

# Pancreatic cancer in adults:

## diagnosis and management

*Appendix J*

*Risk of Bias Summaries*

*February 2018*

*Final draft*

*Developed by the National Guideline Alliance, hosted  
by the Royal College of Obstetricians and  
Gynaecologists*



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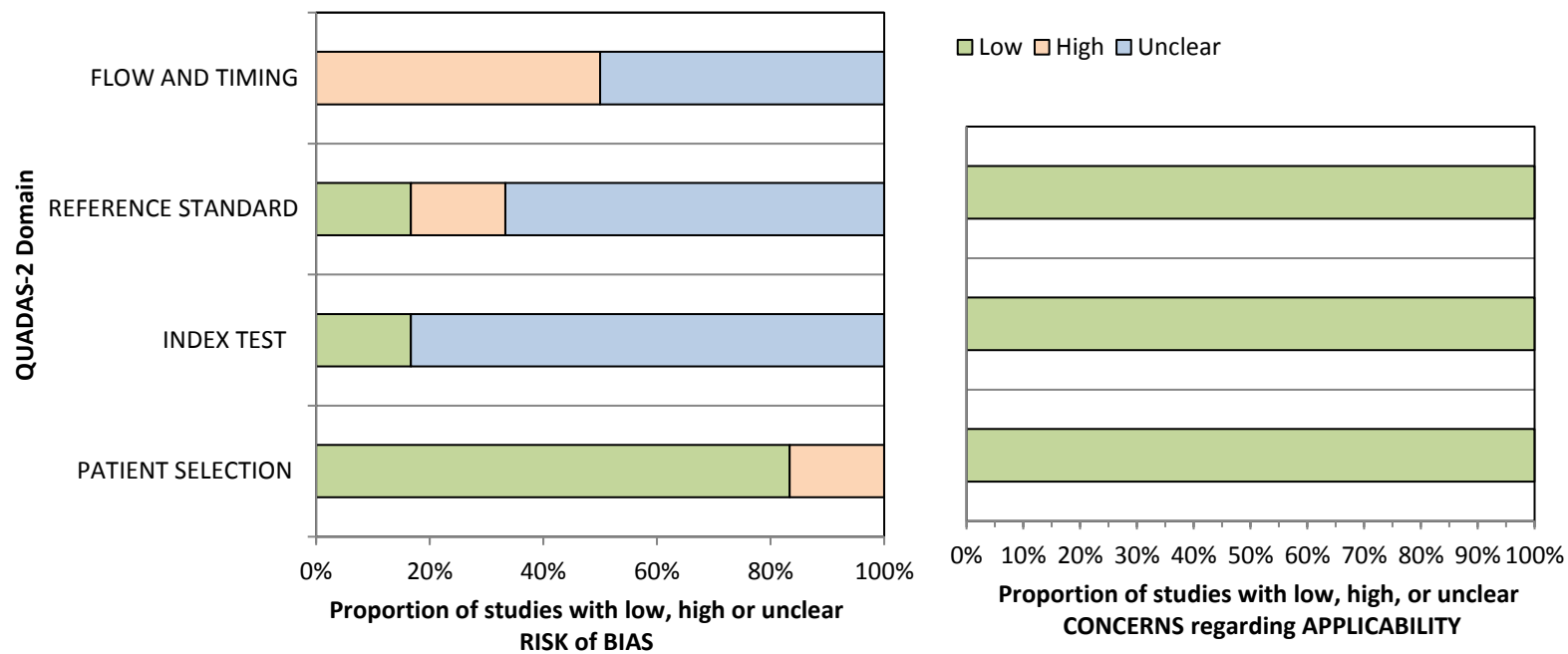
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# 1 Appendix J: Risk of bias summaries

## J.12 People with jaundice

3 Figure 1: Risk of bias and applicability concerns graph: review authors' judgements about each domain presented as percentages  
4 across included studies

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1 **Table 1: Risk of bias and applicability concerns summary: review authors' judgements about each domain for each included study**

| Study        | RISK OF BIAS      |            |                    |                 | INDIRECTNESS <sup>a</sup> |            |                    |
|--------------|-------------------|------------|--------------------|-----------------|---------------------------|------------|--------------------|
|              | PATIENT SELECTION | INDEX TEST | REFERENCE STANDARD | FLOW AND TIMING | PATIENT SELECTION         | INDEX TEST | REFERENCE STANDARD |
| Agarwal 2004 | Low               | Unclear    | Unclear            | Unclear         | Low                       | Low        | Low                |
| Ghaneh 2018  | Low               | Low        | Low                | High            | Low                       | Low        | Low                |
| Kim 2014     | Low               | Unclear    | High               | High            | Low                       | Low        | Low                |
| Oppong 2010  | Low               | Unclear    | Unclear            | Unclear         | Low                       | Low        | Low                |
| Ross 2008    | High              | Unclear    | Unclear            | High            | Low                       | Low        | Low                |
| Tummala 2013 | Low               | Unclear    | Unclear            | Unclear         | Low                       | Low        | Low                |

