

Appendix 2. Citation matrix

The citation matrices presented below have only included the primary papers that were analysed quantitatively in the four included meta-analyses of this overview to avoid false positive results. The following primary papers have not been included here:

- primary papers of systematic reviews without meta-analysis
- primary papers not quantitatively analysed in systematic review with meta-analysis

The corrected covered area (CCA)[1] was calculated separately for different measurement analyses based on its own citation matrix to represent the actual overlapping situation. When the measurement only reported by one systematic review, then CCA will not be calculated.

Formula of CCA[1]: $CCA = (N-r)/(rc-r)$

N= number of included publications (including double counting)

r= number of rows (number of index publications)

c= number of columns (number of reviews)

Interpretation of CCA scores[1]: 0-5 : slight overlap
 6-10: moderate overlap
 11-15: high overlap
 >15: very high overlap

Table 1. Citation matrix of primary papers related to antero-posterior dimension measurement of pharyngeal airway at the level of soft palate

| | | Mattos et al, 2011[2] |
|-----------------------|--------------------------|------------------------------|
| Primary papers | Goncalves et al, 2006[3] | / |
| | Mehra et al, 2001[4] | / |

Table 2. Citation matrix of primary papers related to minimum cross-sectional measurement of pharyngeal airway

| | | Christovam et al, 2015[5] |
|-----------------------|----------------------------|----------------------------------|
| Primary papers | Abransom et al, 2011[6] | / |
| | Raffaini & Pisani, 2013[7] | / |
| | Schendel et al, 2014[8] | / |

Table 3. Citation matrix of primary papers related to total volumetric changes of pharyngeal airway

| | | Christovam et al, 2015[5] | Rosario et al, 2016[9] |
|---------------------------|-----------------------------------|--------------------------------------|-----------------------------------|
| Primary papers | Bianchi et al, 2014[10] | / | |
| | Brunetto et al, 2014[11] | / | |
| | Hernandez-Alfrado et al, 2011[12] | / | / |
| | Hsieh et al, 2014[13] | / | |
| | Raffaini & Pisani, 2013[7] | / | / |
| | Abransom et al, 2011[6] | | / |
| | Butterfield et al, 2015a[14] | | / |
| | Butterfield et al, 2015b[15] | | / |
| | Valladeres-Neto et al, 2013[16] | | / |

CCA= 22% (very high overlap)

Table 4. Citation matrix of surgical success rates after MMA

| | | Holty <i>et al</i> , 2010[17] | Elshaug <i>et al</i> , 2007[18] |
|-----------------|------------------------------|----------------------------------|------------------------------------|
| Primary studies | Yu et al, 2009[19] | / | |
| | Lye et al, 2005[20] | / | |
| | Lye et al, 2007[21] | / | |
| | Lu et al, 2007[22] | / | |
| | Fairbun et al, 2007[23] | / | |
| | Dekeister et al, 2006[24] | / | |
| | Hoekema et al, 2006[25] | / | |
| | Smatt & Ferri, 2005[26] | / | |
| | Dattillo & Drooger, 2004[27] | / | / |
| | Goh & Lim, 2003[28] | / | / |
| | Li et al, 2002[29] | / | / |
| | Handler et al, 2001[30] | / | / |
| | Li et al, 2000-1[31] [32-34] | / | |
| | Bettega et al, 2000[35] | / | |
| | Gregg et al, 2000[36] | / | |
| | Wagner et al, 2000[37, 38] | / | |
| | Li et al, 2000-3[39-41] | / | |
| | Lee et al, 1999[42] | / | |
| | Prinsell 1999[43] | / | |
| | Hochban et al, 1994-7[44-47] | / | |
| | Waite et al, 1989[48] | / | |
| | Riley et al, 1986[49] | / | |

CCA= 18.2% (very high overlap)

Table 5. Citation matrix of surgical cure rates after MMA

| | | Holty <i>et al</i> , 2010[17] |
|-----------------|------------------------------|-------------------------------|
| Primary studies | Yu et al, 2009[19] | / |
| | Lu et al, 2007[22] | / |
| | Fairbun et al, 2007[23] | / |
| | Dekeister et al, 2006[24] | / |
| | Hoekema et al, 2006[25] | / |
| | Smatt & Ferri, 2005[26] | / |
| | Dattillo & Drooger, 2004[27] | / |
| | Goh & Lim, 2003[28] | / |
| | Handler et al, 2001[30] | / |
| | Li et al, 2000-1[31] [32-34] | / |
| | Wagner et al, 2000[37, 38] | / |
| | Li et al, 2000-3[39-41] | / |
| | Lee et al, 1999[42] | / |
| | Hochban et al, 1994-7[44-47] | / |
| | Waite et al, 1989[48] | / |
| | Riley et al, 1986[49] | / |

