**Supplementary Table 1** Primary procedures included in the analysis

| **Primary Procedure** | **With DI** | **Without DI** | **Total** |
| --- | --- | --- | --- |
| 0SRC0J9-RPLCE RT KNEE JT W/SS,CEMENT,OA | 8 | 195,336 | 195,344 |
| 0SRD0J9-RPLCE LT KNEE JT W/SS,CEMENT,OA | 5 | 188,659 | 188,664 |
| 0FT44ZZ-RESECTION OF GALLBLADDER,PEA | 20 | 156,856 | 156,876 |
| 0DB64Z3-EXCISION OF STOMACH PEA,VERTICAL | 4 | 65,372 | 65,376 |
| 0DTJ4ZZ-RESECTION OF APPENDIX,PERC ENDO APP | 5 | 57,146 | 57,151 |
| 0UT90ZZ-RESECTION OF UTERUS,OPEN APPROACH | 6 | 56,461 | 56,467 |
| 02100Z9-BYPSS CA 1 ART FRM L INT MAMMRY, OA | 27 | 51,152 | 51,179 |
| 027034Z-DILAT COR ART,1 ART,W/DEID,PA | 2 | 46,825 | 46,827 |
| 0SR904A-RPLCM RT HIP JT W/CERM POLYUNCMN,OA | 1 | 37,441 | 37,442 |
| 10D00Z1-EXTRCTN PRD CNCPTN,LW CRVCL,OPN APP | 2 | 36,950 | 36,952 |
| 0SG00AJ-FUSN LMBR VERT JNT W IBFD,POS,AC,OA | 2 | 33,638 | 33,640 |
| 0SRB04A-RPLCM LT HIP JT CERM POLYSSUNCMN,OA | 3 | 32,703 | 32,706 |
| 0D164ZA-BYPASS STOMACH JEJUNUM PEA | 5 | 31,053 | 31,058 |
| 0RG20A0-FSN 2+ CVJ W/IFD,ANT AP,ANT COL,OA | 6 | 29,492 | 29,498 |
| 0VT04ZZ-RESECTION PROSTATE, PERCU ENDO APPR | 3 | 28,947 | 28,950 |
| 02RF08Z-RPLCMN AORTIC VALV W/ZOOPLSTC TS,OA | 3 | 25,886 | 25,899 |
| 0JH606Z-INSERT PACE,DUAL CHAM CHEST SUBC,OA | 2 | 25,407 | 25,409 |
| 0WUF0JZ-SUPPLEMENT ABDOMINAL WALL W/SS, OA | 3 | 25,106 | 25,109 |
| 02RF38Z-RPLCMN AORTIC VALV W/ZOOPLSTC TS,PA | 4 | 22,294 | 22,298 |
| 0DTN0ZZ-RESECTION OF SIGMOID COLON,OPEN APP | 1 | 21,989 | 21,990 |
| 0DTF0ZZ-RESECTION OF RT LARGE INTESTINE,OA | 3 | 21,923 | 21,926 |
| 01NB0ZZ-RELEASE LUMBAR NERVE, OPEN APPROACH | 3 | 19,199 | 19,202 |
| 0QS706Z-REPOS LT UPPER FEMUR W/IMIFD, OA | 2 | 17,184 | 17,186 |
| 021109W-BYP CA 2 ART FRM AORTA W AVT,OA | 8 | 17,118 | 17,126 |
| 0SRB04Z-REPLCM LT HIP JT CERAMIC POLY SS,OA | 2 | 17,018 | 17,020 |
| 0SR902A-RPLCM RT HIP JT W/METL POLUNCEMN,OA | 1 | 16,543 | 16,544 |
| 0QS606Z-REPOS RT UPPER FEMUR W/IMIFD,OA | 2 | 16,302 | 16,304 |
| 0DTF4ZZ-RESECTION OF RT LARGE INTESTINE,PEA | 1 | 16,106 | 16,107 |
| 0QS704Z-REPOS LT UPPER FEMUR W/IFD, OA | 3 | 15,812 | 15,815 |
| 4A023N7-MSRMNT CARD SAMPLG&PRSR,LT HEART,PA | 1 | 15,720 | 15,721 |
| 0DBN0ZZ-EXCISION SIGMOID COLON OPEN APPROAC | 3 | 15,578 | 15,581 |
| 0DB80ZZ-EXCISION SMALL INTESTINE OPEN APPRO | 1 | 15,416 | 15,417 |
| 0SR90JA-REPLACE RT HIP JT W/SS,UNCEMENT,OA | 2 | 15,336 | 15,338 |
| 03CL0ZZ-EXTIRPATION OF MATTER FROM LICA,OA | 1 | 14,978 | 14,979 |
| 0RG10A0-FSN CVJ W/IFD, ANT AP, ANT COL, OA | 2 | 14,559 | 14,561 |
| 0FT40ZZ-RESECTION OF GALLBLADDER,OPEN APPR | 3 | 14,428 | 14,431 |
| 0SRB02A-RPLCM LT HIP JT METL POLSSUNCEMN,OA | 1 | 14,185 | 14,186 |
| 0SRB0JA-REPLACE LT HIP JT W/SS,UNCEMENT,OA | 2 | 13,543 | 13,545 |
| 0WQF0ZZ-REPAIR ABDOMINAL WALL, OPEN APPRCH | 2 | 13,535 | 13,537 |
| 0DBB0ZZ-EXCISION OF ILEUM, OPEN APPROACH | 3 | 12,879 | 12,882 |
| 0SG30AJ-FUSN LUMBSCRL JT W/IBFD,POST,AC,OA | 1 | 12,636 | 12,637 |
| 04V03DZ-RESTRIC AA W/INTRALUM DEV,PERC APPR | 2 | 12,417 | 12,419 |
| 0RRJ0JZ-REPLCMT RT SHOULDER JNT W/SS, OA | 1 | 12,400 | 12,401 |
