

Supplementary Material #3

The Composite Autonomic Symptom Score (COMPASS-31)

COMPASS-31 score will be calculated as per Sletten 2012 (1).

Items and response scales

1. In the past year, have you ever felt faint, dizzy, “goofy”, or had difficulty thinking soon after standing up from a sitting or lying position?
 - 1) Yes
 - 2) No (if you marked No, please skip to question 5)
2. When standing up, how frequently do you get these feelings or symptoms?
 - 1) Rarely
 - 2) Occasionally
 - 3) Frequently
 - 4) Almost Always
3. How would you rate the severity of these feelings or symptoms? 1
 - 1) Mild
 - 2) Moderate
 - 3) Severe
4. In the past year, have these feelings or symptoms that you have experienced:
 - 1) Gotten much worse
 - 2) Gotten somewhat worse
 - 3) Stayed about the same
 - 4) Gotten somewhat better
 - 5) Gotten much better
 - 6) Completely gone
5. In the past year, have you ever noticed color changes in your skin, such as red, white, or purple?
 - 1) Yes
 - 2) No (if you marked No, please skip to question 8)
6. What parts of your body are affected by these color changes? (Check all that apply)
 - 1) Hands
 - 2) Feet
7. Are these changes in your skin color:
 - 1) Getting much worse
 - 2) Getting somewhat worse
 - 3) Staying about the same
 - 4) Getting somewhat better
 - 5) Getting much better
 - 6) Completely gone
8. In the past 5 years, what changes, if any, have occurred in your general body sweating?
 - 1) I sweat much more than I used to
 - 2) I sweat somewhat more than I used to
 - 3) I haven't noticed any changes in my sweating
 - 4) I sweat somewhat less than I used to
 - 5) I sweat much less than I used to
9. Do your eyes feel excessively dry?
 - 1) Yes
 - 2) No

10. Does your mouth feel excessively dry?
 - 1) Yes
 - 2) No
11. For the symptom of dry eyes or dry mouth that you have had for the longest period of time, is this symptom:
 - 1) I have not had any of these symptoms
 - 2) Getting much worse
 - 3) Getting somewhat worse
 - 4) Staying about the same
 - 5) Getting somewhat better
 - 6) Getting much better
 - 7) Completely gone
12. In the past year, have you noticed any changes in how quickly you get full when eating a meal?
 - 1) I get full a lot more quickly now than I used to
 - 2) I get full more quickly now than I used to
 - 3) I haven't noticed any change
 - 4) I get full less quickly now than I used to
 - 5) I get full a lot less quickly now than I used to
13. In the past year, have you felt excessively full or persistently full (bloated feeling) after a meal?
 - 1) Never
 - 2) Sometimes
 - 3) A lot of the time
14. In the past year, have you vomited after a meal?
 - 1) Never
 - 2) Sometimes
 - 3) A lot of the time
15. In the past year, have you had a cramping or colicky abdominal pain?
 - 1) Never
 - 2) Sometimes
 - 3) A lot of the time
16. In the past year, have you had any bouts of diarrhea?
 - 1) Yes
 - 2) No (if you marked No, please skip to question 20)
17. How frequently does this occur?
 - 1) Rarely
 - 2) Occasionally
 - 3) Frequently _____ times per month
 - 4) Constantly
18. How severe are these bouts of diarrhea?
 - 1) Mild
 - 2) Moderate
 - 3) Severe
19. Are your bouts of diarrhea getting:
 - 1) Much worse
 - 2) Somewhat worse
 - 3) Staying the same
 - 4) Somewhat better
 - 5) Much better
 - 6) Completely gone