Table 6. Citation matrix of apnea-hypopnea index (AHI) outcomes after MMA

| | Zaghi et al, 2015[50] | Holtby et al, 2010[17] | Caples et al, 2010[51] | Knudsen et al, 2015[52] |
|-----------------|---------------------------|---------------------------|---------------------------|----------------------------|
| Primary studies | Serra et al, 2012[53] | / | | |
| | Brevi et al, 2011[54] | / | | |
| | Riley et al, 1990[55] | / | / | |
| | Vicini et al, 2010[56] | / | | |
| | Riley et al, 1989[57] | / | | |
| | Jalbert et al, 2012[58] | / | | |
| | Varghese et al, 2012[59] | / | | |
| | Li et al, 2000[34] | / | | |
| | Hochban et al, 1994[44] | / | | |
| | Hochban et al, 1997[45] | / | | |
| | Ronchi et al, 2010[60] | / | | |
| | Fairbun et al, 2007[23] | / | / | / |
| | Li et al, 2000[40] | / | | |
| | Wagner et al, 2000[37] | / | | |
| | Ronchi et al, 2013[61] | / | | |
| | Riley et al, 1990[62] | / | | |
| | Hochban et al, 1997[44] | / | | / |
| | Lin et al, 2011[63] | / | | / |
| | Goh & Lim, 2003[28] | / | | |
| | Schendel et al, 2014[8] | / | | |
| | Waite et al, 1989[48] | / | | |
| | Riley et al, 1986[49] | / | | |
| | Li et al, 2010[64] | / | | |
| | Jaspers et al, 2013[65] | / | | |
| | de Lange et al, 2004[66] | / | | |
| | Hoekema et al, 2006[25] | / | | |
| | Barrera 2013[67] | / | | |
| | Yu et al, 2009[19] | / | | |
| | Sencimen et al, 2012[68] | / | | |
| | Schendel et al, 2011[69] | / | | |
| | Matsuo et al, 2009[70] | / | | |
| | Johnson & Boyd, 2002[71] | / | | |
| | El et al, 2011[72] | / | | |
| | Doff et al, 2013[73] | / | | |
| | Corcoran et al, 2009[74] | / | | |
| | Barrera et al, 2007[75] | / | | |
| | Banhiran et al, 2007[76] | / | | |
| | Yu et al, 2009[19] | | / | |
| | Lye et al, 2008[20, 21] | | / | |
| | Lu et al, 2007[22] | | / | |
| | Dekeister et al, 2006[24] | | / | / |
| | Hoekema et al, 2006[25] | | / | |

| | | | | | |
|--|--------------------------------------|--|---|---|---|
| | Smatt & Ferri, 2005[26] | | / | | |
| | Dattilo & Drooger, 2004[27] | | / | | |
| | Goh & Lim, 2003[28] | | / | / | |
| | Li <i>et al</i> , 2002[29] | | / | | |
| | Handler <i>et al</i> , 2001[30] | | / | | |
| | Li <i>et al</i> , 2000-1[31] [32-34] | | / | | |
| | Bettega <i>et al</i> , 2000[35] | | / | | |
| | Gregg <i>et al</i> , 2000[36] | | / | / | |
| | Wagner <i>et al</i> , 2000[37, 38] | | / | | |
| | Li et al, 2000-3[39-41] | | / | | |
| | Lee <i>et al</i> , 1999[42] | | / | | |
| | Prinsell 1999[43] | | / | / | |
| | Conradt <i>et al</i> , 1996[77] | | / | | |
| | Conradt <i>et al</i> , 1998[78] | | / | / | |
| | Conradt <i>et al</i> , 1997[46] | | | / | |
| | Hochban <i>et al</i> , 1994-7[44-47] | | / | | |
| | Waite <i>et al</i> , 1989[48] | | / | | |
| | Riley <i>et al</i> , 1986[49] | | / | | |
| | Kessler <i>et al</i> , 2007[79] | | | / | |
| | Abransom <i>et al</i> , 2011[6] | | | | / |
| | Zinser <i>et al</i> , 2013[80] | | | | / |

CCA=5.29%(slight overlap)

Table 7. Citation matrix of respiratory disturbance index (RDI) outcomes after MMA

| | | Zaghi <i>et al</i> , 2015[50] |
|-----------------|-----------------------------------|-------------------------------|
| Primary studies | Jones <i>et al</i> , 2010[81] | / |
| | Dattilo & Drooger, 2004[27] | / |
| | Arcuri <i>et al</i> , 2011[82] | / |
| | Handler <i>et al</i> , 2001[30] | / |
| | Abransom <i>et al</i> , 2011[6] | / |
| | Barrera 2013[67] | / |
| | Lee <i>et al</i> , 1999[42] | / |
| | Van Sickels & Wallender, 2012[83] | / |
| | Conley & Legan, 2006[84] | / |
| | Colin, 2004[85] | / |
| | Banhiran <i>et al</i> , 2007[76] | / |

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