

## Epoetin alfa:

### Epogen®; Procrit®; Retacrit™ (Subcutaneous/Intravenous)

**\*NON-DIALYSIS\***

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#### I. Length of Authorization

- Coverage will be provided for 45 days and may be renewed unless otherwise specified.
  - Reduction of Allogeneic Blood Transfusions in Elective, Non-Cardiac, Non-Vascular Surgery: Coverage may not be renewed.

#### II. Dosing Limits

##### A. Quantity Limit (max daily dose) [NDC Unit]:

- 2,000 U/mL single-dose vial: 3 vials per week
- 3,000 U/mL single-dose vial: 3 vials per week
- 4,000 U/ml single-dose vial: 3 vials per week
- 10,000 U/mL single-dose vial: 3 vials per week
- 10,000 U/mL 2 mL multi-dose vial: 3 vials per week
- 20,000 U/mL multi-dose vial: 3 vials per week
- 40,000 U/mL single-dose vial: 1 vial per week

##### B. Max Units (per dose and over time) [HCPCS Unit]:

- MDS: 120 billable units every 7 days
- Surgery patients: 600 billable units every 15 days
- All other indications: 60 billable units every 7 days

#### III. Initial Approval Criteria<sup>1-3,6,7</sup>

Coverage is provided in the following conditions:

- Patient is at least 18 years of age or older (unless otherwise specified); **AND**
- Initiation of therapy Hemoglobin (Hb) < 10 g/dL and/or Hematocrit (Hct) < 30% (unless otherwise specified); **AND**

#### **Universal Criteria** <sup>1-3,5,8</sup>

- Lab values are obtained within 30 days of the date of administration (unless otherwise indicated); **AND**
- Patient has adequate iron stores as demonstrated by serum ferritin  $\geq$  100 ng/mL (mcg/L) and transferrin saturation (TSAT)  $\geq$  20% (measured within the previous 3 months for renewal)\*; **AND**
- Other causes of anemia (e.g. hemolysis, bleeding, vitamin deficiency, etc.) have been ruled out; **AND**
- Patient does not have uncontrolled hypertension; **AND**

#### **Anemia Secondary to Myelodysplastic Syndrome (MDS) ‡** <sup>4,6</sup>

- Endogenous serum erythropoietin level of  $\leq$  500 mUnits/mL; **AND**
- Patient has lower risk disease (*i.e., defined as IPSS-R [Very Low, Low, Intermediate], IPSS [Low/Intermediate-1], WPSS [Very Low, Low, Intermediate]*); **AND**
- Patient has symptomatic anemia

#### **Anemia Secondary to Myeloproliferative Neoplasms (MPN) - Myelofibrosis ‡** <sup>4,7</sup>

- Endogenous serum erythropoietin level of < 500 mUnits/mL

#### **Anemia Secondary to Chemotherapy Treatment †** <sup>1-5</sup>

- Patient is at least 5 years of age; **AND**
- Patient is receiving concomitant myelosuppressive chemotherapy; **AND**
- Patient's chemotherapy is not intended to cure their disease (*i.e., palliative treatment*); **AND**
- There are a minimum of two additional months of planned chemotherapy

#### **Anemia Secondary to Chronic Kidney Disease (Non-Dialysis Patients) †** $\Phi$ <sup>1-3,8</sup>

- Patient is at least 1 month of age

#### **Anemia Secondary to Zidovudine-Treated, HIV-Infected Patients †** $\Phi$ <sup>1-3</sup>

- Patient is at least 8 months of age; **AND**
- Endogenous serum erythropoietin level of  $\leq$  500 mUnits/mL; **AND**
- Patient is receiving zidovudine administered at  $\leq$  4200 mg/week

#### **Reduction of Allogeneic Blood Transfusions in Elective, Non-Cardiac, Non-Vascular Surgery †** <sup>1-3</sup>

- Hemoglobin (Hb) >10 g/dL and  $\leq$ 13 g/dL and/or Hematocrit (Hct) >30% and  $\leq$ 39%; **AND**

- Patient is at high-risk of blood-loss from surgery that is elective, non-cardiac and non-vascular; **AND**
- Patient is unwilling or unable to participate in an autologous blood donation program prior to surgery

† FDA approved indication(s); ‡ Compendia recommended indication(s); Ⓢ Orphan Drug – *applicable to Procrit/Epogen only*

#### IV. **Renewal Criteria**<sup>1-3,6,7</sup>

Coverage can be renewed based upon the following criteria:

- Patient continues to meet universal and other indication-specific relevant criteria identified in section III; **AND**
- Previous dose was administered within the past 60 days; **AND**
- Anemia response compared to pretreatment baseline; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: severe cardiovascular events (stroke, myocardial infarction, congestive heart failure, thromboembolism, etc.), uncontrolled hypertension, increased risk of tumor progression/recurrence in patients with cancer, seizures, pure red cell aplasia, serious allergic reactions (anaphylaxis, angioedema, bronchospasm, etc.), severe cutaneous reactions (erythema multiforme, Stevens-Johnson Syndrome [SJS]/Toxic Epidermal Necrolysis [TEN], etc.), “gasping syndrome” (central nervous system depression, metabolic acidosis, gasping respirations) due to benzyl alcohol preservative, etc.; **AND**

##### **Anemia Secondary to Myelodysplastic Syndrome (MDS):**

- Hemoglobin (Hb) <12 g/dL and/or Hematocrit (Hct) <36%

##### **Anemia Secondary to Myeloproliferative Neoplasms - Myelofibrosis**

- Hemoglobin (Hb) <10 g/dL and/or Hematocrit (Hct) <30%

##### **Reduction of Allogeneic Blood Transfusions in Elective, Non-Cardiac, Non-Vascular Surgery**

- Coverage may not be renewed.

##### **Anemia Secondary to Chemotherapy Treatment**

- *Refer to Section III for criteria* (age was met initially)

##### **Anemia Secondary to Zidovudine Treated, HIV-Infected Patients:**

- Hemoglobin (Hb) < 12 g/dL and/or Hematocrit (Hct) < 36%; **AND**
- Patient is receiving zidovudine administered at ≤ 4200 mg/week

##### **Anemia Secondary to Chronic Kidney Disease:**

- **Pediatric patients:** Hemoglobin (Hb) < 12 g/dL and/or Hematocrit (Hct) < 36%

- **Adults:** Hemoglobin (Hb) < 11 g/dL and/or Hematocrit (Hct) < 33%

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Intravenous iron supplementation may be taken into account when evaluating iron status                                                                                                                                                                                                                                                                                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• Functional iron deficiency (i.e., adequate iron stores with an insufficient supply of available iron) may occur in patients with chronic diseases, cancer, and/or in those currently receiving ESAs.</li> <li>• Iron is not generally recommended in anemic patients with a Ferritin &gt;500 ng/mL</li> <li>• Anemic patients with a Ferritin ≤500 ng/mL AND TSAT &lt;50% may derive benefit from IV iron therapy in conjunction with ESA</li> </ul> |

## V. Dosage/Administration <sup>1-3,24,28</sup>

| Indication                                        | Dose                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Anemia due to CKD – non-dialysis§                 | <ul style="list-style-type: none"> <li>• Adult patients: 50-100 units/kg intravenously or subcutaneously three times weekly</li> <li>• Pediatric patients: 50 units/kg intravenously or subcutaneously three times weekly</li> </ul>                                                                                                                                                                                                                                                                                            |
| Anemia due to HIV on zidovudine§                  | <ul style="list-style-type: none"> <li>• 100 units/kg intravenously or subcutaneously three times weekly</li> <li>• May titrate up to 300 units/kg per dose</li> </ul>                                                                                                                                                                                                                                                                                                                                                          |
| Anemia due to chemotherapy§                       | <ul style="list-style-type: none"> <li>• Adult patients: 150 units/kg subcutaneously three times weekly or 40,000 units subcutaneously once weekly <ul style="list-style-type: none"> <li>○ May titrate up to 300 units/kg subcutaneously three times weekly or 60,000 units subcutaneously once weekly</li> </ul> </li> <li>• Pediatric patients (5-18 years): 600 units/kg intravenously once weekly <ul style="list-style-type: none"> <li>○ May titrate up to 900 units/kg intravenously once weekly</li> </ul> </li> </ul> |
| Perioperative use                                 | <ul style="list-style-type: none"> <li>• 300 units/kg/day subcutaneously for 10 days before surgery, on the day of surgery, and for 4 days after surgery (15 days total)</li> </ul> <p><b>-OR-</b></p> <ul style="list-style-type: none"> <li>• 600 units/kg/dose subcutaneously on days 21, 14, and 7 before surgery plus 1 dose on the day of surgery (4 total doses)</li> </ul>                                                                                                                                              |
| Anemia due to MDS§                                | <ul style="list-style-type: none"> <li>• 40,000 to 60,000 units subcutaneously once to twice weekly</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Anemia due to myeloproliferative neoplasms (MPN)§ | <ul style="list-style-type: none"> <li>• 10,000 units subcutaneously three times weekly</li> <li>• May increase dose to 20,000 units subcutaneously three times weekly</li> </ul>                                                                                                                                                                                                                                                                                                                                               |
| Most commonly initiated dose                      | 40,000 units weekly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

