

Tab. 1. Number of primary implantations entered into the register by individual hospitals in 2003-2009

| Hospital                                                             | Number of primary implantations entered into the register |              |              |              |              |               |               |               |
|----------------------------------------------------------------------|-----------------------------------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
|                                                                      | 2003                                                      | 2004         | 2005         | 2006         | 2007         | 2008          | 2009          | Total         |
| Fakultní nemocnice v Motole 1. LF UK                                 | 674                                                       | 700          | 646          | 573          | 598          | 637           | 660           | 4 488         |
| Fakultní nemocnice Brno                                              | 354                                                       | 320          | 325          | 290          | 370          | 319           | 355           | 2 333         |
| Fakultní nemocnice Plzeň                                             | 219                                                       | 272          | 255          | 385          | 292          | 417           | 378           | 2 218         |
| Fakultní nemocnice v Motole 2. LF UK                                 | 293                                                       | 278          | 279          | 275          | 275          | 330           | 305           | 2 035         |
| Fakultní nemocnice Olomouc                                           | 106                                                       | 34           | 240          | 228          | 313          | 285           | 256           | 1 462         |
| Fakultní nemocnice Na Bulovce                                        | 191                                                       | 213          | 257          | 197          | 258          | 179           | 149           | 1 444         |
| Oblastní nemocnice Mladá Boleslav, a.s., nemocnice Středoč. kraje    | 63                                                        | 1            | 208          | 304          | 260          | 322           | 281           | 1 439         |
| Krajská nemocnice Pardubice                                          | 154                                                       | 193          | 212          | 199          | 218          | 214           | 194           | 1 384         |
| Fakultní nemocnice Královské Vinohrady                               | 187                                                       | 190          | 194          | 155          | 151          | 208           | 266           | 1 351         |
| Šumperská nemocnice a.s.                                             | 137                                                       | 157          | 180          | 191          | 219          | 208           | 256           | 1 348         |
| Ústřední vojenská nemocnice Praha                                    |                                                           | 170          | 130          | 255          | 228          | 259           | 302           | 1 344         |
| Fakultní nemocnice Hradec Králové                                    | 81                                                        | 62           | 127          | 170          | 223          | 303           | 328           | 1 294         |
| Nemocnice České Budějovice, a.s.                                     |                                                           |              | 170          | 255          | 235          | 279           | 283           | 1 222         |
| Nemocnice s poliklinikou Karviná-Ráj, příspěvková organizace         | 8                                                         | 230          | 213          | 204          | 188          | 210           | 154           | 1 207         |
| Nemocnice Litomyšl                                                   | 141                                                       | 162          | 179          | 134          | 149          | 185           | 210           | 1 160         |
| Nemocnice Znojmo, příspěvková organizace                             | 127                                                       | 186          | 163          | 152          | 166          | 184           | 181           | 1 159         |
| Nemocnice sv.Zdislavy, a.s. – Mostiště                               |                                                           |              | 176          | 178          | 233          | 255           | 264           | 1 106         |
| Krajská nemocnice Liberec, příspěvková organizace                    | 124                                                       | 119          | 128          | 117          | 125          | 202           | 284           | 1 099         |
| Kroměřížská nemocnice a.s.                                           | 12                                                        | 5            | 229          | 200          | 185          | 194           | 203           | 1 028         |
| Uherskohradištská nemocnice a. s.                                    | 115                                                       | 145          | 181          | 150          | 119          | 172           | 134           | 1 016         |
| Oblastní nemocnice Kolín, a.s., nemocnice Středočeského kraje        | 113                                                       | 124          | 117          | 147          | 94           | 171           | 165           | 931           |
| Krajská nemocnice T. Bati, a.s.                                      |                                                           |              | 149          | 142          | 179          | 222           | 229           | 921           |
| Nemocnice Kyjov, příspěvková organizace                              | 112                                                       | 124          | 127          | 131          | 130          | 135           | 154           | 913           |
| Středomoravská nem. a.s., Nemocnice Přerov                           | 22                                                        | 161          | 149          | 138          | 107          | 157           | 164           | 898           |
| Nemocnice Třebíč, příspěvková organizace                             | 125                                                       | 126          | 137          | 139          | 123          | 139           | 103           | 892           |
| Nemocnice Rudolfa a Štefanie Benešov, a.s., nemocnice Středoč. kraje | 145                                                       | 134          | 130          | 142          | 149          | 177           |               | 877           |
| Karlovarská krajská nemocnice a.s., nemocnice v Sokolově             |                                                           |              | 196          | 177          | 127          | 194           | 179           | 873           |
| Městská nemocnice Ostrava, příspěvková organizace                    | 150                                                       | 139          | 130          | 108          | 51           | 140           | 142           | 860           |
| Městská nemocnice v Litoměřicích                                     |                                                           | 134          | 149          | 133          | 127          | 162           | 148           | 853           |
| Nemocnice Havlíčkův Brod, příspěvková organizace                     | 48                                                        | 46           | 250          | 249          | 91           | 116           | 39            | 839           |
| Fakultní nemocnice u sv. Anny v Brně                                 |                                                           | 228          | 377          | 90           |              | 143           |               | 838           |
| Oblastní nemocnice Náchod a.s.                                       | 89                                                        | 95           | 109          | 130          | 114          | 140           | 140           | 817           |
| Nemocnice ve Frýdku-Místku, příspěvková organizace                   | 118                                                       | 166          | 83           | 91           | 87           | 125           | 136           | 806           |
| Nemocnice Pelhřimov, příspěvková organizace                          | 88                                                        | 97           | 111          | 117          | 118          | 134           | 133           | 798           |
| Nemocnice Jindřichův Hradec, a.s.                                    | 97                                                        | 102          | 105          | 118          | 83           | 134           | 151           | 790           |
| Nemocnice s poliklinikou Česká Lípa, a.s.                            | 59                                                        | 107          | 97           | 141          | 110          | 143           | 133           | 790           |
| Slezská nemocnice v Opavě, příspěvková organizace                    | 68                                                        | 87           | 107          | 118          | 122          | 147           | 136           | 785           |
| Karlovarská krajská nemocnice a.s.                                   |                                                           | 67           | 151          | 134          | 143          | 157           | 125           | 777           |
| Oblastní nemocnice Kladno, a.s., nemocnice Středočeského kraje       | 98                                                        | 161          | 146          | 112          | 144          | 75            | 26            | 762           |
| Krajská zdravotní, a.s. – Masarykova nemocnice v Ústí n. L.o.z.      | 22                                                        |              | 120          | 99           | 115          | 192           | 201           | 749           |
| Klatovská nemocnice, a.s.                                            | 84                                                        | 115          | 128          | 82           | 109          | 113           | 98            | 729           |
| Nemocnice s poliklinikou v Novém Jičíně, příspěvková organizace      | 88                                                        | 110          | 75           | 75           | 94           | 137           | 150           | 729           |
| Oblastní nemocnice Rychnov nad Kněžnou a.s.                          | 83                                                        | 103          | 92           | 95           | 89           | 117           | 129           | 708           |
| Nemocnice Jihlava, příspěvková organizace                            | 88                                                        | 118          | 115          | 75           | 92           | 79            | 124           | 691           |
| Středomoravská nem. a.s., Nemocnice Prostějov                        | 77                                                        | 93           | 107          | 95           | 83           | 111           | 110           | 676           |
| Vsetínská nemocnice a.s.                                             | 94                                                        | 59           | 89           | 82           | 100          | 113           | 128           | 665           |
| Nemocnice s poliklinikou Semily                                      | 106                                                       | 128          | 110          | 103          | 104          | 104           | 1             | 656           |
| Fakultní nemocnice Ostrava                                           | 100                                                       | 1            | 7            | 25           | 185          | 171           | 164           | 653           |
| Nemocnice Písek, a. s.                                               | 7                                                         | 1            | 132          | 113          | 109          | 150           | 138           | 650           |
| Nemocnice Trinec, příspěvková organizace                             | 1                                                         | 31           | 118          | 111          | 130          | 124           | 113           | 628           |
| Centrum léčby pohybového aparátu, s.r.o.                             | 79                                                        | 67           | 77           | 82           | 88           | 85            | 103           | 581           |
| Nemocnice Tábor, a.s.                                                | 74                                                        | 68           | 68           | 64           | 89           | 94            | 88            | 545           |
| Nemocnice Na Františku s poliklinikou                                | 61                                                        | 75           | 82           | 71           | 81           | 86            | 88            | 544           |
| Úrazová nemocnice v Brně                                             |                                                           |              |              | 244          | 249          |               |               | 493           |
| Nemocnice Nové Město na Moravě, příspěvková organizace               | 118                                                       | 39           | 143          | 73           | 10           | 10            | 54            | 447           |
| NH Hospital a.s., Nemocnice Hořovice                                 |                                                           |              |              | 1            | 4            | 146           | 290           | 441           |
| Oblastní nemocnice Trutnov a.s.                                      | 33                                                        | 1            | 45           | 55           | 57           | 115           | 122           | 428           |
| Nemocnice Boskovice, s.r.o.                                          | 36                                                        | 34           | 36           | 43           | 68           | 80            | 118           | 415           |
| Nemocnice Most, p.o.                                                 |                                                           |              |              |              | 2            | 228           | 169           | 399           |
| Mulačova nemocnice s.r.o.                                            |                                                           |              | 62           | 75           | 82           | 92            | 87            | 398           |
| Vojenská nemocnice Brno                                              |                                                           |              | 48           | 83           | 72           | 86            | 104           | 393           |
| Nemocnice Břeclav, příspěvková organizace                            | 93                                                        | 19           | 94           | 68           | 83           |               | 12            | 369           |
| Sdružené zdravotnické zařízení Krnov, příspěvková organizace         |                                                           |              | 113          | 91           |              | 132           |               | 336           |
| Nemocnice Kadaň s.r.o.                                               |                                                           | 43           | 53           | 47           | 56           | 62            | 55            | 316           |
| Oblastní nemocnice Příbram, a.s.                                     | 20                                                        |              | 86           | 107          | 98           |               |               | 311           |
| Nemocnice s poliklinikou na Praze 5–Na Homolce                       |                                                           |              |              |              |              | 128           | 131           | 259           |
| Nemocnice Chrudim                                                    |                                                           | 41           | 45           | 44           | 44           | 38            | 38            | 250           |
| Krajská zdravotní, a.s. – Nemocnice Teplice, o.z.                    | 19                                                        | 75           | 56           | 37           | 29           | 7             |               | 223           |
| ORTHES s.r.o. – Rožnov pod Radhoštěm                                 |                                                           |              |              |              | 100          | 122           |               | 222           |
| P-P Klinika Kladno, spol. s r.o.                                     |                                                           |              |              |              |              | 83            | 103           | 186           |
| Oblastní nemocnice Příbram, a.s.                                     |                                                           |              |              |              |              | 108           | 70            | 178           |
| MEDITERRA s.r.o. – nemocnice Malvazinky                              |                                                           | 2            | 5            | 3            |              | 103           | 34            | 147           |
| Mělnická zdravotní , a.s.                                            | 3                                                         | 2            | 5            | 3            | 2            | 59            | 61            | 135           |
| Nemocnice Prachatice a.s.                                            |                                                           |              |              |              |              | 65            | 59            | 124           |
| Karvinská hornická nemocnice a.s                                     |                                                           |              |              |              |              |               | 104           | 104           |
| Nemocnice Slaný                                                      |                                                           |              |              |              |              |               | 102           | 102           |
| <b>Total</b>                                                         | <b>5 604</b>                                              | <b>6 760</b> | <b>9 423</b> | <b>9 315</b> | <b>9 328</b> | <b>11 513</b> | <b>11 094</b> | <b>63 037</b> |

Tab. 2. Number of revision surgeries entered into the register by individual hospitals in 2003-2009

| Hospital                                                           | Number of revision surgeries entered into the register |              |              |              |              |              |              |              |
|--------------------------------------------------------------------|--------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                                                    | 2003                                                   | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | Total        |
| Fakultní nemocnice v Motole 1. LF UK                               | 240                                                    | 227          | 201          | 160          | 166          | 144          | 158          | 1 296        |
| Fakultní nemocnice v Motole 2. LF UK                               | 56                                                     | 69           | 49           | 45           | 59           | 58           | 46           | 382          |
| Fakultní nemocnice Brno                                            | 70                                                     | 64           | 51           | 59           | 53           | 53           | 27           | 377          |
| Ústřední vojenská nemocnice Praha                                  |                                                        | 37           | 19           | 88           | 73           | 75           | 65           | 357          |
| Fakultní nemocnice Olomouc                                         | 48                                                     |              | 43           | 51           | 57           | 47           | 42           | 288          |
| Nemocnice s poliklinikou Karviná-Ráj, příspěvková organizace       |                                                        | 41           | 54           | 56           | 64           | 36           | 34           | 285          |
| Oblastní nemocnice Kladno, a.s., nemocnice Středočeského kraje     | 46                                                     | 43           | 34           | 48           | 49           | 63           | 2            | 285          |
| Fakultní nemocnice Královské Vinohrady                             | 47                                                     | 29           | 15           | 49           | 33           | 26           | 60           | 259          |
| Krajská nemocnice Liberec, příspěvková organizace                  | 28                                                     | 49           | 29           | 25           | 34           | 28           | 30           | 223          |
| Fakultní nemocnice Plzeň                                           | 25                                                     | 22           | 32           | 31           | 37           | 36           | 40           | 223          |
| Krajská nemocnice Pardubice                                        | 27                                                     | 28           | 39           | 32           | 34           | 27           | 32           | 219          |
| Fakultní nemocnice Na Bulovce                                      | 36                                                     | 38           | 30           | 29           | 33           | 20           | 23           | 209          |
| Fakultní nemocnice Hradec Králové                                  | 18                                                     | 12           | 6            | 24           | 43           | 58           | 31           | 192          |
| Nemocnice Znojmo, příspěvková organizace                           | 18                                                     | 27           | 17           | 26           | 36           | 34           | 32           | 190          |
| Městská nemocnice Ostrava, příspěvková organizace                  | 27                                                     | 27           | 41           | 24           | 13           | 24           | 32           | 188          |
| Krajská nemocnice T. Bati, a. s.                                   |                                                        |              | 36           | 33           | 31           | 50           | 37           | 187          |
| Krajská zdravotní, a.s. – Masarykova nemocnice v Ústí n. Lab. o.z. | 3                                                      |              | 41           | 35           | 41           | 20           | 37           | 177          |
| Nemocnice České Budějovice, a.s.                                   |                                                        |              | 17           | 36           | 29           | 33           | 44           | 159          |
| Nemocnice s poliklinikou Semily                                    | 28                                                     | 24           | 28           | 22           | 25           | 31           |              | 158          |
| Městská nemocnice v Litoměřicích                                   |                                                        | 34           | 13           | 14           | 23           | 35           | 35           | 154          |
| Oblastní nemocnice Mladá Boleslav, a.s., nem. Středoč.kraje        | 7                                                      |              | 14           | 28           | 30           | 31           | 34           | 144          |
| Nemocnice Pelhřimov, příspěvková organizace                        | 15                                                     | 32           | 25           | 18           | 24           | 16           | 12           | 142          |
| Nemocnice Tábor, a.s.                                              | 28                                                     | 29           | 12           | 22           | 28           | 13           | 8            | 140          |
| Karlovarská krajská nemocnice a.s., nemocnice v Sokolově           |                                                        | 1            | 1            | 39           | 25           | 32           | 30           | 128          |
| Nemocnice Jihlava, příspěvková organizace                          | 19                                                     | 24           | 25           | 15           | 16           | 10           | 10           | 119          |
| Oblastní nemocnice Kolín, a.s., nemocnice Středočeského kraje      | 18                                                     | 12           | 10           | 18           | 26           | 19           | 13           | 116          |
| Nemocnice Havlíčkův Brod, příspěvková organizace                   | 4                                                      | 5            | 36           | 48           | 9            | 10           |              | 112          |
| Nemocnice Litomyšl                                                 | 16                                                     | 16           | 9            | 11           | 19           | 10           | 26           | 107          |
| Středomoravská nem. a.s., Nemocnice Prostějov                      | 18                                                     | 10           | 8            | 20           | 17           | 13           | 18           | 104          |
| Fakultní nemocnice u sv. Anny v Brně                               |                                                        | 8            | 60           | 9            |              | 26           |              | 103          |
| Šumperská nemocnice a.s.                                           | 10                                                     | 11           | 16           | 19           | 16           | 15           | 14           | 101          |
| Oblastní nemocnice Náchod a.s.                                     | 15                                                     | 17           | 12           | 11           | 10           | 16           | 19           | 100          |
| Oblastní nemocnice Rychnov nad Kněžnou a.s.                        | 7                                                      | 14           | 14           | 12           | 25           | 11           | 12           | 95           |
| Kroměřížská nemocnice a.s.                                         | 3                                                      |              | 21           | 24           | 22           | 13           | 12           | 95           |
| Uherskohradištská nemocnice a.s.                                   | 22                                                     | 12           | 18           | 16           | 10           | 4            | 11           | 93           |
| Karlovarská krajská nemocnice a.s.                                 |                                                        | 8            | 9            | 13           | 21           | 26           | 13           | 90           |
| Fakultní nemocnice Ostrava                                         | 5                                                      |              | 2            | 2            | 22           | 26           | 24           | 81           |
| Nemocnice Písek, a.s.                                              |                                                        |              | 14           | 7            | 23           | 13           | 16           | 73           |
| Nemocnice Jindřichův Hradec, a.s.                                  | 13                                                     | 13           | 10           | 10           | 7            | 10           | 8            | 71           |
| Nemocnice sv.Zdislavy, a.s. – Mostiště                             |                                                        |              | 4            | 11           | 10           | 23           | 22           | 70           |
| Nemocnice Třebíč, příspěvková organizace                           | 15                                                     | 12           | 11           | 5            | 5            | 8            | 11           | 67           |
| Klatovská nemocnice, a.s.                                          | 10                                                     | 9            | 5            | 6            | 10           | 9            | 15           | 64           |
| Nemocnice s poliklinikou Česká Lípa, a.s.                          | 9                                                      | 12           | 7            | 6            | 3            | 20           | 7            | 64           |
| Nemocnice ve Frýdku-Místku, příspěvková organizace                 | 4                                                      | 1            | 9            | 5            | 15           | 11           | 16           | 61           |
| Nemocnice Kyjov, příspěvková organizace                            | 18                                                     | 15           | 12           | 8            | 3            | 1            | 1            | 58           |
| Slezská nemocnice v Opavě, příspěvková organizace                  | 6                                                      | 3            | 6            | 7            | 7            | 8            | 16           | 53           |
| Středomoravská nem. a.s., Nemocnice Přerov                         | 1                                                      | 5            | 6            | 12           | 9            | 7            | 13           | 53           |
| Nemocnice Rudolfa a Stefanie Benešov, a.s., nem. Středoč. kraje    | 5                                                      | 9            | 16           | 13           | 5            |              |              | 48           |
| Nemocnice Nové Město na Moravě, příspěvková organizace             | 14                                                     | 2            | 19           | 10           |              |              | 1            | 46           |
| Nemocnice Kadaň s.r.o.                                             |                                                        | 8            | 6            | 6            | 9            | 3            | 11           | 43           |
| Úrazová nemocnice v Brně                                           |                                                        |              |              | 23           | 16           |              |              | 39           |
| Vsetínská nemocnice a.s.                                           | 4                                                      | 4            | 6            | 10           | 3            | 6            | 5            | 38           |
| Nemocnice Most, p.o.                                               |                                                        |              |              |              |              | 22           | 16           | 38           |
| NH Hospital a.s., Nemocnice Hořovice                               |                                                        |              |              |              | 1            | 18           | 18           | 37           |
| Oblastní nemocnice Příbram, a.s.                                   |                                                        |              | 16           | 8            | 9            |              |              | 33           |
| Nemocnice Břeclav, příspěvková organizace                          | 10                                                     | 2            | 8            | 6            | 3            |              | 1            | 30           |
| Vojenská nemocnice Brno                                            |                                                        |              | 6            | 7            | 7            | 3            | 5            | 28           |
| Nemocnice Na Františku s poliklinikou                              | 2                                                      | 4            | 2            | 4            | 7            | 1            | 6            | 26           |
| Sdružené zdravotnické zařízení Krnov, příspěvková organizace       |                                                        |              | 7            | 9            |              | 10           |              | 26           |
| Nemocnice Třinec, příspěvková organizace                           |                                                        |              | 4            | 3            | 6            | 11           |              | 24           |
| Nemocnice s poliklinikou na Praze 5 - Na Homolce                   |                                                        |              |              |              |              | 11           | 10           | 21           |
| Mulačova nemocnice s.r.o.                                          |                                                        |              | 2            | 4            | 4            | 6            | 4            | 20           |
| Nemocnice Boskovice, s.r.o.                                        | 1                                                      |              | 1            | 3            | 5            | 4            | 5            | 19           |
| Nemocnice Prachatice a.s.                                          |                                                        |              |              |              |              | 11           | 6            | 17           |
| Centrum léčby pohybového aparátu, s.r.o.                           | 2                                                      | 1            | 4            | 1            | 4            | 2            | 2            | 16           |
| ORTHES s.r.o. – Rožnov pod Radhoštěm                               |                                                        |              |              |              | 10           | 4            |              | 14           |
| Oblastní nemocnice Trutnov a.s.                                    | 1                                                      |              |              | 3            | 3            | 5            | 1            | 13           |
| Krajská zdravotní, a.s. – Nemocnice Teplice, o.z.                  | 1                                                      | 4            | 3            | 4            | 1            |              |              | 13           |
| Nemocnice Chrudim                                                  |                                                        | 2            |              |              | 1            | 2            |              | 7            |
| Karvinská hornická nemocnice a.s.                                  |                                                        |              |              |              |              |              | 7            | 7            |
| Nemocnice Slaný                                                    |                                                        |              |              |              |              |              | 6            | 6            |
| MEDITERRA s.r.o. – nemocnice Malvazinky                            |                                                        |              |              |              |              | 3            | 2            | 5            |
| P-P Klinika Kladno, spol. s r.o.                                   |                                                        |              |              |              |              | 1            | 2            | 3            |
| Nemocnice s poliklinikou v Novém Jičíně, příspěvková org.          |                                                        | 1            |              |              |              |              |              | 1            |
| Oblastní nemocnice Příbram, a.s.                                   |                                                        |              |              |              |              | 1            |              | 1            |
| <b>Total</b>                                                       | <b>1 020</b>                                           | <b>1 077</b> | <b>1 271</b> | <b>1 403</b> | <b>1 439</b> | <b>1 423</b> | <b>1 298</b> | <b>8 931</b> |

