**Etiology: Coronary heart disease (any)**

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| **Overall risk of bias = low** | | | | | |
| Buntinx 1991 | 31 | 318 | | 9.7 | [ 6.8; 13.7] |
| Nilsson 2008 | 61 | 516 | | 11.8 | [ 9.2; 15.0] |
| Verdon 2008 | 85 | 672 | | 12.6 | [10.3; 15.5] |
| Bösner 2009 | 179 | 1212 | | 14.8 | [12.8; 16.9] |
| Haasenritter 2012 | 93 | 856 | | 10.9 | [ 8.9; 13.2] |
| | | | | | |
| **Overall risk of bias = unclear or high** | | | | | |
| Rosser 1990 | 287 | 832 | | 34.5 | [31.3; 37.9] |
| Klinkman 1994 | 52 | 392 | | 13.3 | [10.1; 17.1] |
| Svavarsdottir 1996 | 34 | 190 | | 17.9 | [12.9; 24.3] |
| Katerndahl 1997 | 2 | 51 | | 3.9 | [ 0.7; 14.6] |

0    20    40    60    80
Percent

| I² | Tau² | Prediction interval |
|---|---|---|
| 96.6% (95.0-97.6%) | 0.271 | 4.2-37.6% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

**Etiology: Coronary heart disease (stable)**

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|

**Overall risk of bias = low**

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| Sox 1990 | 23 | 289 | ⊢+⊣ | 8.0 | [5.2; 11.9] |
| Buntinx 1991 | 21 | 318 | ⊢+⊣ | 6.6 | [4.2; 10.1] |
| Verdon 2008 | 75 | 672 | ⊢+⊣ | 11.2 | [8.9; 13.8] |
| Bösner 2009 | 135 | 1212 | + | 11.1 | [9.5; 13.1] |
| Haasenritter 2012 | 71 | 856 | + | 8.3 | [6.6; 10.4] |

**Overall risk of bias = unclear or high**

| | | | | | |
|---|---|---|---|---|---|
| Klinkman 1994 | 41 | 392 | ⊢+⊣ | 10.5 | [7.7; 14.0] |

Scale: 0  20  40  60  80
Percent
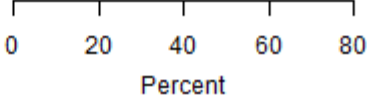
| I² | Tau² | Prediction interval |
|---|---|---|
| 54.2% (0.0-81.6%) | 0.024 | 6.1-14.7% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

---

**Etiology: Acute coronary syndrome/ myocardial infarction**

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|

**Overall risk of bias = low**

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| Buntinx 1991 | 10 | 318 | ⊢+⊣ | 3.1 | [1.6; 5.9] |
| Verdon 2008 | 10 | 672 | + | 1.5 | [0.8; 2.8] |
| Bösner 2009 | 44 | 1212 | + | 3.6 | [2.7; 4.9] |
| Haasenritter 2012 | 22 | 856 | + | 2.6 | [1.7; 3.9] |

**Overall risk of bias = unclear or high**

| | | | | | |
|---|---|---|---|---|---|
| Rosser 1990 | 24 | 832 | + | 2.9 | [1.9; 4.3] |
| Klinkman 1994 | 6 | 392 | + | 1.5 | [0.6; 3.5] |
| Svavarsdottir 1996 | 4 | 190 | ⊢+⊣ | 2.1 | [0.7; 5.7] |

Scale: 0  20  40  60  80
Percent

| I² | Tau² | Prediction interval |
|---|---|---|
| 40.4% (0.0-74.9%) | 0.048 | 1.4-4.9% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

## Etiology: Cardiovascular diseases

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| **Overall risk of bias = low** | | | | | |
| Buntinx 1991 | 44 | 318 | | 13.8 | [10.3; 18.2] |
| Verdon 2008 | 108 | 672 | | 16.1 | [13.4; 19.1] |
| | | | | | |
| **Overall risk of bias = unclear or high** | | | | | |
| Bryninckx 2009 | 741 | 1996 | | 37.1 | [35.0; 39.3] |

