**Appendix**

**Table 1. Patient diagnosis/surgery and medication**Lab code CP corresponds to chronic inflammatory pain (IP) patients, lab code NP corresponds to neuropathic pain patients, lab code C corresponds to control patients. L: left; R: right; OA: osteoarthritis; THR: total hip replacement; TKR: total knee replacement; MMT: medial meniscal tear; TURP: transurethral resection of the prostate; BKA: below knee amputation; LBP: low back pain.

|  |  |  |
| --- | --- | --- |
| Lab code | Diagnosis/surgery | Medication |
| CP\_1 | R hip OA | Perindopril, Paroxetine, Panadol Osteo, Aspirin, Allopurinol, Mometasone nostrils prn |
| CP\_2 | L knee OA | Candesartan/HCT, Metformin, Ventolin, Flixotide, Diclofenac, Panadol Osteo |
| CP\_3 | L hip OA | Oxycodone/Naloxone, Celecoxib, Oxycodone prn, Panadol Osteo, Olmesartan |
| CP\_4 | L hip OA | Baclofen, Oxycontin, Oxycodone/Naloxone, Oxycodone, Paracetamol, Pregabaline, Frusemide, Mirtazapine,  |
| CP\_5 | L knee OA | Candesartan/HCT, Atorvastatin, Panadol Osteo |
| CP\_6 | L hip OA | Atovastatin, Candesartan, Rabeprazole, Diclofenac |
| CP\_7 | L hip OA | Telmisartan, Amlodipine |
| CP\_8 | R knee OA | Telmisartan, Ivabradine, Rosuvastatin, Aspirin, Esomeprazole, Frusemide, Salbutamol, Seretide, Paracetamol |
| CP\_9 | L knee OA | Cartia, Metoprolol, Simvastatin, Ramipril, Latanoprost  |
| CP\_10 | L MMT | Irbesartan, Metformin, Insulin, Aspirin, Theophylline, Salbutamol, Seretide, Allopurinol, Hydroxychloroquine, Paracetamol, Panadeine Forte |
| CP\_11 | R knee OA | Paracetamol, Oxycodone prn, Tramadol prn |
| CP\_12 | L THR | Telmisartan, Ezetimibe, Clopidogrel, Metoprolol, Paracetamol prn, Oxycodone rarely, Tramadol rarely |
| CP\_13 | L THR | Atorvastatin, Pantoprazol, Panadol Osteo, Seretide |
| CP\_14 | R THR | Aspirin, Metoprolol, Rosuvastatin, Perindopril |
| CP\_15 | R hip OA | Paracetamol prn, Predisolone, Metformin, Frusemide, Verapamil, Irbesartan, Potassium, Atorvastatin, Ezetimibe, Esomeprazole, |
| CP\_17 | L TKR | Multivit |
| CP\_18 | R THR | Isosorbide, Thyroxine, Aspirin, Rabeprazole, Diazepam, Salbutamol, Paracetamol, |
| CP\_19 | L hip OA | Glimepiride, Metformin, Insulin, Candesartan, Diltiazem, Aspirin, Moxonidine, Rosuvastatin, Buprenorphine, Paracetamol |
| CP\_20 | L knee OA | Abatacept, Methotrexate, Pregabalin, Metoprolol, Aspirin, Atorvastatin, Esomeprazole, Irbesartan, Patacetamol, Targin, ?Endone |
| CP\_21 | L THR | Metformin, Gliclazide, Fenofibrate, Ezetimibe, Metoprolol, Frusemide, Digoxin, Aspirin, Candesartan, Spironolactone,Valproate, |
| CP\_22 | L TKR | Metformin, Exforge (Amlodipine/Valsartan/HCT), Lansoprazole, Panadol Osteo, inhalers, |
| CP\_23 | L THR | Candesartan, Metoprolol, Isosorbode, Prazosin, Rosuvastatin, Clopidogrel, Digoxin, Colchicine, Esomeprazole, Sertraline, Oxybutynin |