| 0QS636Z-REPOS RT UPPER FEMUR W/IMIFD,PA | 2 | 12,384 | 12,386 |
| 02583ZZ-DESTRUCTION OF CONDUCTN MECHANSM,PA | 2 | 12,264 | 12,266 |
| 0DN80ZZ-RELEASE SMALL INTESTINE,OPEN APPR | 3 | 11,552 | 11,555 |
| 021209W-BYP CA 3 ART FRM AORTA W AVT,OA | 6 | 11,456 | 11,462 |
| 0SG00A0-FUSN LMBR VERT JNT W IBFD,AAP,AC,OA | 1 | 11,262 | 11,263 |
| 0TC78ZZ-EXTIRP MATTER LT URETER,VN OR AOE | 2 | 11,192 | 11,194 |
| 027035Z-DILAT COR ART,1 ART,W 2 DEID,PA | 2 | 10,814 | 10,816 |
| 0SG10AJ-FUSN 2+ LMB VERT JT IBFD,POST,AC,OA | 1 | 10,464 | 10,465 |
| 02HV33Z-INSERTION INFUSION DEV,SVC,PA | 2 | 10,187 | 10,189 |
| 0SB20ZZ-EXCISION LUMBAR VERTEBRAL DISC,OA | 2 | 10,085 | 10,087 |
| 0TC68ZZ-EXTIRP MATTER RT URETER,VN OR AOE | 3 | 9,991 | 9,994 |
| 06H03DZ-INSERTN INTRALUMN DEV INTO IVC,PA | 1 | 9,684 | 9,685 |
| 0UT94ZZ-RESECTION OF UTERUS,PERC ENDO APP | 5 | 9,421 | 9,426 |
| 0QSJ04Z-REPOS RIGHT FIBULA W/IFD, OPEN APP | 1 | 9,177 | 9,178 |
| 0SRD0JA-RPLCE LT KNEE JT W/SS,UNCEMENT,OA | 1 | 8,993 | 8,994 |
| 0WUF4JZ-SUPPLEMENT ABDOMINAL WALL W/SS, PEA | 2 | 8,629 | 8,631 |
| 00C40ZZ-EXTIRPT MATTR FRM INTRAC SUBD SP,OA | 5 | 8,581 | 8,586 |
| 0DBN4ZZ-EXCISION SIGMOID COLON PERC ENDO AP | 1 | 8,480 | 8,481 |
| 021009W-BYP CA 1 ART FRM AORTA W/AVT,OA | 4 | 8,455 | 8,459 |
| 0SG00A1-FUSN LMBR VERT JNT W IBFD,POS,PC,OA | 1 | 8,276 | 8,277 |
| 0RG2071-FSN 2+ CVJ W/ATS POS AP POS COL,OA | 5 | 8,102 | 8,107 |
| 0DTJ0ZZ-RESECTION OF APPENDIX,OPEN APPROACH | 2 | 7,887 | 7,889 |
| 0UT9FZZ-RESECTION UTERUS,VN/AO W/PE ASSIST | 1 | 7,772 | 7,773 |
| 0QSK04Z-REPOS LEFT FIBULA W/IFD, OPEN APP | 2 | 7,718 | 7,720 |
| 0SG30A0-FUSN LUMBOSACRAL JT WIBFD,AAP,AC,OA | 1 | 7,585 | 7,586 |
| 0JH608Z-INSERT DEFIB GEN CHEST SUBCU,OA | 3 | 7,345 | 7,348 |
| 0SR903A-RPLCM RT HIP JT W/CERMC SS UNCMN,OA | 1 | 6,717 | 6,718 |
| 00B70ZZ-EXCISION OF CEREBRAL HEMISPHERE,OA | 2 | 6,602 | 6,604 |
| 0QS734Z-REPOS LT UPPER FEMUR W/IFD, PA | 1 | 6,464 | 6,465 |
| 0FBG0ZZ-EXCISION OF PANCREAS, OPEN APPROACH | 1 | 6,439 | 6,440 |
| 0DV44ZZ-RESTRICTION OF ESOPHAGSTRC JCTN,PEA | 1 | 6,160 | 6,161 |
| 02RG08Z-RPLCMN MITRAL VALV W/ZOOPLSTC TS,OA | 4 | 6,141 | 6,145 |
| 0SPD0JZ-RMVL SS LT KNEE JOINT,OA | 1 | 6,022 | 6,023 |
| 0QSB04Z-REPOS RT LOWER FEMUR W/IFD, OA | 1 | 5,996 | 5,997 |
| 0RG20K0-FSN 2+ CVJ W/NATS ANT AP ANT COL,OA | 2 | 5,981 | 5,983 |
| 0VT00ZZ-RESECTION OF PROSTATE,OPEN APPROACH | 1 | 5,648 | 5,649 |
| 0TBB8ZZ-EXCISION OF BLADDER,VN OR AOE | 1 | 5,534 | 5,535 |
| 02RF0JZ-REPLCMNT AORTIC VALVE W/SS,OA | 1 | 5,416 | 5,417 |
| 02L73DK-OCCLUSION LAA W/INTRALUMINAL DEV,PA | 1 | 5,413 | 5,414 |
| 0RB30ZZ-EXC CERVICAL VERTEBRAL DISC, OA | 2 | 5,325 | 5,327 |
| 0UT20ZZ-RESECTION OF BILATERAL OVARIES,OA | 1 | 5,270 | 5,271 |
| 0TT10ZZ-RESECTION LT KIDNEY,OPEN APPROACH | 2 | 5,197 | 5,199 |
| 0JB70ZZ-EXCISION BACK SUBCU TIS FAS, OA | 1 | 4,769 | 4,770 |
| 03CG3ZZ-EXTIRPATN MATTR FR INTRACRNL ART,PA | 1 | 4,687 | 4,688 |
| 0JH609Z-INSERT CARD RSYNC DEFIB PULS GEN,OA | 2 | 4,572 | 4,574 |
| 0DTG0ZZ-RESECTION OF LT LARGE INTESTINE,OA | 1 | 4,539 | 4,540 |