Tab. 3. Aggregate number of primary implantations and revision surgeries processed by the register in 2003-2009

| Year         | Primary       | Revision     |
|--------------|---------------|--------------|
| 2003         | 5 604         | 1 020        |
| 2004         | 6 760         | 1 077        |
| 2005         | 9 423         | 1 271        |
| 2006         | 9 315         | 1 403        |
| 2007         | 9 328         | 1 439        |
| 2008         | 11 513        | 1 423        |
| 2009         | 11 094        | 1 298        |
| <b>Total</b> | <b>63 037</b> | <b>8 931</b> |

Tab. 4. Number of primary implantations in individual years by gender

| Year         | Male          | Female        | Total         |
|--------------|---------------|---------------|---------------|
| 2003         | 2 166         | 3 433         | 5 604         |
| 2004         | 2 638         | 4 122         | 6 760         |
| 2005         | 3 716         | 5 707         | 9 423         |
| 2006         | 3 641         | 5 674         | 9 315         |
| 2007         | 3 730         | 5 598         | 9 328         |
| 2008         | 4 720         | 6 796         | 11 513        |
| 2009         | 4 609         | 6 487         | 11 094        |
| <b>Total</b> | <b>25 220</b> | <b>37 817</b> | <b>63 037</b> |

Tab. 5. Number of revision surgeries in individual years by gender

| Year         | Male         | Female       | Total        |
|--------------|--------------|--------------|--------------|
| 2003         | 303          | 717          | 1 020        |
| 2004         | 362          | 715          | 1 077        |
| 2005         | 418          | 853          | 1 271        |
| 2006         | 522          | 881          | 1 403        |
| 2007         | 533          | 906          | 1 439        |
| 2008         | 524          | 899          | 1 423        |
| 2009         | 493          | 805          | 1 298        |
| <b>Total</b> | <b>3 155</b> | <b>5 776</b> | <b>8 931</b> |

Tab. 6. Patient age structure at the time of their primary implantation

| Age          | Male          | Female        | Primary implantations |
|--------------|---------------|---------------|-----------------------|
| 0-19         | 11            | 16            | 27                    |
| 20-24        | 33            | 31            | 64                    |
| 25-29        | 83            | 73            | 156                   |
| 30-34        | 158           | 138           | 296                   |
| 35-39        | 271           | 261           | 532                   |
| 40-44        | 539           | 510           | 1 049                 |
| 45-49        | 1 006         | 963           | 1 969                 |
| 50-54        | 2 231         | 2 271         | 4 502                 |
| 55-59        | 4 072         | 4 112         | 8 184                 |
| 60-64        | 4 802         | 5 226         | 10 028                |
| 65-69        | 4 020         | 6 223         | 10 243                |
| 70-74        | 3 613         | 7 200         | 10 813                |
| 75-79        | 2 858         | 6 613         | 9 471                 |
| 80-84        | 1 201         | 3 126         | 4 327                 |
| 85-89        | 244           | 826           | 1 070                 |
| 95+          | 16            | 47            | 63                    |
| Unknown      | 62            | 181           | 243                   |
| <b>Total</b> | <b>25 220</b> | <b>37 817</b> | <b>63 037</b>         |

Tab. 7. Patient age structure at the time of their revision surgery

| Age          | Male         | Female       | Revisions    |
|--------------|--------------|--------------|--------------|
| 0-19         | –            | 3            | 3            |
| 20-24        | 1            | 3            | 4            |
| 25-29        | 10           | 7            | 17           |
| 30-34        | 18           | 20           | 38           |
| 35-39        | 26           | 49           | 75           |
| 40-44        | 53           | 55           | 108          |
| 45-49        | 100          | 115          | 215          |
| 50-54        | 207          | 269          | 476          |
| 55-59        | 396          | 488          | 884          |
| 60-64        | 469          | 741          | 1 210        |
| 65-69        | 461          | 940          | 1 401        |
| 70-74        | 571          | 1 125        | 1 696        |
| 75-79        | 531          | 1 173        | 1 704        |
| 80-84        | 252          | 587          | 839          |
| 85-89        | 49           | 173          | 222          |
| 95+          | 1            | 3            | 4            |
| Unknown      | 10           | 25           | 35           |
| <b>Total</b> | <b>3 155</b> | <b>5 776</b> | <b>8 931</b> |

Tab. 8. Number of primary implantations by gender and age at the time of operation

| Age          | Male          | Female        | Primary implantations |
|--------------|---------------|---------------|-----------------------|
| 0-19         | 11            | 16            | 27                    |
| 20-24        | 33            | 31            | 64                    |
| 25-29        | 83            | 73            | 156                   |
| 30-34        | 158           | 138           | 296                   |
| 35-39        | 271           | 261           | 532                   |
| 40-44        | 539           | 510           | 1 049                 |
| 45-49        | 1 006         | 963           | 1 969                 |
| 50-54        | 2 231         | 2 271         | 4 502                 |
| 55-59        | 4 072         | 4 112         | 8 184                 |
| 60-64        | 4 802         | 5 226         | 10 028                |
| 65-69        | 4 020         | 6 223         | 10 243                |
| 70-74        | 3 613         | 7 200         | 10 813                |
| 75-79        | 2 858         | 6 613         | 9 471                 |
| 80-84        | 1 201         | 3 126         | 4 327                 |
| 85-89        | 244           | 826           | 1 070                 |
| 95+          | 16            | 47            | 63                    |
| Unknown      | 62            | 181           | 243                   |
| <b>Total</b> | <b>25 220</b> | <b>37 817</b> | <b>63 037</b>         |

Tab. 9. Number of revision surgeries by gender and age at the time of operation

| Age          | Male         | Female       | Revisions    |
|--------------|--------------|--------------|--------------|
| 0-19         | –            | 3            | 3            |
| 20-24        | 1            | 3            | 4            |
| 25-29        | 10           | 7            | 17           |
| 30-34        | 18           | 20           | 38           |
| 35-39        | 26           | 49           | 75           |
| 40-44        | 53           | 55           | 108          |
| 45-49        | 100          | 115          | 215          |
| 50-54        | 207          | 269          | 476          |
| 55-59        | 396          | 488          | 884          |
| 60-64        | 469          | 741          | 1 210        |
| 65-69        | 461          | 940          | 1 401        |
| 70-74        | 571          | 1 125        | 1 696        |
| 75-79        | 531          | 1 173        | 1 704        |
| 80-84        | 252          | 587          | 839          |
| 85-89        | 49           | 173          | 222          |
| 95+          | 1            | 3            | 4            |
| Unknown      | 10           | 25           | 35           |
| <b>Total</b> | <b>3 155</b> | <b>5 776</b> | <b>8 931</b> |

Tab. 10. Summary of basic diagnoses and their share in the total number of registered primary implantations

| Basic<br>(original diagnosis)      | Primary implantations |               |
|------------------------------------|-----------------------|---------------|
|                                    | Cases                 | %             |
| Ankylosing spondylitis             | 138                   | 0.22          |
| Developmental dysplasia of the hip | 183                   | 0.29          |
| Other                              | 990                   | 1.57          |
| Femoral head necrosis              | 3 320                 | 5.27          |
| Unknown                            | 12                    | 0.02          |
| Postdysplastic osteoarthritis      | 5 920                 | 9.39          |
| Primary osteoarthritis             | 43 250                | 68.61         |
| Rheumatoid arthritis               | 478                   | 0.76          |
| M. Perthes or coxa vara adolesc.   | 183                   | 0.29          |
| Femoral head resection             | 31                    | 0.05          |
| Hip trauma or posttraum. OA        | 8 532                 | 13.53         |
| <b>Total</b>                       | <b>63 037</b>         | <b>100.00</b> |

Tab. 11. Summary of basic diagnoses and their share in the total number of registered revision surgeries

| Basic<br>(original diagnosis)      | Revisions    |               |
|------------------------------------|--------------|---------------|
|                                    | Cases        | %             |
| Ankylosing spondylitis             | 34           | 0.38          |
| Developmental dysplasia of the hip | 55           | 0.62          |
| Other                              | 367          | 4.11          |
| Femoral head necrosis              | 138          | 1.55          |
| Unknown                            | 58           | 0.65          |
| Postdysplastic osteoarthritis      | 839          | 9.39          |
| Primary osteoarthritis             | 6 457        | 72.30         |
| Rheumatoid arthritis               | 149          | 1.67          |
| M. Perthes or coxa vara adolesc.   | 21           | 0.24          |
| Femoral head resection             | 14           | 0.16          |
| Hip trauma or posttraum. OA        | 799          | 8.95          |
| <b>Total</b>                       | <b>8 931</b> | <b>100.00</b> |

Tab. 12. Rate of percentage share of primary diagnoses in primary implantations and revision surgeries

| Basic<br>(original diagnosis)      | % in primary<br>impl. | % in<br>revisions |
|------------------------------------|-----------------------|-------------------|
| Ankylosing spondylitis             | 0.22                  | 0.38              |
| Developmental dysplasia of the hip | 0.29                  | 0.62              |
| Other                              | 1.57                  | 4.11              |
| Femoral head necrosis              | 5.27                  | 1.55              |
| Unknown                            | 0.02                  | 0.65              |
| Postdysplastic osteoarthritis      | 9.39                  | 9.39              |
| Primary arthritis                  | 68.61                 | 72.30             |
| Rheumatoid arthritis               | 0.76                  | 1.67              |
| M. Perthes or coxa vara adolesc.   | 0.29                  | 0.24              |
| Femoral head resection             | 0.05                  | 0.16              |
| Hip trauma or posttraum. OA        | 13.53                 | 8.95              |
| <b>Total</b>                       | <b>100.00</b>         | <b>100.00</b>     |

Tab. 13. Share of all deceased (w/o relation to operation) in individual categories of primary implantations by the type of fixation for the monitored period 2003-2009

| Fixation             | Primary implantations | Deceased     | %           |
|----------------------|-----------------------|--------------|-------------|
| Cemented             | 29 650                | 3 276        | 11.05       |
| Hybrid - cemented AC | 435                   | 30           | 6.90        |
| Hybrid - cemented FC | 10 924                | 665          | 6.09        |
| Uncemented           | 22 028                | 614          | 2.79        |
| <b>Total</b>         | <b>63 037</b>         | <b>4 585</b> | <b>7.27</b> |

Tab. 14. Share of all deceased (w/o relation to operation) in individual categories of revision surgeries by the type of fixation for the monitored period 2003-2009

| Fixation             | Revisions    | Deceased     | %           |
|----------------------|--------------|--------------|-------------|
| Cemented             | 2 979        | 399          | 13.39       |
| Hybrid - cemented AC | 726          | 52           | 7.16        |
| Hybrid - cemented FC | 1 117        | 88           | 7.88        |
| Uncemented           | 4 109        | 306          | 7.45        |
| <b>Total</b>         | <b>8 931</b> | <b>4 585</b> | <b>9.46</b> |

Tab. 15. Comparison of the number of completed monitoring in primary implantation groups in individual years for death in general and for death caused by TED for the period 2003-2009

| Year          | Primary implantations | * Numbers of deceased patients in the years 2003-2009 |                            | TED-% of all primary HR | TED-% of all deceased patients |
|---------------|-----------------------|-------------------------------------------------------|----------------------------|-------------------------|--------------------------------|
|               |                       | Follow-up completed for death                         | Death for some form of TED |                         |                                |
| 2003          | 5 604                 | 819                                                   | 50                         | 0.89                    | 6.11                           |
| 2004          | 6 760                 | 837                                                   | 45                         | 0.67                    | 5.38                           |
| 2005          | 9 423                 | 960                                                   | 53                         | 0.56                    | 5.52                           |
| 2006          | 9 315                 | 661                                                   | 33                         | 0.35                    | 4.99                           |
| 2007          | 9 328                 | 600                                                   | 33                         | 0.35                    | 5.50                           |
| 2008          | 11 513                | 487                                                   | 24                         | 0.21                    | 4.93                           |
| 2009          | 11 094                | 221                                                   | 16                         | 0.14                    | 7.24                           |
| <b>Total*</b> | <b>63 037</b>         | <b>4 585</b>                                          | <b>254</b>                 | <b>0.40</b>             | <b>5.54</b>                    |

\* The data does not represent contingent relation between death and THA operation. It is just an enumeration of the count of completed monitoring in the period 2003-2009 in patients operated within the given interval (line/year).

Tab. 16. Number of completed follow-ups in primary implantation groups in individual years for death caused by TED for the period 2003-2009 according to time interval from operation

| Follow-up time (years) | Deaths by year of implantation |           |           |           |           |           |           | Death caused by TED* |
|------------------------|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|
|                        | 2003                           | 2004      | 2005      | 2006      | 2007      | 2008      | 2009      |                      |
| 1                      | 13                             | 12        | 10        | 6         | 13        | 13        | 16        | 83                   |
| 2                      | 4                              | 8         | 8         | 12        | 9         | 11        |           | 52                   |
| 3                      | 7                              | 3         | 11        | 9         | 11        |           |           | 41                   |
| 4                      | 4                              | 10        | 10        | 6         |           |           |           | 30                   |
| 5                      | 5                              | 7         | 13        |           |           |           |           | 25                   |
| 6                      | 7                              | 4         |           |           |           |           |           | 11                   |
| 7                      | 10                             |           |           |           |           |           |           | 10                   |
| Unknown                |                                | 1         | 1         |           |           |           |           | 2                    |
| <b>Total*</b>          | <b>50</b>                      | <b>45</b> | <b>53</b> | <b>33</b> | <b>33</b> | <b>24</b> | <b>16</b> | <b>254</b>           |

\* The data does not represent contingent relation between death and THA operation. It is just an enumeration of the count of completed monitoring in the appointed time interval from operation.

Tab. 17. Ratio of lateral (right-left) hip involvement in primary implantations

| Localization | Primary HR    | %             |
|--------------|---------------|---------------|
| Left         | 29 531        | 46.85         |
| Right        | 33 506        | 53.15         |
| <b>Total</b> | <b>63 037</b> | <b>100.00</b> |

Tab. 18. Ratio of lateral (right-left) hip involvement in revision surgeries

| Localization | Revisions    | %             |
|--------------|--------------|---------------|
| Left         | 4 149        | 46.46         |
| Right        | 4 782        | 53.54         |
| <b>Total</b> | <b>8 931</b> | <b>100.00</b> |

Tab. 19. Example of anonymous table with indicated position of a virtual hospital (XY) in individual categories of primary implantations by the number of cases entered into the register

