

# Sensitivity of magnetoencephalography as a diagnostic tool for epilepsy: a prospective study

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# Study design & methods

- Prospective trial
- 2 centres in The Netherlands
- 138 patients
  
- Routine MEG in addition to EEG and MRI for diagnosis of epilepsy
  
- Primary outcome: sensitivity, specificity and diagnostic gain
- Secondary outcome: congruence of localization of epileptiform discharges on MEG compared to MRI and clinical diagnosis

# Results & conclusion

Test	Sensitivity	Specificity
MEG	31.6%	78.4%
EEG	31.6%	100%
Routine + additional EEGs	52.6%	97.3%

Diagnostic gain of MEG compared to

- EEG: 16.8%
- Routine plus additional EEG: 9.5%

Congruence of localization: 35.7%

**Routine MEG has additional value in the primary diagnosis epilepsy.**