

BeneFusion SP5 TCI

Advanced Anesthesia Syringe Pump



Ease of use

Stackable slideway:
Easy to stack

3.5" large screen
Easy to read

Plunger:
Easy and flexible to set syringes

Lock & catch:
Fix pumps together firmly

Big alarm light:
Good visibility

Friendly keypad format:
Intuitive & quick

Syringes:
5/10/20/30/50/60ml

Powerful Function for Anesthesia

BeneFusion SP5 TIVA and BeneFusion SP5 TCI is our new advanced solution for intravenous anesthesia. It combines ease of use and advanced safety feature as well as powerful anesthesia functions in one single pump, making intravenous anesthesia much safer and easier. Anesthetists could choose either TCI (target control infusion) mode or TIVA (total intravenous anesthesia) mode according to patient need or personal preference.

TCI - Target Controlled Infusion

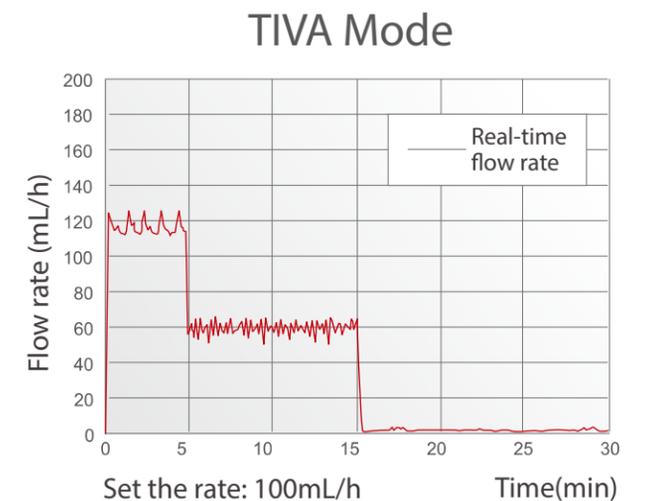
The TCI mode provides confident pharmacokinetics (PK) model for both adult and child.

Drug Name	PK Model	Drug concentration	Target	Age (years)	Cpt/Cet
Propofol	Marsh	10.0 mg/ml (1%) 20.0 mg/ml (2%)	Plasma	16 - 150	0.0 - 15.0ug/ml
	Schnider		Plasma/Effect Site	16 - 94	
	Kataria (Pedia)		Plasma	3 - 16	
	Paedfusor (Pedia)		Plasma	1 - 18	
Remifentanil	Minto	20.0 - 50.0 ug/ml	Plasma/Effect Site	12 - 100	0.0 - 20.0 ng/ml
Sulfentanil	Gepts	0.20 - 5.00 ug/ml	Plasma/Effect Site	12 - 150	0.0 - 20.0 ng/ml
Alfentanil	Maitre	100 - 500 ug/ml	Plasma/Effect Site	18 - 95	0.0 - 500 ng/ml

* Cpt: target plasma concentration
* Cet: target effect site concentration

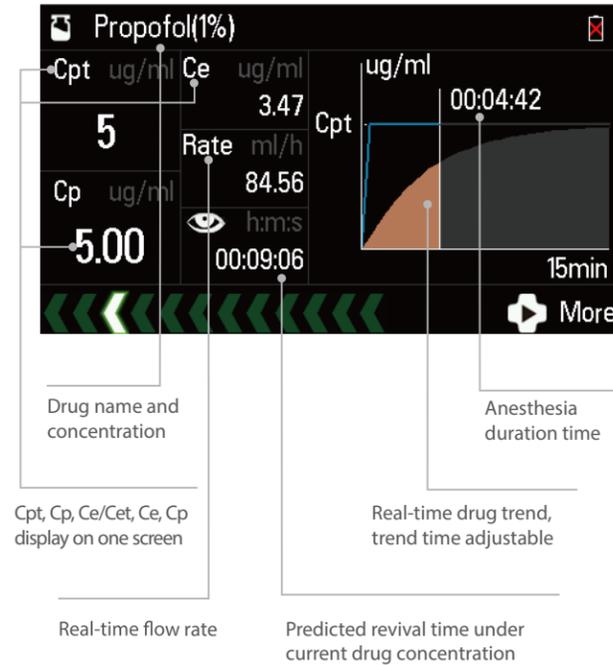
TIVA Total Intravenous Anesthesia

The smart TIVA pump helps to administer anesthesia drugs so that the anesthetists can concentrate on improving patient care.