| Position of respective hospital (XY) |        |        |                 |      |         |                 |        |        |            |        |        |
|--------------------------------------|--------|--------|-----------------|------|---------|-----------------|--------|--------|------------|--------|--------|
| Cemented                             |        |        | Hybrid- cem. AC |      |         | Hybrid- cem. FC |        |        | Uncemented |        |        |
| Ranking                              | Fig.   | %      | Ranking         | Fig. | %       | Ranking         | Fig.   | %      | Ranking    | Fig.   | %      |
| 1                                    | 1724   | 5.81 % | 1               | 91   | 20.92 % | 1               | 1088   | 9.96 % | 1          | 1659   | 7.53 % |
| 2                                    | 1635   | 5.51 % | 2               | 30   | 6.90 %  | 2               | 514    | 4.71 % | 2          | 1095   | 4.97 % |
| 3                                    | 1100   | 3.71 % | 3               | 21   | 4.83 %  | 3               | 470    | 4.30 % | 3          | 1040   | 4.72 % |
| 4                                    | 896    | 3.02 % | 4               | 20   | 4.60 %  | 4               | 447    | 4.09 % | 4          | 992    | 4.50 % |
| 5                                    | 892    | 3.01 % | 5               | 16   | 3.68 %  | 5               | 410    | 3.75 % | 5          | 659    | 2.99 % |
| 6                                    | 802    | 2.70 % | 6               | 15   | 3.45 %  | 6               | 362    | 3.31 % | 6          | 624    | 2.83 % |
| 7                                    | 774    | 2.61 % | 7               | 14   | 3.22 %  | 7               | 350    | 3.20 % | 7          | 610    | 2.77 % |
| 8                                    | 733    | 2.47 % | 7               | 14   | 3.22 %  | 8               | 333    | 3.05 % | 8          | 608    | 2.76 % |
| 9                                    | 724    | 2.44 % | 9               | 13   | 2.99 %  | 9               | 329    | 3.01 % | 9          | 601    | 2.73 % |
| 10                                   | 710    | 2.39 % | 10              | 12   | 2.76 %  | 10              | 314    | 2.87 % | 10         | 590    | 2.68 % |
| 11                                   | 654    | 2.21 % | 11              | 11   | 2.53 %  | 11              | 299    | 2.74 % | 11         | 554    | 2.51 % |
| 12                                   | 644    | 2.17 % | 11              | 11   | 2.53 %  | 12              | 269    | 2.46 % | 12         | 521    | 2.37 % |
| 13                                   | 641    | 2.16 % | 13              | 10   | 2.30 %  | 13              | 264    | 2.42 % | 13         | 510    | 2.32 % |
| 14                                   | 573    | 1.93 % | 13              | 10   | 2.30 %  | 14              | 257    | 2.35 % | 14         | 434    | 1.97 % |
| 15                                   | 566    | 1.91 % | 15              | 8    | 1.84 %  | 15              | 252    | 2.31 % | 15         | 407    | 1.85 % |
| 16                                   | 556    | 1.88 % | 16              | 7    | 1.61 %  | 16              | 231    | 2.11 % | 16         | 405    | 1.84 % |
| 17                                   | 553    | 1.87 % | 17              | 6    | 1.38 %  | 17              | 208    | 1.90 % | 17         | 393    | 1.78 % |
| 18                                   | 527    | 1.78 % | 17              | 6    | 1.38 %  | 18              | 203    | 1.86 % | 18         | 381    | 1.73 % |
| 19                                   | 522    | 1.76 % | 17              | 6    | 1.38 %  | 19              | 196    | 1.79 % | 19         | 363    | 1.65 % |
| 20                                   | 491    | 1.66 % | 17              | 6    | 1.38 %  | 20              | 195    | 1.79 % | 20         | 357    | 1.62 % |
| 20                                   | 491    | 1.66 % | 17              | 6    | 1.38 %  | 21              | 193    | 1.77 % | 20         | 357    | 1.62 % |
| 22                                   | 475    | 1.60 % | 17              | 6    | 1.38 %  | 22              | 191    | 1.75 % | 22         | 342    | 1.55 % |
| 23                                   | 471    | 1.59 % | 23              | 5    | 1.15 %  | 23              | 185    | 1.69 % | 23         | 337    | 1.53 % |
| 24                                   | 462    | 1.56 % | 23              | 5    | 1.15 %  | 24              | 180    | 1.65 % | 24         | 331    | 1.50 % |
| 25                                   | 455    | 1.53 % | 23              | 5    | 1.15 %  | 25              | 177    | 1.62 % | 25         | 322    | 1.46 % |
| 26                                   | 444    | 1.50 % | 23              | 5    | 1.15 %  | 26              | 176    | 1.61 % | 26         | 321    | 1.46 % |
| 27                                   | 415    | 1.40 % | 27              | 4    | 0.92 %  | 27              | 157    | 1.44 % | 27         | 306    | 1.39 % |
| 28                                   | 407    | 1.37 % | 27              | 4    | 0.92 %  | 28              | 130    | 1.19 % | 28         | 282    | 1.28 % |
| 29                                   | 400    | 1.35 % | 27              | 4    | 0.92 %  | 28              | 130    | 1.19 % | 29         | 251    | 1.14 % |
| 30                                   | 398    | 1.34 % | 27              | 4    | 0.92 %  | 30              | 114    | 1.04 % | 30         | 242    | 1.10 % |
| 31                                   | 397    | 1.34 % | 27              | 4    | 0.92 %  | 31              | 113    | 1.03 % | 31         | 237    | 1.08 % |
| 32                                   | 387    | 1.31 % | 27              | 4    | 0.92 %  | 32              | 111    | 1.02 % | 32         | 235    | 1.07 % |
| 33                                   | 384    | 1.30 % | 27              | 4    | 0.92 %  | 33              | 104    | 0.95 % | 33         | 234    | 1.06 % |
| 34                                   | 377    | 1.27 % | 27              | 4    | 0.92 %  | 34              | 98     | 0.90 % | 34         | 213    | 0.97 % |
| 35                                   | 375    | 1.26 % | 27              | 4    | 0.92 %  | 35              | 97     | 0.89 % | 35         | 205    | 0.93 % |
| 36                                   | 372    | 1.25 % | 36              | 3    | 0.69 %  | 36              | 96     | 0.88 % | 36         | 203    | 0.92 % |
| 37                                   | 368    | 1.24 % | 36              | 3    | 0.69 %  | 37              | 94     | 0.86 % | 37         | 202    | 0.92 % |
| 38                                   | 363    | 1.22 % | 36              | 3    | 0.69 %  | 37              | 94     | 0.86 % | 38         | 195    | 0.89 % |
| 39                                   | 353    | 1.19 % | 36              | 3    | 0.69 %  | 39              | 91     | 0.83 % | 39         | 192    | 0.87 % |
| 40                                   | 352    | 1.19 % | 36              | 3    | 0.69 %  | 40              | 90     | 0.82 % | 40         | 191    | 0.87 % |
| 41                                   | 315    | 1.06 % | 41              | 2    | 0.46 %  | 41              | 89     | 0.81 % | 41         | 190    | 0.86 % |
| 42                                   | 314    | 1.06 % | 41              | 2    | 0.46 %  | 42              | 87     | 0.80 % | 42         | 178    | 0.81 % |
| 43                                   | 302    | 1.02 % | 41              | 2    | 0.46 %  | 42              | 87     | 0.80 % | 42         | 178    | 0.81 % |
| 44                                   | 293    | 0.99 % | 41              | 2    | 0.46 %  | 42              | 87     | 0.80 % | 44         | 173    | 0.79 % |
| 45                                   | 285    | 0.96 % | 41              | 2    | 0.46 %  | 45              | 78     | 0.71 % | 45         | 169    | 0.77 % |
| 46                                   | 277    | 0.93 % | 41              | 2    | 0.46 %  | 46              | 69     | 0.63 % | 46         | 167    | 0.76 % |
| 47                                   | 265    | 0.89 % | 41              | 2    | 0.46 %  | 47              | 66     | 0.60 % | 47         | 166    | 0.75 % |
| 48                                   | 255    | 0.86 % | 48              | 1    | 0.23 %  | 48              | 65     | 0.60 % | 48         | 165    | 0.75 % |
| 49                                   | 239    | 0.81 % | 48              | 1    | 0.23 %  | 49              | 58     | 0.53 % | 49         | 160    | 0.73 % |
| 50                                   | 222    | 0.75 % | 48              | 1    | 0.23 %  | 49              | 58     | 0.53 % | 50         | 153    | 0.69 % |
| 51                                   | 215    | 0.73 % | 48              | 1    | 0.23 %  | 51              | 53     | 0.49 % | 51         | 149    | 0.68 % |
| 51                                   | 215    | 0.73 % | 48              | 1    | 0.23 %  | 52              | 49     | 0.45 % | 52         | 138    | 0.63 % |
| 53                                   | 209    | 0.70 % | 48              | 1    | 0.23 %  | 53              | 48     | 0.44 % | 53         | 130    | 0.59 % |
| 54                                   | 201    | 0.68 % | 48              | 1    | 0.23 %  | 54              | 45     | 0.41 % | 54         | 121    | 0.55 % |
| 55                                   | 197    | 0.66 % | 48              | 1    | 0.23 %  | 55              | 42     | 0.38 % | 55         | 116    | 0.53 % |
| 56                                   | 196    | 0.66 % | 48              | 1    | 0.23 %  | 56              | 40     | 0.37 % | 56         | 114    | 0.52 % |
| 57                                   | 195    | 0.66 % | 48              | 1    | 0.23 %  | 57              | 36     | 0.33 % | 57         | 113    | 0.51 % |
| 58                                   | 192    | 0.65 % | 48              | 1    | 0.23 %  | 57              | 36     | 0.33 % | 58         | 109    | 0.49 % |
| 59                                   | 176    | 0.59 % | Total:          | 435  | 100 %   | 59              | 33     | 0.30 % | 59         | 108    | 0.49 % |
| 60                                   | 136    | 0.46 % |                 |      |         | 60              | 31     | 0.28 % | 60         | 107    | 0.49 % |
| 61                                   | 123    | 0.41 % |                 |      |         | 61              | 30     | 0.27 % | 61         | 105    | 0.48 % |
| 62                                   | 115    | 0.39 % |                 |      |         | 62              | 17     | 0.16 % | 62         | 103    | 0.47 % |
| 63                                   | 113    | 0.38 % |                 |      |         | 62              | 17     | 0.16 % | 63         | 100    | 0.45 % |
| 63                                   | 113    | 0.38 % |                 |      |         | 64              | 15     | 0.14 % | 64         | 97     | 0.44 % |
| 65                                   | 107    | 0.36 % |                 |      |         | 65              | 13     | 0.12 % | 65         | 95     | 0.43 % |
| 66                                   | 91     | 0.31 % |                 |      |         | 66              | 11     | 0.10 % | 66         | 92     | 0.42 % |
| 67                                   | 73     | 0.25 % |                 |      |         | 66              | 11     | 0.10 % | 67         | 84     | 0.38 % |
| 68                                   | 64     | 0.22 % |                 |      |         | 68              | 10     | 0.09 % | 68         | 69     | 0.31 % |
| 69                                   | 53     | 0.18 % |                 |      |         | 69              | 9      | 0.08 % | 68         | 69     | 0.31 % |
| 70                                   | 51     | 0.17 % |                 |      |         | 69              | 9      | 0.08 % | 70         | 68     | 0.31 % |
| 71                                   | 46     | 0.16 % |                 |      |         | 71              | 5      | 0.05 % | 71         | 55     | 0.25 % |
| 72                                   | 41     | 0.14 % |                 |      |         | 72              | 3      | 0.03 % | 72         | 50     | 0.23 % |
| 73                                   | 34     | 0.11 % |                 |      |         | 73              | 2      | 0.02 % | 73         | 47     | 0.21 % |
| 74                                   | 24     | 0.08 % |                 |      |         | 73              | 2      | 0.02 % | 74         | 38     | 0.17 % |
| 75                                   | 21     | 0.07 % |                 |      |         | 75              | 1      | 0.01 % | 75         | 30     | 0.14 % |
| 76                                   | 19     | 0.06 % |                 |      |         | Total:          | 10 924 | 100 %  | 76         | 20     | 0.09 % |
| Total:                               | 29 650 | 100 %  |                 |      |         |                 |        |        | 77         | 1      | 0.00 % |
|                                      |        |        |                 |      |         |                 |        |        | Total:     | 22 028 | 100 %  |

Tab. 20. Example of summary of revisions with linkage to previous surgery kept on the register's records by the hospital of their performance (virtual hospital XY)

| Date: 30. 6. 2010<br>Follow-up: 1. 1. 2003 31. 12. 2009<br>Hospital: XY |                   |     |
|-------------------------------------------------------------------------|-------------------|-----|
| Place of previous surgery                                               | Place of revision | No. |
| other                                                                   | respective        | 276 |
| respective                                                              | other             | 50  |
| respective                                                              | respective        | 427 |

Tab. 21. Example of virtual table reporting revision surgeries carried out elsewhere in patients with previous surgery performed at the respective – monitored (XY) hospital

| Date: 30. 6. 2010<br>Follow-up time: 1. 1. 2003 31. 12. 2009<br>Respective hospital: XY |                          |                  |                                  |
|-----------------------------------------------------------------------------------------|--------------------------|------------------|----------------------------------|
| ID                                                                                      | Date of previous surgery | Date of revision | Revision implant fixation method |
| 17541XXXX                                                                               | 3/18/2006                | 6. 2. 2006       | hybrid cem. FC                   |
| 23082XXXX                                                                               | 3/15/2007                | 8/16/2007        | uncemented                       |
| 25542XXXX                                                                               | 10/16/2006               | 10. 12. 2007     | uncemented                       |
| 29611XXXX                                                                               | 1. 8. 2003               | 12. 5. 2008      | uncemented                       |
| 340628XXX                                                                               | 11. 5. 2003              | 11/30/2005       | cemented                         |
| 380226XXX                                                                               | 5/13/2008                | 9/22/2008        | uncemented                       |
| 44063XXXX                                                                               | 8. 11. 2004              | 5/31/2005        | uncemented                       |
| 44571XXXX                                                                               | 3/26/2007                | 12/27/2008       | uncemented                       |
| 52080XXXX                                                                               | 4. 10. 2006              | 12. 6. 2007      | uncemented                       |

Tab. 22. Number and types of surgical approaches in primary implantations

| Surgical approach                        | Primary implantation | %             |
|------------------------------------------|----------------------|---------------|
| Anterolateral                            | 49 022               | 77.76         |
| Other                                    | 527                  | 0.84          |
| MIS - 2 approaches                       | 40                   | 0.06          |
| MIS - anterolateral                      | 2 000                | 3.17          |
| MIS - lateral                            | 178                  | 0.28          |
| Posterolateral                           | 556                  | 0.88          |
| Transfemoral                             | 19                   | 0.03          |
| Transgluteal                             | 10 674               | 16.93         |
| Transtrochanteral (trochanter osteotomy) | 23                   | 0.04          |
| <b>Total</b>                             | <b>63 037</b>        | <b>100.00</b> |

Tab. 23. Number and types of surgical approaches in revision surgeries

| Surgical approach                        | Revisions    | %             |
|------------------------------------------|--------------|---------------|
| Anterolateral                            | 4 676        | 52.35         |
| Other                                    | 127          | 1.42          |
| MIS - 2 approaches                       | 2            | 0.02          |
| MIS - anterolateral                      | 25           | 0.28          |
| MIS - lateral                            | 3            | 0.03          |
| Posterolateral                           | 174          | 1.95          |
| Transfemoral                             | 98           | 1.10          |
| Transgluteal                             | 3 801        | 42.55         |
| Transtrochanteral (trochanter osteotomy) | 27           | 0.30          |
| <b>Total</b>                             | <b>8 931</b> | <b>100.00</b> |

Tab. 24. Number and percentage share of primary operations divided by type of fixation in individual years

| Year         | Cemented      | %            | Hybrid cem. AC | %           | Hybrid cem. FC | %            | Uncemented    | %            | Total         | %             |
|--------------|---------------|--------------|----------------|-------------|----------------|--------------|---------------|--------------|---------------|---------------|
| 2003         | 2 830         | 50.50        | 43             | 0.77        | 821            | 14.65        | 1 910         | 34.08        | 5 604         | 100.00        |
| 2004         | 3 285         | 48.59        | 67             | 0.99        | 1 105          | 16.35        | 2 303         | 34.07        | 6 760         | 100.00        |
| 2005         | 4 659         | 49.44        | 63             | 0.67        | 1 668          | 17.70        | 3 033         | 32.19        | 9 423         | 100.00        |
| 2006         | 4 431         | 47.57        | 72             | 0.77        | 1 672          | 17.95        | 3 140         | 33.71        | 9 315         | 100.00        |
| 2007         | 4 513         | 48.38        | 63             | 0.68        | 1 658          | 17.77        | 3 094         | 33.17        | 9 328         | 100.00        |
| 2008         | 5 246         | 45.57        | 65             | 0.56        | 1 948          | 16.92        | 4 254         | 36.95        | 11 513        | 100.00        |
| 2009         | 4 686         | 42.24        | 62             | 0.56        | 2 052          | 18.50        | 4 294         | 38.71        | 11 094        | 100.00        |
| <b>Total</b> | <b>29 650</b> | <b>47.04</b> | <b>435</b>     | <b>0.69</b> | <b>10 924</b>  | <b>17.33</b> | <b>22 028</b> | <b>34.94</b> | <b>63 037</b> | <b>100.00</b> |

Tab. 25. Number and percentage share of revision surgeries divided by type of fixation in individual years

| Year         | Cemented     | %            | Hybrid cem. AC | %           | Hybrid cem. FC | %            | Uncemented   | %            | Total        | %             |
|--------------|--------------|--------------|----------------|-------------|----------------|--------------|--------------|--------------|--------------|---------------|
| 2003         | 359          | 35.20        | 66             | 6.47        | 161            | 15.78        | 434          | 42.55        | 1 020        | 100.00        |
| 2004         | 422          | 39.18        | 66             | 6.13        | 137            | 12.72        | 452          | 41.97        | 1 077        | 100.00        |
| 2005         | 466          | 36.66        | 117            | 9.21        | 172            | 13.53        | 516          | 40.60        | 1 271        | 100.00        |
| 2006         | 456          | 32.50        | 98             | 6.99        | 177            | 12.62        | 672          | 47.90        | 1 403        | 100.00        |
| 2007         | 459          | 31.90        | 138            | 9.59        | 174            | 12.09        | 668          | 46.42        | 1 439        | 100.00        |
| 2008         | 445          | 31.27        | 110            | 7.73        | 167            | 11.74        | 701          | 49.26        | 1 423        | 100.00        |
| 2009         | 372          | 28.66        | 131            | 10.09       | 129            | 9.94         | 666          | 51.31        | 1 298        | 100.00        |
| <b>Total</b> | <b>2 979</b> | <b>33.36</b> | <b>726</b>     | <b>8.13</b> | <b>1 117</b>   | <b>12.51</b> | <b>4 109</b> | <b>46.01</b> | <b>8 931</b> | <b>100.00</b> |

Tab. 26. Summary of grafts used in primary implantations

| Graft                   | Primary implantations | %             |
|-------------------------|-----------------------|---------------|
| Frozen alogenuous       | 166                   | 0.26          |
| Autologous              | 15 081                | 23.92         |
| Autologous + alogenuous | 114                   | 0.18          |
| None                    | 47 676                | 75.63         |
| <b>Total</b>            | <b>63 037</b>         | <b>100.00</b> |

Tab. 27. Summary of grafts used in revision surgeries

| Graft                   | Revisions    | %             |
|-------------------------|--------------|---------------|
| Frozen alogenuous       | 2 489        | 27.87         |
| Autologous              | 1 117        | 12.51         |
| Autologous + alogenuous | 237          | 2.65          |
| None                    | 5 088        | 56.97         |
| <b>Total</b>            | <b>8 931</b> | <b>100.00</b> |

Tab. 28. Number of revision surgeries according to relation to previous surgery recorded in the register and their development in 2003-2009

| Year         | Revisions w/o linkage to previous recorded surgery | Revisions with linkage to previous recorded surgery |
|--------------|----------------------------------------------------|-----------------------------------------------------|
| 2003         | 1 016                                              | 4                                                   |
| 2004         | 1 026                                              | 51                                                  |
| 2005         | 1 136                                              | 135                                                 |
| 2006         | 1 207                                              | 196                                                 |
| 2007         | 1 211                                              | 228                                                 |
| 2008         | 1 120                                              | 303                                                 |
| 2009         | 963                                                | 335                                                 |
| <b>Total</b> | <b>7 679</b>                                       | <b>1 252</b>                                        |

Tab. 29. Example of virtual table of a list of all revision surgeries carried out in hospital XY without linkage to recorded previous surgeries in the register

| Follow-up time: 1. 1. 2003      31. 12. 2009 |                           |     |
|----------------------------------------------|---------------------------|-----|
| Monitored hospital: XY                       |                           |     |
| Place of previous surgery                    | Place of revision surgery | No. |
| other hospital                               | monitored hospital        | 20  |
| unknown*                                     | monitored hospital        | 403 |
| monitored hospital                           | other hospital            | 19  |
| monitored hospital                           | monitored hospital        | 170 |

\* w/o linkage to recorded previous surgery

Tab. 30. Rate of patient who changed hospital after previous surgery or, on the contrary, remained at the original hospital within the entire CR

| Follow-up time: 1. 1. 2003      31. 12. 2009 |             |               |
|----------------------------------------------|-------------|---------------|
| All hospitals                                |             |               |
| Place of revision surgery                    | No.         | %             |
| Same hospital as previous surgery            | 6605        | 73.96         |
| Elsewhere than previous surgery              | 2326        | 26.04         |
| <b>Total performed revision surgeries</b>    | <b>8931</b> | <b>100.00</b> |

Tab. 31. Number of all revisions and their re-revision surgeries entered into the register

| Revisions            | Number       | %            |
|----------------------|--------------|--------------|
| 1.                   | 8 095        | 90.64        |
| Re-revised (x) times |              |              |
| 2.                   | 692          | 7.75         |
| 3.                   | 108          | 1.21         |
| 4.                   | 25           | 0.28         |
| 5.+                  | 11           | 0.12         |
| <b>Total</b>         | <b>8 931</b> | <b>100.0</b> |

Tab. 32. Revision surgeries divided by the time interval from previous surgery

| Time interval from previous surgery | Revisions    | %             |
|-------------------------------------|--------------|---------------|
| < 6 weeks                           | 265          | 2.97          |
| 7-16 weeks                          | 96           | 1.07          |
| 17 weeks - 1 year                   | 264          | 2.96          |
| 2 years                             | 161          | 1.80          |
| 3 years                             | 130          | 1.46          |
| 4 years                             | 75           | 0.84          |
| 5 years                             | 45           | 0.50          |
| 6 years                             | 26           | 0.29          |
| 7 years                             | 7            | 0.08          |
| Unknown*                            | 7 862        | 88.03         |
| <b>Total</b>                        | <b>8 931</b> | <b>100.00</b> |