| 0PSG04Z-REPOSITION LT HUM SHAFT W/IFD, OA | 1 | 4,496 | 4,497 |
| 0SRS01A-RPLCE LT HIP JT,FMRL METLSS,UNCM,OA | 1 | 4,217 | 4,218 |
| 0Y6D0Z3-DETACHMENT LT UPPER LEG,LOW, OA | 1 | 4,162 | 4,163 |
| 00NW0ZZ-RELEASE CERVICAL SPINAL CORD, OA | 1 | 4,149 | 4,150 |
| 0PSF04Z-REPOSITION RT HUM SHAFT W/IFD, OA | 1 | 4,123 | 4,124 |
| 0TB14ZZ-EXCISION OF LT KIDNEY,PERC ENDO APP | 1 | 4,119 | 4,120 |
| 0JB90ZZ-EXCISION BUTTOCK SUBCU TIS FAS, OA | 2 | 4,092 | 4,094 |
| 0Y6C0Z3-DETACHMENT RT UPPER LEG,LOW, OA | 1 | 4,060 | 4,061 |
| 0SB40ZZ-EXCISION OF LUMBOSACRAL DISC,OA | 1 | 4,029 | 4,030 |
| 0TY00Z0-TRANSPLANT RT KIDNEY,ALLOGENEIC,OA | 2 | 3,875 | 3,877 |
| 0GTK0ZZ-RESECTION THYROID GLAND, OA | 4 | 3,869 | 3,873 |
| 30233N1-TRNSFS NONATLGS RD BLD CLS IN PV,PA | 1 | 3,866 | 3,867 |
| 0W9D00Z-DRAINAGE PERICARDIAL CAVITY W/DD,OA | 2 | 3,800 | 3,802 |
| 0RG10K0-FSN CVJ W/NATS, ANT AP, ANT COL, OA | 1 | 3,739 | 3,740 |
| 02703DZ-DILATION COR ART,1 ART,W/ID,PA | 1 | 3,730 | 3,731 |
| 0QSG06Z-REPOS RT TIBIA W/IMIFD, OPEN APP | 1 | 3,636 | 3,637 |
| 07TP0ZZ-RESECTION OF SPLEEN, OPEN APPROACH | 3 | 3,509 | 3,512 |
| 021309W-BYP CA 4+ ART FRM AORTA W AVT,OA | 3 | 3,469 | 3,472 |
| 0JBM0ZZ-EXC LT UPPER LEG SUBCU TIS FAS, OA | 1 | 3,463 | 3,464 |
| 0RG7071-FSN 2-7 TVJ W/ATS POS AP POS COL,OA | 1 | 3,461 | 3,462 |
| 03VG3DZ-RESTRICTN INTRACRANL ARTERY W/ID,PA | 3 | 3,455 | 3,458 |
| 0DB60ZZ-EXCISION OF STOMACH, OPEN APPROACH | 1 | 3,335 | 3,336 |
| 0RT30ZZ-RESECTION CERVICAL VERTEBRAL DSC,OA | 2 | 3,304 | 3,306 |
| 0BTC4ZZ-RESECTION RT UPPER LUNG LOBE PEA | 2 | 3,231 | 3,233 |
| 0DBL0ZZ-EXCISION TRANSVERSE COLON OPEN APPR | 1 | 3,189 | 3,190 |
| 0SR901A-RPLCM RT HIP JT W/METL SS UNCEMN,OA | 1 | 3,186 | 3,187 |
| 00B10ZZ-EXCISION OF CEREBRAL MENINGES,OA | 1 | 3,170 | 3,171 |
| 0QSH06Z-REPOS LT TIBIA W/IMIFD, OPEN APP | 1 | 3,165 | 3,166 |
| 0RG2070-FSN 2+ CVJ W/ATS ANT AP ANT COL,OA | 1 | 3,151 | 3,152 |
| 02RX0JZ-REPLACEM THORAC AORT,ASC W/SS,OA | 1 | 3,124 | 3,125 |
| 00160J6-BYP CEREB VEN PERITNL CAVTY W/SS,OA | 1 | 3,119 | 3,120 |
| 0DJ08ZZ-INSPECT UPPR INTESTINTRACT NAT/AOE | 1 | 3,072 | 3,073 |
| 0SPD09Z-RMVL LINER LT KNEE JOINT,OA | 1 | 2,969 | 2,970 |
| 0BBC4ZZ-EXCISION RT UP LUNG LOBE PEA | 1 | 2,891 | 2,892 |
| 0SRB01A-RPLCM LT HIP JT W/METL SS UNCEMN,OA | 1 | 2,848 | 2,849 |
| 0JPT0PZ-REMVL CRRD TRUNK SUBCU TIS FAS, OA | 2 | 2,821 | 2,823 |
| 009400Z-DRAIN INTRACRAN SUBDUR SPAC W/DD,OA | 1 | 2,813 | 2,814 |
| 009630Z-DRAING CRBRL VENTRC W/DRAING DEV,PA | 2 | 2,769 | 2,771 |
| 0BH17EZ-INSERT ENDOTRACHAIRWAY TRACH NAT/AO | 4 | 2,765 | 2,769 |
| 0NSV04Z-REPOSITION LT MANDIBLE INTRL FIX OA | 3 | 2,734 | 2,737 |
| 02RF3JZ-REPLCMNT AORTIC VALVE W/SS,PA | 1 | 2,651 | 2,652 |
| 0DT80ZZ-RESECTION OF SMALL INTESTINE,OA | 1 | 2,633 | 2,634 |
| 0B9F8ZX-DRAIN RT LWR LUNG LOBE NAT/AOE DIAG | 2 | 2,626 | 2,628 |
| 03180ZD-BYPASS LBA,UPPER ARM VEIN,OA | 2 | 2,618 | 2,620 |
| 0B9J8ZX-DRAIN LT LWR LUNG LOBE NAT/AOE DX | 2 | 2,596 | 2,598 |
| 0BTC0ZZ-RESECTION RT UPPER LUNG LOBE OA | 1 | 2,581 | 2,582 |
| 0WQF4ZZ-REPAIR ABDOMNAL WALL,PERCU END APPR | 1 | 2,508 | 2,509 |
