**Supplementary Appendix S2:** Table of milligram morphine equivalents (MME) by medication.

|  |  |
| --- | --- |
| Medication | Milligrams |
| **Morphine** | **1** |
| Codeine | 0.15 |
| Fentanyl (in mcg) | 7.2 |
| Hydrocodone | 1 |
| Hydromorphone | 4 |
| Meperidine | 0.1 |
| Methadone | 3 |
| Oxycodone | 1.5 |
| Oxymorphone | 3.0 |

For example, 30 mg of codeine would be 4.5 MME (30 X 0.15). All medications are assumed to be in oral formulation, except fentanyl, which is assumed to be transdermal. MME is not calculated for liquid formulations.