\* unknown or w/o linkage to previous surgery

Tab. 33. Surgical technique of the revision

| Surgical technique of revision*      | Number        | %             |
|--------------------------------------|---------------|---------------|
| Removal of all components only       | 296           | 2.58          |
| Removal of paraartic. ossifications  | 283           | 2.46          |
| Osteosynthesis                       | 304           | 2.65          |
| Revision only                        | 230           | 2.00          |
| Exchange of acetabular cup inlay     | 462           | 4.02          |
| Reimplantation- second step          | 330           | 2.87          |
| Removal of all components + spacer   | 280           | 2.44          |
| Exchange of acetabular component     | 3 151         | 27.44         |
| Exchange of femoral stem             | 1 783         | 15.52         |
| Exchange of head                     | 2 020         | 17.59         |
| Exchange of all components           | 2 346         | 20.43         |
| <b>Evaluated number of revisions</b> | <b>8 931</b>  |               |
| <b>Total*</b>                        | <b>11 485</b> | <b>100.00</b> |

\* to register several methods at once is allowed

Tab. 34. Summary of reasons for revision surgeries

| Reason for revision*                    | Number        | %             |
|-----------------------------------------|---------------|---------------|
| Pain w/o evident loosening              | 96            | 0.80          |
| Haematoma                               | 45            | 0.38          |
| Deep infection                          | 715           | 5.98          |
| Other                                   | 256           | 2.14          |
| Mechanic failure of implant             | 301           | 2.52          |
| Fade of PE acetabular cup or inlay      | 303           | 2.54          |
| Periacetabular osteolysis               | 505           | 4.23          |
| Femoral osteolysis                      | 422           | 3.53          |
| Paraartikular ossifications             | 224           | 1.87          |
| Periprosthetic fracture                 | 424           | 3.55          |
| Recurrent luxation                      | 761           | 6.37          |
| Reimplantation- second step             | 307           | 2.57          |
| Conservatively non- repositionable lux. | 117           | 0.98          |
| Loosening of acetabular component       | 4 887         | 40.90         |
| Loosening of femoral component          | 2 587         | 21.65         |
| <b>Evaluated number of revisions</b>    | <b>8 931</b>  |               |
| <b>* Registered number of reasons</b>   | <b>11 950</b> | <b>100.00</b> |

\* to register multiple reasons at once is allowed

Tab. 35. Number of all revision surgeries after luxation during 2003-2009 by years and by time interval from previous surgery

| Interval/Year     | 2003      | 2004      | 2005       | 2006       | 2007       | 2008       | 2009       | Total      |
|-------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| < 6 weeks         | 1         | 8         | 34         | 25         | 19         | 29         | 32         | 148        |
| 7-16 weeks        | 1         | 8         | 9          | 8          | 12         | 10         | 12         | 60         |
| 17 weeks - 1 year |           | 8         | 6          | 6          | 12         | 12         | 11         | 55         |
| 2 years           |           |           |            | 3          | 2          | 1          | 4          | 10         |
| 3 years           |           |           |            | 4          | 3          | 3          | 6          | 16         |
| 4 years           |           |           |            |            | 1          |            | 4          | 5          |
| 5 years           |           |           |            |            | 1          | 2          | 1          | 4          |
| 6 years           |           |           |            |            |            |            | 2          | 2          |
| Unknown           | 70        | 59        | 82         | 86         | 92         | 89         | 85         | 563        |
| <b>Total</b>      | <b>72</b> | <b>83</b> | <b>131</b> | <b>132</b> | <b>142</b> | <b>146</b> | <b>157</b> | <b>863</b> |

Tab. 36. Number of revision surgeries indicated for luxation w/o linkage to primary implantation in the register for the period 2003-2009 by individual years

| Interval/Year | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      | 2009      | Total      |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Unknown       | 70        | 59        | 78        | 71        | 81        | 80        | 73        | 512        |
| <b>Total</b>  | <b>70</b> | <b>59</b> | <b>78</b> | <b>71</b> | <b>81</b> | <b>80</b> | <b>73</b> | <b>512</b> |

Tab. 37. Number of revision surgeries indicated for luxation with linkage to previous surgery recorded in the register in 2003-2009

| Interval/Year     | 2003     | 2004      | 2005      | 2006      | 2007      | 2008      | 2009      | Total      |
|-------------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| < 6 weeks         | 1        | 8         | 34        | 25        | 19        | 29        | 32        | 148        |
| 7-16 weeks        | 1        | 8         | 9         | 8         | 12        | 10        | 12        | 60         |
| 17 weeks - 1 year |          | 8         | 6         | 6         | 12        | 12        | 11        | 55         |
| 2 years           |          |           |           | 3         | 2         | 1         | 4         | 10         |
| 3 years           |          |           |           | 4         | 3         | 3         | 6         | 16         |
| 4 years           |          |           |           |           | 1         |           | 4         | 5          |
| 5 years           |          |           |           |           | 1         | 2         | 1         | 4          |
| 6 years           |          |           |           |           |           |           | 2         | 2          |
| Unknown           |          |           | 4         | 15        | 11        | 9         | 12        | 51         |
| <b>Total</b>      | <b>2</b> | <b>24</b> | <b>53</b> | <b>61</b> | <b>61</b> | <b>66</b> | <b>84</b> | <b>351</b> |

Tab. 38. Number of primary implantations revised for luxation during 2003-2009 including the time interval and the revision rate (RR)

| Interval                 | Number of revised primary implantations |
|--------------------------|-----------------------------------------|
| < 6 weeks                | 148                                     |
| 7-16 weeks               | 60                                      |
| 17 weeks – 1 year        | 55                                      |
| 2 years                  | 10                                      |
| 3 years                  | 16                                      |
| 4 years                  | 5                                       |
| 5 years                  | 4                                       |
| 6 years                  | 2                                       |
| <b>Total</b>             | <b>300</b>                              |
| <b>Revision Rate (%)</b> | <b>0.48</b>                             |

Tab. 39. Number and share of luxations revised in primary implantations in relation to the diameter of used head

| Diameter of head | Number of primary implantations | Number of revised primary implantations | Revision Rate (RR) |
|------------------|---------------------------------|-----------------------------------------|--------------------|
| 22.00            | 142                             | 1                                       | 0.70               |
| 28.00            | 5 2761                          | 254                                     | 0.48               |
| 32.00            | 6 593                           | 25                                      | 0.38               |
| 36.00            | 1 557                           | 3                                       | 0.19               |
| Other            | 1 984                           | 17                                      | 0.86               |
| <b>Total*</b>    | <b>63 037</b>                   | <b>300</b>                              | <b>0.48</b>        |

\* all implants including monoblocs

Tab. 40. Deep infection resulting in revision – occurrence distribution in time in primary implantations carried out in 2003-2009 with determination of the RR

| Interval/Year                              | Number of revised primary implantations for infections |              |              |              |              |               |               |                |
|--------------------------------------------|--------------------------------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|----------------|
|                                            | 2003                                                   | 2004         | 2005         | 2006         | 2007         | 2008          | 2009          | Celkový součet |
| < 6 weeks                                  |                                                        | 1            | 3            | 2            |              | 1             | 3             | 10             |
| 7-16 weeks                                 |                                                        | 2            |              | 3            | 3            |               | 3             | 11             |
| 17 weeks – 1 year                          | 2                                                      | 10           | 16           | 8            | 6            | 7             | 5             | 54             |
| 2 years                                    | 2                                                      | 2            | 6            | 5            | 6            | 3             |               | 24             |
| 3 years                                    | 7                                                      | 4            | 4            | 7            | 2            |               |               | 24             |
| 4 years                                    | 4                                                      | 3            | 3            | 1            |              |               |               | 11             |
| 5 years                                    | 4                                                      | 2            | 1            |              |              |               |               | 7              |
| 6 years                                    | 2                                                      |              |              |              |              |               |               | 2              |
| <b>Total of revisions</b>                  | <b>21</b>                                              | <b>24</b>    | <b>33</b>    | <b>26</b>    | <b>17</b>    | <b>11</b>     | <b>11</b>     | <b>143</b>     |
| <b>Number of all primary implantations</b> | <b>5 604</b>                                           | <b>6 760</b> | <b>9 423</b> | <b>9 315</b> | <b>9 328</b> | <b>11 513</b> | <b>11 094</b> | <b>63 037</b>  |
| <b>Revision rate (RR %) 30. 6. 10</b>      | <b>0.37</b>                                            | <b>0.36</b>  | <b>0.35</b>  | <b>0.28</b>  | <b>0.18</b>  | <b>0.10</b>   | <b>0.10</b>   | <b>0.23</b>    |

Tab. 41. Cups used in primary implantations in 2003-2009 ranged by usage frequency and irrespective of the type of fixation

| Material:                                                | Number        |
|----------------------------------------------------------|---------------|
| PE Cup Müller (AESCULAP)                                 | 10 196        |
| Cup PlasmaCup SC (3 holes) (AESCULAP)                    | 6 738         |
| Acetabular Cup SPC PE (SULZER)                           | 5 397         |
| CLS-Spotorno (SULZER)                                    | 3 701         |
| Acetabular Cup ALLOFIT (SULZER)                          | 3 173         |
| Cemented Cup Müller ZZ (BIOMET MERCK)                    | 2 217         |
| Cup CSF „Zweymüller Alloclassic“ (SULZER)                | 1 938         |
| Cup standard (BEZNOSKA)                                  | 1 863         |
| Cup typ 02 – standard / N (BEZNOSKA)                     | 1 740         |
| Cup BICON PLUS (older type) (PLUS ENDOPROTETIK)          | 1 670         |
| Cup Bicon Plus – (SMITH+NEPHEW)                          | 1 634         |
| Ultima – Cem. Cup UCC 28 mm (JOHNSON & JOHNSON)          | 1 549         |
| Cup CEMENTed ZCA (ZIMMER)                                | 1 447         |
| Cup spherical MSF (HA) (MEDIN)                           | 1 432         |
| Cup S.F/B3 (BEZNOSKA)                                    | 1 029         |
| L-Cup Ti porocoat (BIOMET MERCK)                         | 855           |
| Cup typ 02 cross – standard / N (BEZNOSKA)               | 831           |
| Cup Delta PF – s HA (LIMA)                               | 800           |
| Cup PE STANDARD (LIMA)                                   | 779           |
| Cup „Poldi X“ – Ti (BEZNOSKA)                            | 720           |
| Cup Duraloc Sector (JOHNSON & JOHNSON)                   | 701           |
| Cup ScrewCup SC – (AESCULAP)                             | 687           |
| Cup S.F/A (BEZNOSKA)                                     | 588           |
| Cup TRILOGY Uncemented (ZIMMER)                          | 564           |
| Cup standard (BEZNOSKA)                                  | 525           |
| Cup Pinnacle Sector – HA (JOHNSON & JOHNSON)             | 512           |
| Cup Ana.Nova MII – (INTRAPLANT)                          | 458           |
| Cup S.F./II/B3 (BEZNOSKA)                                | 397           |
| Cup typ 02 – standard / 10 (BEZNOSKA)                    | 384           |
| Cup Procotyl L – Ti (Wright)                             | 368           |
| Cup SPH-CONTACT –(LIMA)                                  | 360           |
| Cup PE typ Charnley (M.I.L.)                             | 335           |
| Cup PlasmaCup NSC (AESCULAP)                             | 322           |
| Cup Pinnacle 100 – HA (JOHNSON & JOHNSON)                | 315           |
| Cup Exceed ABT PE inlay (BIOMET MERCK)                   | 290           |
| Cup standard –big (BEZNOSKA)                             | 280           |
| Cup Duraloc 100 – (JOHNSON & JOHNSON)                    | 276           |
| ASR ACETABULÁRNÍ COMP. (JOHNSON & JOHNSON)               | 269           |
| Cup antilux (BEZNOSKA)                                   | 263           |
| Cup CEMENTED ZCA OFFSET 10° (ZIMMER)                     | 200           |
| Cup TRILOGY– (ZIMMER)                                    | 185           |
| Cup PE OFFSET 20° (LIMA)                                 | 180           |
| Cup PE typ Müller(BIOMET MERCK)                          | 172           |
| Cup SPH-BLIND – (LIMA)                                   | 167           |
| Cup typ 97 – standard (BEZNOSKA)                         | 165           |
| Cup PE (Durasul), low-profile (SULZER)                   | 158           |
| Cup Duraloc Option (JOHNSON & JOHNSON)                   | 154           |
| Cup Mallory-Head Ti porocoat (BIOMET MERCK)              | 148           |
| Cup Duraloc 1200 (JOHNSON & JOHNSON)                     | 139           |
| Cup typ 02 cross – standard / 10 (BEZNOSKA)              | 134           |
| Cup Exceed ABT pro ceramic or metal inlay (BIOMET MERCK) | 13            |
| Cup typ 02 – antilux(BEZNOSKA)                           | 125           |
| Cup Duraloc 300 – (JOHNSON & JOHNSON)                    | 124           |
| Cup TRILOGY– with holes (ZIMMER)                         | 100           |
| Cup EHS – porous coat (WRIGHT)                           | 97            |
| Cup PE PLOCHÁ (LIMA)                                     | 91            |
| Cup Recap (BIOMET MERCK)                                 | 90            |
| Cup TRILOGY– w/o holes (ZIMMER)                          | 83            |
| Cup Fittback – w/o spikes (LAFITT)                       | 78            |
| Cup typ 02 cross – antilux. (BEZNOSKA)                   | 76            |
| Cup screwedí PPF –(BIOMET MERCK)                         | 74            |
| Cup oval – MO (HA) (MEDIN)                               | 73            |
| Cup Balgrist – (SULZER)                                  | 71            |
| Cup typ 97 – antilux.(BEZNOSKA)                          | 52            |
| Cup antilux. Medium (BEZNOSKA)                           | 46            |
| Cup DUROM (ZIMMER)                                       | 40            |
| Cup UTC (Ultima) –(JOHNSON & JOHNSON)                    | 38            |
| Cup Müller all-poly (WRIGHT)                             | 37            |
| Cup Atlanta (M.I.L.)                                     | 36            |
| Cup flat (BEZNOSKA)                                      | 33            |
| Uncemented cup (M.I.L.)                                  | 32            |
| Cup PlasmaCup MSC (AESCULAP)                             | 29            |
| Ultima – Cem. Cup UCC 32 mm (JOHNSON & JOHNSON)          | 25            |
| Cup PE LUBINUS– EXCENTRIC (LINK)                         | 24            |
| Cup „Poldi X“ – AK (BEZNOSKA)                            | 23            |
| Cem. Cup Elite Plus LPW (JOHNSON & JOHNSON)              | 22            |
| Cup Duraloc Bantam –(JOHNSON & JOHNSON)                  | 21            |
| Cup Trident – w/o holes (HOWMEDICA)                      | 18            |
| Cup VarioCup – (AAP MEBIO)                               | 15            |
| Cup Pinnacle 300 – (JOHNSON & JOHNSON)                   | 12            |
| Cup Oval Modular MOM (HA) (MEDIN)                        | 12            |
| Cup typ 97 – flat (BEZNOSKA)                             | 12            |
| Cup big flat (BEZNOSKA)                                  | 12            |
| Cup PlasmaCup S – (AESCULAP)                             | 11            |
| Cup Aura – (SMITH + NEPHEW)                              | 10            |
| Cup TRILOGY Ceramic –3 holes (ZIMMER)                    | 10            |
| Cup with rim (BEZNOSKA)                                  | 9             |
| Cup Pinnacle Bantam (JOHNSON & JOHNSON)                  | 9             |
| Cup Lineage – Ti, porocoat (WRIGHT)                      | 9             |
| Cup medium flat (BEZNOSKA)                               | 8             |
| Cup antilux. big (BEZNOSKA)                              | 8             |
| Cem. Cup Charnley standard (JOHNSON & JOHNSON)           | 8             |
| Cup CoCr Conserve (WRIGHT)                               | 7             |
| Cup S.F/B6 (BEZNOSKA)                                    | 7             |
| Cup S.F/B – flat (BEZNOSKA)                              |               |
| Oval cup TC (BEZNOSKA)                                   | 5             |
| Cup antilux. with rim – big (BEZNOSKA)                   | 5             |
| Cup DELTA ST– (LIMA)                                     | 5             |
| Cup SPH ST –(LIMA)                                       | 4             |
| Cup S.F./II/B6 (BEZNOSKA)                                | 4             |
| Long Oval Cup – LOR (SULZER)                             | 4             |
| Cup Exceed ABT– HA pro keram./kov. VI (BIOMET MERCK)     | 3             |
| Cup Pinnacle 100 – (JOHNSON & JOHNSON)                   | 3             |
| Cup Screw Munich –AESCULAP)                              | 3             |
| Cup with rim big (BEZNOSKA)                              | 3             |
| Cup PE LUBINUS– EXCENTRIC ANTILUX. (LINK)                | 2             |
| Cup Delta ST C – porocoat + HA (LIMA)                    | 2             |
| Cup Monoblock Trabecular Metal/PE –(ZIMMER)              | 2             |
| PE Cup Isofar (AESCULAP)                                 | 2             |
| Octopus – Cup (JOHNSON & JOHNSON)                        | 2             |
| Cup PE cemented (SULZER)                                 | 2             |
| Cup DELTA ST– POROCOAT (LIMA)                            | 2             |
| Cup PE S METASUL (ZIMMER)                                | 2             |
| Cup EPF PLUS– TI PLUS ENDOPROTETIK)                      | 1             |
| Cup with rim, medium (BEZNOSKA)                          | 1             |
| Cup SPH REVISION – (LIMA)                                | 1             |
| Cup Pinnacle Sector – (JOHNSON & JOHNSON)                | 1             |
| Cup T.O.P.– (LINK)                                       | 1             |
| Conical Cup WK (WALTER)                                  | 1             |
| Cem. Cup Elite Plus Ogee (JOHNSON & JOHNSON)             | 1             |
| Cup RSC – (BEZNOSKA)                                     | 1             |
| Cup Exceed ABT– HA PE inlay (BIOMET MERCK)               | 1             |
| Cup antilux. With rim medium (BEZNOSKA)                  | 1             |
| Partial pelvic replacement wit acetabular cup (LINK)     | 1             |
| Cup Delta PF – porocoat (LIMA)                           | 1             |
| Flat Cup with rim(BEZNOSKA)                              | 1             |
| Flat Cup with rim, big size(BEZNOSKA)                    | 1             |
| <b>Total*</b>                                            | <b>61 329</b> |

\* Does not include special complex custom-made replacements or developmental implants