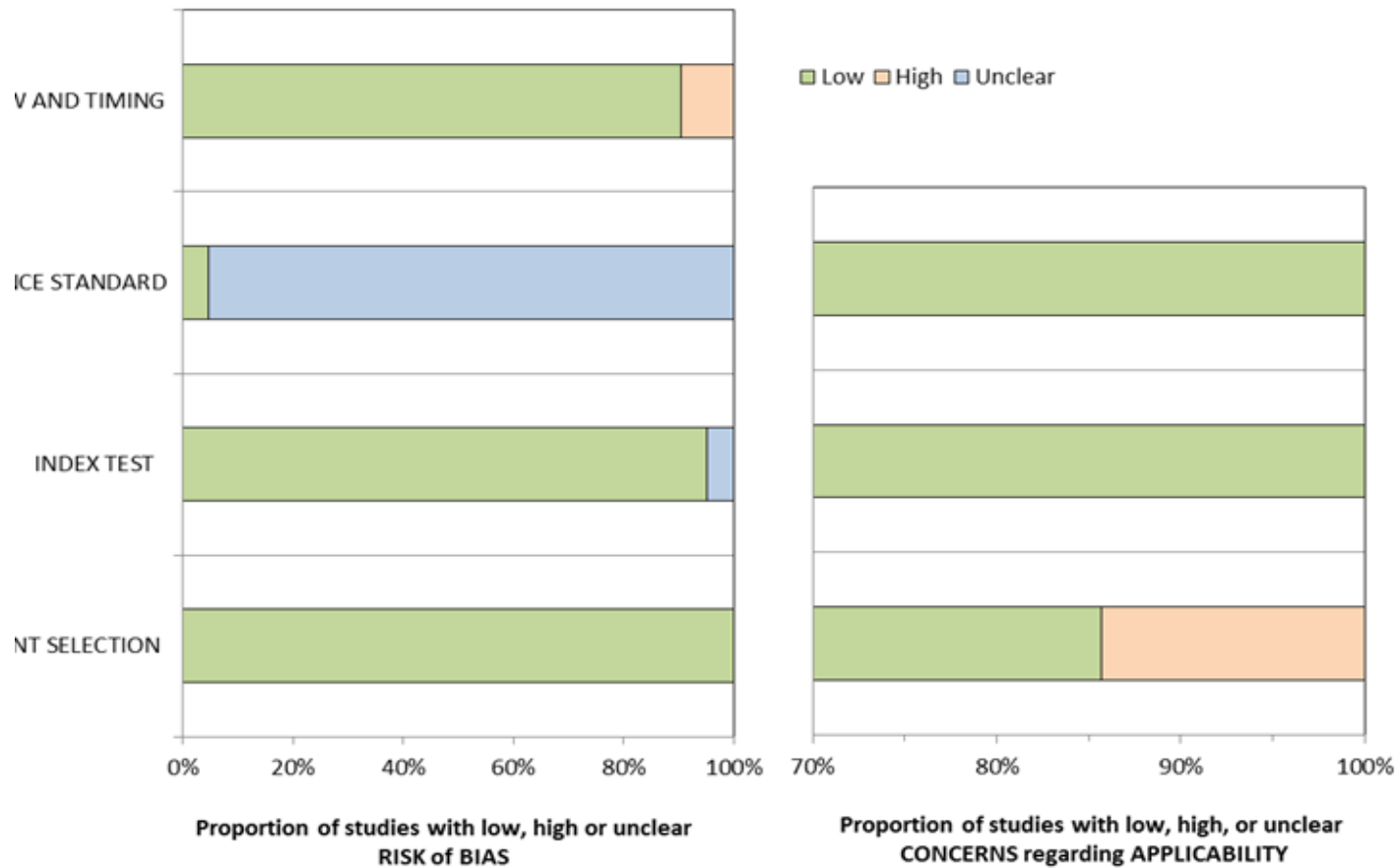
2 Notes: <sup>a</sup>, the applicability items of QUADAS-2 were used to evaluate indirectness.

