

### The Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS)

Overview:

The Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) is an instrument for evaluating the functional status of patients with Amyotrophic Lateral Sclerosis. It can be used to monitor functional change in a patient over time.

Measures:

- (1) speech
- (2) salivation
- (3) swallowing
- (4) handwriting
- (5) cutting food and handling utensils (with or without gastrostomy)
- (6) dressing and hygiene
- (7) turning in bed and adjusting bed clothes
- (8) walking
- (9) climbing stairs
- (10) breathing

| Measure    | Finding  | Points |
|------------|--|--------|
| Speech     | Normal   | 4      |
|            | Detectable speech disturbance  | 3      |
|            | Intelligible with repeating  | 2      |
|            | Speech combined with nonvocal communications                               | 1      |
|            | Loss of useful speech  | 0      |
| Salivation | Normal   | 4      |
|            | Slight but definite excess of saliva in mouth; may have nighttime drooling | 3      |

|                                    |   |   |
|------------------------------------|---|---|
|                                    | Moderately excessive saliva; may have minimal drooling                        | 2 |
|                                    | Marked excess of saliva with some drooling                                    | 1 |
|                                    | Marked drooling; requires constant tissue or handkerchief                     | 0 |
| Swallowing                         | Normal  | 4 |
|                                    | Early eating problems; occasional choking                                     | 3 |
|                                    | Dietary consistency changes   | 2 |
|                                    | Needs supplemental tube feedings  | 1 |
|                                    | Nothing by mouth (NPO); exclusively parenteral or enteral feeding             | 0 |
| Handwriting                        | Normal  | 4 |
|                                    | Slow or sloppy; all words are legible   | 3 |
|                                    | Not all words are legible   | 2 |
|                                    | Able to grasp pen but unable to write   | 1 |
|                                    | Unable to grip pen  | 0 |
| Cutting food and handling utensils | No gastrostomy/normal   | 4 |
|                                    | No gastrostomy; somewhat slow and clumsy but no help required                 | 3 |
|                                    | No gastrostomy; can cut most foods although clumsy and slow; some help needed | 2 |
|                                    | No gastrostomy; food must be cut by someone but can still feed slowly         | 1 |
|                                    | No gastrostomy; needs to be fed   | 0 |
|                                    | With gastrostomy; normal  | 4 |
|                                    | With gastrostomy; clumsy but able to perform with manipulations independently | 3 |

|  |  |   |
|--|--|---|
|  | With gastrostomy; some help needed with closures and fasteners         | 2 |
|  | With gastrostomy; provides minimal assistance to caregiver             | 1 |
|  | With gastrostomy; unable to perform any aspect of task                 | 0 |
| Dressing and hygiene                     | Normal   | 4 |
|  | Independent and complete self-care with effort or decreased efficiency | 3 |
|  | Intermittent assistance or substitute methods                          | 2 |
|  | Needs attendant for self-care  | 1 |
|  | Total dependence   | 0 |
| Turning in bed and adjusting bed clothes | Normal   | 4 |
|  | Somewhat slow and clumsy but no help needed                            | 3 |
|  | Can turn alone or adjust sheets but with great difficulty              | 2 |
|  | Can initiate but not turn or adjust sheets alone                       | 1 |
|  | Helpless   | 0 |
| Walking                                  | Normal   | 4 |
|  | Early ambulation difficulties  | 3 |
|  | Walks with assistance  | 2 |
|  | Nonambulatory functional movement only                                 | 1 |
|  | No purposeful leg movement   | 0 |
| Climbing stairs                          | Normal   | 4 |
|  | Slow   | 3 |

|           |   |   |
|-----------|---|---|
|           | Mild unsteadiness or fatigue                                      | 2 |
|           | Needs assistance  | 1 |
|           | Cannot do   | 0 |
| Breathing | Normal  | 4 |
|           | Shortness of breath with minimal exertion (walking, talking etc.) | 3 |
|           | Shortness of breath at rest                                       | 2 |
|           | Intermittent (e.g. nocturnal) ventilatory assistance required     | 1 |
|           | Ventilator dependent  | 0 |

ALSERS = SUM (points for all 10 measures)

Interpretation:

- minimum score: 0
- maximum score: 40
- The higher the score the more function is retained.

Performance:

- It shows close agreement with objective measures of muscle strength and pulmonary function.
- It shows good construct validity and is sensitive to change in the patient's condition.
- It shows test-retest reliability and is consistent.

References:

ALS CNTF Treatment Study (ACTS) Phase I-II Study Group. The Amyotrophic Lateral Sclerosis Functional Rating Scale. Assessment of activities of daily living in patients with Amyotrophic Lateral Sclerosis. Arch Neurol. 1996; 53: 141-147.

Cedarbaum JM Stambler N. Performance of the Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) in multicenter clinical trials. J Neurological Sciences. 1997; 152 (Suppl 1): S1 – S9.