Tab. 42. Stems used in primary implantations in 2003-2009 ranked by usage frequency and irrespective of the type of fixation

| Material                                      | Producer                        | Number |
|-----------------------------------------------|---------------------------------|--------|
| Stem with conical neck 12/14 – AK             | BEZNOSKA S.R.O.                 | 9 932  |
| Stem Centrament                               | AESULAP                         | 8 477  |
| Stem Geradschaft, cone 12/14                  | SULZER                          | 6 904  |
| Stem SL „Zweymüller Alloclassic“              | ZIMMER                          | 2 708  |
| Stem MS-30 polished (Protasul – FeCrNi...)    | SULZER+ZIMMER                   | 2 620  |
| Stem Centrament – older type                  | AESULAP                         | 2 566  |
| Stem Bicontact                                | AESULAP                         | 2 249  |
| Stem ZWEYMÜLLER SL PLUS                       | PLUS ENDOPROTETIK AG            | 2 055  |
| Stem Bi-metric CoCr 12/14                     | BIOMET MERCK                    | 1 580  |
| Stem CLS 135° – cone 12/14                    | ZIMMER                          | 1 400  |
| Stem CLS 145°, cone 12/14                     | SULZER                          | 1 362  |
| Stem Antega                                   | AESULAP                         | 1 361  |
| Stem SM-Geradschaft, cone 12/14               | B.BRAUN                         | 1 228  |
| Cervicocapital stem (monobloc)                | BEZNOSKA S.R.O.                 | 1 151  |
| Stem LOGICA MIRROR polished                   | LIMA                            | 1 127  |
| Stem S.F/S                                    | BEZNOSKA S.R.O.                 | 1 016  |
| Stem Corail w/o collar                        | JOHNSON & JOHNSON LTD.          | 865    |
| Stem Taperloc CoCr standard 12/14             | BIOMET MERCK                    | 829    |
| Stem S.F/ML                                   | BEZNOSKA S.R.O.                 | 803    |
| Stem cemented CSC                             | BEZNOSKA S.R.O.                 | 792    |
| Stem C2 standard                              | LIMA                            | 699    |
| Stem Excia Plasmapore, cone 12/14             | AESULAP                         | 665    |
| FJORD cemented Stem 12/14                     | JOHNSON & JOHNSON LTD.          | 544    |
| Stem TEP wit head „Poldi III“                 | BEZNOSKA S.R.O.                 | 541    |
| Stem SL.-Twin straight                        | ENDOPLANT GMBH                  | 539    |
| Stem Antega – CaP sprayed                     | AESULAP                         | 488    |
| Stem VERSYS STANDARD w/o collar               | ZIMMER                          | 483    |
| Stem Taperloc Ti porocoat standard 12/14      | BIOMET MERCK                    | 467    |
| Stem AML, cone 12/14                          | JOHNSON & JOHNSON LTD.          | 457    |
| Stem Corail w/o collar (older type)           | JOHNSON & JOHNSON LTD.          | 390    |
| Stem C-Stem                                   | JOHNSON & JOHNSON LTD.          | 380    |
| Stem Profemur – Z                             | WRIGHT MEDICAL TECHNOLOGY, INC. | 336    |
| Stem Saphir cemented neutral – cone 8,9/10    | MATERIEL IMPLANTS LIMOUSIN      | 302    |
| Hip stem MT (HA)                              | MEDIN a.s.                      | 300    |
| Stem Bi-Metric w/o collar – porocoat          | BIOMET MERCK                    | 296    |
| Femoral component Metha                       | AESULAP                         | 282    |
| Stem MAYO                                     | ZIMMER                          | 258    |
| ASR FEMORAL COMPONENT                         | JOHNSON & JOHNSON LTD.          | 229    |
| Stem SL (SELF LOCKING) TITAN + POROCOAT       | LIMA                            | 177    |
| Femoral Stem                                  | SULZER                          | 175    |
| Cylindrical stem uncemented MC-T (Ti)         | MEDIN a.s.                      | 163    |
| Cylindrical stem cemented MC-S (Fe)           | MEDIN a.s.                      | 161    |
| Stem VERSYS-LD cemented                       | ZIMMER                          | 154    |
| Modular femoral componen Ana.Nova MII – Stem  | INTRAPLANT GMBH                 | 153    |
| Stem VERSYS HERITAGE polished                 | ZIMMER                          | 147    |
| Hip stem uncemented 12/14 Ti Al6V4            | BIOMET MERCK                    | 136    |
| Stem H-MOOS                                   | LIMA                            | 127    |
| Revisional stem conical neck 12/14            | BEZNOSKA S.R.O.                 | 122    |
| Stem Bi-metric Ti porous 12/14                | BIOMET MERCK                    | 122    |
| Stem Excia cemented, cone 12/14               | AESULAP                         | 115    |
| Stem Fit                                      | LIMA                            | 97     |
| Stem Bicontact SD                             | AESULAP                         | 94     |
| Femorál component Proxima – STD offset        | JOHNSON & JOHNSON LTD.          | 94     |
| Stem Anca-Fit s HA 1/3 proxim.                | WRIGHT MEDICAL TECHNOLOGY, INC. | 93     |
| Stem Saphir cemented anatomical – cone 8,9/10 | MATERIEL IMPLANTS LIMOUSIN      | 92     |
| Stem TMF polished                             | WRIGHT MEDICAL TECHNOLOGY, INC. | 88     |
| Stem Corail cemented                          | JOHNSON & JOHNSON LTD.          | 80     |
| Stem Eurofitt HA                              | LAFITT                          | 77     |
| Stem CL TRAUMA                                | LIMA                            | 74     |
| Stem LOGICA CS – TI                           | LIMA                            | 69     |
| Stem VERSYS-CPT 130 MM                        | ZIMMER                          | 67     |
| Stem Ultima straight                          | JOHNSON & JOHNSON LTD.          | 65     |
| Stem Corail AMT with collar                   | JOHNSON & JOHNSON LTD.          | 56     |
| Stem VERSYS LARGE METAPHYSIS w/o collar       | ZIMMER                          | 55     |
| Femoral componen Proxima – High offset        | JOHNSON & JOHNSON LTD.          | 50     |
| Stem Corail with collar (older type)          | JOHNSON & JOHNSON LTD.          | 49     |
| Stem C2 lateralised                           | LIMA                            | 43     |
| Femoral component DUROM „RESURFACING“         | ZIMMER                          | 41     |
| Stem S.F/SL                                   | BEZNOSKA S.R.O.                 | 40     |

|                                                     |                                 |               |
|-----------------------------------------------------|---------------------------------|---------------|
| ASR Femoral component UNI                           | JOHNSON & JOHNSON LTD.          | 39            |
| Stem Versys Tapered standard                        | ZIMMER                          | 39            |
| Stem MS-30 matný (Protasul – FeCrNi...), cone 12/14 | SULZER                          | 38            |
| Stem Ultima Howse II                                | JOHNSON & JOHNSON LTD.          | 37            |
| Stem with conical neck 14/16 – AK                   | BEZNOSKA S.R.O.                 | 36            |
| Stem with conical neck 12/14 – Ti                   | BEZNOSKA S.R.O.                 | 36            |
| Stem SL WAGNER, LATERALIZOVANÝ, cone 12/14          | ZIMMER                          | 34            |
| Stem Versys Tapered Large metaphysis                | ZIMMER                          | 33            |
| Stem SPII CHROMKOBALT 135°                          | WALDEMAR LINK, HAMBURG          | 32            |
| Stem S.F./MLL                                       | BEZNOSKA S.R.O.                 | 31            |
| Stem ZWEYMÜLLER SLR PLUS (Revisional)               | PLUS ENDOPROTETIK AG            | 29            |
| Stem LOGICA CS – FECRNI...                          | LIMA                            | 28            |
| Elite Plus – cone 9/10                              | JOHNSON & JOHNSON LTD.          | 27            |
| Stem Saphir anatomical, sprayed– cone 8,9/10        | MATERIEL IMPLANTS LIMOUSIN      | 25            |
| Stem STRAIGHT PLUS                                  | PLUS ENDOPROTETIK AG            | 22            |
| Stem SL (SELF LOCKING) AISI                         | LIMA                            | 20            |
| Stem VERSYS LARGE METAPHYSIS with collar            | ZIMMER                          | 19            |
| Stem ALLOCLASSIC OFFSET                             | ZIMMER                          | 19            |
| Stem Accolade, cone 12/14 (V40)                     | STRYKER                         | 18            |
| Stem Bicontact revisional)                          | AESULAP                         | 16            |
| Stem Profemur Xm cemented                           | WRIGHT MEDICAL TECHNOLOGY, INC. | 16            |
| Stem S.F. revisional                                | BEZNOSKA S.R.O.                 | 16            |
| Stem VERSYS STANDARD with collar                    | ZIMMER                          | 15            |
| Stem SLL „Zweymüller Alloclassic“ revisional        | ZIMMER                          | 13            |
| Stem LOGICA STANDARD                                | LIMA                            | 13            |
| Revisional hip stem 12/14 Ti Al6V4                  | BIOMET MERCK                    | 11            |
| Stem Extrem                                         | BEZNOSKA S.R.O.                 | 11            |
| Stem – type CSB                                     | BEZNOSKA S.R.O.                 | 10            |
| Stem revisional neck cone 14/16                     | BEZNOSKA S.R.O.                 | 10            |
| Stem VERSYS NO-COAT cemented                        | ZIMMER                          | 9             |
| Stem Charnley with head 22,225 mm                   | JOHNSON & JOHNSON LTD.          | 8             |
| Revisional femoral component                        | LIMA                            | 8             |
| Stem VarioLock polished                             | AAP MEBIO                       | 8             |
| Stemí – type CSB (monobloc)                         | BEZNOSKA S.R.O.                 | 8             |
| Modular Femoral component RMD                       | BEZNOSKA S.R.O.                 | 7             |
| Stem Selfitt HA                                     | LAFITT                          | 7             |
| Stem Bi-metric Ti 12/14                             | BIOMET MERCK                    | 7             |
| S-ROM STD                                           | JOHNSON & JOHNSON LTD.          | 6             |
| Stem VERSYS-CPT EXT. OFFSET 130 MM                  | ZIMMER                          | 6             |
| revisional femoral component Versys Large Junction  | ZIMMER                          | 5             |
| Stem CLS 125° – cone 12/14                          | ZIMMER                          | 5             |
| Stem VarioLock Ti                                   | AAP MEBIO                       | 5             |
| S-ROM Long Stem                                     | JOHNSON & JOHNSON LTD.          | 4             |
| S-ROM STD Stem Lateralized                          | JOHNSON & JOHNSON LTD.          | 4             |
| Stem revisional conical Ti 12/14 Al6V4              | BIOMET MERCK                    | 4             |
| Stem SL (SELF LOCKING) TITAN                        | LIMA                            | 4             |
| Stem straight – type Müller, cone 12/14             | BEZNOSKA S.R.O.                 | 4             |
| G2 uncemented Stem 12/14                            | JOHNSON & JOHNSON LTD.          | 4             |
| PFC * cemented Stem 10/12 mm Co-Cr                  | JOHNSON & JOHNSON LTD.          | 4             |
| Stem with conical neck 14/16 – Ti                   | BEZNOSKA S.R.O.                 | 3             |
| Stem Bicontact S                                    | AESULAP                         | 3             |
| FEMOR. Component MODULUS–                           | LIMA                            | 3             |
| FEMOR. Component RPS- PROX. POUZDRO                 | LIMA                            | 3             |
| Stem VERSYS HERITAGE EXO polished                   | ZIMMER                          | 3             |
| FEMOR. component RPS- Stem with neck                | LIMA                            | 3             |
| revisional Stem sprayed – cone 12/14                | MATERIEL IMPLANTS LIMOUSIN      | 2             |
| Stem ZWEYMÜLLER SL PLUS- Ti/HA                      | PLUS ENDOPROTETIK AG            | 2             |
| FEMOR. component F2L MULTINECK                      | LIMA                            | 2             |
| Stem VERSYS PRE-COAT cemented                       | ZIMMER                          | 2             |
| revisional Stem Prevision                           | AESULAP                         | 2             |
| Stem Taperloc CoCr lateralised 12/14                | BIOMET MERCK                    | 1             |
| Stem revisional                                     | BEZNOSKA S.R.O.                 | 1             |
| FEMOR. Component MODULUS- neck 135°                 | LIMA                            | 1             |
| Stem prox. Femur replacement – Ti                   | WALDEMAR LINK, HAMBURG          | 1             |
| Stem revisional anatomical Ti porocoat with collar  | BIOMET MERCK                    | 1             |
| Stem METABLOC, cone 12/14                           | ZIMMER                          | 1             |
| Stem CPS-PLUS                                       | PLUS ENDOPROTETIK AG            | 1             |
| Stem SL „Zweymüller Alloclassic“ HA sprayed         | SULZER                          | 1             |
| <b>Total*</b>                                       |                                 | <b>62 603</b> |

\* Does not include special complex custom-made replacements or developmental implants

Tab. 43. Cups used in revision surgeries in 2003-2009 ranked by usage frequency and irrespective of the type of fixation

| Material                            | Producer                   | Number |
|-------------------------------------|----------------------------|--------|
| Cup oval – MO (HA)                  | MEDIN a.s.                 | 740    |
| PE Cup Müller                       | AESULAP                    | 673    |
| Cup CLS–Spotorno                    | SULZER                     | 557    |
| Cup acetabulr SPC PE                | SULZER                     | 474    |
| Cup cemented Müller ZZ              | BIOMET MERCK               | 311    |
| Burch-Schneider cage (older type)   | SULZER                     | 278    |
| Burch-Schneider cage                | BEZNOSKA S.R.O.            | 125    |
| Burch-Schneiderova plate            | ZIMMER                     | 146    |
| Cup Bicon Plus                      | SMITH + NEPHEW MEDICAL     | 212    |
| Cup BICON PLUS- (older type)        | PLUS ENDOPROTETIK AG       | 208    |
| Cup Plasmacup SC (3 holes)          | AESULAP                    | 190    |
| Cup standard                        | BEZNOSKA S.R.O.            | 157    |
| Cup standard big                    | BEZNOSKA S.R.O.            | 142    |
| Cup CSF „Zweymüller Alloclassic“    | SULZER                     | 132    |
| Cup PE (Durasul), low-profile       | SULZER                     | 130    |
| Cup standard medium                 | BEZNOSKA S.R.O.            | 113    |
| Cup Balgrist                        | SULZER                     | 105    |
| Cup cemented ZCA OFFSET 10°         | ZIMMER                     | 99     |
| Cup antilux.                        | BEZNOSKA S.R.O.            | 92     |
| Ultima – cemented Cup UCC 28 mm     | JOHNSON & JOHNSON LTD.     | 92     |
| Acetabular cup ALLOFIT              | SULZER                     | 90     |
| Cup type 02 – standard / N          | BEZNOSKA S.R.O.            | 85     |
| Cup oval TC                         | BEZNOSKA S.R.O.            | 78     |
| Oval cup LOR                        | SULZER                     | 75     |
| Cup cemented ZCA                    | ZIMMER                     | 64     |
| Cup PE OFFSET 20°                   | LIMA                       | 61     |
| Cup uncemented „Poldi X“ – Ti       | BEZNOSKA S.R.O.            | 58     |
| Cup Plasmacup MSC (with holes))     | AESULAP                    | 55     |
| Cup type 02 – standard / 10         | BEZNOSKA S.R.O.            | 50     |
| Cup Screwcup SC –                   | AESULAP                    | 49     |
| Cup L-Cup Ti porocoat               | BIOMET MERCK               | 48     |
| Cup type 02 cross – standard / N    | BEZNOSKA S.R.O.            | 45     |
| Oval cup MODULAR (HA)               | MEDIN a.s.                 | 45     |
| Spherical cup – MS (HA)             | MEDIN a.s.                 | 45     |
| Cup S.F/B3                          | BEZNOSKA S.R.O.            | 44     |
| Plate for acetabular reconstruction | AESULAP                    | 40     |
| Cup antilux. medium                 | BEZNOSKA S.R.O.            | 38     |
| Cup S.F/B6                          | BEZNOSKA S.R.O.            | 37     |
| Octopus – Cup                       | JOHNSON & JOHNSON LTD.     | 34     |
| Cup Delta PF – HA                   | LIMA                       | 34     |
| Ultima – cemented Cup UCC 32 mm     | JOHNSON & JOHNSON LTD.     | 34     |
| Cup S.F./II/B3                      | BEZNOSKA S.R.O.            | 31     |
| Cup Duraloc 1200 – porocoat         | JOHNSON & JOHNSON LTD.     | 31     |
| Cup type 02 cross – standard / 10   | BEZNOSKA S.R.O.            | 22     |
| Cup with rim big                    | BEZNOSKA S.R.O.            | 21     |
| Cup antilux. big                    | BEZNOSKA S.R.O.            | 20     |
| Cup PE type Charnley                | MATERIEL IMPLANTS LIMOUSIN | 18     |
| Cup Ana. Nova MII                   | INTRAPLANT GMBH            | 16     |
| Cup S.F./II/B6                      | BEZNOSKA S.R.O.            | 16     |
| Cup PE type Müller                  | BIOMET MERCK               | 13     |
| Cup type 02 – antilux.              | BEZNOSKA S.R.O.            | 13     |
| Cup with rim medium                 | BEZNOSKA S.R.O.            | 13     |
| Cup type 97 – standard              | BEZNOSKA S.R.O.            | 13     |

|                                            |                                |              |
|--------------------------------------------|--------------------------------|--------------|
| Cup S.F./A                                 | BEZNOSKA S.R.O.                | 13           |
| Cup RSC                                    | BEZNOSKA S.R.O.                | 12           |
| Cup flat medium                            | BEZNOSKA S.R.O.                | 11           |
| Cup flat                                   | BEZNOSKA S.R.O.                | 10           |
| Cup CoCr Conserve                          | WRIGHT MEDICAL TECHNOLOGY,INC. | 10           |
| Cup PE STANDARD                            | LIMA                           | 9            |
| Cup with rim                               | BEZNOSKA S.R.O.                | 9            |
| Cup Pinnacle Sector – HA                   | JOHNSON & JOHNSON LTD.         | 9            |
| Cup Duraloc Sector – porocoat              | JOHNSON & JOHNSON LTD.         | 8            |
| Cup type 97 – antilux.                     | BEZNOSKA S.R.O.                | 7            |
| Cup TRILOGY uncemented                     | ZIMMER                         | 7            |
| Cup type 02 cross – antilux.               | BEZNOSKA S.R.O.                | 5            |
| Cup PE cemented,                           | SULZER                         | 5            |
| Cup Duraloc 100 – porocoat                 | JOHNSON & JOHNSON LTD.         | 5            |
| Cup flat big                               | BEZNOSKA S.R.O.                | 5            |
| Cup Duraloc Option                         | JOHNSON & JOHNSON LTD.         | 5            |
| Cup SPH REVISION                           | LIMA                           | 4            |
| Cup TRILOGY- with holes                    | ZIMMER                         | 4            |
| Hip cup uncemented                         | MATERIEL IMPLANTS LIMOUSIN     | 4            |
| Cup Aura –                                 | SMITH + NEPHEW MEDICAL         | 3            |
| Cup Exceed ABT porocoat inlay Ringloc-X    | BIOMET MERCK                   | 3            |
| Cup SPH-BLIND                              | LIMA                           | 3            |
| Cup Pinnacle 100 – HA                      | JOHNSON & JOHNSON LTD.         | 3            |
| Cup SPH BICOMPONENTE –                     | LIMA                           | 2            |
| Cup PE type Charnley/Müller                | MATERIEL IMPLANTS LIMOUSIN     | 2            |
| Cup – single use                           | LIMA                           | 2            |
| Cup necemented „Poldi X“ – AK              | BEZNOSKA S.R.O.                | 2            |
| Cup antilux. with rim big                  | BEZNOSKA S.R.O.                | 2            |
| Cup SPH-CONTACT                            | LIMA                           | 2            |
| Cup antilux. with rim medium               | BEZNOSKA S.R.O.                | 2            |
| Cup UTC (Ultima)                           | JOHNSON & JOHNSON LTD.         | 1            |
| cemented Cup Elite Plus LPW                | JOHNSON & JOHNSON LTD.         | 1            |
| Cup Pinnacle Multihole – porocoat          | JOHNSON & JOHNSON LTD.         | 1            |
| PE Cup Isofar                              | AESULAP                        | 1            |
| Cup TRILOGY– „CLUSTER“                     | ZIMMER                         | 1            |
| Cup Delta revision – porocoat              | LIMA                           | 1            |
| Cup WEBER, PE                              | ZIMMER                         | 1            |
| Cup uncemented Atlanta                     | MATERIEL IMPLANTS LIMOUSIN     | 1            |
| Cup Duraloc Bantam                         | JOHNSON & JOHNSON LTD.         | 1            |
| Cup Delta – TT hemisfer. modul             | LIMA                           | 1            |
| Cup Exceed ABT porocoat ceram./metal inlay | BIOMET MERCK                   | 1            |
| Cup S.F./B – flat                          | BEZNOSKA S.R.O.                | 1            |
| Cup Müller all-poly                        | WRIGHT MEDICAL TECHNOLOGY,INC. | 1            |
| <b>Total*</b>                              |                                | <b>5 913</b> |