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## J.2.1 People without jaundice but with a pancreatic abnormality

2 Figure 2: QUADAS-2 Risk of bias and applicability concerns graph: review authors' judgements about each domain presented as  
3 percentages across included studies

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1 **Table 2: QUADAS-2 Risk of bias and applicability concerns summary: review authors' judgements about each domain for each**  
2 **included study**

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| Study                 | RISK OF BIAS      |            |                    |                 | INDIRECTNESS <sup>a</sup> |            |                    |
|-----------------------|-------------------|------------|--------------------|-----------------|---------------------------|------------|--------------------|
|                       | PATIENT SELECTION | INDEX TEST | REFERENCE STANDARD | FLOW AND TIMING | PATIENT SELECTION         | INDEX TEST | REFERENCE STANDARD |
| Bang 2012             | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Bournet 2015          | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Bournet 2009          | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Fabbri 2011           | Low               | Low        | Unclear            | High            | Low                       | Low        | Low                |
| Fritscher-Ravens 2002 | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Harewood 2002         | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Hikichi 2009          | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Iglesias-Garcia 2007  | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Kliment 2010          | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Krishna 2009          | Low               | Low        | Unclear            | Low             | High                      | Low        | Low                |
| Lee 2014              | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Mishra 2006           | Low               | Low        | Unclear            | Low             | High                      | Low        | Low                |
| Ramesh 2015           | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Seicean 2016          | Low               | Low        | Low                | Low             | Low                       | Low        | Low                |
| Strand 2014           | Low               | Unclear    | Unclear            | Low             | High                      | Low        | Low                |
| Tamm 2007             | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Touchefeu 2009        | Low               | Low        | Unclear            | High            | Low                       | Low        | Low                |
| Wakatsuki 2005        | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Wittman 2006          | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Yang 2015             | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Yusuf 2009            | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |

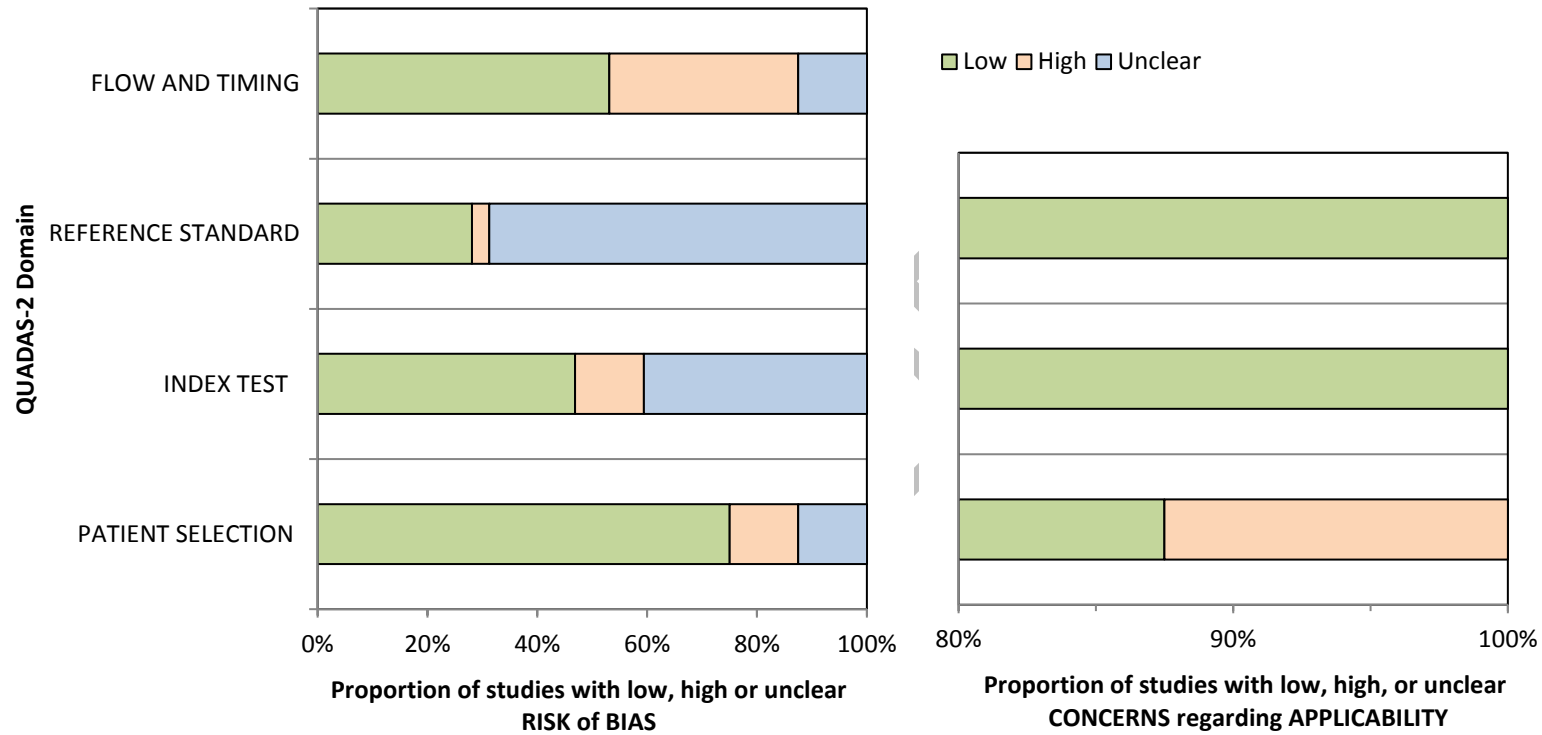
4 Notes: <sup>a</sup>, the applicability items of QUADAS-2 were used to evaluate indirectness.