| 0D1L0Z4-BYPASS TRANSVERSE COLON CUTANE OA | 1 | 2,496 | 2,497 |
| 041L0JL-BYPASS LFA,POPLITEAL ARTRY W/SS,OA | 1 | 2,491 | 2,492 |
| 03LG3DZ-OCCLUSION INTRACRANL ARTERY W/ID,PA | 1 | 2,489 | 2,490 |
| 0PSL04Z-REPOSITION LT ULNA W/IFD, OPEN APP | 1 | 2,465 | 2,466 |
| 04CL3ZZ-EXTIRPATN MTTR FR LT FEMORAL ART,PA | 1 | 2,454 | 2,455 |
| 02UG3JZ-SUPPLEMENT MITRAL VALVE W/SS,PA | 1 | 2,416 | 2,417 |
| 027036Z-DILATION COR ART,1 ART,W 3 DEID,PA | 1 | 2,368 | 2,369 |
| 5A1955Z-RESPIRTRY VENTILTN,>96 CONSCTV HRS | 6 | 2,365 | 2,371 |
| 0BTG4ZZ-RESECTION LT UP LUNG LOBE PERCU END | 1 | 2,331 | 2,332 |
| 02RG0JZ-REPLCMNT MITRAL VALVE W/SS,OA | 2 | 2,271 | 2,273 |
| 0210099-BYP CA 1 ART FRM LIM W/AVT,OA | 2 | 2,242 | 2,244 |
| 0DBE0ZZ-EXCISION LARGE INTESTINE OA | 1 | 2,219 | 2,220 |
| 0JBB0ZZ-EXCISION PERIM SUBCU TIS FAS, OA | 1 | 2,139 | 2,140 |
| 0B9C8ZX-DRAIN RT UP LUNG LOBE NAT/AOE DIAG | 1 | 2,136 | 2,137 |
| 0WJG4ZZ-INSPECTION OF PERITONEAL CAVITY,PEA | 1 | 2,132 | 2,133 |
| 5A02210-ASSIST CARDC OUTPT BALN PUMP,CONTIN | 2 | 2,107 | 2,109 |
| 0BBF4ZZ-EXCISION RT LWR LUNG LOBE PEA | 1 | 2,102 | 2,103 |
| 0DTP4ZZ-RESECTION OF RECTUM,PERCU ENDO APPR | 1 | 2,077 | 2,078 |
| 0W9F0ZZ-DRAINAGE OF ABDOMINAL WALL, OA | 1 | 2,077 | 2,078 |
| 0Y6H0Z3-DETACHMENT AT RT LOWER LEG,LOW, OA | - | 2,061 | 2,061 |
| 0BBF4ZX-EXCISION RT LWR LUNG LOBE PEA DX | 3 | 2,032 | 2,035 |
| 4A023FZ-MEASURMNT CARDIAC RHYTHM,PERCU APPR | 1 | 2,032 | 2,033 |
| 00NX0ZZ-RELEASE THORACIC SPINAL CORD, OA | 2 | 1,947 | 1,949 |
| 0GB04ZZ-EXCISION OF PITUITARY GLAND,PEA | 1 | 1,935 | 1,936 |
| 0Y6X0Z0-DETACH AT RT 5TH TOE,COMPLETE, OA | 1 | 1,923 | 1,924 |
| 02110Z9-BYPSS CA 2 ART FRM L INT MAMMRY, OA | 1 | 1,908 | 1,909 |
| 5A1945Z-RESPRTRY VENTILTN,24-96 CONSCTV HRS | 2 | 1,887 | 1,889 |
| 0RR30JZ-REPLCMT CERV VERT DISC W/SS, OA | 1 | 1,877 | 1,878 |
| 0NST04Z-REPOSITION RT MANDIBLE INTRL FIX OA | 2 | 1,850 | 1,852 |
| 07B60ZX-EXCISION LT AXILLARY LYMPHA,OA,DIAG | 1 | 1,832 | 1,833 |
| 0BBC8ZX-EXCISN RT UP LUNG LOBE NAT/AOE DX | 1 | 1,814 | 1,815 |
| 0BJ08ZZ-INSPECT TRACHBRONC TREE NAT/AOE | 2 | 1,746 | 1,748 |
| 0SBC0ZZ-EXCISION OF RIGHT KNEE JOINT,OA | 1 | 1,727 | 1,728 |
| 0Y6M0ZF-DETACH RT FOOT, PARTIAL 5TH RAY, OA | 1 | 1,704 | 1,705 |
| 0W9D0ZZ-DRAINAGE OF PERICARDIAL CAVITY,OA | 1 | 1,673 | 1,674 |
| 0QSD04Z-REPOS RIGHT PATELLA W/IFD, OPEN APP | 1 | 1,667 | 1,668 |
| 0KBP0ZZ-EXCISION LEFT HIP MUSCLE, OA | 1 | 1,654 | 1,655 |
| 0D1M0Z4-BYPASS DESCEND COLON CUTANEOUS OA | 1 | 1,652 | 1,653 |
| 0RG6071-FSN TVJ W/ATS, POS AP, POS COL, OA | 1 | 1,637 | 1,638 |
| 0D1B4Z4-BYPASS ILEUM TO CUTANEOUS PEA | 1 | 1,628 | 1,629 |
| 0QSG35Z-REPOS RIGHT TIBIA W/EFD, PA | 1 | 1,605 | 1,606 |
| 0BUT4JZ-SUPPLEMENT DIAPHRAGM W/SS, PEA | 1 | 1,598 | 1,599 |
| 0BTJ4ZZ-RESECTION LT LWR LUNG LOBE PERC END | 1 | 1,588 | 1,589 |
| 04R00JZ-REPLC ABDOM AORTA W/ SYNTH SUBS,OA | 1 | 1,570 | 1,571 |
| 0GTG0ZZ-RESECTION LT THYROID GL LOBE, OA | 6 | 1,552 | 1,558 |
| 02HA3RZ-INSRT SHORT EXT HEART ASST HEART,PA | 1 | 1,545 | 1,546 |
| 0RG1070-FSN CVJ W/ATS, ANT AP, ANT COL, OA | 1 | 1,539 | 1,540 |
| 0BTF0ZZ-RESECTION RT LWR LUNG LOBE OPEN APP | 1 | 1,533 | 1,534 |
