

Safe administration infusion set for anti-cancer drugs

Brief introduction of BQ's anti-cancer infusion products



2021

Safe preparation
and administration
of light sensitive
drugs



Anti-Cancer treatment is a medical professional field, and various treatment methods including surgery, radiation, nuclear therapy, etc. are now used. Among them, infusion of anti-cancer drugs is still the main method of treatment. Since cancer treatment is a very professional and diversified therapy, it brings a series of inherent risks to patients and medical staff, while treating cancer pain. Therefore, all process steps require professional knowledge, special attention and specific medical treatments and special facilities assistance.

As a professional manufacturer of medical devices, BQ Plus Medical provides infusion consumables for the entire process of anti-cancer treatment, including secondary line and chemotherapy infusion sets, which not only meet the needs of clinical anti-cancer drug infusion, but also improve the efficiency of medical care, and play a role in protecting medical staff and patients from the poison of chemotherapy drugs.

Phone:(86)21-5774 3953
www.bqplusmedical.com

BQ+ plus Medical Co., Ltd

Do you know what are the main challenges of chemotherapy?

Chemotherapy is one of the most challenging procedures in infusion therapy.

From the preparation and transportation of drugs, the management of patients and post-treatment treatment, medical workers, doctors, pharmacists and patients are at permanent risk to their health.

Every day, thousands of pharmacists, nurses, doctors and other caregivers may be seriously threatened in their physical and reproductive health, and they often do not even realize this.

Although the dangerous nature of chemotherapy, antiviral drugs, antibiotics, hormones and other drugs is well known, it is estimated that millions of health workers continue to be exposed to these substances each year.

Chemical contamination risk:

accidental exposure of health care professionals to dangerous drugs.

Risk of infection caused by sharp instrument stabbing:

In the medical environment, skin stabbing and accidents caused by sharp instruments.

These instruments include needles, scalpels, and broken glass.



Closed system of transfer device

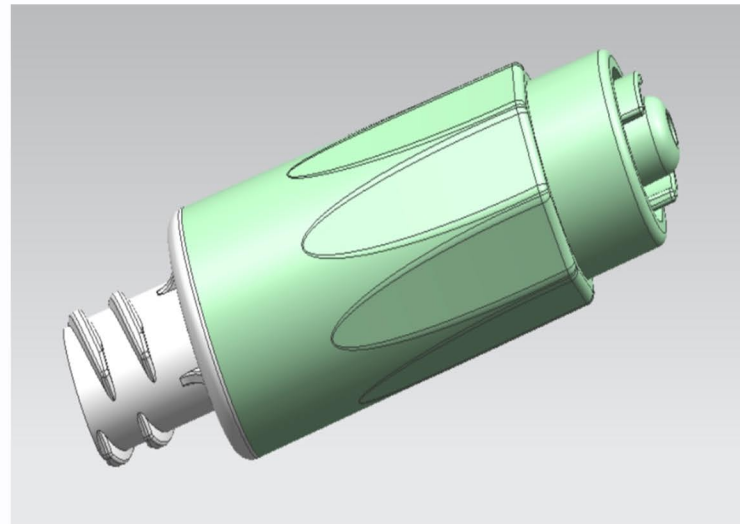
Universal vial adaptor and needle free

connector



Universal vial adaptor fit for 13mm&20mm vials;
Two filters design, high flow;
0.2um PALL menbrane;
Needle free connector, no injuries.

Closed male luer lock



No-drip design, eliminate the
chemical contamination;
Silicone rubber, safe and reliable;
Fit for needle free connector;
Female luer end, fit for luer ,lock
syringe;

Luer lock Syringe



Male luer lock end, fit for needle
free connector,
Fit for closed male luer;
No injuries, reduce the chemical
contamination;

A safe closed system

- TPU+PVC co-extrusion·
- Two layers makes sure DEHP-free to solution
- Light-resistance to ensure the effect of light-sensitive drugs
- Complete closed system



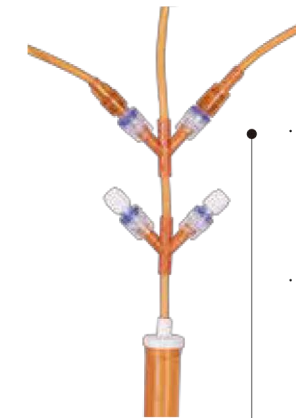
- Thickness of TPU $\geq 0.12\text{mm}$.
- Decolorization is qualified.
- Light-resistance is qualified (290nm~450nm wavelength).

- Extrusion chamber can be 90mm length.
- 15um nylon filter at the bottom guarantees the flow and particle filtration.
- 8um liquid lock filter is available.

Needle Free Valve

- MRI compatibility
- Blood compatibility
- Smooth and tight seal, easy to disinfect thoroughly
- No leakage under 200kpa
- Good self-resilience enables the safe administration of medication.