### J.3.1 Pancreatic Cysts

2 **Figure 3: Risk of bias and applicability concerns graph: review authors' judgements about each domain presented as percentages**  
3 **across included studies**

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2 **Figure 4: Risk of bias and applicability concerns summary: review authors' judgements about each domain for each included study**

| Study         | RISK OF BIAS      |            |                    |                 | INDIRECTNESS <sup>a</sup> |            |                    |
|---------------|-------------------|------------|--------------------|-----------------|---------------------------|------------|--------------------|
|               | PATIENT SELECTION | INDEX TEST | REFERENCE STANDARD | FLOW AND TIMING | PATIENT SELECTION         | INDEX TEST | REFERENCE STANDARD |
| Ardengh 2007  | Low               | Unclear    | Unclear            | High            | Low                       | Low        | Low                |
| Brugge 2004   | Low               | Low        | Low                | Low             | Low                       | Low        | Low                |
| Cizginer 2011 | Unclear           | Low        | Low                | Unclear         | Low                       | Low        | Low                |
| Frossard 2003 | Unclear           | Unclear    | Unclear            | Low             | Low                       | Low        | Low                |
| Gaddam 2015   | Low               | Unclear    | Unclear            | High            | Low                       | Low        | Low                |
| Gerke 2006    | Low               | Low        | Low                | High            | Low                       | Low        | Low                |
| Ghaneh 2018   | Low               | Low        | Low                | High            | Low                       | Low        | Low                |
| Hirono 2012   | Low               | Unclear    | Unclear            | High            | Low                       | Low        | Low                |
| Jang 2014     | High              | Low        | Unclear            | High            | High                      | Low        | Low                |
| Kamata 2016   | High              | Unclear    | Unclear            | High            | High                      | Low        | Low                |
| Kim 2012      | Low               | Low        | Low                | Low             | Low                       | Low        | Low                |
| Kim 2015      | High              | Low        | unclear            | High            | High                      | Low        | Low                |
| Lee 2001      | Low               | Low        | Low                | Unclear         | Low                       | Low        | Low                |
| Linder 2006   | Low               | Unclear    | Unclear            | Unclear         | Low                       | Low        | Low                |
| Moris 2016    | Low               | High       | Unclear            | Low             | Low                       | Low        | Low                |
| Nagashio 2014 | Low               | High       | High               | Low             | Low                       | Low        | Low                |
| Nara 2009     | Low               | Low        | Unclear            | Unclear         | Low                       | Low        | Low                |
| Oh 2014       | Low               | Unclear    | Unclear            | Low             | Low                       | Low        | Low                |
| Oppong 2015   | Low               | High       | Unclear            | Low             | Low                       | Low        | Low                |
| Othman 2012   | Low               | Unclear    | Unclear            | Low             | Low                       | Low        | Low                |
| Pais 2007     | Unclear           | Low        | Low                | Low             | Low                       | Low        | Low                |
| Park 2011     | Low               | Unclear    | Unclear            | Low             | Low                       | Low        | Low                |
| Pitman 2010   | Low               | Low        | Low                | High            | Low                       | Low        | Low                |
| Pitman 2013   | Unclear           | Unclear    | Unclear            | Low             | Low                       | Low        | Low                |
| Smith 2016    | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |

| Study                  | RISK OF BIAS      |            |                    |                 | INDIRECTNESS <sup>a</sup> |            |                    |
|------------------------|-------------------|------------|--------------------|-----------------|---------------------------|------------|--------------------|
|                        | PATIENT SELECTION | INDEX TEST | REFERENCE STANDARD | FLOW AND TIMING | PATIENT SELECTION         | INDEX TEST | REFERENCE STANDARD |
| Song 2007              | Low               | Low        | Unclear            | High            | Low                       | Low        | Low                |
| Sperti 2001            | Low               | Unclear    | Unclear            | Low             | Low                       | Low        | Low                |
| Sperti 2005            | Low               | Unclear    | Unclear            | Low             | Low                       | Low        | Low                |
| Takanami 2011          | High              | Low        | Unclear            | High            | High                      | Low        | Low                |
| Talar-Wojnarowska 2013 | Low               | Unclear    | Unclear            | Low             | Low                       | Low        | Low                |
| Wu 2007                | Low               | High       | Unclear            | Low             | Low                       | Low        | Low                |
| Zhang 2010             | Low               | Low        | Low                | Low             | Low                       | Low        | Low                |

