Supplemental Online Content

Vu M, Tortorice K, Zacher J, et al. Assessment of use and safety of edaravone for amyotrophic lateral sclerosis in the Veterans Affairs Health Care System. *JAMA Netw Open*. 2020;3(10):e2014645. doi:10.1001/jamanetworkopen.2020.14645

eFigure. Flowchart of Descriptive Assessment, Matched Cohort Design, and Chronic User Sub-Analysis

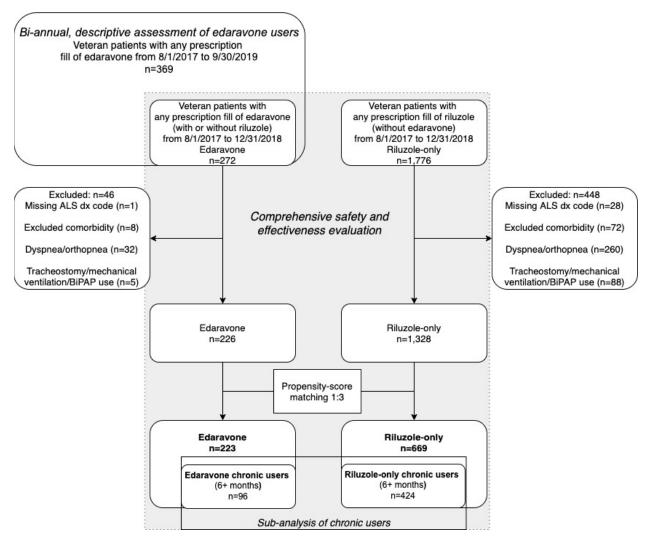
eTable 1. Riluzole Use Patterns Among Edaravone Patients

eTable 2. Riluzole Use Continuation Among Patients With Riluzole Use Prior to Edaravone Initiation

eTable 3. Comprehensive Safety and Effectiveness Evaluation-Matched Edaravone and Riluzole-Only Users

This supplemental material has been provided by the authors to give readers additional information about their work.

eFigure. Flowchart of descriptive assessment, matched cohort design, and chronic user sub-analysis



ALS dx: Amyotrophic lateral sclerosis diagnosis code; Excluded comorbidity: Parkinson's disease, dementia, or schizophrenia; BiPAP: bilevel positive airway pressure

| | Riluzole use ^a | | | | |
|---|---|---|--|--|--|
| | Prior to edaravone initiation ^b | During edaravone treatment period (edaravone with riluzole) ^b | After edaravone discontinuation ^{b,c} | | |
| | n, row % | n, row % | n, row % | | |
| All edaravone users N=369 | 255 (69.1%) | 263 (71.3%) | 134 (36.3%) | | |
| Edaravone matched cohort N=223 | 157 (70.4%) | 162 (72.6%) | 94 (42.2%) | | |
| Edaravone chronic user sub-cohort ^d N=96 | 64 (66.7%) | 68 (70.8%) | 34 (35.4%) | | |

^a defined as receiving ≥1 riluzole prescription fill during time periods specified, using prescription data from 8/1/2017 to 9/30/2019

^b time periods are not mutually exclusive (e.g., not all edaravone with riluzole patients had use prior to edaravone initiation)

^c no further treatment cycles were recorded within 60 days of the last dose and before the end of the evaluation period

^d receiving ≥6 months of edaravone treatment

eTable 2: Riluzole use continuation among patients with riluzole use prior to edaravone initiation

| | | Riluzole use after edaravone initiation? ^a | | |
|---|--|---|--|--|
| | Patients with riluzole use prior to edaravone initiation ^a n= | Yes (row % of those with prior use): | No (row % of those with prior use): | |
| All edaravone users N=369 | 255 | 236 (92.5%) | 19 (7.5%) | |
| Edaravone matched cohort N=223 | 157 | 146 (93.0%) | 11 (7.0%) | |
| Edaravone chronic user sub-cohort ^ь | | 59 (92.2%) | 5 (7.8%) | |

^a defined as receiving \geq 1 riluzole prescription fill during time periods specified, using prescription data from 8/1/2017 to 9/30/2019.

^b receiving \geq 6 months of edaravone treatment

| | Before matching | | | After matching | | |
|--|-------------------------|---------------------------|--------------|-------------------------|--------------------------|-----------|
| Baseline characteristics | Edaravone N=226 | Riluzole-only N=1,328 | SMD | Edaravone N=223 | Riluzole-only N=669 | SMD |
| | n (%) | n (%) | | n (%) | n (%) | |
| Age ≥65 years | 130 (57.5%) | 923 (69.5%) | 0.25 | 130 (58.3%) | 389 (58.2%) | 0 |
| Male | 216 (95.6%) | 1294 (97.4%) | 0.10 | 216 (96.9%) | 649 (97.0%) | 0.01 |
| Caucasian | 167 (73.9%) | 964 (72.6%) | 0.03 | 164 (73.5%) | 489 (73.1%) | 0.01 |
| Married | 172 (76.1%) | 947 (71.3%) | 0.11 | 169 (75.8%) | 509 (76.1%) | 0.01 |
| Priority service connection 50%-100% | 224 (99.1%) | 1226 (92.3%) | 0.34 | 221 (99.1%) | 663 (99.1%) | 0 |
| No copay | 224 (99.1%) | 1227 (92.4%) | 0.34 | 221 (99.1%) | 663 (99.1%) | 0 |
| Duration of ALS | n (% cat) | n (% cat) | | n (% cat) | n (% cat) | |
| ≤2 years | 154 (68.1%) | 918 (69.1%) | 0.02 | 153 (68.6%) | 458 (68.5%) | 0.01 |
| >2 years Unknown | 20 (8.9%) 52 (23.0%) | 124 (9.3%) 286 (21.5%) | 0.01 0.04 | 20 (9.0%) 50 (22.4%) | 62 (9.3%) 149 (22.3%) | 0 0.01 |

eTable 3: Comprehensive safety and effectiveness evaluation- matched edaravone and riluzole-only users

SMD=Standardized mean difference