§

- For patients with CKD,
  - Dose increases of 25% can be considered if after 4 weeks of initial therapy the hemoglobin has increased less than 1 g/dL and the current hemoglobin level is less than the indication specific level noted above.
  - Dose decreases of 25% or more can be considered if the hemoglobin rises rapidly by more than 1 g/dL in any 2-week period.
  - Dose and frequency requested are the minimum necessary for the patient to avoid RBC transfusions.
  - Avoid frequent dose adjustments. Do not increase the dose more frequently than once every 4 weeks; decreases can occur more frequently.
  - If patients fail to respond over a 12-week dose escalation period, further doses increases are unlikely to improve response and discontinuation of therapy should be considered.
- For patients with MDS:
  - After 3 to 4 months of therapy, if there is no response as measured by at least a 1.5 g/dL increase in hemoglobin or a decrease in RBC transfusions, discontinuation of therapy should be considered.
- For patients with MPN:
  - After 3 months of therapy, if there is no response as measured by at least a 2 g/dL increase in hemoglobin or a decrease in RBC transfusions, discontinuation of therapy should be considered.
- For patients on Cancer Chemotherapy
  - After 8 weeks of therapy, if there is no response as measured by hemoglobin levels or if RBC transfusions are still required, discontinue therapy.
- For zidovudine treated HIV infected patients
  - If the patient fails to respond after 8 weeks of therapy, increase dose by approximately 50-100 U/kg at 4- to 8- week intervals until the hemoglobin reaches levels needed to avoid transfusion or max dose of 300 U/kg is reached.
  - If the hemoglobin exceeds the indication specific level noted above, withhold therapy and resume therapy once level declines to <11 g/dL, at a dose 25% below the previous dose.

## VI. Billing Code/Availability Information

HCPCS code:

- J0885 – Injection, epoetin alfa, (for non-esrd use), 1000 units; 1 billable unit = 1,000 units
- Q5106 – Injection, epoetin alfa, biosimilar, (Retacrit) (for non-esrd use), 1000 units; 1 billable unit = 1,000 units

NDC:

| Brand   | HCPCS | Strength    | MDV or SDV | MDV Size | NDC        |
|---------|-------|-------------|------------|----------|------------|
| Epogen  | J0885 | 2,000 U/mL  | SDV        |          | 55513-0126 |
| Epogen  | J0885 | 3,000 U/mL  | SDV        |          | 55513-0267 |
| Epogen  | J0885 | 4,000 U/mL  | SDV        |          | 55513-0148 |
| Epogen  | J0885 | 10,000 U/mL | SDV        |          | 55513-0144 |
| Epogen  | J0885 | 10,000 U/mL | MDV        | 2 mL     | 55513-0283 |
| Epogen  | J0885 | 20,000 U/mL | MDV        | 1 mL     | 55513-0478 |
| Procrit | J0885 | 2,000 U/mL  | SDV        |          | 59676-0302 |
| Procrit | J0885 | 3,000 U/mL  | SDV        |          | 59676-0303 |

**Epoetin alfa (Epogen®, Procrit®, Retacrit™)  
Non-Dialysis Prior Auth Criteria**

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|          |       |             |     |      |            |
|----------|-------|-------------|-----|------|------------|
| Procrit  | J0885 | 4,000 U/mL  | SDV |      | 59676-0304 |
| Procrit  | J0885 | 10,000 U/mL | SDV |      | 59676-0310 |
| Procrit  | J0885 | 10,000 U/mL | MDV | 2 mL | 59676-0312 |
| Procrit  | J0885 | 20,000 U/mL | MDV | 1 mL | 59676-0320 |
| Procrit  | J0885 | 40,000 U/mL | SDV |      | 59676-0340 |
| Retacrit | Q5106 | 2,000 U/mL  | SDV |      | 00069-1305 |
| Retacrit | Q5106 | 3,000 U/mL  | SDV |      | 00069-1306 |
| Retacrit | Q5106 | 4,000 U/mL  | SDV |      | 00069-1307 |
| Retacrit | Q5106 | 10,000 U/mL | SDV |      | 00069-1308 |
| Retacrit | Q5106 | 10,000 U/mL | MDV | 2 mL | 00069-1318 |
| Retacrit | Q5106 | 20,000 U/mL | MDV | 1 mL | 00069-1311 |
| Retacrit | Q5106 | 40,000 U/mL | SDV |      | 00069-1309 |

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6. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Myelodysplastic Syndrome Version 3.2021. National Comprehensive Cancer Network, 2021. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc.” To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed April 2021.