| CP\_24 | R TKR | Amiodarone, Citalopram, Ezetimibe, Irbesartan, Atorvastatin, Prednisolone, Omeprazole, Targin, Panadeine Forte, Panadol SR,  |
| CP\_25 | R THR | Candesartan, Atorvastatin, Thyroxine, Ranitidine, Rabeprazole, Tramadol, Panadol SR, Seretide, Salbutamol, |
| CP\_26 | L THR | Paracetamol, Diclofenac, Glucosamine |
| CP\_27 | R TKR | Irbesartan, Pantoprazole, Pregabalin, Amitriptyline, Targin, Panadeine Forte, Celexicob |
| CP\_28 | L TKR | Atorvastatin, Telmisartan, Esomeprazole, Meloxicam, Paracetamol SR, Thyroxine |
| CP\_29 | L hip OA | No meds |
| CP\_30 | R THR | Bisoprolol, Pantoprazole, Ramipril, Frusemide, Paracetamol SR, Pregabalin, Diclofenac, Warfarin |
| CP\_31 | L THR | Perindopril/Amlodipine |
| CP\_32 | R THR | Atorvastatin, Tiotropium, Seretide, Salbutamol |
| CP\_33 | L TKR | Coumadin, Atorvastatin, Panadeine Forte, Paracetamol |
| CP\_34 | TURP/L hip-knee OA | Sertraline. Duodart, Paracetamol, Panadeine, Salbutamol |
| NP\_1 | L4-S1 decompression, redo | Rosuvastatin, Telmisartan, Pantoprazole, Panadol Osteo, Tramadol prn |
| NP\_2 | Redo pelvic fx | Fentanyl patch, Panadeine Forte, Tapentadol, Tramadol SR prn, Amitriptyline, Gabapentine, Temazepam, Venlafaxine |
| NP\_3 | Phantom pain/B stump revision | Diclofenac, Pregabalin, Panadeine Forte prn, Citalopram |
| NP\_6 | Phantom pain/R leg stump | Amlodipine, Candesartan, Ezetimibe, Pregabalin, Aspirin, |
| NP\_8 | Erythromelalgia/Bilat BKA | Duloxetine, Naltrexone, Rosuvastatin, Baclofen/Amitriptyline/Ketamine patch |
| NP\_9 | Chronic LBP | Quetiapine, Fumarate, Panadol, Panadol Osteo, Pizotifen, Doxycycline, Esomeprazole, Valproate, Mirtazapine, Frusemide, Diazepam, |
| NP\_10 | Revision L stump/phantom pain | Enoxaparin, Paracetamol, Pregabalin, Tapentadol, Amitriptyline, Calcitonin, Clonidine, Ibuprofen, Piperacillin/Tazobactam |
| NP\_11 | Chronic pain/TURP | Duodart, Spironolactone, Allopurinol, Valaciclovir, Rosuvastatin, Pregabalin, Frusemide, Prednisolone, Symbicort, Tiotropium, |
|  |  |  |
| C\_100 | No surgery |  |
| C\_034 | No surgery |  |
| C\_112 | No surgery | Panadol |
| C\_116 | No surgery |  |
| C\_118 | No surgery |  |
| C\_130 | No surgery |  |

**Table 2. Summary of patient demographics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | n | mean age | % female | % male | % no response |
| Inflammatory pain | 33 | 67 | 27 | 45 | 27 |
| Neuropathic pain | 8 | 59 | 13 | 38 | 50 |
| Non-surgical comparison group | 5 | 53 | 60 | 40 | 0 |

**Table 3. Samples arranged by blot**



**Table 4 Fold difference calculation relative to mean of non-surgical samples**



**Fig. 1. Tukey boxplots of relative Sez6 levels.**
Tukey Box-and-whisker plots (calculating outliers as 1.5x interquartile range) by conditions identified 2 IP outliers and 1 NP outlier (triangles).

**Non-surgical Inflammatory group Pain**

**Neuropathic Pain**

**0**

**5**

**15**

 \*

**10**

**Fold difference relative to mean of non-surgical group**