37252 and 37253 are add-on codes and therefore require a base code. Do not report codes 37252 and 37253 with lithoplasty codes C9764-C9767, as these HCPCS Level II codes are not listed as base codes for IVUS in the *CPT Codebook*. Add-on code edits apply here.~~

19. ~~For physician billing, lithoplasty is coded the same as a POBA. Report codes 37220-37235 when Shockwave balloons are used for lithoplasty during lower extremity revascularization procedures.~~

27. Infrainguinal arterial revascularization guidelines have defined hierarchy as follows: stent with atherectomy supersedes atherectomy, which supersedes stent placement, which supersedes angioplasty. ~~This guideline also applies to intravascular lithoplasty codes C9764-C9767.~~

Page 415, Coding Instructions

25. Use codes 37248/37249 for venoplasty of pulmonary vein stenoses and codes ~~37238/37239~~ **33745/33746** for stent placement across pulmonary vein stenoses **to improve intracardiac flow**. Catheter placement codes are bundled in the pulmonary veins. ~~New codes are anticipated for these procedures in 2022.~~

Page 422, Code Table

~~Revascularization, endovascular, open or percutaneous, lower extremity artery(ies), except tibial/peroneal; with intravascular lithotripsy and atherectomy, includes angioplasty within the same vessel(s), when performed~~	~~C9766~~	~~5193~~	~~N/A~~	~~C9766~~	~~5193~~	~~N/A~~
~~Revascularization, endovascular, open or percutaneous, lower extremity artery(ies), except tibial/peroneal; with intravascular lithotripsy and transluminal stent placement(s), and atherectomy, includes angioplasty within the same vessel(s), when performed~~	~~C9767~~	~~5194~~	~~N/A~~	~~C9767~~	~~5194~~	~~N/A~~

Page 423, Coding Instructions

8. ~~For hospital billing to Medicare, atherectomy and balloon lithoplasty are not reported separately. Report code C9766 for lithoplasty and atherectomy or C9767 for lithoplasty, atherectomy, and stent placement in the same vessel. Angioplasty is bundled, if performed. Codes C9766 and C9767 are effective July 1, 2020, for hospital billing.~~

9. ~~As of the date of printing, there remains little guidance for intravascular lithotripsy codes C9764-C9767. The procedure is only FDA approved for use in lower extremity arteries. This procedure is in clinical trials for coronary arteries, and is investigational for use in disrupting calcific valves.~~

10. ~~Do not report lithoplasty codes C9764-C9767 in coronary arteries (or any non-lower extremity arteries).~~

11. ~~Only report one intravascular lithotripsy code per lower extremity vascular territory (iliac, femoral/popliteal, tibial/peronal), as the code descriptions state "vessel(s)".~~

12. ~~IVUS codes 37252 and 37253 are add-on codes and therefore require a base code. Do not report codes 37252 and 37253 with lithoplasty codes C9764-C9767, as these HCPCS Level II codes are not listed as base codes for IVUS in the *CPT Codebook*. Add-on code edits apply here.~~

13. ~~For physician billing, lithoplasty is coded the same as a POBA. Report codes 37220-37235 when Shockwave balloons are used for lithoplasty during lower extremity revascularization procedures.~~

Page 425, Examples

~~*4) Patient with left leg rest pain and ultrasound suggesting popliteal stenosis. Via right common femoral access, a contralateral sheath is placed into the left common iliac artery with diagnostic left lower extremity angiography done (75710-59), showing 70% proximal SFA stenosis and 95% popliteal stenosis. Lithoplasty of the proximal superficial femoral artery lesion (C9764) is performed, followed by 6 mm stent placement (add C9765, delete C9764). The popliteal artery is then treated with a Phoenix atherectomy device and a Shockwave 5 mm lithoplasty balloon (add C9767, delete C9765).*~~

Page 429, Code Table

~~Revascularization, endovascular, open or percutaneous, lower extremity artery(ies), except tibial/peroneal; with intravascular lithotripsy, and transluminal stent placement(s), includes angioplasty within the same vessel(s), when performed~~	~~C9765~~	~~5193~~	~~N/A~~	~~Bundled~~
~~Revascularization, endovascular, open or percutaneous, lower extremity artery(ies), except tibial/peroneal; with intravascular lithotripsy and transluminal stent placement(s), and atherectomy, includes angioplasty within the same vessel(s), when performed~~	~~C9767~~	~~5194~~	~~N/A~~	~~Bundled~~

