

## Subcutaneous Fentanyl and Alfentanil in Palliative Care St Peters Hospice: Information for Primary Care

### Introduction

- Fentanyl and alfentanil are strong opioids which can be given as subcutaneous (SC) injections or in a syringe pump mixed with other commonly used SC drugs (some reports of incompatibility in syringe pump with cyclizine for both fentanyl and alfentanil).
- Advice from Hospice or Specialist Palliative Care professionals is recommended.
- Unlike morphine or diamorphine there is no accumulation of fentanyl, alfentanil or their metabolites in renal failure. Their use may avoid unpleasant side effects such as myoclonus or confusion if eGFR <30ml/minute.

### Indication and uses

- Consider use if:
  - SC opioid is needed and
  - Patient has eGFR <30ml/minute and
  - Clinically relevant risk of side effects if another opioid is used.
- NB. There are risks in using an opioid which is less familiar to health professionals and not widely available so a pragmatic decision should be made weighing up risks and benefits. e.g. always use for patient stopping dialysis, but may not be necessary for patient at the very end of life with an EGFR in the 20s requiring only low doses of opioid.
- If a pragmatic decision is made to use SC morphine, diamorphine or oxycodone in a patient with eGFR<30ml/minute monitor for side effects or toxicity and change to SC alfentanil or fentanyl if these develop.

### Approximate dose conversions

Patient on drug A PO=oral SC=subcutaneous	Divide the 24 hour dose (in mg) of A by this number:	To convert to the 24 hour dose (in mg) of drug B	Example	
			A	B
PO morphine	150	SC fentanyl	30mg	200 micrograms
PO morphine	30	SC alfentanil	30mg	1mg
SC diamorphine	10	SC alfentanil	10mg	1mg

### Practicalities of using SC fentanyl/alfentanil

- Fentanyl vials are 50 micrograms per ml so maximum SC injection is 100 micrograms and maximum dose in pump is ~600-900 micrograms depending on syringe size and other drugs in the pump.
- ***For an opioid naïve patient stopping dialysis suggested starting doses of fentanyl: 12.5-25 micrograms SC PRN and initial dose in a syringe pump: 50-100 micrograms over 24 hrs.***
- If volume of fentanyl e.g. of prn injection prohibits use, change to alfentanil (ask for specialist advice).
- There are 2 different strengths of alfentanil so caution is required:
  - 500micrograms/ml and 5mg/ml.
- SC alfentanil injection is short acting lasting only ~ 1hr so is not ideal for prn use.