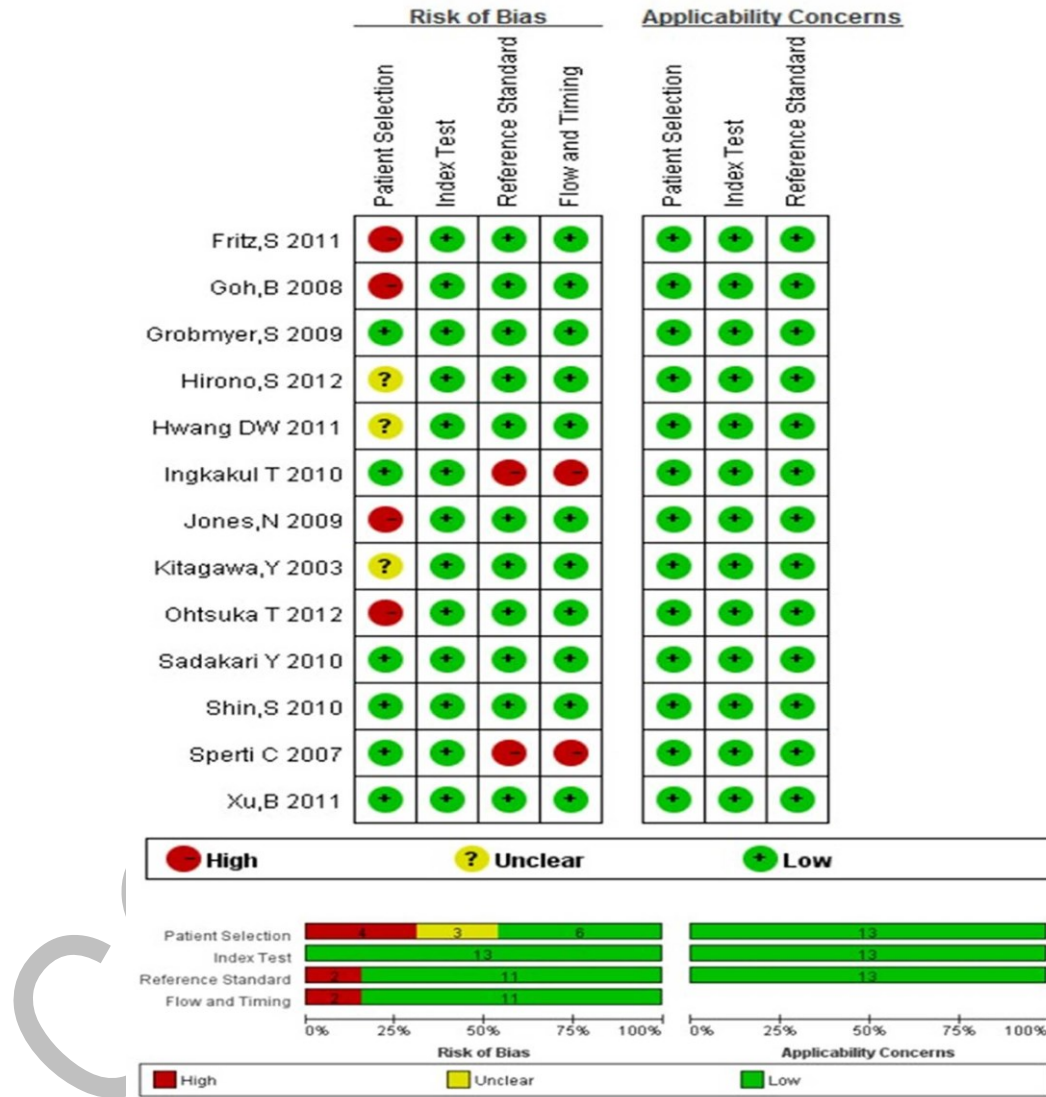
1 Notes: <sup>a</sup>, the applicability items of QUADS-2 were used to evaluate indirectness.

