**Appendix Table E24. Quality assessment of studies assessing the predictive ability of LTA in patients with ischemic heart disease**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year [ref]****UID****Country****Study Name** | **1** | **2** | **3** | **Patients selection** **ROB****(selection)** | **Applicability****(selection)** | **4** | **5** | **Index test ROB****(index)** | **Applicability****(index)** | **6** | **7** | **Reference standard ROB****(reference)** | **Applicability****(reference)** | **8** | **9** | **10** | **11** | **Flow and timing ROB****(flow & timing)** |
| Geisler, 2010{Geisler, 2010 54 /id}20526607GermanyNR | yes | yes | yes | low | low | NR | yes | unclear | low | yes | NR | unclear | low | no | yes | yes | no | high |
| Cuisset, 2009{Cuisset, 2009 111 /id}19801028FranceNR | yes | No | yes | low | low | NR | No  | unclear  | high | yes | NR | Low | low | no [30 days] | yes  | yes  | yes | low |
| Frere, 2007{Frere, 2007 193 /id}17938809FranceNR | yes | No | yes | low | low | NR | No | High | Low | yes | NR | Unclear | low | no [30 days] | yes  | yes  | yes | low |
| Hoshino, 2009{Hoshino, 2009 143 /id}19106460JapanNR | No | Yes | yes | low | low | NR | Yes | unclear  | high | No | NR | high | high | NO [28 days] | yes  | yes  | yes | low |
| Breet, 2010{Breet, 2010 86 /id}20179285NetherlandsPOPULAR | yes  | yes | yes | low | low | NR | no | high | low | yes | yes | low | low | yes  | yes | yes | yes | low |
| Gurbel, 2010{Gurbel, 2010 84 /id}2019487810 study sites in North America and EuropeRESPOND | yes  | yes | yes | low | low | Yes | Yes | Low | High | No | Yes | high | high | NO[30 days] | yes | yes | No | High |
| Kim, 2010{Kim, 2010 241 /id}20449634KoreaNR | yes  | yes | yes | low | low | NR | yes | unclear | high | Yes | NR | unclear | Low | no [6 months] | yes  | yes  | yes | low |
| Angiolillo, 2007{Angiolillo, 2008 180 /id}18312754USAOPTIMUS | NO | yes  | yes  | low  | low  | NR | NR | unclear  | unclear  | No | NR | unclear | high | no [1 month] | yes  | yes  | yes | low |
| Blindt, 2007{Blindt, 2007 189 /id}18064332 GermanyNR | NO | NO | yes  | HIGH | LOW | NR | No  | unclear  | high | yes | NR | Unclear | low | no [6 months] | yes  | yes  | yes | low |
| Bliden,2007{Bliden, 2007 202 /id}17291930USANR | yes  | yes  | yes  | low  | low  | NR | yes  | unclear | high  | yes  | NR | unclean  | low  | yes  | yes  | yes  | yes  | low  |
| Gori,2008{Gori, 2008 151 /id}19132241Italy RECLOSE | yes  | yes  | yes  | low  | low  | NR | yes  | unclear | low  | yes | NR | unclear | low | no | yes | yes | yes | low |
| Gurbel,2010{Gurbel, 2010 68 /id}20691842USAPREPARE POST-STENTING | yes | yes | yes | low | low | NR | NO | high | high | yes | yes | low | low | yes | yes | yes | yes | low  |
| Matetzky,2004{Matetzky, 2004 188 /id}15184279Israel No | yes  | yes  | yes  | low  | low  | NR | no  | high | low  | no | yes  | low  | low  | no  | yes  | yes  | yes  | low |
| Angiolollo, 2007{Angiolillo, 2007 194 /id}17936152SpainNR | NO | yes  | yes  | low  | low  | NR | NR | unclear | low  | Yes | NR | Unclear | low  | Yes [2 years] | yes  | yes  | yes  | low |
| Aradi, 2008{Aradi, 2008 236 /id}18388039HungaryNR | NO | yes  | yes  | low  | low  | NR | No | High | High  | Yes | NR | Unclear | low  | No [~9 monthss] | yes  | yes  | yes  | low |
| Bellemain-Appaix 2010{Bellemain-Appaix, 2010 87 /id}20170822FranceALBION (Assessment of the Best Loading Dose of Clopidogrel to Blunt Platelet Activation, Inflammation and Ongoing Necrosis) | Yes [RCT substudy] | yes  | yes  | low  | low  | NR | No | High | High | No | NR | High | High | No [24 hrs | yes  | yes  | yes  | low |
| Breet, 2011{Breet, 2011 15 /id}21478385The NetherlandsPOPular | Yes | yes  | yes  | low  | low  | NR | Yes | Unclear | Unclear | Yes | Yes | Low | low  | Yes [1 year] | yes  | yes  | yes  | low |
| Breet, 2010{Breet, 2010 50 /id}20695984NetherlandsSubstudy of a larger cohort (Breet 2010 PMID: 20179285) | Yes | yes  | yes  | low  | low  | NR | No | Unclear | Low | Yes | Yes | Low | low  | Yes [1 year] | yes  | yes  | yes  | low |
