**Supplementary materials**

*Table S1. Incidence of deep, superficial and total surgical site infections per body mass index category per surgery type, Dutch national surveillance network PREZIES 2012-2017*

| **Surgical specialty** | **Surgery type** | **SSIs** | **BMI** |
| --- | --- | --- | --- |
| **<18.5** |  | **18.5-25** |  | **25-30** |  | **30-40** |  | **s>40** |
| **Inc. (95% CI)** |  | **Inc. (95% CI)** |  | **Inc. (95% CI)** |  | **Inc. (95% CI)** |  | **Inc. (95% CI)** |
| Cardio-thoracic | **BYPASS** | Total | 2.63 (0.47-13.50) |  | 1.27 (0.97-1.66) |  | 1.58 (1.31-1.91) |  | 2.74 (2.24-3.34) |  | 3.67 (1.44-9.06) |
| Superf. | 0.00 (0.00-9.18) |  | 0.42 (0.26-0.68) |  | 0.88 (0.68-1.13) |  | 1.00 (0.72-1.40) |  | 1.83 (0.50-6.44) |
| Deep | 2.63 (0.47-13.50) |  | 0.85 (0.61-1.18) |  | 0.70 (0.53-0.93) |  | 1.74 (1.35-2.23) |  | 1.83 (0.50-6.44) |
| **OPVALV** | Total | 0.00 (0.00-9.89) |  | 0.59 (0.30-1.15) |  | 0.78 (0.46-1.33) |  | 1.77 (1.08-2.90) |  | 3.33 (0.92-11.36) |
| Superf. | 0.00 (0.00-9.89) |  | 0.07 (0.01-0.41) |  | 0.36 (0.17-0.78) |  | 0.47 (0.18-1.21) |  | 1.67 (0.29-8.86) |
| Deep | 0.00 (0.00-9.89) |  | 0.51 (0.25-1.05) |  | 0.42 (0.20-0.87) |  | 1.30 (0.73-2.31) |  | 1.67 (0.29-8.86) |
| Breast  | **MASTEC** | Total | 3.67 (2.16-6.18) |  | 3.12 (2.75-3.55) |  | 4.66 (4.13-5.25) |  | 7.06 (6.21-8.01) |  | 10.58 (7.55-14.63) |
| **LUMPEC** | Total | 0.99 (0.34-2.86) |  | 1.53 (1.30-1.80) |  | 2.66 (2.32-3.04) |  | 4.19 (3.66-4.80) |  | 8.28 (6.16-11.04) |
| Gastro intestinal | **LPAPPY** | Total | 4.55 (1.26-15.14) |  | 2.82 (2.04-3.90) |  | 4.38 (3.32-5.91) |  | 4.34 (2.72-6.83) |  | 0.00 (0.00-12.06) |
| Superf. | 4.55 (1.26-15.14) |  | 0.40 (0.17-0.94) |  | 1.42 (0.83-2.42) |  | 1.02 (0.40-2.59) |  | 0.00 (0.00-12.06) |
| Deep | 0.00 (0.00-8.03) |  | 2.42 (1.70-3.44) |  | 2.96 (2.04-4.27) |  | 3.32 (1.95-5.59) |  | 0.00 (0.00-12.06) |
| **LPCHOL** | Total | 1.04 (0.28-3.70) |  | 2.08 (1.78-2.41) |  | 2.47 (2.20-2.76) |  | 3.41 (3.05-3.81) |  | 5.36 (4.06-7.03) |
| Superf. | 1.04 (0.28-3.70) |  | 1.13 (0.92-1.38) |  | 1.59 (1.38-1.83) |  | 2.38 (2.08-2.72) |  | 4.24 (3.11-5.77) |
| Deep | 0.00 (0.00-1.95) |  | 0.95 (0.76-1.19) |  | 0.88 (0.73-1.06) |  | 1.04 (0.84-1.27) |  | 1.12 (0.61-2.04) |
| **OPCOLO** | Total | 16.33 (12.54-20.98) |  | 15.18 (14.10-16.33) |  | 17.91 (16.63-19.25) |  | 20.67 (18.69-22.80) |  | 32.04 (23.81-41.56) |
| Superf. | 5.78 (3.64-9.06) |  | 8.17 (7.36-9.06) |  | 9.65 (8.69-10.71) |  | 13.24 (11.62-15.06) |  | 18.45 (12.14-27.02) |
| Deep | 10.54 (7.53-14.58) |  | 7.01 (6.26-7.85) |  | 8.25 (7.36-9.24) |  | 7.42 (6.20-8.87) |  | 13.59 (8.27-21.53) |
| **LPCOLO** | Total | 6.91 (4.23-11.09) |  | 7.96 (7.28-8.69) |  | 8.57 (7.89-9.31) |  | 10.62 (9.46-11.89) |  | 17.11 (11.95-23.88) |
| Superf. | 1.84 (0.72-4.64) |  | 3.31 (2.88-3.81) |  | 4.14 (3.67-4.68) |  | 6.39 (5.50-7.42) |  | 8.55 (5.07-14.08) |