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## Appendix 1 – Covered Diagnosis Codes

| ICD-10 | ICD-10 Description                                                        |
|--------|---------------------------------------------------------------------------|
| B20    | Human immunodeficiency virus [HIV] disease                                |
| C93.10 | Chronic myelomonocytic leukemia, not having achieved remission            |
| C94.40 | Acute panmyelosis with myelofibrosis not having achieved remission        |
| C94.41 | Acute panmyelosis with myelofibrosis in remission                         |
| C94.42 | Acute panmyelosis with myelofibrosis in relapse                           |
| C94.6  | Myelodysplastic disease, not classified                                   |
| D46.0  | Refractory anemia without ring sideroblasts, so stated                    |
| D46.1  | Refractory anemia with ring sideroblasts                                  |
| D46.20 | Refractory anemia with excess of blasts, unspecified                      |
| D46.21 | Refractory anemia with excess of blasts 1                                 |
| D46.4  | Refractory anemia, unspecified                                            |
| D46.9  | Myelodysplastic syndrome, unspecified                                     |
| D46.A  | Refractory cytopenia with multilineage dysplasia                          |
| D46.B  | Refractory cytopenia with multilineage dysplasia and ring sideroblasts    |
| D46.C  | Myelodysplastic syndrome with isolated del(5q) chromosomal abnormality    |
| D46.Z  | Other myelodysplastic syndromes                                           |
| D47.1  | Malignant neoplasm of peripheral nerves of upper limb, including shoulder |
| D47.4  | Malignant neoplasm of peripheral nerves of abdomen                        |

|        |                                                                                                                                                                 |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D61.1  | Drug-induced aplastic anemia                                                                                                                                    |
| D63.0  | Anemia in neoplastic disease                                                                                                                                    |
| D63.1  | Anemia in chronic kidney disease                                                                                                                                |
| D63.8  | Anemia in other chronic diseases classified elsewhere                                                                                                           |
| D64.81 | Anemia due to antineoplastic chemotherapy                                                                                                                       |
| D64.9  | Anemia unspecified                                                                                                                                              |
| D75.81 | Secondary polycythemia                                                                                                                                          |
| I12.9  | Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease                                  |
| I13.0  | Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease      |
| I13.10 | Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease |
| N18.30 | Chronic kidney disease, stage 3 (moderate), unspecified                                                                                                         |
| N18.31 | Chronic kidney disease, stage 3a                                                                                                                                |
| N18.32 | Chronic kidney disease, stage 3b                                                                                                                                |
| N18.4  | Chronic kidney disease, stage 4 (severe)                                                                                                                        |
| N18.9  | Chronic kidney disease, unspecified                                                                                                                             |
| Z41.8  | Encounter for other procedures for purposes other than remedying health state                                                                                   |
| Z51.11 | Encounter for antineoplastic chemotherapy                                                                                                                       |
| Z51.89 | Encounter for other specified aftercare                                                                                                                         |

**Dual coding requirements:**

- Preoperative use: must bill D63.8 or D64.9 AND Z41.8
- Anemia due to zidovudine in HIV patients: must bill D61.1 AND B20
- Anemia due to CKD (not on dialysis): must bill D63.1 AND N18.31, N18.32, or N18.4

**Appendix 2 – Centers for Medicare and Medicaid Services (CMS)**

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD), Local Coverage Determinations (LCDs), and Local Coverage Articles (LCAs) may exist and compliance with these policies is required where applicable. They can be found at:

<http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

**Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD/LCA):**

|                                                                                                                                                                                                                                                                                             |                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>Jurisdiction(s):</b> ALL                                                                                                                                                                                                                                                                 | <b>NCD/LCD Document (s):</b> NCD110.21 |
| <a href="https://www.cms.gov/medicare-coverage-database/search/document-id-search-results.aspx?DocID=110.21&amp;bc=gAAAAAAAAAAAAAAAA%3d%3d&amp;">https://www.cms.gov/medicare-coverage-database/search/document-id-search-results.aspx?DocID=110.21&amp;bc=gAAAAAAAAAAAAAAAA%3d%3d&amp;</a> |                                        |