Percent: 0 20 40 60 80
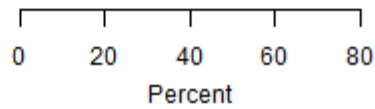
| I² | Tau² | Prediction interval |
|---|---|---|
| 98.6% (97.5-99.2%) | 0.494 | 0.0-100.0% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.
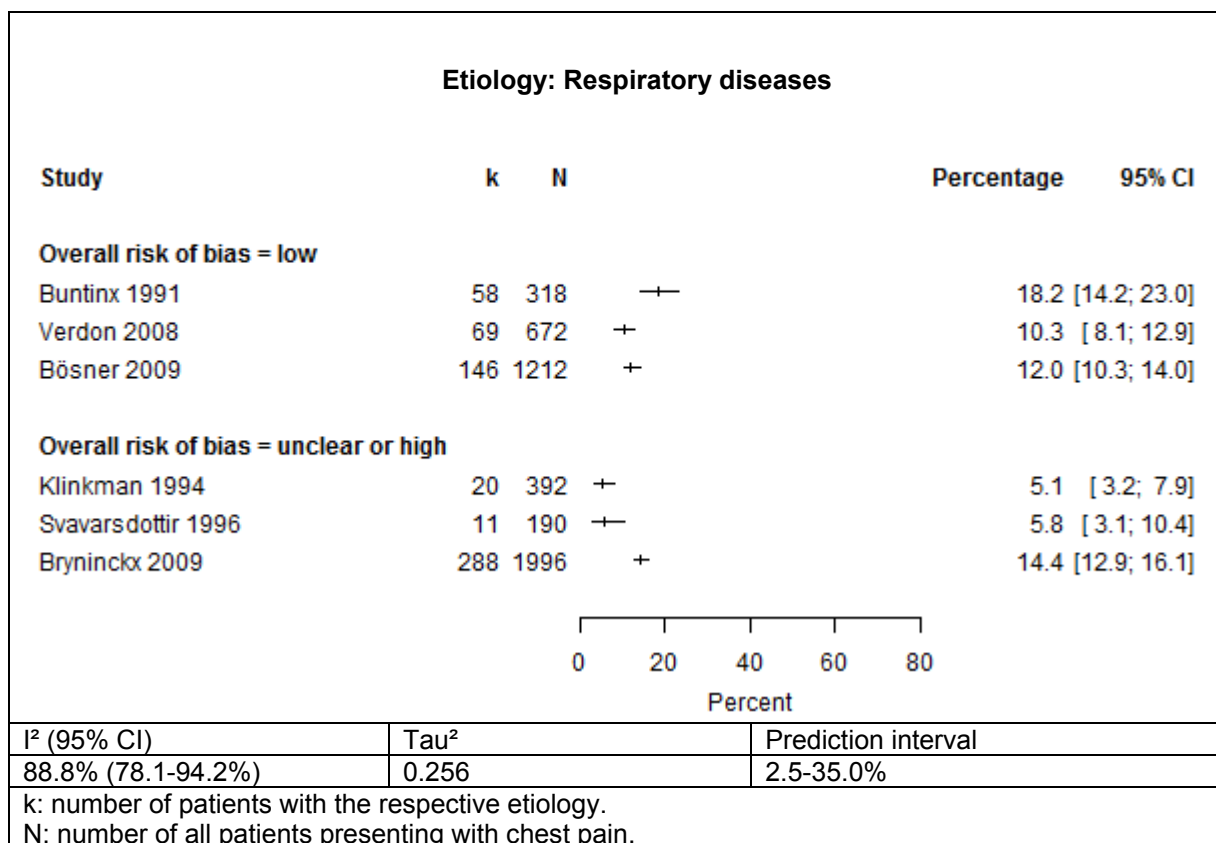
## Etiology: Gastrointestinal disorders

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| **Overall risk of bias = low** | | | | | |
| Buntinx 1991 | 31 | 318 | | 9.7 | [6.8; 13.7] |
| Verdon 2008 | 55 | 672 | | 8.2 | [6.3; 10.6] |
| Bösner 2009 | 68 | 1212 | | 5.6 | [4.4; 7.1] |
| | | | | | |
| **Overall risk of bias = unclear or high** | | | | | |
| Rosser 1990 | 114 | 832 | | 13.7 | [11.5; 16.3] |
| Klinkman 1994 | 74 | 392 | | 18.9 | [15.2; 23.2] |
| Svavarsdottir 1996 | 7 | 190 | | 3.7 | [1.6; 7.7] |
| Katerndahl 1997 | 5 | 51 | | 9.8 | [3.7; 22.2] |
| Bryninckx 2009 | 161 | 1996 | | 8.1 | [6.9; 9.4] |

Percent: 0 20 40 60 80
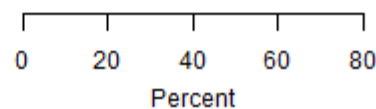
| I² | Tau² | Prediction interval |
|---|---|---|
| 92.1% (86.8-95.3%) | 0.247 | 2.7-27.0% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

| I² | Ae | |
|---|---|---|
| 93.9% (85.5-97.4%) | 0.377 | 0.0-99.9% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

## Etiology: Respiratory diseases

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| **Overall risk of bias = low** | | | | | |
| Buntinx 1991 | 58 | 318 | | 18.2 | [14.2; 23.0] |
| Verdon 2008 | 69 | 672 | | 10.3 | [8.1; 12.9] |
| Bösner 2009 | 146 | 1212 | | 12.0 | [10.3; 14.0] |
| **Overall risk of bias = unclear or high** | | | | | |
| Klinkman 1994 | 20 | 392 | | 5.1 | [3.2; 7.9] |
| Svavarsdottir 1996 | 11 | 190 | | 5.8 | [3.1; 10.4] |
| Bryninckx 2009 | 288 | 1996 | | 14.4 | [12.9; 16.1] |

Percent: 0 20 40 60 80

| I² (95% CI) | Tau² | Prediction interval |
|---|---|---|
| 88.8% (78.1-94.2%) | 0.256 | 2.5-35.0% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

