BESA®
Epilepsy 2.0

Spikes, seizures and more...

February 2016
BESA Epilepsy 2.0
Many different EEG data formats

- Many different EEG data formats
- Automated spike detection
- Automated clustering / hyperclustering
- Automated seizure detection \(^\text{New}\)
- EEG review / EEG report \(^\text{New}\)
- Spike review / spike report
- Seizure review / EEG report \(^\text{New}\)

Alpha-Trace, BESA, Coherence/ITMed, Compumedics, EBNNeuro, EDF+, EGI MFF, Grass-Telefactor (TwinRef), Micromed, Nicolet Nervus, Nihon Kohden, Stellate Harmonie, XLTEK

Manage all datasets in one patient list
Automated detection using 29 regional brain sources

High sensitivity – also for spikes in fissures!

Automated detection takes maximum 3h on a 24h EEG
“Fast evaluation of interictal spikes in long-term EEG by hyper-clustering”

Find more details in Epilepsia, 2012 Jul;53(7):1196–1204
Automated seizure detection

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- Spike review / spike report
- Seizure review / EEG report

“Automatic seizure detection in long-term scalp EEG using an adaptive thresholding technique: a validation study for clinical routine”.

Find more details in Clinical Neurophysiology, 2014 Jul;125(7):1346-52

Algorithm has been developed at the Epilepsy Center, Department of Neurology, Universitätsklinikum Erlangen. Seizure detection takes maximum 5min on a 24h EEG
Many different EEG data formats

Automated spike detection

Automated clustering / hyperclustering

Automated seizure detection New

EEG review / EEG report New

Spike review / spike report

Seizure review / EEG report New

Report is generated automatically during EEG, spike and seizure review.

Add EEG images manually by 1-click

Print your final report or store it as PDF
✓ Many different EEG data formats
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✓ Automated clustering / hyperclustering
✓ Automated seizure detection \textsuperscript{New}
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✓ Seizure review / EEG report \textsuperscript{New}

You decide for each hypercluster: epileptiform or not

Spend only 5 minutes a day to evaluate a 24h EEG

Use optimized montages and filters
Many different EEG data formats

Automated spike detection

Automated clustering / hyperclustering

Automated seizure detection

EEG review / EEG report

Spike review / spike report

Seizure review / EEG report

Quick navigation from seizure to seizure

Mark the seizure onset by 1-click

Finally add your clinical significance
BESA Epilepsy 2.0
Summary

✓ Many different EEG data formats
✓ Automated spike detection
✓ Automated clustering / hyperclustering
✓ Automated seizure detection \textit{New}
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\textbf{Available from March 2016}