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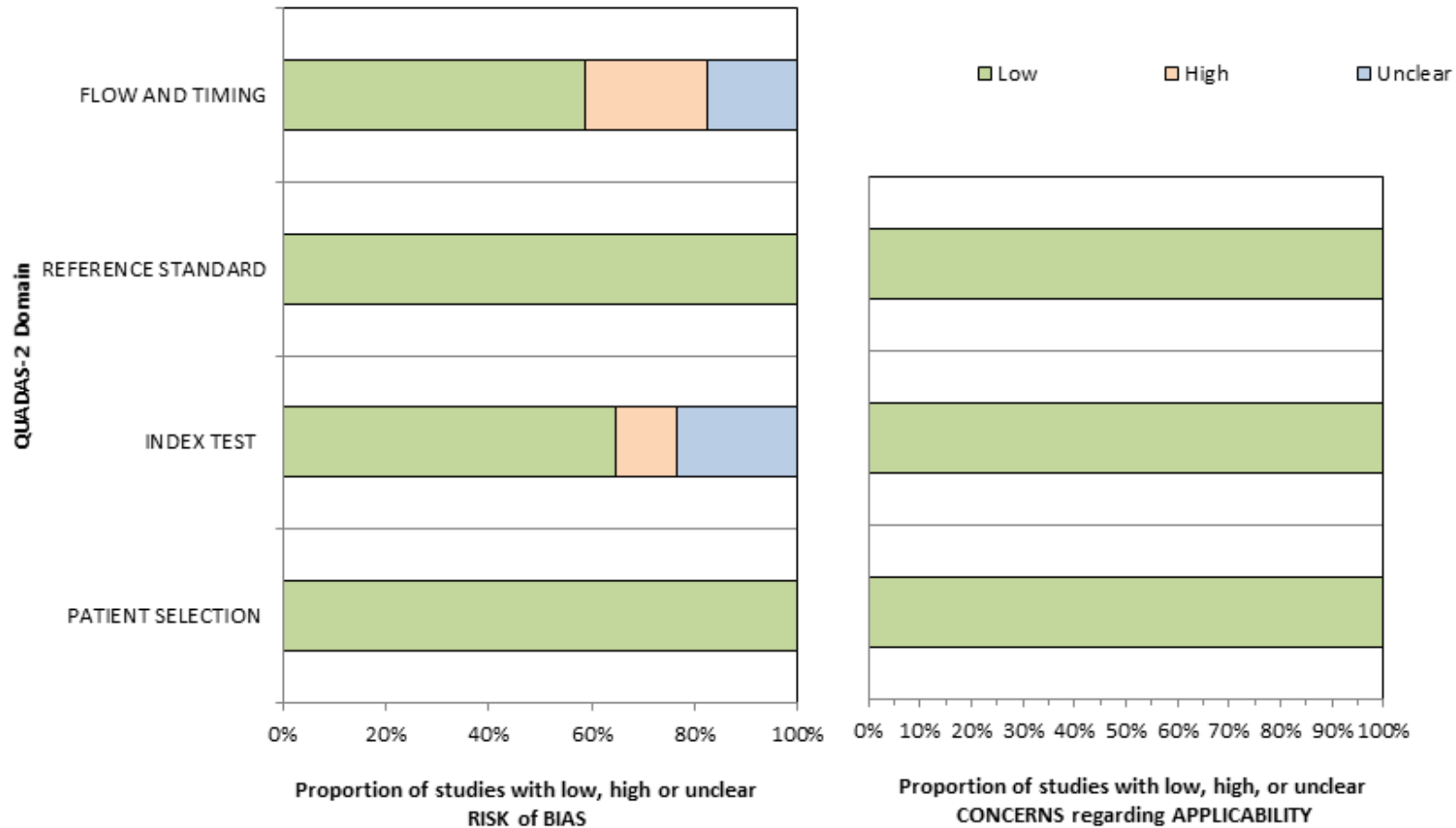
1 **Figure 5: Risk of bias and applicability concerns summary: review authors' judgements (Cao 2016) about each domain for each**  
 2 **included study (n=13)**



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## J.4.1 People with inherited high risk of pancreatic cancer

2 Figure 6: QUADAS-2 Risk of bias and applicability concerns graph: review authors' judgements about each domain presented as  
3 percentages of screening/surveillance studies



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1 **Table 3: QUADAS-2 Summary of risk of bias and applicability concerns: review authors' judgements about each domain for each**  
2 **included study**