\* Only revisions where new component was used

Tab. 44. Stems used in revision surgeries in 2003-2009 ranked by usage frequency and irrespective of the type of fixation

| Material                                               | Producer               | Number |
|--------------------------------------------------------|------------------------|--------|
| Stem with conical neck 12/14 – AK                      | BEZNOSKA S.R.O.        | 997    |
| Stem SL WAGNER, lateralized, cone 12/14                | ZIMMER                 | 407    |
| Stem S.F. revisional                                   | BEZNOSKA S.R.O.        | 264    |
| Stem SLL „Zweymüller Alloclassic“ revisional           | ZIMMER                 | 229    |
| Stem SL „Zweymüller Alloclassic“                       | ZIMMER                 | 196    |
| Stem Centrament                                        | AESULAP                | 194    |
| Stem femoral                                           | SULZER                 | 172    |
| Revisional femoral component                           | LIMA                   | 166    |
| Stem Bicontact revisional                              | AESULAP                | 159    |
| Stem revisional conical neck 12/14                     | BEZNOSKA S.R.O.        | 146    |
| Stem ZWEYMÜLLER SLR PLUS (revisional)                  | PLUS ENDOPROTETIK AG   | 124    |
| Stem Centrament – older type                           | AESULAP                | 99     |
| Revisional femoral component Versys Large Junction     | ZIMMER                 | 86     |
| Stem revisional 12/14 Ti Al6V4                         | BIOMET MERCK           | 85     |
| MODULAR femoral component RMD                          | BEZNOSKA S.R.O.        | 83     |
| Stem ZWEYMÜLLER SL PLUS                                | PLUS ENDOPROTETIK AG   | 80     |
| Stem wit head „Poldi III“                              | BEZNOSKA S.R.O.        | 79     |
| Stem Geradschaft, cone 12/14                           | SULZER                 | 75     |
| Stem uncemented 12/14 Ti Al6V4                         | BIOMET MERCK           | 64     |
| Stem revisional conical Ti 12/14 Al6V4                 | BIOMET MERCK           | 59     |
| Stem Bi-metric CoCr 12/14                              | BIOMET MERCK           | 58     |
| Stem revisional anatomical Ti porocoat with collar     | BIOMET MERCK           | 57     |
| Stem Bicontact                                         | AESULAP                | 43     |
| Stem MS-30 polished (Protasul – FeCrNi...), cone 12/14 | SULZER                 | 41     |
| Stem S.F./S                                            | BEZNOSKA S.R.O.        | 35     |
| Stem CLS 145°, cone 12/14                              | SULZER                 | 27     |
| Stem MT (HA)                                           | MEDIN a.s.             | 21     |
| Stem cemented CSC                                      | BEZNOSKA S.R.O.        | 20     |
| Stem AML, cone 12/14                                   | JOHNSON & JOHNSON LTD. | 19     |
| Stem CLS 135° – cone 12/14                             | ZIMMER                 | 17     |
| Stem Corail w/o collar                                 | JOHNSON & JOHNSON LTD. | 16     |
| Stem SL-Twin straight                                  | ENDOPLANT GMBH         | 15     |
| Stem C2 standard                                       | LIMA                   | 14     |
| Stem S.F./ML                                           | BEZNOSKA S.R.O.        | 14     |
| Stem revisional , conical neck 14/16                   | BEZNOSKA S.R.O.        | 12     |
| Solution – 8 inch                                      | JOHNSON & JOHNSON LTD. | 11     |
| SPACER – Cannulated Stem                               | PROSPON spol. s r.o.   | 11     |
| Stem Bicontact SD                                      | AESULAP                | 10     |
| S-ROM Dlouhý Stem lateralized                          | JOHNSON & JOHNSON LTD. | 9      |
| Stem Antega                                            | AESULAP                | 9      |
| Cylindrical stem uncemented MC-T (Ti)                  | MEDIN a.s.             | 9      |
| Modular femoral component Ana.Nova MII – Stem          | INTRAPLANT GMBH        | 8      |
| Stem with conical neck 14/16 – AK                      | BEZNOSKA S.R.O.        | 8      |
| S-ROM STD                                              | JOHNSON & JOHNSON LTD. | 8      |
| Stem LOGICA MIRROR (polished)                          | LIMA                   | 7      |
| Revisional Stem Prevision                              | AESULAP                | 7      |
| Stem VERSYS-LD cemented                                | ZIMMER                 | 7      |
| Stem polished VERSYS HERITAGE                          | ZIMMER                 | 6      |
| CC stem (monobloc)                                     | BEZNOSKA S.R.O.        | 6      |
| Solution – 10 inch                                     | JOHNSON & JOHNSON LTD. | 6      |
| Solution – 8 inch straight STD                         | JOHNSON & JOHNSON LTD. | 5      |
| Cylindrical stem cemented MC-S (Fe)                    | MEDIN a.s.             | 5      |
| S-ROM STD lateralized                                  | JOHNSON & JOHNSON LTD. | 4      |

|                                                                 |                            |              |
|-----------------------------------------------------------------|----------------------------|--------------|
| ASR Femoral component UNI                                       | JOHNSON & JOHNSON LTD.     | 4            |
| Stem SM-Geradschaft, cone 12/14                                 | B.BRAUN                    | 4            |
| Stem VERSYS-CPT 130 MM                                          | ZIMMER                     | 3            |
| Stem with conical neck 14/16 – Ti                               | BEZNOSKA S.R.O.            | 3            |
| Stem C2 revisional                                              | LIMA                       | 3            |
| Stem Antega – CaP sprayed                                       | AESULAP                    | 3            |
| Stem Ultima rovný                                               | JOHNSON & JOHNSON LTD.     | 3            |
| FJORD cemented Stem 12/14                                       | JOHNSON & JOHNSON LTD.     | 3            |
| Solution – 8 inch right                                         | JOHNSON & JOHNSON LTD.     | 3            |
| Stem Bi-metric Ti porous 12/14                                  | BIOMET MERCK               | 3            |
| Stem Taperloc Ti porocoat standard 12/14                        | BIOMET MERCK               | 3            |
| Stem Corail w/o collar (older type)                             | JOHNSON & JOHNSON LTD.     | 3            |
| Stem Taperloc CoCr standard 12/14                               | BIOMET MERCK               | 3            |
| S-ROM STD Adam s replacement                                    | JOHNSON & JOHNSON LTD.     | 3            |
| Stem with conical neck 12/14 – Ti                               | BEZNOSKA S.R.O.            | 2            |
| Stem Excia Plasmapore, cone 12/14                               | AESULAP                    | 2            |
| S-ROM Dlouhý Stem lateralized krček<br>Náhrada Adamsova oblouku | JOHNSON & JOHNSON LTD.     | 2            |
| Stem Bi-Metric w/o collar – porocoat                            | BIOMET MERCK               | 2            |
| Stem Saphir cemented neutral – cone 8,9/10                      | MATERIEL IMPLANTS LIMOUSIN | 2            |
| Stem VERSYS-CPT LONG 180 MM                                     | ZIMMER                     | 2            |
| Stem Profemur – Z                                               | WRIGHT MEDICAL TECH. INC.  | 2            |
| Stem ZWEYMÜLLER SLR PLUS (revisional)– Ti/HA                    | PLUS ENDOPROTETIK AG       | 2            |
| Stem TMF polished                                               | WRIGHT MEDICAL TECH. INC.  | 2            |
| Femoral component Metha                                         | AESULAP                    | 2            |
| Stem MS-30 matt (Protasul – FeCrNi...), cone 12/14              | SULZER                     | 1            |
| Stem C-Stem                                                     | JOHNSON & JOHNSON LTD.     | 1            |
| Stem SL „Zweymüller Alloclassic“ HA sprayed                     | SULZER                     | 1            |
| Elite Plus – Centralizer                                        | JOHNSON & JOHNSON LTD.     | 1            |
| Stem S.F/MLL                                                    | BEZNOSKA S.R.O.            | 1            |
| Elite Plus – revisional Stem, cone 9/10                         | JOHNSON & JOHNSON LTD.     | 1            |
| Stem H-MOOS                                                     | LIMA                       | 1            |
| Tumoral Stem SPII with prox. Femur replacement 135°             | WALDEMAR LINK, HAMBURG     | 1            |
| Stem Versys Tapered Large metaphysis                            | ZIMMER                     | 1            |
| Femoral component RPS-                                          | LIMA                       | 1            |
| Revisional modular replacement Guardian                         | WRIGHT MEDICAL TECH. INC.  | 1            |
| Stem revisional CSL PLUS                                        | PLUS ENDOPROTETIK AG       | 1            |
| Solution – 10 inch right                                        | JOHNSON & JOHNSON LTD.     | 1            |
| Stem STRAIGHT STEM PLUS                                         | PLUS ENDOPROTETIK AG       | 1            |
| Stem VERSYS-CPT EXT. OFFSET 130 MM                              | ZIMMER                     | 1            |
| CC stem – type CSB                                              | BEZNOSKA S.R.O.            | 1            |
| Stem CLS with HA – cone 12/14                                   | ZIMMER                     | 1            |
| Stem MAYO                                                       | ZIMMER                     | 1            |
| Stem Charnley with head 22,225 mm                               | JOHNSON & JOHNSON LTD.     | 1            |
| Stem VERSYS STANDARD w/o collar                                 | ZIMMER                     | 1            |
| Stem Corail cemented                                            | JOHNSON & JOHNSON LTD.     | 1            |
| Stem Extreme                                                    | BEZNOSKA S.R.O.            | 1            |
| Stem straight- type Müller, cone 12/14                          | BEZNOSKA S.R.O.            | 1            |
| Stem Anca-Fit with HA 1/3                                       | WRIGHT MEDICAL TECH. INC.  | 1            |
| <b>Total*</b>                                                   |                            | <b>4 390</b> |

Tab. 45. Diameters of modular heads used in primary implantations in 2003-2009

| Head diameter (mm) | Primary implantations |
|--------------------|-----------------------|
| 22.00              | 127                   |
| 22.20              | 30                    |
| 26.00              | 1                     |
| 28.00              | 50 887                |
| 32.00              | 5 592                 |
| 36.00              | 1 541                 |
| 38.00              | 2                     |
| 40.00              | 1                     |
| 41.00              | 2                     |
| 42.00              | 22                    |
| 43.00              | 5                     |
| 44.00              | 32                    |
| 44.50              | 13                    |
| 46.00              | 83                    |
| 47.50              | 21                    |
| 48.00              | 66                    |
| 49.00              | 7                     |
| 50.00              | 39                    |
| 51.00              | 7                     |
| 52.00              | 35                    |
| 52.50              | 11                    |
| 54.00              | 34                    |
| 55.50              | 1                     |
| 56.00              | 18                    |
| 58.00              | 9                     |
| 60.00              | 1                     |
| <b>Total*</b>      | <b>58 582</b>         |

\* Modular heads only

Tab. 46. Diameters of modular heads used in revisions and re-revision surgeries in 2003-2009

| Head diameter (mm) | Revision No. |            |           |           |          | Total*      |
|--------------------|--------------|------------|-----------|-----------|----------|-------------|
|                    | 1.           | 2.         | 3.        | 4.        | 5.+      |             |
| 22.00              | 10           |            |           |           |          | 10          |
| 22.20              | 2            |            |           |           |          | 2           |
| 28.00              | 3921         | 350        | 51        | 6         | 3        | 4331        |
| 32.00              | 1186         | 96         | 17        | 5         | 2        | 1306        |
| 36.00              | 50           | 7          | 2         |           |          | 59          |
| 41.00              | 1            |            |           |           |          | 1           |
| 42.00              | 1            |            |           |           |          | 1           |
| 44.00              | 1            | 1          |           |           |          | 2           |
| 46.00              | 1            | 1          | 1         |           |          | 3           |
| 48.00              | 1            |            |           | 1         |          | 2           |
| 50.00              | 1            | 1          |           |           |          | 2           |
| 52.00              | 1            | 2          |           |           |          | 3           |
| 54.00              | 1            |            |           |           |          | 1           |
| 56.00              | 1            | 1          |           |           |          | 2           |
| <b>Total*</b>      | <b>5177</b>  | <b>459</b> | <b>71</b> | <b>12</b> | <b>5</b> | <b>5724</b> |

\* Only revisions where new component was used

Tab. 47. Summary of differences in the filter settings „cause of revision“ employed for evaluation of acetabular and femoral components

| Reason for revision                    | Implants |       |
|----------------------------------------|----------|-------|
|                                        | cups     | stems |
| Pain w/o evident loosening             | Yes      | Yes   |
| Haematoma                              | Yes      | Yes   |
| Deep infection                         | Yes      | Yes   |
| Other                                  | Yes      | Yes   |
| Mechanic failure of implant            | Yes      | Yes   |
| Fade of PE acetabular cup or inlay     | Yes      | No    |
| Periacetabular osteolysis              | Yes      | No    |
| Femoral osteolysis                     | Yes      | Yes   |
| Paraarticular ossifications            | Yes      | Yes   |
| Periprosthetic fracture                | No       | Yes   |
| Recurrent luxation                     | Yes      | Yes   |
| Reimplantation- second step            | No       | No    |
| Conservatively non-repositionable lux. | Yes      | Yes   |
| Loosening of acetabular component      | Yes      | No    |
| Loosening of femoral component         | No       | Yes   |

Tab. 48. Most widely used non-cemented cups in primary implantations (&gt;100) incl. RR for the period 2003-2009

| Material                                             | Primary implantations | Number of revised cases | Revision rate (RR) |
|------------------------------------------------------|-----------------------|-------------------------|--------------------|
| Cup Plasmacup SC (3 holes) ( AESCULAP)               | 6738                  | 113                     | 1.68               |
| CLS-Spotorno (SULZER)                                | 3701                  | 29                      | 0.78               |
| Acetabular Cup ALLOFIT uncemented (SULZER)           | 3173                  | 24                      | 0.76               |
| Cup CSF „Zweymüller Alloclassic“ (SULZER)            | 1938                  | 17                      | 0.88               |
| Cup BICON PLUS(older type) (PLUS ENDOPROTETIK)       | 1670                  | 35                      | 2.10               |
| Cup Bicon Plus – (SMITH+NEPHEW)                      | 1634                  | 27                      | 1.65               |
| Spherical cup MSF (HA) (MEDIN)                       | 1432                  | 28                      | 1.96               |
| Cup S.F/B3 (BEZNOSKA)                                | 1029                  | 26                      | 2.53               |
| Cup L-Cup Ti porocoat (BIOMET MERCK)                 | 855                   | 0                       | 0.00               |
| Cup Delta PF – s HA (LIMA)                           | 800                   | 5                       | 0.63               |
| Cup uncemented „Poldi X“ – Ti (BEZNOSKA)             | 720                   | 13                      | 1.81               |
| Cup Duraloc Sector (JOHNSON & JOHNSON)               | 701                   | 6                       | 0.86               |
| Screwcup SC – (AESULAP)                              | 687                   | 9                       | 1.31               |
| Cup S.F/A (BEZNOSKA)                                 | 588                   | 13                      | 2.21               |
| Cup TRILOGY uncemented (ZIMMER)                      | 564                   | 9                       | 1.60               |
| Cup Pinnacle Sector – HA (JOHNSON & JOHNSON)         | 512                   | 4                       | 0.78               |
| Cup Ana.Nova MII – (INTRAPLANT)                      | 458                   | 2                       | 0.44               |
| Cup S.F./II/B3 (BEZNOSKA)                            | 397                   | 4                       | 1.01               |
| Cup Procotyl L – Ti (Wright)                         | 368                   | 1                       | 0.27               |
| Cup SPH-CONTACT – (LIMA)                             | 360                   | 3                       | 0.83               |
| Cup Plasmacup NSC (w/o holes) (AESULAP)              | 322                   | 4                       | 1.24               |
| Cup Pinnacle 100 – HA (JOHNSON & JOHNSON)            | 315                   | 5                       | 1.59               |
| Cup Exceed ABT PE inlay (BIOMET MERCK)               | 290                   | 1                       | 0.34               |
| Cup Duraloc 100 – (JOHNSON & JOHNSON )               | 276                   | 2                       | 0.72               |
| ASR Acetabular component (JOHNSON & JOHNSON)         | 269                   | 7                       | 2.60               |
| Cup TRILOGY Cluster– (ZIMMER)                        | 185                   | 2                       | 1.08               |
| Cup SPH-BLIND – (LIMA)                               | 167                   | 0                       | 0.00               |
| Cup Duraloc Option (JOHNSON & JOHNSON)               | 154                   | 2                       | 1.30               |
| Cup Mallory-Head Ti porocoat (BIOMET MERCK)          | 148                   | 2                       | 1.35               |
| Cup Duraloc 1200 (JOHNSON & JOHNSON )                | 139                   | 2                       | 1.44               |
| Cup Exceed ABT ceramic or metal inlay (BIOMET MERCK) | 133                   | 2                       | 1.50               |
| Cup Duraloc 300 – (JOHNSON & JOHNSON)                | 124                   | 2                       | 1.61               |
| Cup TRILOGY- S holes (ZIMMER)                        | 100                   | 0                       | 0.00               |
| <b>Average RR of all uncemented cups*</b>            | <b>31 859</b>         | <b>428</b>              | <b>1.34</b>        |

\* Does not include revisions with unambiguous cause on the part of the femur and second stages of two-step re-implantations

Tab. 49. Most widely used non-cemented stems in primary implantations (&gt;100) incl. RR for the period 2003-2009

| Material                                                | Primary implantations | Number of revised cases | Revision rate (RR) |
|---------------------------------------------------------|-----------------------|-------------------------|--------------------|
| Stem SL „Zweymüller Alloclassic“ (ZIMMER)               | 2708                  | 33                      | 1.22               |
| Stem Bicontact (AESCULAP)                               | 2249                  | 37                      | 1.65               |
| Stem ZWEYMÜLLER SL PLUS (PLUS ENDOPROTETIK)             | 2055                  | 30                      | 1.46               |
| Stem CLS 135° – cone 12/14 (ZIMMER)                     | 1400                  | 18                      | 1.29               |
| Stem CLS 145°, cone 12/14 (SULZER)                      | 1362                  | 17                      | 1.25               |
| Stem Antega (AESCULAP)                                  | 1361                  | 44                      | 3.23               |
| Stem S.F/S (BEZNOSKA)                                   | 1016                  | 20                      | 1.97               |
| Stem Corail w/o collar (JOHNSON & JOHNSON)              | 865                   | 10                      | 1.16               |
| Stem S.F./ML (BEZNOSKA)                                 | 803                   | 9                       | 1.12               |
| Stem C2 standard (LIMA)                                 | 699                   | 2                       | 0.29               |
| Stem Excia Plasmapore, cone 12/14 (AESCULAP)            | 665                   | 6                       | 0.90               |
| Stem SL-Twin straight (ENDOPLANT)                       | 539                   | 2                       | 0.37               |
| Stem Antega – CaP sprayed (AESCULAP)                    | 488                   | 5                       | 1.02               |
| Stem VERSYS STANDARD w/o collar (ZIMMER)                | 483                   | 8                       | 1.66               |
| Stem Taperloc Ti porocoat standard 12/14 (BIOMET MERCK) | 467                   | 1                       | 0.21               |
| Stem AML, cone 12/14 (JOHNSON & JOHNSON)                | 457                   | 8                       | 1.75               |
| Stem Corail w/o collar (older type) (JOHNSON & JOHNSON) | 390                   | 4                       | 1.03               |
| Stem Profemur – Z (Wright)                              | 336                   | 4                       | 1.19               |
| Stem kyčelní MT older type (HA) (MEDIN)                 | 300                   | 8                       | 2.67               |
| Stem Bi-Metric w/o collar – porocoat (BIOMET MERCK)     | 296                   | 2                       | 0.68               |
| Femorální komponenta Metha (AESCULAP)                   | 282                   | 6                       | 2.13               |
| Stem MAYO                                               | 258                   | 5                       | 1.94               |
| Stem SL (SELF LOCKING) TITANOVÝ + POROCOAT (LIMA)       | 177                   | 1                       | 0.56               |
| Femoral uncemented stem (SULZER)                        | 175                   | 2                       | 1.14               |
| Cylindrical uncemented stem MC-T (Ti) (MEDIN)           | 163                   | 1                       | 0.61               |
| Modular femoral component Ana.Nova MII (INTRAPLANT)     | 153                   | 1                       | 0.65               |
| Uncemented hip stem 12/14 Ti Al6V4 (BIOMET MERCK)       | 136                   | 8                       | 5.88               |
| Stem Bi-metric Ti porous coat 12/14 (BIOMET MERCK)      | 122                   | 1                       | 0.82               |
| <b>Average RR of all uncemented stems*</b>              | <b>21 611</b>         | <b>308</b>              | <b>1.43</b>        |

