**Supplementary Table A.** Respiratory symptoms within two weeks prior to surgery in relation to surgical indications and age groups

|                  | Total | Asymptomatic | Sore throat | Other respiratory symptoms | Sore throat and other respiratory symptoms |
|------------------|-------|--------------|-------------|-----------------------------|---------------------------------------------|
| TOTAL            | 181   | 87           | 22          | 39                          | 33                                          |
| TH               |       |              |             |                             |                                             |
| < 16 years       | 25    | 21           | 0           | 4                           | 0                                           |
| 16–30 years      | 22    | 18           | 0           | 4                           | 0                                           |
| > 30 years       | 2     | 2            | 0           | 0                           | 0                                           |
| CT               | 49    | 17           | 11          | 8                           | 13                                          |
| < 16 years       | 0     | 0            | 0           | 0                           | 0                                           |
| 16–30 years      | 24    | 9            | 2           | 5                           | 8                                           |
| > 30 years       | 25    | 8            | 9           | 3                           | 5                                           |
| RT               | 27    | 15           | 2           | 7                           | 3                                           |
| < 16 years       | 2     | 1            | 0           | 1                           | 0                                           |
| 16–30 years      | 21    | 11           | 2           | 5                           | 3                                           |
| > 30 years       | 4     | 3            | 0           | 1                           | 0                                           |
| PA               | 11    | 6            | 1           | 2                           | 2                                           |
| < 16 years       | 0     | 0            | 0           | 0                           | 0                                           |
| 16–30 years      | 7     | 3            | 1           | 2                           | 1                                           |
| > 30 years       | 4     | 3            | 0           | 0                           | 1                                           |
| TH+CT            | 16    | 6            | 4           | 2                           | 4                                           |
| < 16 years       | 5     | 1            | 2           | 1                           | 1                                           |
| 16–30 years      | 9     | 4            | 2           | 1                           | 2                                           |
| > 30 years       | 2     | 1            | 0           | 0                           | 1                                           |
| CT+RT            | 35    | 14           | 2           | 12                          | 7                                           |
| < 16 years       | 4     | 2            | 1           | 1                           | 0                                           |
| 16–30 years      | 22    | 8            | 1           | 9                           | 4                                           |
| > 30 years       | 9     | 4            | 0           | 2                           | 3                                           |
| RT+PA            | 6     | 2            | 0           | 2                           | 2                                           |
| < 16 years       | 0     | 0            | 0           | 0                           | 0                                           |
| 16–30 years      | 3     | 2            | 0           | 0                           | 1                                           |
| > 30 years       | 3     | 0            | 0           | 2                           | 1                                           |
| TH+RT            | 8     | 5            | 2           | 1                           | 0                                           |
| < 16 years       | 4     | 2            | 2           | 0                           | 0                                           |
| 16–30 years      | 3     | 2            | 0           | 1                           | 0                                           |
| > 30 years       | 1     | 1            | 0           | 0                           | 0                                           |
| CT+PA            | 4     | 1            | 0           | 1                           | 2                                           |
| < 16 years       | 0     | 0            | 0           | 0                           | 0                                           |
| 16–30 years      | 3     | 1            | 0           | 1                           | 1                                           |
| > 30 years       | 1     | 0            | 0           | 0                           | 1                                           |

TH=tonsillar hypertrophy, CT=chronic tonsilitis, RT=recurrent tonsillitis, PA=history of peritonsillar abscess
**Supplementary Table B.** Respiratory symptoms two weeks prior to surgery and surgical indications in relation to gender, atopic diseases and smoking

|                     | Total | Male | Female | Allergic rhinitis | Asthma | Atopic dermatitis | Current smoker |
|---------------------|-------|------|--------|-------------------|--------|-------------------|----------------|
| **TOTAL**           | 181   | 79   | 102    | 70                | 23     | 31                | 39             |
| Asymptomatic        | 87    | 44   | 43     | 34                | 10     | 17                | 14             |
| Sore throat         | 22    | 4    | 18     | 10                | 4      | 3                 | 4              |
| Other respiratory symptoms | 39    | 17   | 22     | 14                | 3      | 5                 | 14             |
| Sore throat and other respiratory symptoms | 33    | 14   | 19     | 12                | 6      | 6                 | 7              |
| TH                  | 25    | 16   | 9      | 5                 | 2      | 2                 | 0              |
| RT                  | 27    | 7    | 20     | 3                 | 1      | 4                 | 8              |
| PA                  | 11    | 8    | 3      | 4                 | 1      | 0                 | 3              |
| TH+CT               | 16    | 10   | 6      | 7                 | 2      | 4                 | 3              |
| CT+RT               | 35    | 13   | 22     | 14                | 6      | 9                 | 12             |
| RT+PA               | 6     | 5    | 1      | 4                 | 1      | 1                 | 3              |
| TH+RT               | 8     | 4    | 4      | 2                 | 2      | 1                 | 3              |
| CT+PA               | 4     | 2    | 2      | 2                 | 0      | 1                 | 1              |

