COMPATIBILITY INFORMATION FOR USE DURING COVID-19 PANDEMIC

Additional compatibility information is provided here for selected drugs likely to be used in the management of COVID-19 patients in intensive care units. Check the individual medicine monographs for information about preparation, stability and recommended concentrations.
Updated April 2020.

ALFENTANIL

In a syringe
Alfentanil in concentrations up to 500 microgram/mL is compatible with:
- midazolam up to 0.2 mg/mL for 24 hours (in sodium chloride 0.9%)
- midazolam up to 1.1 mg/mL for 12 hours (in sodium chloride 0.9%)
- propofol 1% (Diprivan brand only) for 6 hours

By Y-site
Alfentanil 250 microgram/mL is compatible with:
- midazolam 2.5 mg/mL for 3 hours
Alfentanil 500 microgram/mL is compatible with:
- propofol 1% (Diprivan brand only) for one hour

DEXMEDETOMIDINE

By Y-site
Dexmedetomidine 4 microgram/mL (in sodium chloride 0.9%) is compatible for 4 hours with:
- fentanyl 50 microgram/mL
- midazolam 2 mg/mL
- morphine sulfate 15 mg/mL
- propofol 1% (Diprivan brand only)

FENTANYL

In a syringe
Fentanyl up to 2 microgram/mL is compatible with:
- propofol 1% (Diprivan brand only) for 90 minutes
Fentanyl up to 30 microgram/mL is compatible with:
- midazolam up to 2.5 mg/mL for 24 hours (in sodium chloride 0.9%)
Fentanyl up to 50 microgram/mL is compatible with:
- propofol 1% and 2% (Fresenius Kabi brand only) for 12 hours

By Y-site
Fentanyl 25 microgram/mL is compatible with:
- midazolam 2.5 mg/mL for 3 hours
Fentanyl 50 microgram/mL is compatible with:
- dexmedetomidine 4 microgram/mL (in sodium chloride 0.9%) for 4 hours
- propofol 1% (Diprivan brand only) for one hour

MIDAZOLAM

In a syringe
Midazolam up to 0.2 mg/mL is compatible with:
- alfentanil up to 500 microgram/mL for 24 hours (in sodium chloride 0.9%)
Midazolam up to 1.1 mg/mL is compatible with:
- alfentanil up to 500 microgram/mL for 12 hours (in sodium chloride 0.9%)
Midazolam up to 2 mg/mL is compatible with:
- morphine sulfate up to 8 mg/mL for 24 hours (in sodium chloride 0.9%)
Midazolam up to 2.5 mg/mL is compatible with:
- fentanyl up to 30 microgram/mL for 24 hours

By Y-site
Midazolam 2 mg/mL is compatible for 4 hours with:
- dexmedetomidine 4 microgram/mL (in sodium chloride 0.9%)
Midazolam 2.5 mg/mL is compatible for 3 hours with:
- alfentanil 250 microgram/mL
- fentanyl 25 microgram/mL
- morphine sulfate 4 mg/mL

Do not mix midazolam with propofol. Variable compatibility has been reported and signs of incompatibility are difficult to detect visually. Seek advice from a critical care specialist or medicines information service.
MORPHINE

In a syringe
Morphine sulfate up to 8 mg/mL is compatible with:
  • midazolam up to 2 mg/mL for 24 hours (in sodium chloride 0.9%)

By Y-site
Morphine sulfate 4 mg/mL is compatible with:
  • midazolam 2.5 mg/mL for 3 hours
Morphine sulfate 15 mg/mL is compatible with:
  • dexmedetomidine 4 microgram/mL (in sodium chloride 0.9%) for 4 hours

Do not mix morphine sulfate with propofol. Variable compatibility has been reported and signs of incompatibility are difficult to detect visually. Seek advice from a critical care specialist or medicines information service.

PROPOFOL

In a syringe
Propofol 1% and 2% (Fresenius Kabi brand only) is compatible with:
  • fentanyl up to 50 microgram/mL for 12 hours (in sodium chloride 0.9%)
Propofol 1% (Diprivan brand only) is compatible with:
  • alfentanil up to 500 microgram/mL for 6 hours
  • fentanyl up to 2 microgram/mL for 90 minutes

By Y-site
Propofol 1% (Diprivan brand only) is compatible with:
  • alfentanil 500 microgram/mL for one hour
  • dexmedetomidine 4 microgram/mL (in sodium chloride 0.9%) for 4 hours
  • fentanyl 50 microgram/mL for one hour

Do not mix propofol with midazolam or morphine. Variable compatibility has been reported and signs of incompatibility are difficult to detect visually. Seek advice from a critical care specialist or medicines information service.

REFERENCES
2. Trissel LA, Leissing NC. Trissel’s Tables of physical compatibility. Lake Forest IL: Multimatrix; 1996.