\* Does not include revisions with unambiguous cause on the part of the acetabulum and second stages of two-step re-implantations

Tab. 50. Most widely used cemented cups in primary implantations (&gt;100) incl. RR for the period 2003-2009

| Material                                       | Primary implantations | Number of revised cases | Revision rate (RR) |
|------------------------------------------------|-----------------------|-------------------------|--------------------|
| PE Cup type Müller (AESCULAP)                  | 10 196                | 147                     | 1.44               |
| Acetabular cup SPC PE (SULZER)                 | 5 397                 | 56                      | 1.04               |
| Cemented cup Müller ZZ (BIOMET MERCK)          | 2 217                 | 22                      | 0.99               |
| Cup standard (BEZNOSKA)                        | 1 863                 | 25                      | 1.34               |
| Cup type 02 – standard / N (BEZNOSKA)          | 1 740                 | 29                      | 1.67               |
| Ultima – Cem.Cup UCC 28 mm (JOHNSON & JOHNSON) | 1 549                 | 13                      | 0.84               |
| Cup cemented ZCA (ZIMMER)                      | 1 448                 | 13                      | 0.90               |
| Cup type 02 cross – standard / N (BEZNOSKA)    | 831                   | 8                       | 0.96               |
| Cup PE STANDARD (LIMA)                         | 779                   | 5                       | 0.64               |
| Cup standard medium (BEZNOSKA)                 | 525                   | 8                       | 1.52               |
| Cup type 02 – standard / 10 (BEZNOSKA)         | 384                   | 4                       | 1.04               |
| Cup PE type Charnley (M.I.L.)                  | 335                   | 2                       | 0.60               |
| Cup standard big (BEZNOSKA)                    | 280                   | 7                       | 2.50               |
| Cup antilux. (BEZNOSKA)                        | 263                   | 4                       | 1.52               |
| Cup cemented ZCA OFFSET 10° (ZIMMER)           | 200                   | 5                       | 2.50               |
| Cup PE OFFSET 20° (LIMA)                       | 180                   | 4                       | 2.22               |
| Cup PE type Müller (BIOMET MERCK)              | 172                   | 1                       | 0.58               |
| Cup type 97 – standard (BEZNOSKA)              | 165                   | 5                       | 3.03               |
| Cup PE (Durasul), low profile (SULZER)         | 158                   | 2                       | 1.27               |
| Cup type 02 cross – standard / 10 (BEZNOSKA)   | 134                   |                         | 0.00               |
| Cup type 02 – antilux.(BEZNOSKA)               | 125                   |                         | 0.00               |
| <b>Average RR of all cemented cups*</b>        | <b>29 424</b>         | <b>428</b>              | <b>1.45</b>        |

\* Does not include revisions with unambiguous cause on the part of the femur and second stages of two-step re-implantations

Tab. 51. Most widely used cemented stems in primary implantations (&gt;100) incl. RR for the period 2003-2009

| Material                                                      | Primary implantation | Number of revised cases | Revision rate (RR) |
|---------------------------------------------------------------|----------------------|-------------------------|--------------------|
| Stem with conical neck 12/14 – AK (BEZNOSKA)                  | 9 932                | 140                     | 1.41               |
| Stem Centrament (AESCULAP)                                    | 8 477                | 137                     | 1.62               |
| Stem Geradschaft. cone 12/14 (SULZER)                         | 6 904                | 71                      | 1.03               |
| Stem MS-30 polished (Protasul – FeCrNi...) (SULZER)@+(Zimmer) | 2 620                | 17                      | 0.65               |
| Stem Centrament – older type (AESCULAP)                       | 2 566                | 91                      | 3.55               |
| Stem Bi-metric CoCr 12/14 (BIOMET MERCK)                      | 1 580                | 11                      | 0.70               |
| Stem SM-Geradschaft. cone 12/14 (AESCULAP)                    | 1 228                | 7                       | 0.57               |
| CC stem (monobloc) (BEZNOSKA)                                 | 1 151                | 11                      | 0.96               |
| Stem LOGICA MIRROR (polished) (LIMA)                          | 1 127                | 11                      | 0.98               |
| Stem Taperloc CoCr standard 12/14 (BIOMET MERCK)              | 829                  | 5                       | 0.60               |
| Stem cemented CSC (BEZNOSKA)                                  | 792                  | 12                      | 1.52               |
| FJORD cemented stem 12/14 (JOHNSON & JOHNSON)                 | 544                  | 6                       | 1.10               |
| Stem wit head (monobloc) „Poldi III“ (BEZNOSKA)               | 541                  | 7                       | 1.29               |
| Stem C-Stem (JOHNSON & JOHNSON)                               | 380                  | 4                       | 1.05               |
| Stem Saphir cemented neutral – cone 8.9/10 (M.I.L.)           | 302                  | 2                       | 0.66               |
| ASR femoral component (JOHNSON & JOHNSON)                     | 229                  | 8                       | 3.49               |
| Cylindrical cemented stem MC-S (Fe) (MEDIN)                   | 161                  | 3                       | 1.86               |
| Stem VERSYS-LD cemented (ZIMMER)                              | 154                  | 3                       | 1.95               |
| Stem polished VERSYS HERITAGE (ZIMMER)                        | 147                  | 2                       | 1.36               |
| Stem H-MOOS (LIMA)                                            | 127                  | 1                       | 0.79               |
| Stem revisional, conical neck 12/14 (BEZNOSKA)                | 122                  | 2                       | 1.64               |
| Stem Excia cemented. cone 12/14 (AESCULAP)                    | 115                  |                         | 0.00               |
| <b>Average RR of all cemented stems*</b>                      | <b>40 887</b>        | <b>567</b>              | <b>1.39</b>        |

\* Does not include revisions with unambiguous cause on the part of the femur and second stages of two-step re-implantations

Tab. 52. Most widely used non-cemented cup in revisions and re-revision surgeries (&gt;50)

| Material                           | Producer               | Revision No. |            |           |          |     |              |
|------------------------------------|------------------------|--------------|------------|-----------|----------|-----|--------------|
|                                    |                        | 1.           | 2.         | 3.        | 4.       | 5.+ | Total*       |
| Cup Balgrist                       | SULZER                 | 102          | 3          |           |          |     | 105          |
| Cup Bicon Plus                     | SMITH + NEPHEW MEDICAL | 200          | 12         |           |          |     | 212          |
| Cup BICON PLUS – (starší typ)      | PLUS ENDOPROTETIK AG   | 197          | 11         |           |          |     | 208          |
| Cup CSF „Zweymüller Alloclassic“   | SULZER                 | 121          | 10         |           | 1        |     | 132          |
| Oval cup – MO (HA)                 | MEDIN a.s.             | 694          | 33         | 10        | 3        |     | 740          |
| Oval cup – LOR                     | SULZER                 | 70           | 5          |           |          |     | 75           |
| Cup Plasmacup MSC (multiple holes) | AESCULAP               | 53           | 1          |           | 1        |     | 55           |
| Cup Plasmacup SC (3 holes)         | AESCULAP               | 182          | 7          | 1         |          |     | 190          |
| Cup CLS-Spotorno                   | SULZER                 | 539          | 14         | 3         | 1        |     | 557          |
| Oval cup TC                        | BEZNOSKA S.R.O.        | 69           | 9          |           |          |     | 78           |
| Acetabular Cup AlloFIT             | SULZER                 | 79           | 10         | 1         |          |     | 90           |
| <b>Total*</b>                      |                        | <b>2 353</b> | <b>125</b> | <b>16</b> | <b>6</b> |     | <b>2 500</b> |

\* Only revisions where new component was used

Tab. 53. Most widely used non-cemented stems in revisions and re-revision surgeries (&gt;50)

| Material                                           | Producer             | Revision No. |            |           |          |          |              |
|----------------------------------------------------|----------------------|--------------|------------|-----------|----------|----------|--------------|
|                                                    |                      | 1.           | 2.         | 3.        | 4.       | 5.+      | Total*       |
| Stem Bicontact Revisional                          | AESULAP              | 148          | 9          | 2         |          |          | 159          |
| Femoral stem                                       | SULZER               | 161          | 9          | 1         |          | 1        | 172          |
| Hip stem uncemented 12/14 Ti Al6V4                 | BIOMET MERCK         | 57           | 7          |           |          |          | 64           |
| Hip stem revisional 12/14 Ti Al6V4                 | BIOMET MERCK         | 78           | 7          |           |          |          | 85           |
| Anatomical revisional stem with collar Ti porocoat | BIOMET MERCK         | 55           | 2          |           |          |          | 57           |
| Stem Revisional conical Ti 12/14 Al6V4             | BIOMET MERCK         | 56           | 3          |           |          |          | 59           |
| Stem S.F. Revisional                               | BEZNOSKA S.R.O.      | 228          | 32         | 3         | 1        |          | 264          |
| Stem SL "Zweymüller Alloclassic"                   | ZIMMER               | 179          | 15         | 2         |          |          | 196          |
| Stem SL WAGNER, lateralized, Cone 12/14            | ZIMMER               | 365          | 36         | 4         | 1        | 1        | 407          |
| Stem SLL "Zweymüller Alloclassic" Revisional       | ZIMMER               | 205          | 19         | 4         | 1        |          | 229          |
| Stem ZWEYMÜLLER SL PLUS                            | PLUS ENDOPROTETIK AG | 75           | 4          | 1         |          |          | 80           |
| Stem ZWEYMÜLLER SLR PLUS (Revisional)              | PLUS ENDOPROTETIK AG | 118          | 5          | 1         |          |          | 124          |
| Modularfemoral component RMD                       | BEZNOSKA S.R.O.      | 51           | 22         | 9         | 1        |          | 83           |
| Revisional femoral component                       | LIMA                 | 144          | 19         | 2         |          | 1        | 166          |
| Revisional femoral component Versys Large Junction | ZIMMER               | 69           | 13         | 2         | 2        |          | 86           |
| <b>Total*</b>                                      |                      | <b>1 988</b> | <b>202</b> | <b>31</b> | <b>6</b> | <b>3</b> | <b>2 230</b> |

\* Only revisions where new component was used

Tab. 54. Most widely used cemented cups in revisions and re-revision surgeries (&gt;50)

| Material                        | Producer               | Revision No. |            |           |          |          |              |
|---------------------------------|------------------------|--------------|------------|-----------|----------|----------|--------------|
|                                 |                        | 1.           | 2.         | 3.        | 4.       | 5.+      | Total*       |
| Acetabular cup                  | SULZER                 | 458          | 14         | 2         |          |          | 474          |
| Cup antilux.                    | BEZNOSKA S.R.O.        | 85           | 7          |           |          |          | 92           |
| Cup cemented Müller ZZ          | BIOMET MERCK           | 301          | 9          | 1         |          |          | 311          |
| Cup cemented ZCA                | ZIMMER                 | 60           | 3          |           |          |          | 63           |
| Cup cemented ZCA OFFSET 10°     | ZIMMER                 | 90           | 8          | 1         |          |          | 99           |
| Cup PE (Durasul), low- profile  | SULZER                 | 120          | 9          | 1         |          |          | 130          |
| Cup PE OFFSET 20°               | LIMA                   | 47           | 10         | 2         | 2        |          | 61           |
| Cup standard                    | BEZNOSKA S.R.O.        | 150          | 7          |           |          |          | 157          |
| Cup standard medium             | BEZNOSKA S.R.O.        | 110          | 3          |           |          |          | 113          |
| Cup standard big                | BEZNOSKA S.R.O.        | 142          |            |           |          |          | 142          |
| Cup type 02 – standard/10       | BEZNOSKA S.R.O.        | 45           | 5          |           |          |          | 50           |
| Cup type 02 – standard/N        | BEZNOSKA S.R.O.        | 83           | 2          |           |          |          | 85           |
| PE cup type Müller              | AESULAP                | 591          | 66         | 14        | 1        | 1        | 673          |
| Ultima – cemented cup UCC 28 mm | JOHNSON & JOHNSON LTD. | 87           | 5          |           |          |          | 92           |
| <b>Total*</b>                   |                        | <b>2 367</b> | <b>148</b> | <b>21</b> | <b>3</b> | <b>1</b> | <b>2 540</b> |

\* Only revisions where new component was used

Tab. 55. Most widely used cemented stems in revisions and re-revision surgeries (&gt;50)

| Material                           | Producer        | Revision No. |           |           |    |     |              |
|------------------------------------|-----------------|--------------|-----------|-----------|----|-----|--------------|
|                                    |                 | 1.           | 2.        | 3.        | 4. | 5.+ | Total*       |
| Stem Bi-metric CoCr 12/14          | BIOMET MERCK    | 52           | 6         |           |    |     | 58           |
| Stem Centrament                    | AESULAP         | 173          | 17        | 4         |    |     | 194          |
| Stem Centrament – older type       | AESULAP         | 93           | 5         | 1         |    |     | 99           |
| Stem Geradschaft, cone 12/14       | SULZER          | 69           | 5         | 1         |    |     | 75           |
| Stem revisional conical neck 12/14 | BEZNOSKA S.R.O. | 134          | 11        | 1         |    |     | 146          |
| Stem with head „Poldi III“         | BEZNOSKA S.R.O. | 79           |           |           |    |     | 79           |
| Stem with conical neck 12/14 – AK  | BEZNOSKA S.R.O. | 955          | 35        | 7         |    |     | 997          |
| <b>Total*</b>                      |                 | <b>1 555</b> | <b>79</b> | <b>14</b> |    |     | <b>1 648</b> |

\* Only revisions where new component was used

Tab. 56. Summary of cement types used in primary implantations in 2003-2009

| Material                                      | Producer                                        | No. of uses in primary implantations |
|-----------------------------------------------|-------------------------------------------------|--------------------------------------|
| Cement Palacos R                              | HERAEUS                                         | 20 647                               |
| Bone CEMENT CMW 2                             | JOHNSON & JOHNSON LTD.                          | 5 480                                |
| Cement Palacos R with gentamycin (older type) | HERAEUS                                         | 3 686                                |
| Cement Biomet                                 | BIOMET MERCK                                    | 3 111                                |
| Bone cement Smartset HV                       | DEPUY ORTHOPAEDICS, INC.                        | 2 159                                |
| Bone CEMENT CMW 1                             | JOHNSON & JOHNSON LTD.                          | 1 285                                |
| Cement Palacos R with gentamycin              | HERAEUS                                         | 766                                  |
| Bone cement Simplex                           | STRYKER                                         | 596                                  |
| Bone cement Palamed                           | BIOMET MERCK                                    | 573                                  |
| Cement Biomet Refobacin (vac.)                | BIOMET MERCK                                    | 513                                  |
| Cement Biomet Refobacin                       | BIOMET MERCK                                    | 428                                  |
| Bone cement Smartset GHV (with gentamycin)    | DEPUY ORTHOPAEDICS, INC.                        | 323                                  |
| Smartmix HV                                   | DEPUY ORTHOPAEDICS, INC.                        | 244                                  |
| Cement Biomet (vac.)                          | BIOMET MERCK                                    | 234                                  |
| Bone CEMENT CMW 1 with gentamycin             | JOHNSON & JOHNSON LTD.                          | 134                                  |
| Bone CEMENT CMW 2 with gentamycin             | JOHNSON & JOHNSON LTD.                          | 87                                   |
| Bone cement „C-ment“, standard viscosity      | EUROPEAN MEDICAL CONTRACTING MANUFACTURING B.V. | 82                                   |
| CEMENT Bone PALACOS E Flow                    | HERAEUS                                         | 48                                   |
| Bone cement Palamed with gentamycin           | BIOMET MERCK                                    | 28                                   |
| Bone CEMENT CMW 2000                          | JOHNSON & JOHNSON LTD.                          | 18                                   |
| Cement Copal with gentamycin + clindamycin    | HERAEUS                                         | 14                                   |
| Cement Biomet Revision Refobacin              | BIOMET MERCK                                    | 10                                   |
| CEMENT Bone CMT-1                             | LIMA                                            | 9                                    |
| Cement Biomet LV Refobacin                    | BIOMET MERCK                                    | 7                                    |
| Bone CEMENT CMW 3                             | JOHNSON & JOHNSON LTD.                          | 4                                    |
| Bone cement „C-ment“, low viscosity           | EUROPEAN MEDICAL CONTRACTING MANUFACTURING B.V. | 3                                    |
| CEMENT Bone CMT-3                             | LIMA                                            | 2                                    |
| Bone CEMENT CMW 2000 with gentamycin          | JOHNSON & JOHNSON LTD.                          | 2                                    |
| Bone cement Osteobond                         | ZIMMER                                          | 2                                    |
| Cement Palacos LV                             | HERAEUS                                         | 1                                    |
| Cement Palacos LV with gentamycin             | HERAEUS                                         | 1                                    |
| Bone cement CMW 3 with gentamycin             | JOHNSON & JOHNSON LTD.                          | 1                                    |
| <b>Total</b>                                  |                                                 | <b>40 498</b>                        |

Tab. 57. Summary of cement types used in revision surgeries in 2003-2009

| Material                                      | Producer                                        | No. of uses in revisions |
|-----------------------------------------------|-------------------------------------------------|--------------------------|
| Cement Palacos R with gentamycin (older type) | HERAEUS                                         | 1 639                    |
| Cement Palacos R                              | HERAEUS                                         | 725                      |
| Bone CEMENT CMW 2                             | JOHNSON & JOHNSON LTD.                          | 227                      |
| Bone cement Smartset GHV (with gentamycin)    | DEPUY ORTHOPAEDICS, INC.                        | 179                      |
| Cement Palacos R with gentamycin              | HERAEUS                                         | 177                      |
| Cement Biomet Refobacin                       | BIOMET MERCK                                    | 135                      |
| Bone CEMENT CMW 1                             | JOHNSON & JOHNSON LTD.                          | 98                       |
| Bone cement Palamed with gentamycin           | BIOMET MERCK                                    | 97                       |
| Bone cement Smartset HV                       | DEPUY ORTHOPAEDICS, INC.                        | 86                       |
| Cement Biomet                                 | BIOMET MERCK                                    | 79                       |
| Bone CEMENT CMW 2 with gentamycin             | JOHNSON & JOHNSON LTD.                          | 68                       |
| Cement Copal with gentamycin + clindamycin    | HERAEUS                                         | 60                       |
| Bone CEMENT CMW 1 with gentamycin             | JOHNSON & JOHNSON LTD.                          | 52                       |
| Bone cement „C-ment“, standard viscosity      | EUROPEAN MEDICAL CONTRACTING MANUFACTURING B.V. | 36                       |
| Cement Biomet Refobacin (vac.)                | BIOMET MERCK                                    | 32                       |
| Bone cement Simplex                           | STRYKER                                         | 30                       |
| Cement Biomet Revision Refobacin              | BIOMET MERCK                                    | 28                       |
| Bone CEMENT CMW 2000 with gentamycin          | JOHNSON & JOHNSON LTD.                          | 17                       |
| Cement Biomet LV Refobacin                    | BIOMET MERCK                                    | 12                       |
| Cement Biomet (vac.)                          | BIOMET MERCK                                    | 7                        |
| Bone cement Palamed                           | BIOMET MERCK                                    | 6                        |
| CEMENT Bone PALACOS E Flow                    | HERAEUS                                         | 4                        |
| Smartmix HV                                   | DEPUY ORTHOPAEDICS, INC.                        | 4                        |
| Bone CEMENT CMW 3 with gentamycin             | JOHNSON & JOHNSON LTD.                          | 1                        |
| <b>Total</b>                                  |                                                 | <b>3 799</b>             |