| Deep | 5.07 (2.85-8.85) |  | 4.64 (4.13-5.22) |  | 4.43 (3.94-4.98) |  | 4.22 (3.50-5.09) |  | 8.55 (5.07-14.08) |
| Ortho- paedics | **TOTHIP** | Total | 1.43 (0.84-2.44) |  | 0.78 (0.70-0.87) |  | 1.39 (1.29-1.50) |  | 2.39 (2.22-2.58) |  | 5.30 (4.29-6.53) |
| Superf. | 0.11 (0.02-0.62) |  | 0.16 (0.13-0.21) |  | 0.30 (0.26-0.35) |  | 0.53 (0.45-0.62) |  | 1.03 (0.64-1.67) |
| Deep | 1.32 (0.76-2.30) |  | 0.62 (0.54-0.70) |  | 1.09 (1.00-1.18) |  | 1.86 (1.71-2.02) |  | 4.26 (3.37-5.39) |
| **PRTHIP** | Total | 2.72 (1.68-4.37) |  | 2.88 (2.48-3.34) |  | 3.79 (3.19-4.50) |  | 5.14 (3.87-6.81) |  | 3.03 (0.54-15.32) |
| Superf. | 0.68 (0.26-1.73) |  | 0.73 (054-0.98) |  | 0.82 (0.57-1.20) |  | 1.83 (1.13-2.95) |  | 0.00 (0.00-10.43) |
| Deep | 2.04 (1.17-3.53) |  | 2.15 (1.81-2.55) |  | 2.96 (2.44-3.60) |  | 3.31 (2.32-4.72) |  | 3.03 (0.54-15.32) |
| **KNEEPR** | Total | 1.58 (0.54-4.54) |  | 0.70 (0.59-0.83) |  | 0.80 (0.72-0.89) |  | 0.96 (0.87-1.06) |  | 2.03 (1.64-2.51) |
| Superf. | 0.00 (0.00-1.98) |  | 0.23 (0.17-0.31) |  | 0.23 (0.19-0.28) |  | 0.27 (0.23-0.33) |  | 0.67 (0.46-0.97) |
| Deep | 1.58 (0.54-4.54) |  | 0.47 (0.38-0.59) |  | 0.57 (0.50-0.64) |  | 0.69 (0.61-0.77) |  | 1.36 (1.05-1.77) |
| Gynae-cology/obstetrics | **VAGHYS** | Total | 0.00 (0.00-9.64) |  | 0.88 (0.52-1.47) |  | 0.27 (0.10-0.68) |  | 1.13 (0.57-2.20) |  | 3.03 (0.83-10.39) |
| Superf. | 0.00 (0.00-9.64) |  | 0.25 (0.10-0.64) |  | 0.07 (0.01-0.37) |  | 0.70 (0.30-1.64) |  | 0.00 (0.00-5.50) |
| Deep | 0.00 (0.00-9.64) |  | 0.63 (0.34-1.15) |  | 0.20 (0.07-0.58) |  | 0.42 (0.14-1.23) |  | 3.03 (0.83-10.39) |
| **CAESEC** | Total | 1.37 (0.63-2.96) |  | 1.09 (0.91-1.30) |  | 0.94 (0.76-1.15) |  | 1.47 (1.23-1.77) |  | 3.97 (2.90-5.40) |
| Superf. | 0.69 (0.23-2.00) |  | 0.79 (0.64-0.97) |  | 0.69 (0.55-0.88) |  | 1.25 (1.03-1.53) |  | 3.65 (2.64-5.04) |
| Deep | 0.69 (0.23-2.00) |  | 0.30 (0.21-.042) |  | 0.24 (0.16-0.36) |  | 0.22 (0.14-0.35) |  | 0.31 (0.11-0.92) |
| Neuro-surgery | **LAMINE** | Total | 2.56 (0.45-13.18) |  | 1.04 (0.65-1.67) |  | 1.67 (1.22-2.29) |  | 1.60 (1.06-2.41) |  | 0.00 (0.00-6.88) |
| Superf. | 0.00 (0.00-8.97) |  | 0.80 (0.47-1.36) |  | 1.41 (1.00-1.98) |  | 1.23 (0.77-1.97) |  | 0.00 (0.00-6.88) |
| Deep | 2.56 (0.45-13.18) |  |  | 0.25 (0.10-0.63) |  | 0.26 (0.12-0.58) |  | 0.36 (0.16-0.85) |  | 0.00 (0.00-6.88) |

Abbreviations: BYPASS = coronary artery bypass grafting, OPVALV = open aortic valve surgery, MASTEC = mastectomy, LUMPEC = lumpectomy, LPAPPY = laparoscopic appendectomy, LPCHOL = laparoscopic cholecystectomy, OPCOLO = open colectomy, LPCOLO = laparoscopic colectomy, TOTHIP = total hip prosthesis, PRTHIP = partial hip prosthesis, KNEEPR = total knee prosthesis, VAGHYS = vaginal hysterectomy, CAESEC = Caesarean section, LAMINE = laminectomy.