| 0BBC4ZX-EXCISN RT UP LUNG LOBE PEA DX | 1 | 1,532 | 1,533 |
| 0QBH0ZZ-EXCISION LEFT TIBIA, OPEN APP | 1 | 1,527 | 1,528 |
| 04V03E6-RESTRC AA,BIFR,W FENES ID 1/2 AR,PA | 1 | 1,476 | 1,477 |
| 0WPF0JZ-REMOVAL OF SS FROM ABDM WALL, OA | 1 | 1,470 | 1,471 |
| 03VG0CZ-RESTRICTN INTRACRANL ARTERY W/ED,OA | 1 | 1,457 | 1,458 |
| 03CK0Z6-EXTIRPAT MATTER FROM RICA,BIFUR,OA | 1 | 1,453 | 1,454 |
| 0JBG0ZZ-EXCISION RT LWR ARM SUBCU TISFAS OA | 1 | 1,448 | 1,449 |
| 0DQ90ZZ-REPAIR DUODENUM, OPEN APPROACH | 1 | 1,428 | 1,429 |
| 03CL0Z6-EXTIRPAT MATTER FROM LICA,BIFUR,OA | 1 | 1,387 | 1,388 |
| 0DBF0ZZ-EXCISN RT LARGE INTESTINE,OPEN APPR | 1 | 1,385 | 1,386 |
| 0TB00ZZ-EXCISION OF RT KIDNEY,OPEN APPROACH | 1 | 1,372 | 1,373 |
| 07T10ZZ-RESECTION RT NECK LYMPHATIC,OA | 1 | 1,367 | 1,368 |
| 03LG0CZ-OCCLUSION INTRACRANL ARTERY W/ED,OA | 1 | 1,342 | 1,343 |
| 02RW0JZ-REPLACEM THORAC AORT,DESC W/SS,OA | 1 | 1,292 | 1,293 |
| 0WBF0ZZ-EXCISION OF ABDOMINAL WALL, OA | 1 | 1,272 | 1,273 |
| 0BTJ0ZZ-RESECTION LT LWR LUNG LOBE OPEN AP | 1 | 1,267 | 1,268 |
| 02PA3MZ-REMOVAL CARDIAC LEAD FROM HEART,PA | 1 | 1,264 | 1,265 |
| 0BBG8ZX-EXCISN LT UP LUNG LOBE NAT/AOE DX | 1 | 1,259 | 1,260 |
| 0DH60UZ-INSERT FEED DEV STOMACH OPEN APPROA | 1 | 1,251 | 1,252 |
| 00C43ZZ-EXTIRPT MATTR FRM INTRA SUBDU SP,PA | 1 | 1,214 | 1,215 |
| 0TC03ZZ-EXTIRP OF MATTER FROM RT KIDNEY,PA | 1 | 1,214 | 1,215 |
| 0DBH4ZZ-EXCISION OF CECUM PERCU ENDO APPROA | 1 | 1,213 | 1,214 |
| 0JD70ZZ-EXTR BACK SUBCU TIS AND FAS, OA | 1 | 1,190 | 1,191 |
| 02HK3KZ-INSERTN DEFIBRIL LEAD RT VENTRCL,PA | 1 | 1,181 | 1,182 |
| 0Y6F0ZZ-DETACHMENT AT RT KNEE REGION, OA | 1 | 1,164 | 1,165 |
| 0BBJ4ZX-EXCISION LT LWR LUNG LOBE PEA DX | 1 | 1,125 | 1,126 |
| 0211093-BYP CA 2 ART FRM CA W/AVT,OA | 2 | 1,091 | 1,093 |
| 0DTK4ZZ-RESECTION OF ASCENDING COLON,PEA | 1 | 1,089 | 1,090 |
| 0SRR03A-RPLCE RT HIP JT,FMRL CRMCSS,UNCM,OA | 1 | 1,076 | 1,077 |
| 0J9C0ZZ-DRAINAGE PR SUBCU TISSUE FAS, OA | 1 | 1,074 | 1,075 |
| 0RG70K1-FSN 2-7 TVJ W/NATS POS AP POS CL,OA | 1 | 1,060 | 1,061 |
| 02580ZZ-DESTRUCTION OF CONDUCTN MECHANSM,OA | 1 | 1,044 | 1,045 |
| 0D9Q0ZZ-DRAINAGE OF ANUS, OPEN APPROACH | 1 | 1,033 | 1,034 |
| 0W9B30Z-DRAINAGE LT PLEURAL CAVITY W/DD, PA | 1 | 978 | 979 |
| 02100AW-BYP CA 1 ART FRM AORTA W AAT,OA | 1 | 959 | 60 |
| 0RG4071-FSN CTVJ W/ATS, POS AP, POS COL, OA | 1 | 939 | 940 |
| 5A2204Z-RESTORATION CARDIAC RHYTHM, SINGLE | 1 | 927 | 928 |
| X2RF032-REPLC AORT VLV W ZOOPL RAPD,OA,NT 2 | 2 | 904 | 906 |
| 0DTB0ZZ-RESECTION OF ILEUM, OPEN APPROACH | 1 | 892 | 893 |
| 0RG20AJ-FSN 2+ CVJ W/IFD, POS AP,ANT COL,OA | 2 | 875 | 877 |
| B24BZZ4-ULTRSOUND HEART W/AORTA,TRNSESOPHGL | 1 | 874 | 875 |
| 03VK3DZ-RESTRICTION RICA W/ID,PERCU APPR | 1 | 869 | 870 |
| 0GTH0ZZ-RESECTION RT THYROID GL LOBE, OA | 1 | 858 | 859 |
| 0D194ZB-BYPASS DUODENUM TO ILEUM PEA | 1 | 848 | 849 |
| 0SRU0J9-RPLC LT KNEE JT,FEMRL W/SS,CEMNT,OA | 1 | 842 | 843 |
| 03CL3ZZ-EXTIRPATION OF MATTER FROM LICA,PA | 1 | 832 | 833 |
| 0W9500Z-DRAINAGE LOWER JAW W/DRAIN DEV, OA | 2 | 826 | 828 |