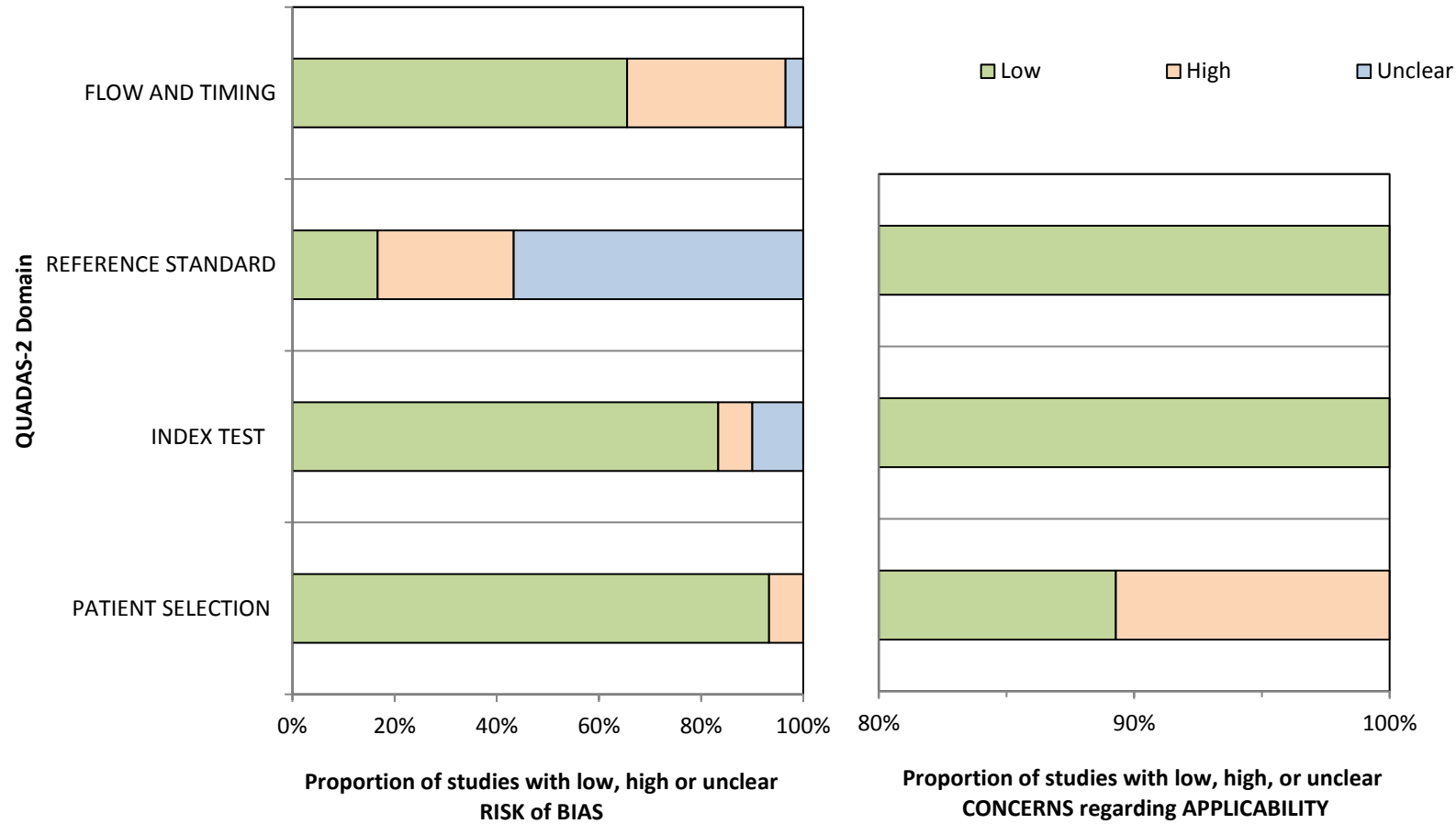
| Study                         | RISK OF BIAS      |            |                    |                 | APPLICABILITY     |            |                    |
|-------------------------------|-------------------|------------|--------------------|-----------------|-------------------|------------|--------------------|
|                               | PATIENT SELECTION | INDEX TEST | REFERENCE STANDARD | FLOW AND TIMING | PATIENT SELECTION | INDEX TEST | REFERENCE STANDARD |
| Al-Sukhni 2012                | Low               | Low        | Low                | High            | Low               | Low        | Low                |
| Bartsch 2016                  | Low               | High       | Low                | Low             | Low               | Low        | Low                |
| Canto 2006                    | Low               | Low        | Low                | Low             | Low               | Low        | Low                |
| Canto 2004                    | Low               | Low        | Low                | Low             | Low               | Low        | Low                |
| Canto 2012                    | Low               | Unclear    | Low                | Unclear         | Low               | Low        | Low                |
| Chang 2017                    | Low               | Low        | Low                | Low             | Low               | Low        | Low                |
| Del Chiaro 2015               | Low               | Unclear    | Low                | Low             | Low               | Low        | Low                |
| Harinck 2016/<br>Konings 2016 | Low               | Low        | Low                | High            | Low               | Low        | Low                |
| Kimmey 2002                   | Low               | Low        | Low                | Low             | Low               | Low        | Low                |
| Ludwig 2011                   | Low               | Unclear    | Low                | Unclear         | Low               | Low        | Low                |
| Nicholson 2015                | Low               | Low        | Low                | Unclear         | Low               | Low        | Low                |
| Poley 2009                    | Low               | Low        | Low                | Low             | Low               | Low        | Low                |
| Potjer 2013                   | Low               | Low        | Low                | Low             | Low               | Low        | Low                |
| Sud 2014                      | Low               | Low        | Low                | High            | Low               | Low        | Low                |
| Vasen 2016                    | Low               | High       | Low                | Low             | Low               | Low        | Low                |
| Verna 2010                    | Low               | Unclear    | Low                | High            | Low               | Low        | Low                |
| Zubarik 2011                  | Low               | Low        | Low                | Low             | Low               | Low        | Low                |