| Buonamici, 2007{Buonamici, 2007 200 /id}17572245ItalyNR | Yes | yes  | yes  | low  | low  | NR | No | Unclear | High | Yes | Yes | Low | low  | No [6 months] | yes  | yes  | yes  | low |
| Campo, 2007{Campo, 2007 197 /id}17868803ItalyNR | No | yes  | yes  | low  | low  | NR | No | Unclear | Unclear | Yes | NR | Unclear | low  | No [6 months] | yes  | yes  | yes  | low |
| Cuisset, 200919736156FranceNR | Yes | yes  | yes  | low  | low  | Yes | No | High | High | Yes | NR | Unclear | low  | No [30 days] | yes  | yes  | yes  | low |
| Cuisset, 2006{Cuisset, 2006 212 /id}16371119FranceNR | Yes | yes  | yes  | low  | low  | NR | No | High | Low | Yes | Yes | Low | low  | No [1 month] | yes  | yes  | yes  | low |
| Cuisset, 2006{Cuisset, 2006 237 /id}17010792FranceNR | Yes | yes  | yes  | low  | low  | NR | No | High | Low | Yes | Yes | Low | low  | No [1 month] | yes  | yes  | yes  | low |
| Cuisset, 2007{Cuisset, 2007 204 /id}17264958FranceNR | Yes | yes  | No | low  | low  | NR | Yes | Unclear | High | Yes | NR | Unclear | low  | No [12 hrs] | yes  | yes  | No [20 patients who did not receive successful angioplasty were excluded from the study] | low |
| Geisler, 2008{Geisler, 2008 184 /id}17949474GermanyNR | Yes | yes  | yes  | low  | low  | NR | No | High | High | Yes | Yes | Low | low  | NO (30 days) | yes  | yes  | NO (~13% of patients were lost to followup) | High |
| Geisler, 2006{Geisler, 2006 210 /id}17005534GermanyNR | Yes | yes  | yes  | low  | low  | NR | Yes | Unclear | High | Yes | Yes | Low | low  | No [3 months] | yes  | yes  | yes  | low |
| Geisler, 2010{Geisler, 2010 101 /id}19812059GermanyNR | Yes | yes  | yes  | low  | low  | Yes | No | High | High | Yes | Yes | Low | low  | No [3 months] | yes  | yes  | yes  | low |
| Giusti, 2009{Giusti, 2009 134 /id}19268736ItalyRECLOSE study(Low Responsiveness to Clopidogrel and Sirolimus- or Paclitaxel-Eluting Stent Thrombosis) | Yes | yes  | yes  | low  | low  | NR | No | High | High | Yes | YES(states that event adjudication was blind to laboratory results) | Low | low  | No [6 months] | yes  | yes  | yes  | low |
| Gori, 2008 {Gori, 2008 164 /id}18718420ItalyRECLOSE study(Low Responsiveness to Clopidogrel and Sirolimus- or Paclitaxel-Eluting Stent Thrombosis) | Yes | yes  | yes  | low  | low  | Yes | Yes | Low | High | Yes | Yes | Low | low  | No [6 months] | yes  | yes  | yes  | low |
| Gurbel, 2008{Gurbel, 2008 157 /id}19012177USANone | Yes | yes  | yes  | low  | low  | NR | Yes | Unclear | Low | Yes | Yes | Low | low  | Yes [2 years] | yes  | yes  | yes  | low |
| Gurbel, 2004{Gurbel, 2004 220 /id}15154601USANone | NR | yes  | yes  | low  | low  | NR | No | High | Low | Yes | NR | Unclear | low  | NO (30 days) | yes  | yes  | yes | High |
| Hochholzer, 2006{Hochholzer, 2006 208 /id}17084243GermanyEXCELSIOR | No | yes  | yes  | low  | low  | NR | NR | Unclear | High | Yes | NR | Unclear | low  | NO (30 days) | yes  | yes  | yes | Low |
| Htun, 2011{Htun, 2011 20 /id}21273381GermanyNR | Yes | yes  | No [232 of 1567 patients excluded in final analysis] | low  | low  | NR | Yes | Unclear | High | Yes | NR | Unclear | low  | Yes [1 year] | yes  | yes  | No [15% excluded in final analysis] | low |
| L’Allier, 2008{L'Allier, 2008 178 /id}18342223CanadaPREPAIR study | Yes | yes  | yes  | low  | low  | Yes | Yes | Low | High | Yes | NR | Unclear | low  | NO (1 month) | yes  | yes  | yes | Low |
| Liu, 2011{Liu, 2011 12 /id}21613806ChinaNone | Yes | yes  | yes  | low  | low  | NR | Yes | Unclear | Unclear | Yes | NR | Unclear | low  | NO (3 months) | yes  | yes  | YES (~2% [2 patients] withdrew before 12 hr and three more [!3%] were lost to followup later) | Low |
| Muller, 2003{Muller, 2003 223 /id}12719773GermanyNone | NR | yes  | yes  | low  | low  | NR | NR | Unclear | Low | Yes | NR | Unclear | low  | NO [latest date mentioned is a 9-mo measurement, only in 1 pt] | yes  | yes  | yes | Low |