| 00C00ZZ-EXTIRPATION OF MATTER FROM BRAIN,OA | 2 | 803 | 805 |
| 041K09N-BYPSS RFA,POST TIBIAL ARTR W/AVT,OA | 1 | 794 | 795 |
| X2RF332-REPLC AORT VLV W ZOOPL RAPD,PA,NT 2 | 2 | 788 | 790 |
| 5A1935Z-RESPIRTRY VENTILTN,<24 CONSCTV HRS | 1 | 780 | 781 |
| 00NC0ZZ-RELEASE CEREBELLUM, OPEN APPROACH | 1 | 774 | 775 |
| 0DU607Z-SUPPLEMENT STOMACH W/ATS,OPEN APPR | 1 | 773 | 774 |
| 0FB04ZX-EXCISION OF LIVER,PEA,DIAGNOSTIC | 1 | 770 | 771 |
| 03HY32Z-INSERTN MONITORING DEV,UPPER ART,PA | 1 | 724 | 725 |
| 07B20ZX-EXCISION LT NECK LYMPHAT,OA,DIAGNST | 1 | 720 | 721 |
| 0UB10ZZ-EXCISION OF LT OVARY,OPEN APPROACH | 1 | 715 | 716 |
| 03CK3ZZ-EXTIRPATION OF MATTER FROM RICA,PA | 1 | 710 | 711 |
| 06183J4-BYPSS PORTL VEIN TO HEP VEN W/SS,PA | 1 | 710 | 711 |
| 0DH63UZ-INSERT FEED DEV STOMACH PERCU APPRO | 1 | 705 | 706 |
| B246ZZ4-ULTRASOUND RT&LT HEART,TRANSESOPHGL | 1 | 695 | 696 |
| 0W9G0ZZ-DRAINAGE OF PERITONEAL CAVITY, OA | 1 | 685 | 686 |
| 05PY03Z-REMVL INFUS DVCE UPPR VEIN,OPN APPR | 1 | 671 | 672 |
| 03C70ZZ-EXTIRPTN MATTER FR RT BRACHL ART,OA | 1 | 664 | 665 |
| 0BNK4ZZ-RELEASE RT LUNG PERCU ENDO APPROACH | 2 | 650 | 652 |
| 0JD80ZZ-EXTR ABDM SUBCU TIS AND FAS, OA | 1 | 648 | 649 |
| 0YUA4JZ-SUPPLMNT BIL INGUINAL REGN W/SS,PEA | 1 | 637 | 638 |
| 07B10ZX-EXCISION RT NECK LYMPHAT,OA,DIAGNST | 1 | 628 | 629 |
| 3E0L3GC-INTR OTH THRPTC SUBSTN PLRL CVTY,PA | 1 | 609 | 610 |
| 0QS304Z-REPOS LT PELVIC BONE W/IFD, OA | 1 | 604 | 605 |
| 07DR3ZX-EXTRACTN ILIAC BONE MARROW,PA,DIAG | 1 | 601 | 602 |
| 0BQT0ZZ-REPAIR DIAPHRAGM,OPEN APPROACH | 1 | 587 | 588 |
| 02RJ08Z-RPLCMNT TRICUSPD VALV W/ZOOPLSTC,OA | 1 | 584 | 585 |
| 0BNL4ZZ-RELEASE LT LUNG PERCU ENDO APPROACH | 2 | 576 | 578 |
| 0JDM0ZZ-EXTR LT UP LEG SUBCU TIS FAS, OA | 1 | 574 | 575 |
| 02C00ZZ-EXTIRPAT MATTR FRM COR ART,1 ART,OA | 1 | 572 | 573 |
| 0BBJ0ZZ-EXCISION LT LWR LUNG LOBE OA | 1 | 566 | 567 |
| 0Y6M0ZC-DETACH RT FOOT, PARTIAL 3RD RAY, OA | 1 | 556 | 557 |
| 5A1221Z-PERFORMANCE CARDC OUTPUT,CONTINUOUS | 1 | 528 | 529 |
| 0UT64ZZ-RESECTION OF LT FALLOPIAN TUBE,PEA | 1 | 527 | 528 |
| 0W930ZZ-DRAINAGE OF ORAL CAVITY/THROAT,OA | 2 | 516 | 518 |
| 0LQQ0ZZ-REPAIR RIGHT KNEE TENDON, OA | 1 | 495 | 496 |
| 03CY0ZZ-EXTIRPATION MATTR FR UPPER ARTRY,OA | 1 | 487 | 488 |
| 02573ZZ-DESTRUCTION OF LEFT ATRIUM,PA | 1 | 480 | 481 |
| 02HA3RJ-INSRT EXT HEART ASSST INTO HEART,PA | 2 | 478 | 480 |
| 0BBC0ZX-EXCISION RT UP LUNG LOBE OA DX | 1 | 474 | 475 |
| 0QBM0ZX-EXCISION LEFT TARSAL, OA, DIAG | 1 | 468 | 469 |
| 0JB50ZZ-EXCIS LT NECK SUBCUT TISS FAS, OA | 1 | 459 | 460 |
| 0BNK0ZZ-RELEASE RIGHT LUNG, OPEN APPROACH | 1 | 446 | 447 |
| 00UT0JZ-SUPPLEMENT SPINAL MENINGES W/SS,OA | 1 | 438 | 439 |
| 5A1223Z-PERFORMANCE CARDC PACING,CONTINUOUS | 1 | 436 | 437 |
| 0211099-BYPAS CA 2 AR FRM LIM W/AVT,OA | 1 | 431 | 432 |
| 0NBT0ZZ-EXCISION RT MANDIBLE OPEN APPROACH | 1 | 429 | 430 |
| 0D968ZZ-DRAINAGE OF STOMACH NAT/AOE | 1 | 426 | 427 |
| 0FB00ZX-EXCISION OF LIVER,OPEN APPR,DIAGNST | 1 | 415 | 416 |
| 0BBN4ZZ-EXCISION RT PLEURA PERCU ENDO APPR | 1 | 396 | 397 |
| 00H032Z-INSERTION MONITORNG DEVICE,BRAIN,PA | 1 | 383 | 384 |
