# INAHTA Brief

### Title Gadoxetic Acid Disodium (GD-EOB-DTPA) Liver-Specific Magnetic Resonance Imaging Contrast Agent Imaging Contrast Agent

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*Reference* Technology Review Report - 005/2011, <u>http://www.moh.gov.my/technology\_reviews/184</u>

### Aim

To assess the safety, efficacy/effectiveness and cost-effectiveness of Gadoxetic acid disodium liver-specific MRI contrast agent in the detection and characterization of small liver lesions.

### **Conclusions and results**

The review included 28 articles. The studies included consist of four RCTs, 21 diagnostic accuracy studies, one economic evaluation study and two FDA articles. There was fair level of evidence to show that Gd-EOB-DTPA-enhanced MRI was safe and more effective in detecting hepatocellular carcinoma (HCC) than gadopentetate dimeglumine (Gd-DTPA)-enhanced MRI or superparamagnetic iron oxide (SPIO)enhanced MRI. When compared with SPIOenhanced MRI, Gd-EOB-DTPA-enhanced MRI was as efficacious in detecting liver metastases. It had similar diagnostic performance compared with double-contrast MRI [Gd-DTPA-enhanced MRI and SPIO-enhanced MRI] for detection of small liver lesions. Its' diagnostic performance is similar to gadobenate dimeglumine (Gd-BOPTA)-enhanced MRI but it showed better enhancement of liver parenchyma at 20 minutes post contrast compared with Gd-BOPTA at 40 minutes post contrast. There was limited evidence on cost-effectiveness.

### Recommendations

It is recommended that the use of gadoxetic-acid disodium (Gd-EOB-DTPA) liver-specific MRI contrast agent is to be limited such as only to some centres or facilities with hepatobiliary services and on certain types of patients with liver metastasis as

pre-operative diagnostic tool in patients to provide more quality evidence.

### Methods

Electronic databases which included PubMed, Medline, EBM Reviews-Cochrane Central Register of Controlled Trials, EBM Reviews-Cochrane database of systematic reviews, EBM Reviews-HTA Databases, Horizon Scanning databases and FDA website were searched. Relevant articles were critically appraised using Critical Appraisal Skills Programme (CASP) and evidence graded according to NHS Centre for Reviews and Dissemination (CRD) University of York, Report Number 4 (2<sup>nd</sup> Edition).

### Further research/reviews required

More high quality diagnostic studies.

### Written by

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## INAHTA Brief

### Title High Voltage Electrical Field Therapy

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- **Reference** Technology Review Report 013/2011, http://www.moh.gov.my/technology\_reviews/191

### Aim

To determine the safety, effectiveness and cost effectiveness of a high voltage electrical field therapy for the treatment of chronic diseases.

#### **Conclusions and results**

There was no retrievable evidence on safety, effectiveness or cost-effectiveness of a high voltage electrical field therapy.

### Recommendations

The use of high voltage electrical field therapy by general public for treatment of chronic diseases is not recommended until high quality scientific evidence is available to prove its safety, effectiveness and cost-effectiveness.

### Methods

Scientific electronic databases searched include MEDLINE, Cochrane Database of Systematic Reviews, HTA databases, Horizon Scanning databases and FDA website.

### Further research/reviews required

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