Pages 431-432, Coding Instructions

26. ~~Do not report stent placement, atherectomy, or angioplasty in the same vessel that is treated with balloon lithoplasty for hospital billing. Report HCPCS Level II code C9765 when lithoplasty and stent placement are performed, or code C9767 when lithoplasty, atherectomy, and stent placement are performed in the same vessel. Angioplasty is bundled, if performed. Codes C9765 and C9767 are effective July 1, 2020, for hospital billing.~~

27. ~~As of the date of printing, there remains little guidance for intravascular lithotripsy codes C9764-C9767. The procedure is only FDA approved for use in lower extremity arteries. This procedure is in clinical trials for coronary arteries, and is investigational for use in disrupting calcific valves. Additional information will be posted to the ZHealth Publishing website as it becomes available.~~

28. ~~Do not report lithoplasty codes C9764-C9767 in coronary arteries (or any non-lower extremity arteries).~~

29. ~~Only report one intravascular lithotripsy code per lower extremity vascular territory (iliac, femoral/popliteal, tibial/peronal), as the code descriptions state "vessel(s)".~~

30. ~~IVUS codes 37252 and 37253 are add-on codes and therefore require a base code. Do not report codes 37252 and 37253 with lithoplasty codes C9764-C9767, as these HCPCS Level II codes are not listed as base codes for IVUS in the *CPT Codebook*. Add-on code edits apply here.~~

31. ~~For physician billing, lithoplasty is coded the same as a POBA. Report codes 37220-37235 when Shockwave balloons are used for lithoplasty during lower extremity revascularization procedures.~~

Page 441, Code Table

Revascularization, endovascular, open or percutaneous, ~~any vessel(s)~~ **lower extremity artery(ies), except tibial/peroneal**; with intravascular lithotripsy, includes angioplasty within the same vessel(s), when performed	C9764	5192	N/A	Bundled
Revascularization, endovascular, open or percutaneous, ~~any vessel(s)~~ **lower extremity artery(ies), except tibial/peroneal**; with intravascular lithotripsy, and transluminal stent placement(s), includes angioplasty within the same vessel(s), when performed	C9765	5193	N/A	Bundled
Revascularization, endovascular, open or percutaneous, ~~any vessel(s)~~ **lower extremity artery(ies), except tibial/peroneal**; with intravascular lithotripsy and atherectomy, includes angioplasty within the same vessel(s), when performed	C9766	5193	N/A	Bundled
Revascularization, endovascular, open or percutaneous, ~~any vessel(s)~~ **lower extremity artery(ies), except tibial/peroneal**; with intravascular lithotripsy and transluminal stent placement(s), and atherectomy, includes angioplasty within the same vessel(s), when performed	C9767	5194	N/A	Bundled
Revascularization, endovascular, open or percutaneous, tibial/peroneal artery(ies), with intravascular lithotripsy, includes angioplasty within the same vessel (s), when performed	**C9772**	**5193**	**N/A**	**Bundled**
Revascularization, endovascular, open or percutaneous, tibial/peroneal artery(ies); with intravascular lithotripsy, and transluminal stent placement(s), includes angioplasty within the same vessel(s), when performed	**C9773**	**5194**	**N/A**	**Bundled**

Revascularization, endovascular, open or percutaneous, tibial/peroneal artery(ies); with intravascular lithotripsy and atherectomy, includes angioplasty within the same vessel (s), when performed	**C9774**	**5194**	**N/A**	**Bundled**
Revascularization, endovascular, open or percutaneous, tibial/peroneal artery(ies); with intravascular lithotripsy and transluminal stent placement(s), and atherectomy, includes angioplasty within the same vessel (s), when performed	**C9775**	**5194**	**N/A**	**Bundled**

Page 442, Coding Instructions

(new instruction to follow existing #6):

7. Intravascular lithotripsy (IVL) utilizes a specialized balloon (Shockwave) that targets and disrupts vessel wall calcium, making the vessel respond better to other current treatments. The hospital reporting for IVL utilizes HCPCS Level II codes for use in the lower extremity arterial system. While there are sixteen CPT codes to describe lower extremity revascularization, there are only eight HCPCS Level II codes. Our current understanding of these codes is to report one IVL code in the combined iliac, femoral, and popliteal arteries, and one in the tibial/peroneal arteries.