| Muller, 2010{Muller, 2010 51 /id}20728084GermanyNR | Yes | yes  | yes  | low  | low  | Yes | No | Unclear | High | Yes | Yes | Low | low  | No[mean 344 days] | yes  | yes  | yes | Low |
| Obradovic, 2009{Obradovic, 2009 123 /id}19318922SerbiaNR | No | yes  | yes  | low  | low  | NR | No | High | High | No | NR | High | High | No[24 hours] | yes  | yes  | yes | Low |
| Saw, 2008{Saw, 2008 243 /id}19038679CanadaELAPSE trial | NR | yes  | yes  | low  | low  | NR | Yes | Unclear | Low | Yes | NR | Unclear | low  | Yes [12 months] | yes  | yes  | NO (22% withdrew [7 of 33 enrolled]) | Low |
| Trenk, 2008{Trenk, 2008 171 /id}18482659GermanyEXCELSIOR (Impact of Extent of Clopidogrel- Induced Platelet Inhibition During Elective Stent Implantationon Clinical Event Rate) | NO(included all patients in the prospective EXCELSIOR cohort that had genotypic information) | yes  | No | high | low  | Yes | Yes | Low | Low | No | No | High | Low | Yes [1 year] | yes  | yes  | yes | Low |
| Wang, 2010{Wang, 2010 37 /id}21171668ChinaNone | No | yes  | yes  | low  | low  | NR | Yes | Unclear | Low | Yes | Yes | Low | low  | Yes [1 year] | yes  | yes  | yes | Low |
| Wang, 2009{Wang, 2009 130 /id}19041120ChinaNR | No | yes  | yes  | low  | low  | NR | Yes | Unclear | High | Yes | NR | Unclear | low  | Yes [12 months] | yes  | yes  | yes | Low |
| Yong, 2009{Yong, 2009 146 /id}19081397AustraliaPlatelet Responsiveness to Aspirin and Clopidogrel andTroponin Increment after Coronary intervention in Acutecoronary Lesions (PRACTICAL) Trial | Yes | yes  | yes  | low  | low  | Yes | NR | Unclear | High | Yes | Yes | Low | low  | No [6 months] | yes  | yes  | yes  | low |
| Gurbel,2003{Gurbel, 2003 224 /id}12714161USANo | NR | yes | yes | low | low | NR | no | high | unclear | No | NR | high | yes | No (30 days) | yes | yes | No (many had no data at 30 days) | high  |
| Gurbel 2005{Gurbel, 2005 215 /id}16286165USAPREPARE POST-STENTING | Yes | No | No | High | Low | NR | NR | Unclear | High | Yes | Yes  | Low | Low | No [6 months] | yes  | yes  | yes  | low |
| Gurbel 2003{Gurbel, 2003 222 /id}12796140USANR | Yes | YES | Yes | Low | Low | Yes | Yes | Low | Low | Yes | NR | Unclear | Low | No [30 days] | Yes | Yes | Yes | Low |
| Kalantzi, 2012{Kalantzi, 2012 18174 /id} 21806493GreeceNR | NR | yes | yes | low | low | NR | yes  | unclear | low | no | NR | unclear | high | no | yes | yes | yes | low |
| Angiolillo, 2011 {Angiolillo, 2011 18175 /id}ItalyNR | NR | yes  | yes | low | low  | NR | yes  | unclear | low  | yes | NR | unclear | low | yes | yes | yes | yes | low |
| Parodi, 2011{Parodi, 2011 2 /id} 21934054ItalyNR | yes  | yes | yes | low | low | NR | yes | unclear | high | yes | yes  | low | low | yes | yes | yes | yes | low |
| Gurbel, 2012{Gurbel, 2012 18183 /id} 21862113USANR | NR | yes | yes | low | low | NR | No | High | High | No | NR | High | High | No [1 day] | yes | yes | yes | low |
| Saad, 2012{Saad, 2012 18187 /id}22146578EgyptNR | NR | yes | yes | low | low | NR | No | High | High | yes | yes  | low | low | No [6 months] | yes | yes | yes | low |
| Tselepis, 2011 {Tselepis, 2011 1 /id}22008470GreeceNR | yes | yes | yes | low | low | NR | yes | unclear | high | no | NR | high | high | no | yes | yes | yes | low |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gaglia, 2012{Gaglia, 2011 18244 /id}21919956USANR | Yes | Yes | Yes | Low | Low | Yes | Yes | Low | high | Yes | Yes | Low | Low | No [in-hospital] | yes | yes | yes | Low |
| Aradi {Aradi, 2012 18248 /id}21902692HungaryNR | no  | yes | yes | low | low | NR | yes | unclear | high | yes | NR | unclean  | low | yes | yes | yes | yes | low |
| Marcucci, 2012{Marcucci, 2012 18217 /id}22390861ItalyNR | NR | YES | YES | LOW | LOW | NR | Yes | UNCLEAR | High | NR | NR | UNCLEAR | LOW | YES | YES | YES | YES | LOW |
| Ge, 2012{Ge, 2012 18184 /id}21602258ChinaNR | NR | YES | YES | LOW | LOW | NR | YES | UNCLEAR | LOW | YES | NR | UNCLEAR | LOW | NO | YES | YES | YES | LOW |

