METHYLPREDNISOLONE SODIUM SUCCINATE

BRAND NAME  METHYL PRED, METHYL PREDNISOLONE ALPHAPHARM, SOLU-MEDROL

DRUG CLASS  Corticosteroid

AVAILABILITY
- **Methylpred** vial contains 40 mg, 125 mg, 500 mg or 1 g of methylprednisolone sodium succinate. Also contains monobasic sodium phosphate, dibasic sodium phosphate and lactose (40 mg only).  
- **Methylprednisolone Alphapharm** vial contains 500 mg or 1 g of methylprednisolone sodium succinate. Also contains monobasic sodium phosphate, dibasic sodium phosphate and sodium hydroxide.  
- **Solu-Medrol Act-O-Vial** vial contains 40 mg/mL and 125 mg/2 mL of methylprednisolone sodium succinate when reconstituted. Also contains monobasic sodium phosphate, dibasic sodium phosphate and lactose (40 mg strength only).  
- **Solu-Medrol Vial with diluent** vial contains 500 mg/8 mL, 1 g/16 mL and 2 g/31.2 mL of methylprednisolone sodium succinate when reconstituted. Also contains monobasic sodium phosphate and dibasic sodium phosphate. Diluent vial contains water for injections with benzyl alcohol.  
- **Solu-Medrol Vials WITHOUT diluent** vial contains 500 mg or 1 g methylprednisolone sodium succinate. Also contains monobasic sodium phosphate and dibasic sodium phosphate.  

Each gram of methylprednisolone sodium succinate contains 2 mmol of sodium.

pH  7–8 when reconstituted

PREPARATION
- **Act-O-Vial**: place the vial on a flat surface and press down firmly on the plastic activator. Gently turn the vial upside down a few times to mix the solution. **Do not shake.**
- Other vials: reconstitute with the diluent provided or 1–5 mL of water for injections. If a part-dose is required, reconstitute the 500 mg vial with 5 mL or the 1 g vial with 10 mL to make an approximate concentration of 100 mg/mL.

STABILITY
- Vial: store below 25 °C. Protect from light.
- Reconstituted solution: stable for up to 24 hours below 25 °C.
- Infusion solution: solutions in sodium chloride 0.9% are stable for up to 24 hours below 25 °C.

ADMINISTRATION
- **IM injection**: Inject doses up to 250 mg deep into a large muscle e.g. gluteal muscle.
- **SUBCUT injection**: No information
- **IV injection**: Inject doses up to 250 mg over at least 5 minutes. Give doses greater than 250 mg by infusion. Rapid administration of high doses can cause cardiac arrhythmias and cardiac arrest.
- **IV infusion**: Dilute the dose with 100–250 mL of a compatible fluid and infuse over at least 30 minutes.
- **IV use for infants and children**: Doses less than 2 mg/kg can be injected over at least 5 minutes. For doses greater than 2 mg/kg, dilute to 2.5 mg/mL or weaker and infuse over at least 30 minutes. Doses greater than 15 mg/kg must be infused over 1 hour.

COMPATIBILITY
- **Fluids**: Glucose 5%, glucose 5% in sodium chloride 0.9%, sodium chloride 0.9%
- **Y-site**: Aciclovir, amifostine, anidulafungin, aztreonam, bivalirudin, ceftaroline fosamil, ceftobiprole medocaril, defibrotide, dexmedetomidine, dopamine, granisetron, linezolid, metronidazole, morphine sulfate, paracetamol, pethidine, piperacillin-tazobactam (EDTA-free), remifentanil.
INCOMPATIBILITY

Fluids
No information

Drugs
Calcium chloride\(^6\), calcium folinate\(^6\), calcium gluconate\(^1\), caspofungin\(^2\), cefotaxime\(^6\), cefoxitin\(^6\), ciprofloxacin\(^6\), cisatracurium\(^1\), dolasetron\(^1\), filgrastim\(^2\), foscarnet\(^6\), ganciclovir\(^6\), haloperidol lactate\(^6\), hydralazine\(^6\), magnesium sulfate\(^6\), mycophenolate mofetil\(^6\), ondansetron\(^6\), palonosetron\(^2\), pentamidine\(^6\), potassium chloride\(^1\), promethazine\(^6\), propofol\(^1\), protamine\(^6\), pyridoxine\(^6\), rocuronium\(^1\), thiamine\(^6\), tigecycline\(^1\), vancomycin\(^6\), vecuronium\(^1\)

SPECIAL NOTES
Methylprednisolone sodium succinate injection may be given orally in 200 mL of orange juice.\(^7\)

Do not give products that contain benzyl alcohol to neonates.\(^{1,4}\)

REFERENCES