~~7.~~ **8. For hospital** Medicare billing, HCPCS Level II codes C9764-C9767 are used to report revascularization procedures that include ~~intravascular lithoplasty~~ **IVL performed in lower extremities arteries (except tibial/peroneal arteries)**. Report only one of these codes per ~~vessel/vascular~~ territory based on the types of revascularization performed **(for IVL, please note that the iliac arteries and femoral/popliteal arteries are considered one combined "above-knee territory")**:

- Report code C9764 when only ~~lithoplasty~~ **intravascular lithotripsy** is performed in **the above-knee territory** ~~a vessel~~. Angioplasty, if performed, is included **in the same vessel as the IVL**.
- Report code C9765 when ~~lithoplasty~~ **intravascular lithotripsy** and stent placement are performed in **the above-knee territory** ~~a vessel~~. Angioplasty, if performed, is included **in the same vessel as the IVL**.
- Report code C9766 when ~~lithoplasty~~ **intravascular lithotripsy** and atherectomy are performed in **the above-knee territory** ~~a vessel~~. Angioplasty, if performed, is included **in the same vessel as the IVL**.
- Report code C9767 when ~~lithoplasty~~ **intravascular lithotripsy**, stent placement, and atherectomy are all performed in **the above-knee territory** ~~a vessel~~. Angioplasty, if performed, is included **in the same vessel as the IVL**.
- ~~Follow the same reporting rules by territory as for other lower extremity revascularization procedures.~~ **Hospitals report only one of the IVL codes per above-knee territory, as these codes state "artery(ies)" and "vessel(s)."**

9. For hospital Medicare billing, HCPCS Level II codes C9772-C9775 are used to report revascularization procedures that include intravascular lithotripsy performed in the tibial/peroneal artery(ies). Report only one of these codes per unilateral tibial/peroneal territory based on the types of revascularization performed:

- **Report code C9772 when only intravascular lithotripsy is performed in the territory. Angioplasty, if performed, is included in the same vessel as the IVL.**
- **Report code C9773 when intravascular lithotripsy and stent placement are performed in the territory. Angioplasty, if performed, is included in the same vessel as the IVL.**
- **Report code C9774 when intravascular lithotripsy and atherectomy are performed in the territory. Angioplasty, if performed, is included in the same vessel as the IVL.**

- **Report code C9775 when intravascular lithotripsy, stent placement, and atherectomy are all performed in the territory. Angioplasty, if performed, is included in the same vessel as the IVL.**

- **Hospitals report only one of the IVL codes per territory, as these codes state "artery(ies)" and "vessel(s)."**

10. If an intravascular lithotripsy procedure described by codes C9764-C9767 or C9772-C9775 is performed in one iliac/femoral/popliteal or tibial/peroneal artery territory respectively, and an additional vessel intervention is performed in the same territory without intravascular lithotripsy, report the initial intervention code (37220/37221 for iliac or 37228-37231 for tibial/peroneal) for that vessel intervention in the respective territory. Hospital coding example: common iliac artery intravascular lithotripsy with stent placement (C9765), with additional external iliac stent placement without intravascular lithotripsy (37221). Note: If additional intravascular lithotripsy and stent placement in external iliac artery, no additional code is reported, as C9765 includes vessel(s) treated.

~~8.~~ **11.** As of **March 1, 2021** ~~the date of printing~~, there remains ~~little~~ **limited** guidance for intravascular lithotripsy codes C9764-C9767 **and C9772-C9775**. The procedure is ~~only~~ FDA approved for use in lower extremity arteries**, and received FDA approval for use in coronary arteries on February 16, 2021. As of March 1, 2021, there are no available HCPCS Level II codes to report coronary IVL. Monitor the ZHealth Publishing website for updates.** ~~This procedure is in clinical trials for coronary arteries, and~~ **IVL** investigational for use in disrupting ~~calcific~~ **calcified** valves.

~~9.~~ **12.** Do not report ~~lithoplasty~~ **intravascular lithotripsy** codes C9764-C9767 ~~in~~ **for** coronary arteries**,** ~~(or~~ any **non**-lower extremity arteries~~)~~ **(e.g., renals, aorta, subclavian), or the tibial/peroneal arteries**.

