



## Newsletter November 2017

### Assessment of Glasgow Coma Scale (GCS) in intubated patients and in aphasic patients

The assessment of GCS score in intubated patients is impaired due to an unreliable verbal score evaluation and in consequence GCS scores in intubated patients are often inaccurate. Thus in order to assess reliable GCS scores in the SWITCH trial, we would like to provide a refresher about the GCS assessment in intubated and/or aphasic patients.

According to previous publications by Rutledge and later by Meredith, who investigated the Glasgow Coma Scale score in intubated patients, a table was derived that enables calculation of the verbal score based on the eye opening score and best motor score (Table 1).<sup>1,2</sup> Using this table the GCS in intubated patients can be easily and reliably defined.

Due to the known limitations in the GCS assessment in aphasic patients, we recommend to assess the GCS in these patients like in intubated patients according to GCS assessment in intubated patients.

Instruction and example :

1. Mark the assessed best motor score and the eye opening score in table 1 (dark grey).
2. The extrapolated verbal score is the matching number in table 1 (green).
3. The GCS in this example adds up to 7 (eye opening score 2 + best motor score 3 + extrapolated value for verbal score 2)
4. Keep in mind that sedative medication should be reduced to a minimum during this evaluation.

	Eye opening score (1-4)			
Best motor score (1-6)	1	2	3	4
1	1	1	1	2
2	1	2	2	2
3	2	2	3	3
4	2	3	3	4
5	3	3	4	4
6	3	4	4	5

Table 1. The verbal score can be extrapolated by the best motor score and the eye score.



## Current patient accrual (02.11.2017)

Randomized trial: 56

Observational arm: 8

## Top recruiting sites

1. Bern (10 patients randomized)
2. Berlin (7 patients randomized, 1 patient in observational arm)
3. Helsinki (6 patients randomized, 1 patient in observational arm)
4. Giessen (4 patients randomized, 2 patients in observational arm)
5. Aachen (4 patients randomized)

## SWITCH sites

Currently we have 28 sites open for the recruitment of patients.

Recruiting	Aachen, Amsterdam, Bellvitge Hospital Barcelona, Bern, Berlin, Bonn, Düsseldorf, Erlangen, Erfurt, Essen, Frankfurt, Freiburg, Geneva, Giessen, Göttingen, Helsinki, Innsbruck, Kassel, Mainz, Mannheim, München, Münster, Lübeck, Lucerne, Lugano, Sevilla, Utrecht, Würzburg
Coming soon	Madrid, Paris, Barcelona Santa Creu i Sant Pau, Linz
Planned	Edinburgh

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## References

1. Rutledge R, Lentz CW, Fakhry S, Hunt J. Appropriate use of the glasgow coma scale in intubated patients: A linear regression prediction of the glasgow verbal score from the glasgow eye and motor scores. *The Journal of trauma*. 1996;41:514-522
2. Meredith W, Rutledge R, Fakhry SM, Emery S, Kromhout-Schiro S. The conundrum of the glasgow coma scale in intubated patients: A linear regression prediction of the glasgow verbal score from the glasgow eye and motor scores. *The Journal of trauma*. 1998;44:839-844; discussion 844-835