Primary infusion set



- Wing connector is supporting clear identification of which line is connected to which drug.
- Back check valve ensures the flow direction.

Vented Spike

- The filtration of particles & microorganism larger than 0.5um is $\geq 95\%$.

Secondary infusion set

Flowstop protection cap

- Flow stops when the liquid reaches the membrane.
- Anti bacteria during storage and transportation.

- One more chamber to collect the air created during the administration.

Do not disconnect the wing connect during and after the infusion in order to maintain the closed system.





Handling Step

- 1 Close venting cap.
- 2 Spike the container.
- 3 Prime the secondary infusion set .

Safety Feature

- Air vent filter in spike helps to avoid contamination during venting.
- Easy and convenient spiking while helping reduce risks of sharp injury.
- Back check valve ensures fluid direction.
- Hydrophobic, bacteria retentive cap maintaining a closed system until connect to primary infusion set without spillages of fluid.



Handling Step

- 1 Close the robert clamp.
- 2 Connect prepared syringe with diluted drug to the needle free valve.
- 3 Inject drug into container and mix the drug well.

Safety Feature

- Helps to avoid chemical contamination.
- No direct contact to the needle free valve reduce risk of microbiological contamination.
- No needle-stick injury.



1 Preparation

- Preparation of the treatment under the laminar air flow cabinet.



2 Prime line

- Close the venting cap on the spike.
- Spike the IV container and prime the line completely.



3 Connect Syringe

- Close the Robert clamp.
- Disinfect the needle free valve with 75% alcohol cotton.
- Connect the prepared syringe to the needle free valve.



4 Admixture

- Inject the drug into the container.
- Mix the drug well



5 Drug preparation

- Drug preparation done.



6 Transportation

- Ready for the transport to the ward.

Handling Step

- 1 Close venting cap.
- 2 Spike the container.
- 3 Squeeze the drip chamber to fill the drip chamber by 1/2 volume.
- 4 Prime the primary set completely .

Safety Feature

- Air vent filter in spike helps to avoid contamination during venting.
- Easy and convenient spiking while helping reduce risks of sharp injury.
- Fluid filter in the chamber to avoid particular contamination.
- Hydrophobic, bacteria retentive cap maintaining a closed system until connect to primary infusion set without spillages of fluid.

Handling Step

- 1 Close the robert clamp on the primary set.
- 2 Connect secondary set to primary set and start treatment.

Safety Feature

- Closed robert clamp prevents a contamination of flushing solution to reduce the risk of drug contamination.





Handling Step

- 1 After each drug flush the line completely with flushing solution.
- 2 Open robert clamp to start the next treatment.

Safety Feature

- Wing connector is supporting clear identification of which line is connected to which drug.
- Back check valve ensures the flow direction.



Handling Step

- 1 Dispose as a closed system.

Safety Feature

- Due to no disconnection is necessary, it helps a lot to avoid the risk of chemical cotamination.



1 Spike container

- Close the venting cap on the spike.
- Insert spike into container.
- Close roller clamp.
- Squeeze the drip chamber to fill the drip chamber by 1/2 volume, open the roller clamp & venting cap, then prime the set completely.
- Close robert clamp.



2 Prime line

- Close the robert clamp on the secondary set.
- Remove the needle free valve cap on the primary set and prime stop cap on the secondary set.
- Connect the secondary set to needle free valve.



3 Start drug infusion.

- Open the robert clamp on the secondary set to start the drug infusion.



4 Flush the primary set.

- Drain the drug container, then close the robert clamp on secondary set.
- Open the robert clamp on the primary set to flush the primary set.



5 Connect second line.

- Close the robert clamp on the primary set.
- Open the robert the clamp on the next secondary set.
- You can connect up to 4 lines.
- Flush the primary set every time you change a secondary set.

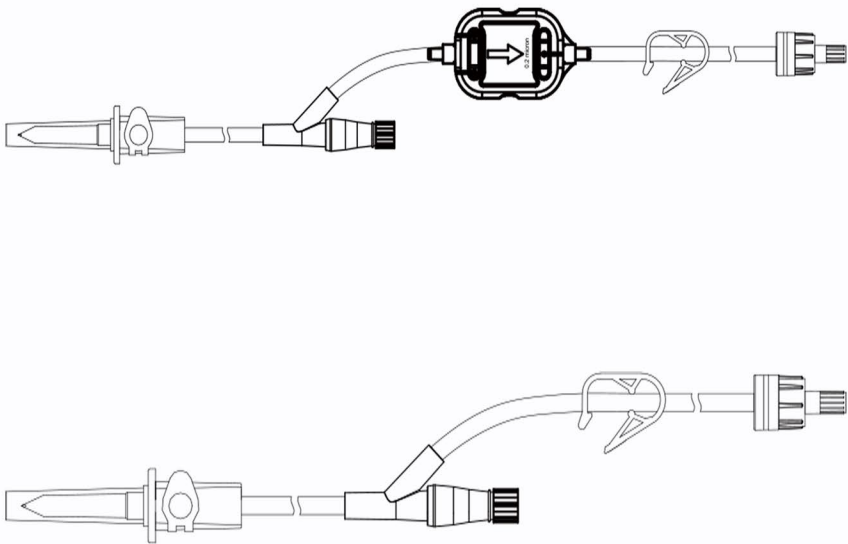


6 Disposal

- After the last drug infusion is finished, flush the primary set again. The set is ready for disposal as a closed system.