10. ~~Only report one intravascular lithotripsy code per lower extremity vascular territory (iliac, femoral/popliteal, tibial/peroneal), as the code descriptions state "vessel(s)".~~

13. Codes C9764-C9767 and C9772-C9775 do not allow reporting of add-on codes 37222, 37223, and 37232-37235 due to add-on code edits. If a separate non-IVL lower extremity revascularization procedure is performed in a different vessel in the same "territory" as an IVL procedure, report the initial vessel interventional code.

14. Report bilateral IVL with a -50 modifier.

15. If IVL is performed in the proximal SFA and a stent is placed in the distal SFA/popliteal, report IVL with stent placement code C9765.

16. If IVL is performed in the proximal SFA and a stent is placed in the common iliac, report codes 37221 and C9764.

~~11.~~ **17.** ~~IVUS codes 37252 and 37253 are add-on codes and therefore require a base code.~~ **Hospitals do not** report codes 37252 and 37253 with ~~lithoplasty~~ **intravascular lithotripsy** codes C9764-C9767 **or C9772-C9775; however,** as these HCPCS Level II codes are not listed as base codes for IVUS in the *CPT Codebook*, **you will likely hit a**dd-on code edits ~~apply here~~.

18. Physicians do report codes 37252 and 37253 when IVUS is performed at the time of intravascular lithotripsy.

~~12.~~ **19.** For physician billing, ~~lithoplasty~~ **intravascular lithotripsy** is coded the same as a POBA. Report codes 37220-37235 when Shockwave balloons are used for ~~lithoplasty~~ **intravascular lithotripsy** during lower extremity revascularization procedures.

Page 449, Examples

(new example to follow #3):

4) Patient with left leg rest pain and ultrasound suggesting popliteal stenosis. Via right common femoral access, a contralateral sheath is placed into the left common iliac artery with diagnostic left lower extremity angiography done (75710-59), showing 70% proximal SFA stenosis and 95% popliteal stenosis. Intravascular lithotripsy with angioplasty of the proximal superficial femoral artery lesion (C9764) is performed, followed by 6 mm stent placement (add C9765, delete C9764). The popliteal artery is then treated with a Phoenix atherectomy device and a Shockwave 5 mm intravascular lithoplasty balloon (add C9767, delete C9765).

Note: This is for facility coding. Physicians do not report C-codes.

Page 456, Coding Instructions

(new instruction to follow #2):

3. Effective January 1, 2021, code 61624 is no longer a status indicator C (inpatient-only) code.

Page 461, Coding Instructions

43. Do not report angioplasty or venoplasty codes 37246-37249 when angioplasty is performed at the same session in the same vessel as a stent placement (e.g., do not submit separate angioplasty with codes 36903, 36906, 36908, 37215-37218, 37220-37235, 61635, 92920-92944, 0075T, 0076T, 0505T, 0620T, C9600-C9608, ~~or~~ C9764-C9767**, or C9772-C9775**).

Page 475, Coding Instructions

(new instruction to follow #1):

2. Effective January 1, 2021, code 37182 is no longer a status indicator C (inpatient-only) code.

Page 492, Coding Instructions

3. Hospitals do ~~not~~ report codes 37252 and 37253 with ~~lithoplasty~~ **intravascular lithotripsy** codes C9764-C9767 **or C9772-C9775; however,** as these HCPCS Level II codes are not listed as base codes for IVUS in the *CPT Codebook*, **you will likely hit a**dd-on code edits ~~apply here~~.

Page 660, Coding Instructions

21. Report code 93356 for deformation imaging. It is an add-on code to **transthoracic** echocardiography when strain imaging is performed.

Page 843, Charge Sheet: Arteriography & Revascularization - 2021

PERCUTANEOUS ANGIOPLASTY - NOT LOWER EXTREMITY	
~~Lithoplasty, w/wo angioplasty (hospital only)~~	~~C6764~~
~~Stent placement with lithoplasty, w/wo angioplasty (hospital only)~~	~~C6765~~
~~Atherectomy with lithoplasty, w/wo angioplasty (hospital only)~~	~~C6766~~
~~Stent placement, atherectomy, and lithoplasty, w/wo angioplasty (hospital only)~~	~~C6767~~

ATHERECTOMY - NOT LOWER EXTREMITY	
~~Femoral/popliteal atherectomy (includes angioplasty)~~	~~37225~~
~~Tibial/peroneal atherectomy, initial vessel (includes angioplasty)~~	~~37229~~
~~Tibial/peroneal atherectomy, each add'l vessel (includes angioplasty)~~	~~37233~~
~~Atherectomy with lithoplasty, w/wo angioplasty (hospital only)~~	~~C6766~~

