OVERVIEW
Amyotrophic Lateral Sclerosis (also known as Lou Gehrig’s disease) is a progressive and degenerative motor neuron disease. ALS is characterized by muscle weakness, disability, and eventual death. Progressive neuromuscular respiratory failure is the most common cause of death in ALS patients. A diagnosis of ALS is based upon evidence of upper and lower motor neuron signs, relentless disease progression, and the absence of an alternative etiology. ALS, as with other motor neuron diseases, does not have a diagnostic test that can confirm or entirely exclude its diagnosis. The mainstay of ALS management is symptomatic treatment and palliative care. There are currently two FDA approved therapies for management of ALS; these are riluzole and edaravone.

This policy is applicable to BlueCHiP for Medicare products only. For Commercial Products, see related policy section.

MEDICAL CRITERIA
Blue CHiP for Medicare
Radicava (edaravone) is medically necessary when ONE of the following are met:
1. There is documentation provided with the request (e.g. treatment start date, length of treatment, patient’s clinical benefit from therapy) indicating that the patient is currently being treated with the requested agent
OR
2. ALL of the following are met:
   A. The patient has a diagnosis of amyotrophic lateral sclerosis (ALS) [also known as Lou Gehrig’s disease]
   AND
   B. The patient has had the diagnosis of ALS for a duration of 2 years or less (documentation must be provided)
   AND
   C. The patient has a baseline percent forced vital capacity (FVC%) of 80% or greater (documentation must be provided)
   AND
   D. The patient is able to perform most activities of daily living (documentation must be provided)
   AND
   E. ONE of the following:
      a. The patient has tried and had an inadequate response to riluzole
      OR
      b. The patient is currently being treated with riluzole
      OR
      c. The patient has a documented intolerance, FDA labeled contraindication, or hypersensitivity to riluzole
   AND
   F. The prescriber is a specialist (e.g. neurologist) or the prescriber has consulted with a specialist
   AND
   G. The patient does NOT have any FDA labeled contraindications to the requested agent

Length of Approval: 6 months.

Criteria for Continued Use

EFFECTIVE DATE: 07|16|2019
POLICY LAST UPDATED: 07|16|2019
Radicava (edaravone) will be approved when ALL of the following are met:
1. The patient has been previously approved for the requested agent through the Prime Therapeutics or Medical Review process
   AND
2. The patient has received clinical benefit from the requested agent (e.g. stabilization or slowing of disease progression, decrease in symptom severity and/or frequency)
   AND
3. ONE of the following
   a. The requested dose is within FDA labeling
      OR
   b. The requested dose for the requested diagnosis is supported by compendia (NCCN Compendium™[ level of evidence 1, 2A], AHFS, DrugDex [FDA approved Class I or Class IIa])
      OR
   c. The requested dose is outside the dose supported by FDA labeling or compendia AND the patient is currently taking and is stable on this dose
      OR
   d. The request is for a change in dose that is outside that supported by FDA labeling or compendia AND the prescriber has submitted documentation (the dose is supported by clinical research in 2 or more peer reviewed medical journals) in support of therapy with a higher dose for the requested diagnosis

Length of Approval: 12 months.

PRIOR AUTHORIZATION
Prior authorization is required for BlueCHiP for Medicare

POLICY STATEMENT
BlueCHiP for Medicare
Radicava (edaravone) is medically necessary when the above criteria have been met.

COVERAGE
Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for applicable physician administered drug benefits/coverage.

BACKGROUND
Amyotrophic Lateral Sclerosis (ALS)
Amyotrophic lateral sclerosis (ALS) is an idiopathic, fatal neurodegenerative disease. It is characterized by loss of motor neurons in the spinal cord, brainstem, and motor cortex. Age of onset is between 58-63 years for sporadic disease and 47-52 years for familial disease, with rapidly decreased incidence after 80 years. The clinical hallmark of ALS is the presence of upper and lower motor neuron (UMN and LMN) features involving brainstem and multiple spinal cord regions of innervation.

ALS is a rapidly progressive disease with 50% of patients dying within 30 months of symptom onset, and about 20% of patients survive between 5 years and 10 years after symptom onset. Older age at symptom onset, early respiratory muscle dysfunction, and bulbar-onset disease are associated with reduced survival, whereas limb-onset disease, younger age at presentation, and longer diagnostic delay are independent predictors of prolonged survival. Dysphagia develops in most patients, with consequent weight loss and malnutrition. Respiratory compromise eventually develops in most cases, leading to exertional dyspnea, orthopnea, hypoventilation with resultant hypercapnia, and early morning headaches. Progressive weakening of the respiratory muscles leads to respiratory failure, often precipitated by pneumonia.

Symptomatic treatments remain the cornerstone for management of patients with ALS. Disease modifying treatment options for ALS are limited. Riluzole is the only agent to have any impact on survival in ALS. The American Academy of Neurology (AAN) has recommended that riluzole be offered to slow disease progression in patients with ALS. Patients most likely to benefit from riluzole therapy are those with definite
or probable ALS with symptoms present for less than five years, a forced vital capacity (FVC) >60 percent of predicted, and no tracheostomy. Edaravone was found to slow the functional deterioration in some patients with ALS, as observed in clinical trials. For patients with ALS who have a disease duration of two years or less, are living independently, and have an FVC ≥80 percent, treatment with edaravone is recommended.

**Efficacy**
The efficacy of edaravone was evaluated in a post-hoc analysis of a 6-month, phase III randomized, placebo-controlled, double-blind study, in patients aged 20 to 75 years with ALS. All study patients had to meet all of the following criteria at screening:

1. Functionality retained most activities of daily living (defined as scores of 2 points or better on each individual item of the ALS Functional Rating Scale – Revised [ALSFRS-R])
2. Normal respiratory function (defined as percent-predicted forced vital capacity [%FVC] values of greater than or equal to 80%)
3. Definite or probable ALS based on the El Escorial revised criteria
4. Disease duration of 2 years or less

Patients who met the criteria above (n= 137) were randomized to receive either edaravone 60 mg intravenously (IV) or placebo for 6 cycles (4 weeks per cycle with 2 weeks on, 2 weeks off). 91% of patients in both the edaravone and placebo group were also receiving treatment with riluzole. The primary efficacy endpoint was change in the Revised ALS Functional Rating Scale (ALSFRS-R) score from baseline to 24 weeks or therapy discontinuation (if discontinuation occurred after the third cycle) after randomization. The change in ALSFRS-R score was -5.01 (SE 0.64) and -7.50 (0.66) in the edaravone and placebo group respectively. The trial authors concluded edaravone showed efficacy in a small subset of patients (i.e. those meeting the criteria noted above) and that “there is no indication that edaravone might be effective in a wider population of patients with ALS who do not meet the criteria”.

**Safety**
The most common adverse events associated with edaravone are contusion, gait disturbance, and headache. Adverse events observed post FDA approval of edaravone include hypersensitivity reactions and anaphylaxis. Edaravone is contraindicated in patients with history of hypersensitivity to edaravone or any of its inactive ingredients.

**Compensia Supported Indications**
For the purposes of the oncology criteria, indications deemed appropriate are those that are supported by NCCN Drugs & Biologics compendia with a category 1 or 2A recommendation.

**CODING**
**BlueCHiP for Medicare**
The following HCPCS code is covered when the medical criteria have been met: J1301 Injection, edaravone, 1 mg

**RELATED POLICIES**
Prior Authorization of Drugs

**PUBLISHED**
Provide Update, September 2019
Provide Update, June 2018
Provider Update, September 2017

**REFERENCES:**