**Common format for Evidence Table – Treatment Primary studies**



|  |  |
| --- | --- |
| **Headings** | **Description**  |
| **I Study ID** |  |
| **1. Reference**  | First author; Journal name; Publication Date;  |
| **II Method** |  |
| **1. Study design** | Specify the type of study: RCT, CCT, case control, case series |
| **2. Source of funding/conflicts of interest** | Specify the source of funding: public research funds, government, not governmental organization, healthcare industry or other (give name of organization or corporation)presence of declaration of interest. |
| **3. Setting** | Numbers of centers, countries involved, healthcare setting, urban/rural/mixed. |
| **4. Sample size** | Give the calculated number in each group and the actual number of patients in each group. |
| **5. Duration of the Study** | Duration in months or years. |
| **III Patient characteristics** |  |
| **1. Eligibility criteria** | State the most relevant inclusion and exclusion criteria for population (patients and pathology). |
| **2. Patient characteristics**  | Specify a priori characteristics (age, tumor, stage).  |
| **3. Group comparability** | p for group comparability. |
| **IV Intervention(s)** |  |
| **1. Intervention(s)** | Precise details of the interventions for each group (including dose, length, regimen and timing if relevant).  |
| **2. Comparator(s)** | Placebo, other treatment (including dose, length, regimen and timing if relevant). |
| **V Results primary outcome** |  |
| **1. Effect size primary outcome** | Summary of the primary outcome in each and between groups: effect size and its precision (p value, CI)Including efficacy: Absolute risk reduction, relative risk (reduction), odds ratios, confidence intervals. |
| **VI Results secondary and all other outcomes** |  |
| **1. Effect size secondary outcome(s)** | Brief description of secondary outcome(s) and p values. |
| **2. Effect size all other outcomes, endpoints** | All other outcomes, endpoints, including adverse effects, toxicity, quality of life |
| **VII Critical appraisal of study quality** |  |
| **1.Level of evidence**  | Classification of intervention studies. |
| **2. Dropouts** | Number of dropouts/withdrawals in each group |
| **3. Results critical appraisal** | Summarize internal validity: sample size, randomization and blinding, use of inappropriate statistical analysis, etc |

# Diagnosis

Uitgangsvraag: Bij patiënten met melanoom stadium III en IV (primair dan wel recidief) die in aanmerking komen voor in opzet curatieve/lokale behandeling, welke diagnostische test - FDG PET/CT, contrast CT of whole body MRI - resulteert in de meest accurate opsporing van metastasen?

## Primary studies

| I Study ID |  II Method | III Patient characteristics | IV Intervention(s) | V Results primary outcome | VI Results secondary and other outcomes | * VII Critical appraisal of study quality
 |
| --- | --- | --- | --- | --- | --- | --- |
| * Jouvet et al, JEADV, 2014
 | * Design: Prospective cohort
* Sources of funding not mentioned
* Setting: Hospital
* Sample size: 37 pat
* Duration: March 2009-January 2011
* Mean interval of 7 days between tests
* Order of tests not mentioned
 | Eligibility criteria: Stage IV cutaneous melanoma patientsExclusion* another cancer, contraindications for MRI

Patient characteristics* Not reported
* 218 visceral or lymph node metastases
 | Index test(s)* whole-body MRI including VIBE and metabolic

(diffusion) sequencescombined PET-CT, CT and superficial lymph nodes US.Reference standard* histopathology

or sequentialimaging during clinical follow-up (at least 9 months) | Diagnostic accuracyLesion basedOverallPET-CT* Accuracy: 86%
* Sensitivity: 80% (71-87%)
* Specificity: 93% (86-97%)
* PPV: 93% (86-98%)
* NPV: 79% (70-87%)

CT* Accuracy: 81%
* Sensitivity: 90% (83-95%)
* Specificity: 70% (60-79%)
* PPV: 79% (71-85%)
* NPV: 85% (75-92%)