~~Stent placement, atherectomy, and lithoplasty, w/wo angioplasty (hospital only)~~	~~C6767~~

PERCUTANEOUS STENT PLACEMENT - NOT LOWER EXTREMITY	
~~Stent placement with lithoplasty, w/wo angioplasty (hospital only)~~	~~C6765~~
~~Stent placement, atherectomy, and lithoplasty, w/wo angioplasty (hospital only)~~	~~C6767~~

~~ENDOVASCULAR LOWER EXTREMITY REVASCULARIZATION~~ ANGIOPLASTY, ATHERECTOMY, & STENT PLACEMENT - LOWER EXTREMITY		
Atherectomy only, iliac artery (report angioplasty separately if done)	**0238T**	**0.00**
~~Lithoplasty~~, **Intravascular lithotripsy,** w/wo angioplasty**, iliac or femoral/popliteal artery** (hospital only)	C9764	N/A
Intravascular lithotripsy, w/wo angioplasty, tibial/peroneal artery(ies) (hospital only)	**C9772**	**N/A**
Stent placement with ~~lithoplasty~~ **intravascular lithotripsy**, w/wo angioplasty**, iliac or femoral/popliteal artery** (hospital only)	C9765	N/A
Stent placement with intravascular lithotripsy, w/wo angioplasty, tibial/peroneal artery(ies) (hospital only)	**C9773**	**N/A**
Atherectomy with ~~lithoplasty~~ **intravascular lithotripsy**, w/wo angioplasty**, iliac or femoral/popliteal artery** (hospital only)	C9766	N/A
Atherectomy with intravascular lithotripsy, w/wo angioplasty, tibial/peroneal artery(ies) (hospital only)	**C9774**	**N/A**
Stent placement, atherectomy, and ~~lithoplasty~~ **intravascular lithotripsy**, w/wo angioplasty**, iliac or femoral/popliteal artery** (hospital only)	C9767	N/A
Stent placement, atherectomy, and intravascular lithotripsy, w/wo angioplasty, tibial/peroneal artery(ies) (hospital only)	**C9775**	**N/A**

Page 846, Charge Sheet: Aortic Stent Grafts & Open Endovascular Procedures - 2021

ENDOVASCULAR PROCEDURES	
~~Lithoplasty, w/wo angioplasty (hospital only)~~	~~C6764~~
~~Stent placement with lithoplasty, w/wo angioplasty (hospital only)~~	~~C6765~~
~~Atherectomy with lithoplasty, w/wo angioplasty (hospital only)~~	~~C6766~~
~~Stent placement, atherectomy, and lithoplasty, w/wo angioplasty (hospital only)~~	~~C6767~~

LOWER EXTREMITY REVASCULARIZATION PROCEDURES		
Angioplasty Only		
~~Lithoplasty~~, **Intravascular lithotripsy,** w/wo angioplasty**, iliac or femoral/popliteal artery** (hospital only)	C9764	N/A
Intravascular lithotripsy, w/wo angioplasty, tibial/peroneal artery(ies) (hospital only)	**C9772**	**N/A**
Atherectomy		
Atherectomy with ~~lithoplasty~~ **intravascular lithotripsy**, w/wo angioplasty**, iliac or femoral/popliteal artery** (hospital only)	C9766	N/A
Atherectomy with intravascular lithotripsy, w/wo angioplasty, tibial/peroneal artery(ies) (hospital only)	**C9774**	**N/A**
Stent Placement with or without Angioplasty		

Stent placement with ~~lithoplasty~~ **intravascular lithotripsy**, w/wo angioplasty**, iliac or femoral/popliteal artery** (hospital only)	C9765	N/A
Stent placement with intravascular lithotripsy, w/wo angioplasty, tibial/peroneal artery(ies) (hospital only)	**C9773**	**N/A**
Stent Placement with Atherectomy		
Stent placement, atherectomy, and ~~lithoplasty~~ **intravascular lithotripsy**, w/wo angioplasty**, iliac or femoral/popliteal artery** (hospital only)	C9767	N/A
Stent placement, atherectomy, and intravascular lithotripsy, w/wo angioplasty, tibial/peroneal artery(ies) (hospital only)	**C9775**	**N/A**