Product portfolio
Secondary infusion set

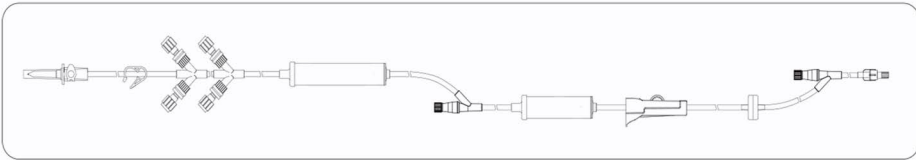
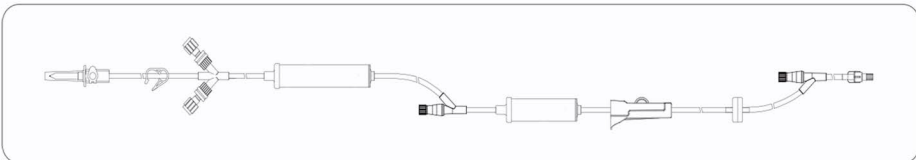
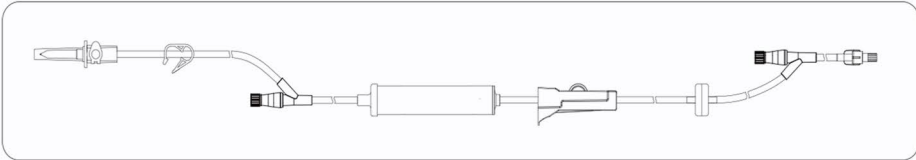
- * light protect DEHP FREE PVC & TPU tubing;
- * Tubing size 3.0*4.0mm, length 40cm, vented spike and robert clamp;
- * with rotating male luer and priming cap at the distal end;
- * needle free connector available;
- * precision filter available;



Re-order	Description	Length	Tubing material	Needle free connector	Precision filter	QTY/CTN
SLD001	Vented spike,tubing size 3.0*4.0mm,Robert clamp,rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	40cm	DEHP FREE PVC	/	/	200
SLD002	Vented spike,tubing size 3.0*4.0mm,Robert clamp,rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	40cm	DEHP FREE PVC	×1	/	200
SLD003	Vented spike,tubing size 3.0*4.0mm,Robert clamp,rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	40cm	DEHP FREE PVC	/	×1	200
SLD004	Vented spike,tubing size 3.0*4.0mm,Robert clamp,rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	40cm	DEHP FREE PVC	×1	×1	200
SLU001	Vented spike,tubing size 3.0*4.0mm,Robert clamp,rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	40cm	PU	/	/	200
SLU002	Vented spike,tubing size 3.0*4.0mm,Robert clamp,rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	40cm	PU	×1	/	200
SLU003	Vented spike,tubing size 3.0*4.0mm,Robert clamp,rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	40cm	PU	/	×1	200
SLU004	Vented spike,tubing size 3.0*4.0mm,Robert clamp,rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	40cm	PU	×1	×1	200

Product portfolio
Primary infusion line

- light protect DEHP FREE PVC & TPU tubing;
- Tubing size 3.0*4.0mm, length 245cm, vented spike and Robert clamp;
- with rotating male luer and priming cap at the distal end;
- multi-ports available;
- precision filter available;



Re-order	Description	Length	Tubing material	Needle free connector	Precision filter	QTY/CTN
PLD001	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	DEHP FREE PVC	×1	/	100
PLD002	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	DEHP FREE PVC	×2	/	100
PLD003	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	DEHP FREE PVC	×4	/	100
PLD004	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	DEHP FREE PVC	×4	×1	100
PLD005	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	DEHP FREE PVC	×1	×1	100
PLD006	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	DEHP FREE PVC	×2	×1	100
PLU001	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	PU	×1	/	100
PLU002	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	PU	×2	/	100
PLU003	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	PU	×4	/	100
PLU004	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	PU	×4	×1	100
PLU005	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	PU	×1	×1	100
PLU006	Vented spike,tubing size 3.0*4.0mm,Robert clamp,W connector, back check valve/needle free connector, long drip chamber, roller clamp, rotating male luer lock and prime cap, peel pouch pack, EO sterilized.	245cm	PU	×2	×1	100