1. Consecutive or random sample of patients enrolled.
2. Case-control design avoided
3. Study avoided inappropriate exclusions

Risk of bias: could the selection of patients have introduced bias ( If ≥2 of the above 3 questions are YES, give LOW here; if ≥2 are NO give HIGH; otherwise, give UNCLEAR)

Concerns that the included patients do not match the review question?

1. Index test results interpreted without knowledge of results of reference standard?
2. If a threshold used, was it prespecified?

Risk of bias: Could the conduct or interpretation of the index test have introduced bias?

(If both of the above questions are YES, give LOW here; if one or both are NO, give HIGH; otherwise, give UNCLEAR)

Concerns that the index test, its conduct, or its interpretation differ from the review question?

1. Reference standard likely to correctly classify the target condition?
2. Reference standard results interpreted without knowledge of index test results?

 Could the reference standard, its conduct, or its interpretation have introduced bias?

(If both of the above questions are YES, give LOW here; if one or both are NO, give HIGH; otherwise, give UNCLEAR)

Are there concerns that the target condition as defined by the reference standard does not match the review question?

1. Appropriate interval between index test and reference standard?
2. All patients received a reference standard?
3. All patients received the same reference standard?
4. Were all patients included in the analysis?

Could the patient flow have introduced bias? (If ≥3 of the above 4 questions are YES, give LOW here; if ≥2 are NO give HIGH; otherwise, give UNCLEAR)