20. In the past year, have you been constipated?
- 1) Yes
 - 2) No (if you marked No, please skip to question 24)
21. How frequently are you constipated?
- 1) Rarely
 - 2) Occasionally
 - 3) Frequently _____ times per month
 - 4) Constantly
22. How severe are these episodes of constipation?
- 1) Mild
 - 2) Moderate
 - 3) Severe
23. Is your constipation getting:
- 1) Much worse
 - 2) Somewhat worse
 - 3) Staying the same
 - 4) Somewhat better
 - 5) Much better
 - 6) Completely gone
24. In the past year, have you ever lost control of your bladder function?
- 1) Never
 - 2) Occasionally
 - 3) Frequently _____ times per month
 - 4) Constantly
25. In the past year, have you had difficulty passing urine?
- 1) Never
 - 2) Occasionally
 - 3) Frequently _____ times per month
 - 4) Constantly
26. In the past year, have you had trouble completely emptying your bladder?
- 1) Never
 - 2) Occasionally
 - 3) Frequently _____ times per month
 - 4) Constantly
27. In the past year, without sunglasses or tinted glasses, has bright light bothered your eyes?
- 1) Never (if you marked Never, please skip to question 29)
 - 2) Occasionally
 - 3) Frequently
 - 4) Constantly
28. How severe is this sensitivity to bright light?
- 1) Mild
 - 2) Moderate
 - 3) Severe
29. In the past year, have you had trouble focusing your eyes?
- 1) Never (if you marked Never, please skip to question 31)
 - 2) Occasionally
 - 3) Frequently
 - 4) Constantly
30. How severe is this focusing problem?

- 1) Mild
- 2) Moderate
- 3) Severe

31. Is the most troublesome symptom with your eyes (i.e. sensitivity to bright light or trouble focusing) getting:

- 1) I have not had any of these symptoms
- 2) Much worse
- 3) Somewhat worse
- 4) Staying about the same
- 5) Somewhat better
- 6) Much better
- 7) Completely gone

Scoring algorithm

Domain	Item	Answer	Points
Orthostatic Intolerance	1	1	1
		2	0
	2	1	0
		2	1
		3	2
		4	3
	3	1	1
		2	2
		3	3
	4	1	3
		2	2
		3	1
		4-6	0
Vasomotor	5	1	1
		2	0
	6	1	1
		2	1
	7	1	3
		2	2
		3	1
		4-6	0
Secretomotor	8	1	1
		2	0
		3	0
		4	1
		5	2
		6	0
	9	1	1
		2	0
	10	1	1
		2	0
	11	1	0
		2	3
		3	2
		4	1

		5-7	0
Gastrointestinal	12	1	2
		2	1
		3-5	0
	13	1	0
		2	1
		3	2
	14	1	0
		2	1
		3	2
	15	1	0
		2	1
		3	2
	16	1	1
		2	0
	17	1	0
		2	1
		3	2
		4	3
	18	1	1
		2	2
		3	3
	19	1	3
		2	2
		3	1
		4-6	0
	20	1	1
		2	0
	21	1	0
		2	1
		3	2
		4	3
	22	1	1
		2	2
		3	3
	23	1	3
		2	2
		3	1
		4-6	0
Bladder	24	1	0
		2	1
		3	2
		4	3
	25	1	0
		2	1
		3	2
		4	3
	26	1	0
		2	1
		3	2
		4	3

Pupillomotor	27	1	0
		2	1
		3	2
		4	3
	28	1	1
		2	2
		3	3
	29	1	0
		2	1
		3	2
		4	3
	30	1	1
		2	2
		3	3
	31	1	0
		2	3
		3	2
		4	1
		5-7	0

Calculation of COMPASS-31-score

1. Orthostatic Intolerance-score: Sum of items 1-4 multiplied by 4
2. Vasomotor-score: Sum of items 5-7 multiplied by 0.8333
3. Secretomotor-score: Sum of items 8-11 multiplied by 2.1428571
4. Gastrointestinal-score: Sum of items 12-23 multiplied by 0.8928571
5. Bladder-score: Sum of items 24-26 multiplied by 1.111
6. Pupillomotor-score: Sum of items 27-31 multiplied by 0.333
7. COMPASS-31-score: Sum of all 6 domain scores

References:

1. Sletten DM, Suarez GA, Low PA, Mandrekar J, Singer W. COMPASS 31: a refined and abbreviated Composite Autonomic Symptom Score. Mayo Clin Proc [Internet]. 2012 Dec [cited 2019 Sep 27];87(12):1196–201. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0025619612010385>