MRI* Accuracy: 70%
* Sensitivity: 68% (59-76%)
* Specificity: 73% (63-82%)
* PPV: 77% (68-85%)
* NPV: 63% (53-72%)

MRI (VIBE)* Accuracy: 85%
* Sensitivity: 84% (76-90%)
* Specificity: 87% (79-93%)
* PPV: 90% (83-95%)
* NPV: 80% (71-86%)

Overall Lymph node PET-CT* Accuracy: 96%
* Sensitivity: 96% (78-100%)
* Specificity: 97% (83-100%)
* PPV: 96% (78-100)
* NPV: 97% (83-100)

CT* Accuracy: 77%
* Sensitivity: 96% (78-100%)
* Specificity: 63% (44-80%)
* PPV: 67% (48-82%)
* NPV: 95% (75-100%)

MRI* Accuracy: 85%
* Sensitivity: 96% (78-100%)
* Specificity: 80% (61-92%)
* PPV: 77% (59-92%)
* NPV: 96% (78-100%)

MRI (VIBE)* Accuracy: 94%
* Sensitivity: 87% (66-97)
* Specificity: 100% (88-100%)
* PPV: 100% (83-100%)
* NPV: 91% (76-98%)

No statistically significant difference(P < 0.05) of overall diagnostic performances between wbMRI and PETCTNo statistically significant difference was found between wbMRI and PET-CT with two channels for CT with respect to different metastatic sites.Compared with the CT,wbMRI had significantly better overall specificity (P = 0.0011) and PPV (P = 0.02).For lung exploration, sensitivity ofwbMRI (51.6%) was inferior to CT (71.4%).To detect superficial metastatic lymph nodes, wbMRI and US both showed high diagnostic accuracy with no statistically significant difference. |  | * Level of evidence: B
* Patients did not receive the same reference standard regardless of the index test result
* Independence between index test en reference test unclear
* Blinding unclear
* Execution of reference test unclear
 |
| * Laurent V, Eur J Radiol, 2010
 | * Design: prospective
* Sources of funding not mentioned
* Setting: one Hospital
* Sample size: 35
* Duration: August 2006-April 2007
* Interval between tests unclear
* Order of tests: unclear
 | Eligibility criteria: patients with cutaneous melanoma presenting a risk of metastatic spread.Exclusion: patient with a cardiac pace maker, metal devices in the body, allergy to contrast medium, restricted renal function, pregnancy,claustrophobiaPatient characteristics* Not given
* Prevalence of disease (malignant lesions): 70/120 = 58%
 | Index tests* PET-CT
* WB-MRI

Reference standard* Histology, imaging, or follow-up including tumor markers (S100 and lactate dehydrogenase) (6 months)
 | Diagnostic accuracyLesion basedOverallPET-CT* Sensitivity: 72,9%
* Specificity: 92,7%
* PPV: 94,4%
* NPV: 66,7%

MRI* Sensitivity: 82,6%
* Specificity: 97,6%
* PPV: 98,3%
* NPV: 76,9%

Lung* PET-CT: Se 30,7%, Sp 100%
* MRI: Se 61,5%, Sp 100%

Bone* PET-CT: Se 71,4%, Sp 100%
* MRI: Se 82,8%, Sp 100%

Liver* PET-CT: Se 50%, Sp 100%
* MRI: Se 100%, Sp 100%

Lymph nodes* PET-CT: Se 82,7%, Sp 100%
* MRI: Se 89,6%, Sp N/A
 |  | * Level of evidence: B
* Consecutive patients
* Blinded study
* Verification bias
* Patients did not receive the same reference standard regardless of the index test result
* Execution of reference test unclear
* Dropouts unknown
 |

Abbreviations: VIBE: Volumetric interpolated breath-hold examination, PET: positron emission tomography, PET-CT: PET/computed tomography, FDG: Fluorine-18-Fluorodeoxyglucose, WB-MRI: whole-body magnetic resonance imaging, NPV: negative predictive value; PPV: positive predictive value