Intuitive Display

The 3.5" TFT color screen allows for multi-information display on one screen.



TCI Therapy Details			
Drug	Remifentanil	20.0ug/ml	Minto
Patient	Female	60.0kg	22years 170cm
Used drug	6.7ug	0.33ml	0.18ug/kg/min
Revival	1.00ng/ml		
Duration	00:00:11		

Users could check the therapy details anytime during the running process. Full detailed information will be displayed on one screen, including drug name and concentration, PK model, patient's information, used drug amount, volume and current dose, revival drug concentration and total duration time.

Patient Concern

4 Induction pattern



Choose the induction pattern according to patient condition, and operation requirement.

Confirm parameter page

Confirm Parameter	
Drug: Remifentanil	Weight: 60.0kg
Model: Minto	Height: 170cm
Conc: 20.00ug/ml	Target: Plasma
Age: 22 years	TargConc: 3.00ng/ml
Gender: Female	Induction: Automatic

Buttons: to start, Return

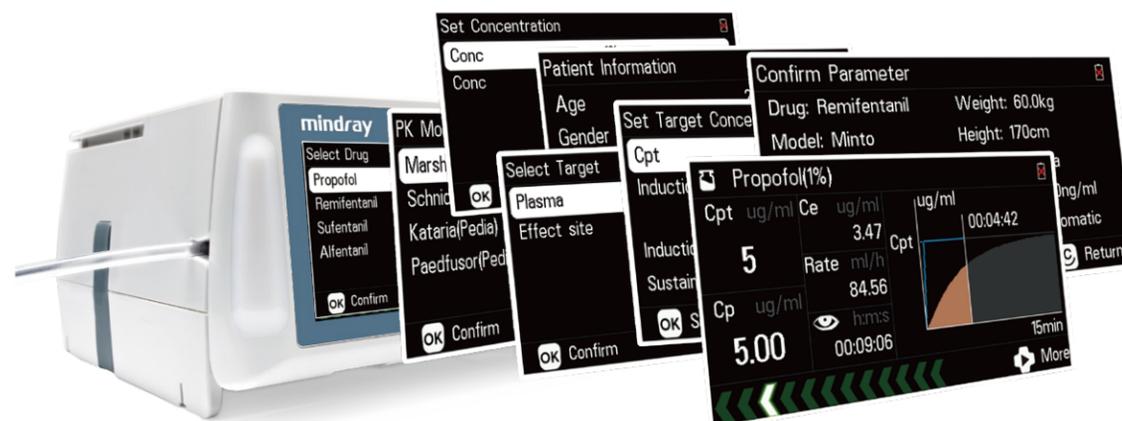
Confirm parameter page before starting, allowing you to double confirm the information for both patient and drug.

OTCI

Optimised TCI function allows you to eliminate individual differences caused by population error. Anesthetists can lock Ce by pressing and holding the  button if the ideal anesthetic depth is being reached.

Intuitive Operation

Step-by-step set-up process, so you don't need to remember every step and possible mis-operation is greatly reduced.



Convert target/ Convert TCI -> TIVA

BeneFusion SP5 TCI allows you to convert between plasma target and effect site target when you pause the pump, and also allows you to convert easily from TCI mode to TIVA mode and back again. The PK calculation will not stop until end of operation.



Accuracy

High accuracy

High accuracy is achieved : $\leq \pm 2\%$ when flow rate is $\geq 1\text{ml/h}$;
and $\leq \pm 5\%$ when flow rate is $< 1\text{ml/h}$.

Safety

Automatic drug compensation

Professional algorithm ensures precise target concentration. It supports automatic drug compensation to re-reach the target concentration after syringe change or any other incident that results in the infusion being suspended or stopped.

Titration function

Titration makes it possible to change target concentration during operation without stopping the pump, guaranteeing continuous infusion.

End operation

Re-selection of PK model or other infusion mode is allowed only after the end of operation or the pump is turned off. This ensure correct continuous calculation will not be interrupted until the end of the operation.

History record

Up to 2000 pieces of infusion information will be stored automatically. The latest records are listed at the top with specific date and time, helping care givers to analyse patients' clinical conditions and to provide good treatment references.

Powerful battery

Powerful battery delivers at least 10 hours battery operating time with only 6 hours charging time. The long run battery is designed to continue through major operations as well as extended post-operative sedation and analgesia infusion.