Tab. 58. Table demonstrating simplified formula for interval method of calculation of cumulative survival curve

| Year | Formula                                                                                                | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|--------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | $(1-0/(2216-0/2))$                                                                                     | 100.00%                         |                         |                          | 2 216                              |
| 1    | $(1-0/(2216-0/2)) * (1-10/(2216-51/2))$                                                                | 99.54%                          | 10                      | 51                       | 2 216                              |
| 2    | $(1-0/(2216-0/2)) * (1-10/(2216-51/2)) * (1-7/(2155-436/2))$                                           | 99.18%                          | 7                       | 436                      | 2 155                              |
| 3    | $(1-0/(2216-0/2)) * (1-10/(2216-51/2)) * (1-7/(2155-436/2)) * (1-8/(1712-330/2))$                      | 98.67%                          | 8                       | 330                      | 1 712                              |
| 4    | $(1-0/(2216-0/2)) * (1-10/(2216-51/2)) * (1-7/(2155-436/2)) * (1-8/(1712-330/2)) * (1-2/(1374-336/2))$ | 98.51%                          | 2                       | 336                      | 1 374                              |

Tab. 59. Cumulative survival probability of non-cemented cups Plasmacup SC (Aesculap)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 6 738                              |
| 1    | 99.17%                          | 56                      | 41                       | 6 738                              |
| 2    | 98.70%                          | 29                      | 947                      | 6 641                              |
| 3    | 98.16%                          | 27                      | 1 388                    | 5 665                              |
| 4    | 97.77%                          | 15                      | 971                      | 4 250                              |
| 5    | 97.56%                          | 6                       | 1 099                    | 3 264                              |
| 6    | 97.14%                          | 7                       | 1 013                    | 2 159                              |
| 7    | 96.78%                          | 3                       | 671                      | 1 139                              |
| 8    | 96.78%                          |                         | 465                      | 465                                |

Tab. 60. Cumulative survival probability of non-cemented cups CLS Spotorno (Sulzer)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 3 701                              |
| 1    | 99.70%                          | 11                      | 16                       | 3 701                              |
| 2    | 99.40%                          | 10                      | 673                      | 3 674                              |
| 3    | 99.07%                          | 9                       | 637                      | 2 991                              |
| 4    | 98.83%                          | 5                       | 557                      | 2 345                              |
| 5    | 98.43%                          | 6                       | 563                      | 1 783                              |
| 6    | 98.22%                          | 2                       | 551                      | 1 214                              |
| 7    | 97.61%                          | 3                       | 365                      | 661                                |
| 8    | 97.61%                          |                         | 293                      | 293                                |

Tab. 61. Cumulative survival probability of non-cemented cups Allofit (Sulzer)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 3 173                              |
| 1    | 99.56%                          | 14                      | 17                       | 3 173                              |
| 2    | 99.15%                          | 11                      | 960                      | 3 142                              |
| 3    | 98.65%                          | 9                       | 735                      | 2 171                              |
| 4    | 98.24%                          | 5                       | 438                      | 1 427                              |
| 5    | 97.84%                          | 3                       | 477                      | 984                                |
| 6    | 97.84%                          |                         | 288                      | 504                                |
| 7    | 97.84%                          |                         | 103                      | 216                                |
| 8    | 97.84%                          |                         | 110                      | 113                                |

Tab. 62. Cumulative survival probability of non-cemented stems Zweymüller SL Alloclassic (Zimmer)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 2 708                              |
| 1    | 99.48%                          | 14                      | 22                       | 2 708                              |
| 2    | 99.07%                          | 10                      | 467                      | 2 672                              |
| 3    | 98.66%                          | 8                       | 564                      | 2 195                              |
| 4    | 98.38%                          | 4                       | 383                      | 1 623                              |
| 5    | 98.10%                          | 3                       | 385                      | 1 236                              |
| 6    | 97.95%                          | 1                       | 374                      | 848                                |
| 7    | 97.40%                          | 2                       | 241                      | 473                                |
| 8    | 95.72%                          | 2                       | 228                      | 230                                |

Tab. 63. Cumulative survival probability of non-cemented stems Bicontact (Aesculap)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 2 249                              |
| 1    | 98.97%                          | 23                      | 8                        | 2 249                              |
| 2    | 98.64%                          | 7                       | 314                      | 2 215                              |
| 3    | 98.34%                          | 5                       | 477                      | 1 897                              |
| 4    | 97.94%                          | 5                       | 356                      | 1 415                              |
| 5    | 97.83%                          | 1                       | 342                      | 1 054                              |
| 6    | 97.48%                          | 2                       | 305                      | 711                                |
| 7    | 97.48%                          |                         | 233                      | 404                                |
| 8    | 97.48%                          |                         | 168                      | 171                                |

Tab. 64. Cumulative survival probability of non-cemented stems Zweymüller SL Plus (Endoprotetik Plus)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 2 055                              |
| 1    | 99.51%                          | 10                      | 6                        | 2 055                              |
| 2    | 98.94%                          | 11                      | 274                      | 2 039                              |
| 3    | 98.57%                          | 6                       | 232                      | 1 754                              |
| 4    | 98.21%                          | 5                       | 301                      | 1 516                              |
| 5    | 98.02%                          | 2                       | 385                      | 1 210                              |
| 6    | 97.86%                          | 1                       | 411                      | 823                                |
| 7    | 97.54%                          | 1                       | 218                      | 411                                |
| 8    | 97.54%                          |                         | 191                      | 192                                |

Tab. 65. Cumulative survival probability of cemented cups PE Müller (Aesculap)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 10.196                             |
| 1    | 99.32%                          | 69                      | 213                      | 10.196                             |
| 2    | 98.86%                          | 42                      | 1.422                    | 9.914                              |
| 3    | 98.40%                          | 35                      | 1.847                    | 8.450                              |
| 4    | 97.82%                          | 34                      | 1.625                    | 6.568                              |
| 5    | 97.39%                          | 18                      | 1.511                    | 4.909                              |
| 6    | 97.09%                          | 8                       | 1.643                    | 3.380                              |
| 7    | 96.44%                          | 8                       | 1.059                    | 1.729                              |
| 8    | 96.14%                          | 1                       | 651                      | 662                                |

Tab. 66. Cumulative survival probability of cemented cups SPC PE (Sulzer)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 5 397                              |
| 1    | 99.57%                          | 23                      | 107                      | 5 397                              |
| 2    | 99.16%                          | 20                      | 814                      | 5 267                              |
| 3    | 98.85%                          | 12                      | 1 213                    | 4 433                              |
| 4    | 98.67%                          | 5                       | 926                      | 3 208                              |
| 5    | 98.45%                          | 4                       | 862                      | 2 277                              |
| 6    | 98.18%                          | 3                       | 674                      | 1 411                              |
| 7    | 97.81%                          | 2                       | 403                      | 734                                |
| 8    | 97.81%                          |                         |                          |                                    |

Tab. 67. Cumulative survival probability of cemented cups Müller ZZ (Biomet Merck)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 2 217                              |
| 1    | 99.54%                          | 10                      | 51                       | 2 217                              |
| 2    | 99.18%                          | 7                       | 436                      | 2 166                              |
| 3    | 98.67%                          | 8                       | 330                      | 1 713                              |
| 4    | 98.51%                          | 2                       | 336                      | 1 375                              |
| 5    | 98.28%                          | 2                       | 314                      | 1 037                              |
| 6    | 98.12%                          | 1                       | 270                      | 721                                |
| 7    | 98.12%                          |                         | 205                      | 450                                |
| 8    | 98.12%                          |                         |                          |                                    |

Tab. 68. Cumulative survival probability of cemented stems – THA stem with conical neck 12/14 AK (Beznoska)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 9 932                              |
| 1    | 99.26%                          | 72                      | 274                      | 9 932                              |
| 2    | 98.70%                          | 51                      | 1 185                    | 9 586                              |
| 3    | 98.48%                          | 17                      | 1 577                    | 8 350                              |
| 4    | 98.23%                          | 15                      | 1 432                    | 8 756                              |
| 5    | 98.10%                          | 6                       | 1 408                    | 5 309                              |
| 6    | 97.91%                          | 6                       | 1 649                    | 3 895                              |
| 7    | 97.85%                          | 1                       | 1 268                    | 2 240                              |
| 8    | 97.85%                          |                         |                          |                                    |

Tab. 69. Cumulative survival probability of cemented stems Centrament – newer type (Aesculap)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 8 477                              |
| 1    | 99.26%                          | 62                      | 136                      | 8 477                              |
| 2    | 98.79%                          | 37                      | 1 001                    | 8 279                              |
| 3    | 98.34%                          | 29                      | 1 775                    | 7 241                              |
| 4    | 97.81%                          | 25                      | 1 491                    | 5 437                              |
| 5    | 97.62%                          | 6                       | 1 714                    | 3 921                              |
| 6    | 97.31%                          | 4                       | 1 930                    | 2 201                              |
| 7    | 97.31%                          |                         |                          |                                    |
| 8    |                                 |                         |                          |                                    |

Tab. 70. Cumulative survival probability of cemented stems Geradschaft cone 12/14 cemented (Sulzer)

| Year | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
|------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| 0    | 100.00%                         |                         |                          | 6 904                              |
| 1    | 99.55%                          | 31                      | 103                      | 6 904                              |
| 2    | 99.22%                          | 20                      | 1 502                    | 6 770                              |
| 3    | 98.87%                          | 16                      | 1 411                    | 5 248                              |
| 4    | 98.66%                          | 7                       | 1 059                    | 3 821                              |
| 5    | 98.39%                          | 6                       | 1 118                    | 2 755                              |
| 6    | 98.14%                          | 3                       | 897                      | 1 631                              |
| 7    | 97.95%                          | 1                       | 410                      | 731                                |
| 8    | 97.95%                          |                         |                          |                                    |

Tab. 71. Cumulative survival probabilities – cemented implants

| <b>Gender</b>         | All                                      |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | All                                      |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | Cemented                                 |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 29 650                             |
| 1                     | 99.37%                                   | 99.37%                          | 183                     | 838                      | 29 650                             |
| 2                     | 99.59%                                   | 98.97%                          | 106                     | 5 186                    | 28 629                             |
| 3                     | 99.62%                                   | 98.59%                          | 78                      | 5 399                    | 23 337                             |
| 4                     | 99.62%                                   | 98.22%                          | 59                      | 4 483                    | 17 860                             |
| 5                     | 99.72%                                   | 97.95%                          | 31                      | 4 243                    | 13 318                             |
| 6                     | 99.74%                                   | 97.69%                          | 18                      | 4 102                    | 9 044                              |
| 7                     | 99.66%                                   | 97.36%                          | 12                      | 2 701                    | 4 924                              |
| 8                     | 99.91%                                   | 97.27%                          | 1                       | 2 179                    | 2 211                              |

Tab. 72. Cumulative survival probabilities – hybrid cemented acetabular component

| <b>Gender</b>         | All                                      |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | All                                      |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | Hybrid cemented acetabular component     |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 435                                |
| 1                     | 97.91%                                   | 97.91%                          | 9                       | 8                        | 435                                |
| 2                     | 99.74%                                   | 97.66%                          | 1                       | 66                       | 418                                |
| 3                     | 98.43%                                   | 96.13%                          | 5                       | 64                       | 351                                |
| 4                     | 100.00%                                  | 96.13%                          |                         | 65                       | 282                                |
| 5                     | 98.91%                                   | 95.08%                          | 2                       | 66                       | 217                                |
| 6                     | 100.00%                                  | 95.08%                          |                         | 57                       | 149                                |
| 7                     | 98.45%                                   | 93.61%                          | 1                       | 55                       | 92                                 |
| 8                     | 100.00%                                  | 93.61%                          |                         | 36                       | 36                                 |

Tab. 73. Cumulative survival probabilities – hybrid cemented femoral component

| <b>Gender</b>         | All                                      |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | All                                      |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | Hybrid - cemented femoral component      |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 10 924                             |
| 1                     | 99.47%                                   | 99.47%                          | 57                      | 203                      | 10 924                             |
| 2                     | 99.49%                                   | 98.97%                          | 49                      | 2 133                    | 10 664                             |
| 3                     | 99.64%                                   | 98.61%                          | 27                      | 1 940                    | 8 482                              |
| 4                     | 99.58%                                   | 98.20%                          | 24                      | 1 587                    | 6 515                              |
| 5                     | 99.68%                                   | 97.88%                          | 13                      | 1 625                    | 4 904                              |
| 6                     | 99.52%                                   | 97.41%                          | 12                      | 1 554                    | 3 268                              |
| 7                     | 99.58%                                   | 97.00%                          | 5                       | 990                      | 1 700                              |
| 8                     | 99.72%                                   | 96.73%                          | 1                       | 700                      | 705                                |

Tab. 74. Cumulative survival probabilities – uncemented implants

| <b>Gender</b>         | All                                      |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | All                                      |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | Uncemented                               |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 22 028                             |
| 1                     | 99.38%                                   | 99.38%                          | 136                     | 110                      | 22 028                             |
| 2                     | 99.57%                                   | 98.95%                          | 85                      | 4 364                    | 21 782                             |
| 3                     | 99.61%                                   | 98.57%                          | 59                      | 4 249                    | 17 333                             |
| 4                     | 99.56%                                   | 98.13%                          | 51                      | 3 071                    | 13 025                             |
| 5                     | 99.66%                                   | 97.80%                          | 28                      | 3 070                    | 9 903                              |
| 6                     | 99.65%                                   | 97.45%                          | 19                      | 2 856                    | 6 805                              |
| 7                     | 99.51%                                   | 96.97%                          | 14                      | 2 158                    | 3 930                              |
| 8                     | 99.54%                                   | 96.53%                          | 4                       | 1 742                    | 1 758                              |

Tab. 75. Cumulative survival probabilities in patients with primary osteoarthritis

| <b>Gender</b>         | All                                      |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | Primary osteoarthritis                   |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | All                                      |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 43 250                             |
| 1                     | 99.57%                                   | 99.57%                          | 187                     | 339                      | 43 250                             |
| 2                     | 99.64%                                   | 99.20%                          | 140                     | 8 180                    | 42 724                             |
| 3                     | 99.62%                                   | 98.83%                          | 115                     | 8 149                    | 34 404                             |
| 4                     | 99.61%                                   | 98.44%                          | 89                      | 6 356                    | 26 140                             |
| 5                     | 99.71%                                   | 98.16%                          | 48                      | 6 159                    | 19 695                             |
| 6                     | 99.68%                                   | 97.85%                          | 33                      | 6 056                    | 13 488                             |
| 7                     | 99.57%                                   | 97.42%                          | 23                      | 4 153                    | 7 399                              |
| 8                     | 99.87%                                   | 97.30%                          | 2                       | 3 189                    | 3 223                              |

Tab. 76. Cumulative survival probabilities in patients after congenital hip dislocation

| <b>Gender</b>         | All                                      |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | Developmental dysplasia of the hip       |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | All                                      |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 6 103                              |
| 1                     | 99.36%                                   | 99.36%                          | 39                      | 24                       | 6 103                              |
| 2                     | 99.66%                                   | 99.02%                          | 19                      | 1 029                    | 6 040                              |
| 3                     | 99.69%                                   | 98.71%                          | 14                      | 1 085                    | 4 992                              |
| 4                     | 99.45%                                   | 98.16%                          | 19                      | 890                      | 3 893                              |
| 5                     | 99.64%                                   | 97.81%                          | 9                       | 901                      | 2 984                              |
| 6                     | 99.63%                                   | 97.45%                          | 6                       | 899                      | 2 074                              |
| 7                     | 99.53%                                   | 96.99%                          | 4                       | 640                      | 1 169                              |
| 8                     | 99.24%                                   | 96.25%                          | 2                       | 519                      | 525                                |

Tab. 77. Cumulative survival probabilities in patients s rheumatoid arthritis

| <b>Gender</b>         | All                                      |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | Rheumatoid arthritis                     |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | All                                      |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 478                                |
| 1                     | 99.16%                                   | 99.16%                          | 4                       | 1                        | 478                                |
| 2                     | 99.09%                                   | 98.26%                          | 4                       | 64                       | 473                                |
| 3                     | 100.00%                                  | 98.26%                          |                         | 97                       | 405                                |
| 4                     | 99.63%                                   | 97.90%                          | 1                       | 76                       | 308                                |
| 5                     | 99.50%                                   | 97.41%                          | 1                       | 65                       | 231                                |
| 6                     | 99.28%                                   | 96.70%                          | 1                       | 54                       | 165                                |
| 7                     | 100.00%                                  | 96.70%                          |                         | 60                       | 110                                |
| 8                     | 100.00%                                  | 96.70%                          |                         | 50                       | 50                                 |

Tab. 78. Cumulative survival probabilities in status post-fracture in general

| <b>Gender</b>         | All                                      |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | Post- fracture                           |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | All                                      |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 8 532                              |
| 1                     | 98.66%                                   | 98.66%                          | 110                     | 655                      | 8 521                              |
| 2                     | 99.26%                                   | 97.93%                          | 51                      | 1 655                    | 7 767                              |
| 3                     | 99.51%                                   | 97.46%                          | 26                      | 1 395                    | 6 061                              |
| 4                     | 99.78%                                   | 97.24%                          | 9                       | 1 158                    | 4 640                              |
| 5                     | 99.61%                                   | 96.86%                          | 11                      | 1 278                    | 3 473                              |
| 6                     | 99.82%                                   | 96.69%                          | 3                       | 1 011                    | 2 184                              |
| 7                     | 100.00%                                  | 96.69%                          |                         | 619                      | 1 170                              |
| 8                     | 99.63%                                   | 96.33%                          | 1                       | 539                      | 551                                |

Tab. 79. Cumulative survival probabilities in status post-fracture in males

| <b>Gender</b>         | Males                                    |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | Post- fracture                           |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | All                                      |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 2 966                              |
| 1                     | 98.31%                                   | 98.31%                          | 48                      | 256                      | 2 966                              |
| 2                     | 99.11%                                   | 97.43%                          | 21                      | 582                      | 2 662                              |
| 3                     | 99.34%                                   | 96.79%                          | 12                      | 467                      | 2 059                              |
| 4                     | 99.78%                                   | 96.58%                          | 3                       | 392                      | 1 580                              |
| 5                     | 99.18%                                   | 95.79%                          | 8                       | 422                      | 1 185                              |
| 6                     | 100.00%                                  | 95.79%                          |                         | 323                      | 755                                |
| 7                     | 100.00%                                  | 95.79%                          |                         | 222                      | 432                                |
| 8                     | 100.00%                                  | 95.79%                          |                         | 206                      | 210                                |

Tab. 80. Cumulative survival probabilities in status post-fracture in females

| <b>Gender</b>         | Females                                  |                                 |                         |                          |                                    |
|-----------------------|------------------------------------------|---------------------------------|-------------------------|--------------------------|------------------------------------|
| <b>Joint</b>          | Hip joint                                |                                 |                         |                          |                                    |
| <b>Diagnosis</b>      | Post- fracture                           |                                 |                         |                          |                                    |
| <b>Fixation type</b>  | All                                      |                                 |                         |                          |                                    |
| <b>Follow-up time</b> | 2003, 2004, 2005, 2006, 2007, 2008, 2009 |                                 |                         |                          |                                    |
| Year                  | Survival probability                     | Cumulative survival probability | Number of revised cases | Number of censored cases | Number of non-revised cases so far |
| 0                     | 100.00%                                  | 100.00%                         |                         |                          | 5 566                              |
| 1                     | 98.84%                                   | 98.84%                          | 62                      | 399                      | 5 566                              |
| 2                     | 99.34%                                   | 98.19%                          | 30                      | 1 073                    | 5 105                              |
| 3                     | 99.60%                                   | 97.80%                          | 14                      | 928                      | 4 002                              |
| 4                     | 99.78%                                   | 97.58%                          | 6                       | 766                      | 3 060                              |
| 5                     | 99.84%                                   | 97.43%                          | 3                       | 856                      | 2 288                              |
| 6                     | 99.72%                                   | 97.15%                          | 3                       | 688                      | 1 429                              |
| 7                     | 100.00%                                  | 97.15%                          |                         | 397                      | 738                                |
| 8                     | 99.40%                                   | 96.57%                          | 1                       | 333                      | 341                                |