## Etiology: Psychogenic

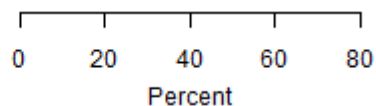| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| **Overall risk of bias = low** | | | | | |
| Buntinx 1991 | 58 | 318 | | 18.2 | [14.2; 23.0] |
| Verdon 2008 | 77 | 672 | | 11.5 | [9.2; 14.2] |
| Bösner 2009 | 115 | 1212 | | 9.5 | [7.9; 11.3] |
| **Overall risk of bias = unclear or high** | | | | | |
| Rosser 1990 | 62 | 832 | | 7.5 | [5.8; 9.5] |
| Klinkman 1994 | 29 | 392 | | 7.4 | [5.1; 10.6] |
| Svavarsdottir 1996 | 9 | 190 | | 4.7 | [2.3; 9.1] |
| Bryninckx 2009 | 194 | 1996 | | 9.7 | [8.5; 11.1] |

Percent: 0  20  40  60  80
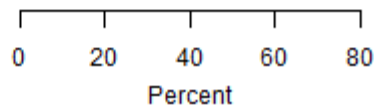
| I² | Tau² | Prediction interval |
|---|---|---|
| 84.8% (70.6-92.2%) | 0.148 | 3.5-23.4% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

## Etiology: Acute anxiety/ panic

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| **Overall risk of bias = low** | | | | | |
| Verdon 2008 | 17 | 672 | | 2.5 | [1.5; 4.1] |
| **Overall risk of bias = unclear or high** | | | | | |
| Klinkman 1994 | 16 | 397 | | 4.0 | [2.4; 6.6] |
| Katerndahl 1997 | 16 | 51 | | 31.4 | [19.5; 46.0] |

Percent: 0  20  40  60  80

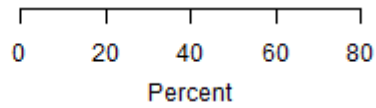| I² | Tau² | Prediction interval |
|---|---|---|
| 96.6% (92.9-98.4%) | 2.271 | 0.0-100.0% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

**Etiology: Depression**

| Study | k | N | | Percentage | 95% CI |
|-------|---|---|---|-----------|--------|
| **Overall risk of bias = low** | | | | | |
| Verdon 2008 | 6 | 672 | ⊢ | 0.9 | [0.4; 2.0] |
| | | | | | |
| **Overall risk of bias = unclear or high** | | | | | |
| Katerndahl 1997 | 3 | 51 | ⊢┼── | 5.9 | [1.5; 17.2] |

```
        0    20   40   60   80
                Percent
```

| I² | Tau² | Prediction interval |
|----|------|---------------------|
| 86.1% (NA) | 1.615 | NA |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

**Etiology: Chest wall syndrome**

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| **Overall risk of bias = low** | | | | | |
| Buntinx 1991 | 78 | 318 | | 24.5 | [20.0; 29.7] |
| Verdon 2008 | 328 | 672 | | 48.8 | [45.0; 52.7] |
| Bösner 2009 | 604 | 1212 | | 49.8 | [47.0; 52.7] |
| | | | | | |
| **Overall risk of bias = unclear or high** | | | | | |
| Rosser 1990 | 212 | 832 | | 25.5 | [22.6; 28.6] |
| Klinkman 1994 | 132 | 392 | | 33.7 | [29.1; 38.6] |
| Svavarsdottir 1996 | 106 | 190 | | 55.8 | [48.4; 62.9] |
| Katerndahl 1997 | 9 | 51 | | 17.6 | [ 8.9; 31.4] |
| Bryninckx 2009 | 600 | 1996 | | 30.1 | [28.1; 32.1] |



Axis: 0  20  40  60  80
Percent

| I² | Tau² | Prediction interval |
|---|---|---|
| 97.4% (96.2-98.2%) | 0.34 | 10.7-71.4% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.

## Etiology: Trauma

| Study | k | N | | Percentage | 95% CI |
|---|---|---|---|---|---|
| **Overall risk of bias = low** | | | | | |
| Verdon 2008 | 26 | 672 | + | 3.9 | [2.6; 5.7] |
| Bösner 2009 | 39 | 1212 | + | 3.2 | [2.3; 4.4] |
| Haasenritter 2012 | 15 | 856 | + | 1.8 | [1.0; 2.9] |
| **Overall risk of bias = unclear or high** | | | | | |
| Rosser 1990 | 27 | 832 | + | 3.2 | [2.2; 4.8] |
| Klinkman 1994 | 7 | 397 | + | 1.8 | [0.8; 3.8] |

```
           0    20   40   60   80
                  Percent
```
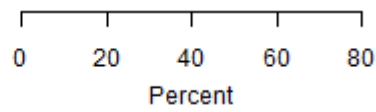
| I² | Tau² | Prediction interval |
|---|---|---|
| 53.5% (0.0-82.9%) | 0.061 | 1.1-6.8% |

k: number of patients with the respective etiology.
N: number of all patients presenting with chest pain.