TH=tonsillar hypertrophy, CT=chronic tonsillitis, RT=recurrent tonsillitis, PA=history of peritonsillar abscess
**Supplementary table C. Viral prevalence in relation to atopic diseases and smoking**

| Total   | Total | Allergic Rhinitis | Asthma | Atopic Dermatitis | Current smoker |
|---------|-------|-------------------|--------|-------------------|----------------|
| TOTAL   | 181   | 70                | 23     | 31                | 39             |
| No viruses | 15   | 7                 | 2      | 4                 | 2              |
| Single infection | 51 | 17               | 6      | 9                 | 14             |
| Dual infection | 76 | 34               | 12     | 9                 | 20             |
| Triple infection | 27 | 9                | 3      | 7                 | 2              |
| Quadruple infection | 11 | 3                | 0      | 2                 | 1              |
| Quintuple infection | 1   | 0                | 0      | 0                 | 0              |
| AdV     | 6     | 1                 | 0      | 3                 | 0              |
| HBoV    | 7     | 1                 | 0      | 0                 | 1              |
| EV      | 32    | 9                 | 4      | 7                 | 2              |
| RSV     | 5     | 4                 | 1      | 1                 | 0              |
| HRV     | 4     | 3                 | 1      | 2                 | 0              |
| FluA    | 2     | 2                 | 1      | 0                 | 0              |
| FluB    | 1     | 0                 | 0      | 1                 | 0              |
| HSV1    | 1     | 1                 | 0      | 0                 | 0              |
| CMV     | 1     | 1                 | 0      | 0                 | 0              |
| EBV     | 130   | 50                | 18     | 21                | 31             |
| HHV6A   | 2     | 1                 | 0      | 0                 | 0              |
| HHV6B   | 29    | 7                 | 3      | 5                 | 8              |
| HHV7    | 97    | 40                | 10     | 14                | 18             |
| Parvo   | 13    | 4                 | 1      | 2                 | 4              |
| BKPyV   | 2     | 0                 | 0      | 0                 | 0              |

AdV=adenovirus, HBoV=human bocavirus (1/2/3/4), EV=enterovirus, RSV=respiratory syncytial virus, RV=rhinovirus (A/B/C), FluA/B=influenza A/B virus, HSV1=herpes simplex virus 1, CMV=human cytomegalovirus, EBV=Epstein-Barr virus, HHV6A/6B/7=human herpesvirus 6A/6B/7, Parvo=parvovirus B19, BKPyV=polyoma BK virus
**Supplementary table D. Intratonsillar viral prevalence in relation to surgical indications and age groups**

|          | TOTAL (number and percentage) | TH | CT | RT | PA | TH+CT | CT+RT | TH+RT | CT+PA |
|----------|-------------------------------|----|----|----|----|-------|-------|-------|-------|
| Age      | No viruses                    |    |    |    |    |       |       |       |       |
| < 16 years | AdV  | HBoV | EV  | RSV | RV  | FluA | FluB | HSV1 | CMV  | EBV  | HHV 6A | HHV 6B | HHV 7 | Parvo | BKPyV |
| < 16 years | 100.0% | 8.3% | 3.3% | 3.9% | 17.7% | 2.8% | 2.2% | 1.1% | 0.6% | 0.6% | 71.8% | 1.1% | 16.0% | 53.5% | 7.2% | 1.1% |
| > 30 years | 16 | 1 | 2 | 4 | 9 | 1 | 1 | 0 | 0 | 0 | 16 | 1 | 5 | 14 | 2 | 2 |
| < 16 years | 22 | 1 | 2 | 4 | 9 | 0 | 1 | 0 | 0 | 0 | 13 | 1 | 5 | 11 | 2 | 2 |
| > 30 years | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| < 16 years | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 |
| > 30 years | 49 | 8 | 0 | 1 | 5 | 1 | 1 | 1 | 0 | 0 | 1 | 34 | 1 | 5 | 28 | 1 | 0 |
| < 16 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 30 years | 24 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 16 | 0 | 2 | 14 | 0 | 0 |
| < 16 years | 25 | 4 | 0 | 1 | 5 | 0 | 1 | 0 | 0 | 1 | 18 | 1 | 3 | 14 | 1 | 0 |
| > 30 years | 27 | 1 | 2 | 1 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 20 | 0 | 6 | 17 | 1 | 0 |
| < 16 years | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 0 | 0 |
| > 30 years | 11 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 2 | 4 | 0 | 0 |
| < 16 years | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 30 years | 7 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 2 | 3 | 0 | 0 |
| < 30 years | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 30 years | 71.8% | 130 | 29 | 97 | 13 | 2 |
| < 16 years | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 30 years | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TH=tonsillar hypertrophy, CT=chronic tonsillitis, RT=recurrent tonsillitis, PA=history of peritonsillar abscess. AdV=adenovirus, HBoV=human bocavirus (1/2/3/4), EV=enterovirus, RSV=respiratory syncytial virus, RV=rhinovirus (A/B/C), FluA/B=influenza A/B virus, HSV1=herpes simplex virus 1, CMV=human cytomegalovirus, EBV=Epstein-Barr virus, HHV6A/6B/7=human herpesvirus 6A/6B/7, Parvo=parvovirus B19, BKPyV=polyoma BK virus