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## J.51 Staging

2 **Figure 7: Risk of bias and applicability concerns graph: review authors' judgements about each domain presented as percentages**  
 3 **across included studies**



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2 **Table 4: Risk of bias and applicability concerns summary: review authors' judgements about each domain for each included study**

| Study            | RISK OF BIAS      |            |                    |                 | INDIRECTNESS <sup>a</sup> |            |                    |
|------------------|-------------------|------------|--------------------|-----------------|---------------------------|------------|--------------------|
|                  | PATIENT SELECTION | INDEX TEST | REFERENCE STANDARD | FLOW AND TIMING | PATIENT SELECTION         | INDEX TEST | REFERENCE STANDARD |
| Connor 2005      | High              | Low        | Low                | Low             | Low                       | Low        | Low                |
| DeWitt 2004      | Low               | Low        | High               | High            | Low                       | Low        | Low                |
| Doucas 2006      | Low               | High       | Unclear            | Low             | Low                       | Low        | Low                |
| Fang 2012        | Low               | Low        | Low                | Low             | Low                       | Low        | Low                |
| Farma 2008       | Low               | Unclear    | Unclear            | Unclear         | Low                       | Low        | Low                |
| Fischer 2002     | Low               | Low        | Unclear            | High            | Low                       | Low        | Low                |
| Fristrup 2006    | Low               | Low        | High               | High            | Low                       | Low        | Low                |
| Furukawa 2008    | Low               | Low        | Unclear            | High            | Low                       | Low        | Low                |
| Ghaneh 2018      | Low               | Low        | Low                | High            | Low                       | Low        | Low                |
| Imbriaco 2005    | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Klauss 2007      | Low               | High       | High               | Low             | Low                       | Low        | Low                |
| Kłęk 2004        | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Koelblinger 2011 | Low               | Low        | Unclear            | High            | Low                       | Low        | Low                |
| Kwon 2002        | Low               | Low        | High               | Low             | Low                       | Low        | Low                |
| Lemke 2004       | Low               | Unclear    | Unclear            | Low             | Low                       | Low        | Low                |
| Liu 2005         | Low               | Low        | High               | Low             | Low                       | Low        | Low                |
| Maithel 2008     | Low               | Low        | High               | Low             | Low                       | Low        | Low                |
| Maluf-Fiho 2004  | Low               | Low        | High               | Low             | High                      | Low        | Low                |
| Mansfield 2008   | Low               | Low        | High               | Low             | High                      | Low        | Low                |
| Minniti 2003     | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Phoa 2005        | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Roche 2003       | Low               | Low        | Low                | Low             | Low                       | Low        | Low                |
| Schacter 2000    | Low               | Low        | Unclear            | High            | Low                       | Low        | Low                |
| Shah 2008        | Low               | Low        | Unclear            | High            | Low                       | Low        | Low                |
| Shami 2011       | Low               | Unclear    | Unclear            | High            | Low                       | Low        | Low                |



| Study             | RISK OF BIAS      |            |                    |                 | INDIRECTNESS <sup>a</sup> |            |                    |
|-------------------|-------------------|------------|--------------------|-----------------|---------------------------|------------|--------------------|
|                   | PATIENT SELECTION | INDEX TEST | REFERENCE STANDARD | FLOW AND TIMING | PATIENT SELECTION         | INDEX TEST | REFERENCE STANDARD |
| Soriano 2004      | Low               | Low        | Low                | Low             | Low                       | Low        | Low                |
| Taylor 2001       | High              | Low        | Unclear            | Low             | High                      | Low        | Low                |
| Tellez-Avila 2012 | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| White 2001        | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |
| Yoneyama 2014     | Low               | Low        | Unclear            | Low             | Low                       | Low        | Low                |

1 Notes: <sup>a</sup>, the applicability items of QUADS-2 were used to evaluate indirectness.

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