| 0F9930Z-DRAINAGE COMMON BILE DUCT W/DD,PA | 1 | 378 | 379 |
| 05PY0JZ-REMVL SYNTH SUBS UPP VEIN,OPN APPR | 1 | 366 | 367 |
| 0C940ZZ-DRAINAGE BUCCAL MUCOSA OPEN APPROAC | 2 | 361 | 363 |
| 0T143JD-BP LT KID PELV TO CUTANEOUS W/SS,PA | 1 | 359 | 360 |
| 30233K1-TRNSFSN NONATLGS FRZN PLSM IN PV,PA | 1 | 355 | 356 |
| 0DB40ZZ-EXCISION ESOPHAGOGASTRIC JT OPEN AP | 1 | 324 | 325 |
| 0PS204Z-REPOSITION 3 MORE RIBS W INT FIX,OA | 1 | 322 | 323 |
| 0HBAXZZ-EXCISION INGUINAL SKIN, EXTERNAL APP | 1 | 296 | 297 |
| 0B948ZX-DRAIN RT UL BRONC NAT/AOE, DIAG | 1 | 295 | 296 |
| 5A12012-PERFORMNC CARDC OUTPUT,SINGL,MANUAL | 1 | 293 | 294 |
| 0NPW04Z-REMVL INTRNL FIX DEV FACIAL BONE OA | 1 | 286 | 287 |
| 0BTL0ZZ-RESECTION LT LUNG OPEN APPROACH | 1 | 281 | 282 |
| 02104Z9-BYPAS CA 1 AR FRM L INT MAMMARY,PEA | 1 | 273 | 274 |
| 0W9300Z-DRAINAGE ORAL CAVITY/THROAT W/DD,OA | 1 | 272 | 273 |
| 0CT90ZZ-RESECTION LT PAROTID GLD OPEN APPRO | 1 | 271 | 272 |
| 02Q50ZZ-REPAIR ATRIAL SEPTUM, OPEN APPROACH | 1 | 267 | 268 |
| 07T74ZZ-RESECTION THORAX LYMPHATC,PEA | 1 | 265 | 266 |
| 0BH18EZ-INSERT ENDOTRACH AIRWAYTRACHNAT/AOE | 1 | 261 | 262 |
| 0RG70J1-FSN 2-7 TVJ W/SS POS AP POS COL,OA | 1 | 249 | 250 |
| 0C9P0ZZ-DRAINAGE OF TONSILS, OPEN APPROACH | 1 | 241 | 242 |
| 06CM3ZZ-EXTIRPTN MATTR FRM RT FEMRL VEN,PA | 1 | 238 | 239 |
| 3E033XZ-INTRODUCTION VASOPRESSOR INTO PV,PA | 1 | 235 | 236 |
| 00Q20ZZ-REPAIR DURA MATER, OPEN APPROACH | 1 | 230 | 231 |
| 00U207Z-SUPPLEMENT DURA MATER W/ATS, OA | 1 | 226 | 227 |
| 07BM4ZZ-EXCISION THYMUS,PERCU ENDO APPROACH | 1 | 209 | 210 |
| 02H73DZ-INSERTN INTRALMN DEV,LT ATRIUM,PA | 1 | 199 | 200 |
| 0W33XZZ-CONTRL BLEED ORAL CAVTY&THROAT,EA | 1 | 199 | 200 |
| 0BBK4ZZ-EXCISION RT LUNG PERCU ENDO APPRO | 1 | 198 | 199 |
| 0LBT0ZZ-EXCISION LEFT ANKLE TENDON, OA | 1 | 198 | 199 |
| 02BM0ZZ-EXCISION OF VENTRICULAR SEPTUM,OA | 1 | 191 | 192 |
| 02QJ0ZZ-REPAIR TRICUSPID VALVE,OPEN APPR | 1 | 185 | 186 |
| 04CT3ZZ-EXTIRPATN MTTR FR RT PERONL ART,PA | 1 | 180 | 181 |
| 07B13ZX-EXCISION RT NECK LYMPHAT,PA,DIAGNST | 1 | 179 | 180 |
| 0MT30ZZ-RESECTION RT ELBOW BURSA LIGMT OA | 1 | 174 | 175 |
| 0LQN0ZZ-REPAIR RIGHT LOWER LEG TENDON, OA | 1 | 171 | 172 |
| 0GB00ZX-EXCISION OF PITUITARY GLAND,OA,DIAG | 1 | 158 | 159 |
| 0W9900Z-DRAINAGE RT PLEURAL CAVITY W/DD,OA | 1 | 158 | 159 |
| 03LY3DZ-OCCLUSION OF UPPER ARTERY W/ID,PA | 1 | 157 | 158 |
| 0DP64UZ-REMOVAL FEEDING DEVICE STOMACH PEA | 1 | 157 | 158 |
| 0BW10FZ-REVISN TRACHEOSTOMY DEV TRACH OA | 1 | 152 | 153 |
| 0F1G0ZB-BYPASS PANCREAS TO SM INTESTINE,OA | 1 | 152 | 153 |
| 0DT30ZZ-RESECTION OF LOWER ESOPHAGUS,OA | 1 | 149 | 150 |
| 0W9B00Z-DRAINAGE LT PLEURAL CAVITY W/DD, OA | 1 | 149 | 150 |
| 0RG20KJ-FSN 2+ CVJ W/NATS POS AP ANT COL,OA | 1 | 148 | 149 |
| 0PB20ZZ-EXCISION 3 OR MORE RIBS,OPEN APPROA | 1 | 147 | 148 |
| 0HX1XZZ-TRANSFER FACE SKIN, EA | 1 | 140 | 141 |
| 0HR8X74-RPLCEMNT BUTTOCK SKIN W/ATS,PT, EA | 1 | 139 | 140 |
| 0RG20ZJ-FSN 2+ CVJ POS AP ANT COL,OA | 1 | 133 | 134 |
| 0WJ60ZZ-INSPECTION OF NECK, OPEN APPROACH | 1 | 131 | 132 |
| 0LS30ZZ-REPOSITION RT UPPER ARM TENDON, OA | 1 | 129 | 130 |