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| <b>Jurisdiction(s):</b> 5, 8                                                                                                                                                                                                                        | <b>NCD/LCD Document (s):</b> L34633 |
| <a href="https://www.cms.gov/medicare-coverage-database/search/lcd-date-search.aspx?DocID=L34633&amp;bc=gAAAAAAAAAAAAAAAA==">https://www.cms.gov/medicare-coverage-database/search/lcd-date-search.aspx?DocID=L34633&amp;bc=gAAAAAAAAAAAAAAAA==</a> |                                     |

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| <b>Jurisdiction(s):</b> 15                                                                                                                                                                                                                      | <b>NCD/LCD Document (s):</b> L34356 |
| <a href="https://www.cms.gov/medicare-coverage-database/search/lcd-date-search.aspx?DocID=L34356&amp;bc=gAAAAAAAAAAAAAA==">https://www.cms.gov/medicare-coverage-database/search/lcd-date-search.aspx?DocID=L34356&amp;bc=gAAAAAAAAAAAAAA==</a> |                                     |

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| <b>Jurisdiction(s):</b> N                                                                                                                                                                                                                       | <b>NCD/LCD Document (s):</b> L36276 |
| <a href="https://www.cms.gov/medicare-coverage-database/search/lcd-date-search.aspx?DocID=L36276&amp;bc=gAAAAAAAAAAAAAA==">https://www.cms.gov/medicare-coverage-database/search/lcd-date-search.aspx?DocID=L36276&amp;bc=gAAAAAAAAAAAAAA==</a> |                                     |

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| <b>Jurisdiction(s):</b> 5, 8                                                                                                                                                                                                                        | <b>NCD/LCD Document (s):</b> A56795 |
| <a href="https://www.cms.gov/medicare-coverage-database/search/article-date-search.aspx?DocID=A56795&amp;bc=gAAAAAAAAAAAAAA">https://www.cms.gov/medicare-coverage-database/search/article-date-search.aspx?DocID=A56795&amp;bc=gAAAAAAAAAAAAAA</a> |                                     |

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| <b>Jurisdiction(s):</b> N                                                                                                                                                                                                                           | <b>NCD/LCD Document (s):</b> A57628 |
| <a href="https://www.cms.gov/medicare-coverage-database/search/article-date-search.aspx?DocID=A57628&amp;bc=gAAAAAAAAAAAAAA">https://www.cms.gov/medicare-coverage-database/search/article-date-search.aspx?DocID=A57628&amp;bc=gAAAAAAAAAAAAAA</a> |                                     |

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| <b>Jurisdiction(s):</b> 15                                                                                                                                                                                                                          | <b>NCD/LCD Document (s):</b> A56462 |
| <a href="https://www.cms.gov/medicare-coverage-database/search/article-date-search.aspx?DocID=A56462&amp;bc=gAAAAAAAAAAAAAA">https://www.cms.gov/medicare-coverage-database/search/article-date-search.aspx?DocID=A56462&amp;bc=gAAAAAAAAAAAAAA</a> |                                     |

| <b>Medicare Part B Administrative Contractor (MAC) Jurisdictions</b> |                                                                                             |                                                   |
|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>Jurisdiction</b>                                                  | <b>Applicable State/US Territory</b>                                                        | <b>Contractor</b>                                 |
| E (1)                                                                | CA, HI, NV, AS, GU, CNMI                                                                    | Noridian Healthcare Solutions, LLC                |
| F (2 & 3)                                                            | AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ                                                      | Noridian Healthcare Solutions, LLC                |
| 5                                                                    | KS, NE, IA, MO                                                                              | Wisconsin Physicians Service Insurance Corp (WPS) |
| 6                                                                    | MN, WI, IL                                                                                  | National Government Services, Inc. (NGS)          |
| H (4 & 7)                                                            | LA, AR, MS, TX, OK, CO, NM                                                                  | Novitas Solutions, Inc.                           |
| 8                                                                    | MI, IN                                                                                      | Wisconsin Physicians Service Insurance Corp (WPS) |
| N (9)                                                                | FL, PR, VI                                                                                  | First Coast Service Options, Inc.                 |
| J (10)                                                               | TN, GA, AL                                                                                  | Palmetto GBA, LLC                                 |
| M (11)                                                               | NC, SC, WV, VA (excluding below)                                                            | Palmetto GBA, LLC                                 |
| L (12)                                                               | DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA) | Novitas Solutions, Inc.                           |
| K (13 & 14)                                                          | NY, CT, MA, RI, VT, ME, NH                                                                  | National Government Services, Inc. (NGS)          |
| 15                                                                   | KY, OH                                                                                      | CGS Administrators, LLC                           |