| 0BCJ8ZZ-EXTIRPAT MATER LT LWR LUNG LOBE AOE | 2 | 126 | 128 |
| 0UTC4ZZ-RESECTION OF CERVIX,PERC ENDO APP | 1 | 114 | 115 |
| 0BDN0ZX-EXTRACTION RT PLEURA OA DX | 1 | 113 | 114 |
| 0KQ10ZZ-REPAIR FACIAL MUSCLE, OA | 1 | 110 | 111 |
| 0DH64UZ-INSERTION FEEDNG DEVICE STOMACH PEA | 1 | 107 | 108 |
| 0WPF4JZ-REMOVAL OF SS FROM ABDM WALL, PEA | 1 | 96 | 97 |
| 0BCF4ZZ-EXTIRPATN MATER RT LWRLUNG LOBE PEA | 1 | 93 | 94 |
| 0C9M00Z-DRAIN PHARYNX DRAIN DEV OPEN APPRO | 1 | 91 | 92 |
| 041K0KQ-BYPS RFA,LWR EXTRMT ARTRY W/NATS,OA | 1 | 89 | 90 |
| 0CBPXZX-EXCISION TONSILS EA DIAGNOSTIC | 1 | 86 | 87 |
| 0BJL4ZZ-INSPECT LT LUNG PERCUTAN ENDO APPRO | 1 | 81 | 82 |
| 02QX0ZZ-REPAIR THORACIC AORTA, ASCENDING,OA | 1 | 78 | 79 |
| 07QP0ZZ-REPAIR SPLEEN, OPEN APPROACH | 1 | 78 | 79 |
| 03LB0ZZ-OCCLUSION OF RT RADIAL ART,OA | 1 | 77 | 78 |
| 04L23DZ-OCCLUSN GASTRC ARTERY W/INTRALM,PA | 1 | 75 | 76 |
| 0X6W0Z0-DETACH LT LITTLE FINGER,COMPLETE,OA | 1 | 71 | 72 |
| 00C03ZZ-EXTIRPATION OF MATTER FROM BRAIN,PA | 1 | 65 | 66 |
| 2Y41X5Z-PACKG NASAL RGN USING PACKG MATERL | 2 | 62 | 64 |
| 0CBM8ZX-EXCISION PHARYNX NAT/AOE DIAG | 1 | 61 | 62 |
| 0C9PXZX-DRAINAGE TONSILS, EA, DIAGNOST | 1 | 60 | 61 |
| 027L0ZZ-DILATION OF LEFT VENTRICLE, OA | 1 | 49 | 50 |
| 0F1D0ZB-BYP PANCREATIC DUCT,SM INTESTINE,OA | 1 | 47 | 48 |
| 0NBQ0ZZ-EXCISION LT ORBIT OPEN APPROACH | 1 | 46 | 47 |
| 0DC84ZZ-EXTIRPATN MATTR SMALL INTESTINE PEA | 1 | 45 | 46 |
| 0CBM7ZZ-EXCISION PHARYNX NAT/ARTF OPENING | 1 | 44 | 45 |
| 0RG10ZJ-FSN CVJ, POS AP, ANT COL, OPEN APP | 1 | 43 | 44 |
| 04R00KZ-REPLC ABD AORTA W/ NATS,OPN APP | 1 | 41 | 42 |
| 0B9K8ZZ-DRAIN RT LUNG NAT/ART OPEN ENDO | 1 | 41 | 42 |
| 047A34Z-DILATION LT RENAL ARTERY W/DEID,PA | 1 | 35 | 36 |
| 0DUP0JZ-SUPPLEMENT RECTUM W/SS,OPEN APPR | 1 | 35 | 36 |
| 0NTV0ZZ-RESECTION LT MANDIBLE OPEN APPROACH | 1 | 31 | 32 |
| 02CP0ZZ-EXTIRPATN MATTR FR PULMNRY TRUNK,OA | 1 | 29 | 30 |
| 02130Z3-BYPSS CA 4+ ART FROM COR ART, OA | 1 | 28 | 29 |
| 0UN70ZZ-RELEASE BILAT FALLOPIAN TUBES,OA | 1 | 25 | 26 |
| B31C1ZZ-FLSCP BLT EXT CRTD ART LOW OSML CNT | 1 | 23 | 24 |
| 0DB40ZX-EXCISION ESOPHAGOGASTRIC JT OA DIAG | 1 | 21 | 22 |
| 5A1D90Z-PERFRM URINRY FILTR,PROL,>18HR/DAY | 1 | 18 | 19 |
| 00NW3ZZ-RELEASE CERVICAL SPINAL CORD, PA | 1 | 16 | 17 |
| 0BQJ0ZZ-REPAIR LT LWR LUNG LOBE OPEN APPRO | 1 | 15 | 16 |
| 0WB3XZZ-EXCISION OF ORAL CAVITY&THROAT,EA | 1 | 15 | 16 |
| 0NSX0ZZ-REPOSIT HYOID BONE OPEN APPROACH | 1 | 13 | 14 |
| 03L03DZ-OCCLUSION RIM ART W/ID,PERCU APPR | 1 | 10 | 11 |
| 0GBJ0ZZ-EXCISION THYROID GLAND ISTHMS,OA | 1 | 9 | 10 |
| 0JPV0WZ-REMVL TIVAD UPP EXTR SUB TIS FAS,OA | 1 | 7 | 8 |
| 0NSX04Z-REPOSIT HYOID BONE INTRNL FIX OA | 1 | 6 | 7 |
| 027335Z-DILAT COR ART,4+ ART,W 2 DEID,PA | 1 | 3 | 4 |
| 021X0ZD-BYP THOR AORTA,ASC CAROTID,OA | 1 | 2 | 3 |
| 0C9M7ZX-DRAIN PHARYNX NAT/ART OPENING DIAG | 1 | 2 | 3 |
| 0B713ZZ-DILATION TRACHEA PERCUTANEOUS APPRO | 1 | 1 | 2 |
| 0Y9G00Z-DRAIN OF LT KNEE REGION W/DD, OA | 1 | 1 | 2 |
| 0CBX0Z0-EXCISION LOWER TOOTH OA SINGLE | 1 | - | 1 |
| **Total** | **609** | **2,233,142** | **2,233,751** |