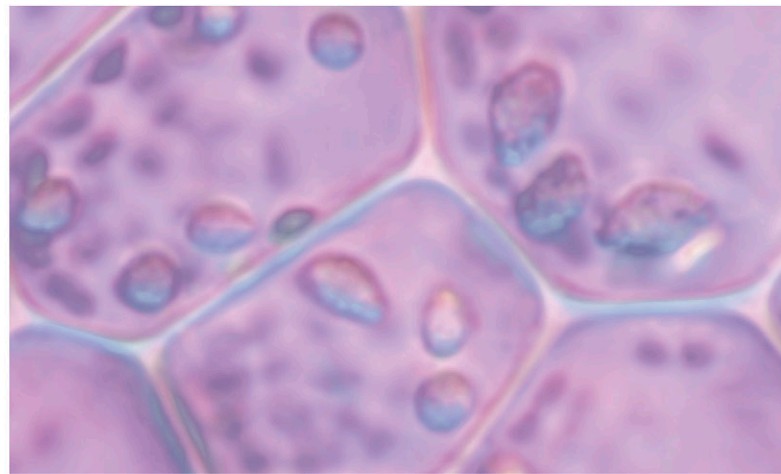
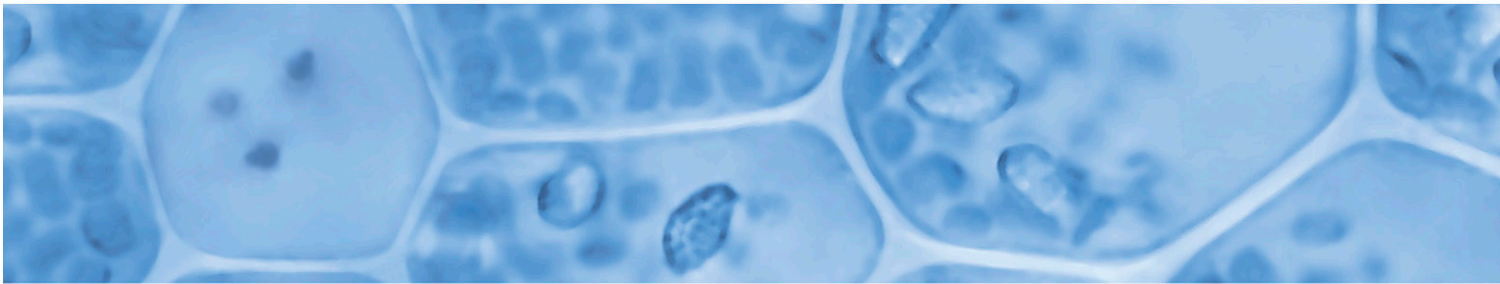
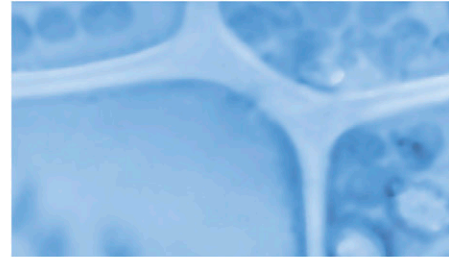


# CODAN CYTO<sup>®</sup>



## Protocol

Cyto-Ad-Wing Z<sup>®</sup> and Connect Z<sup>®</sup> ONCE 2  
with CODAN MicroSpike





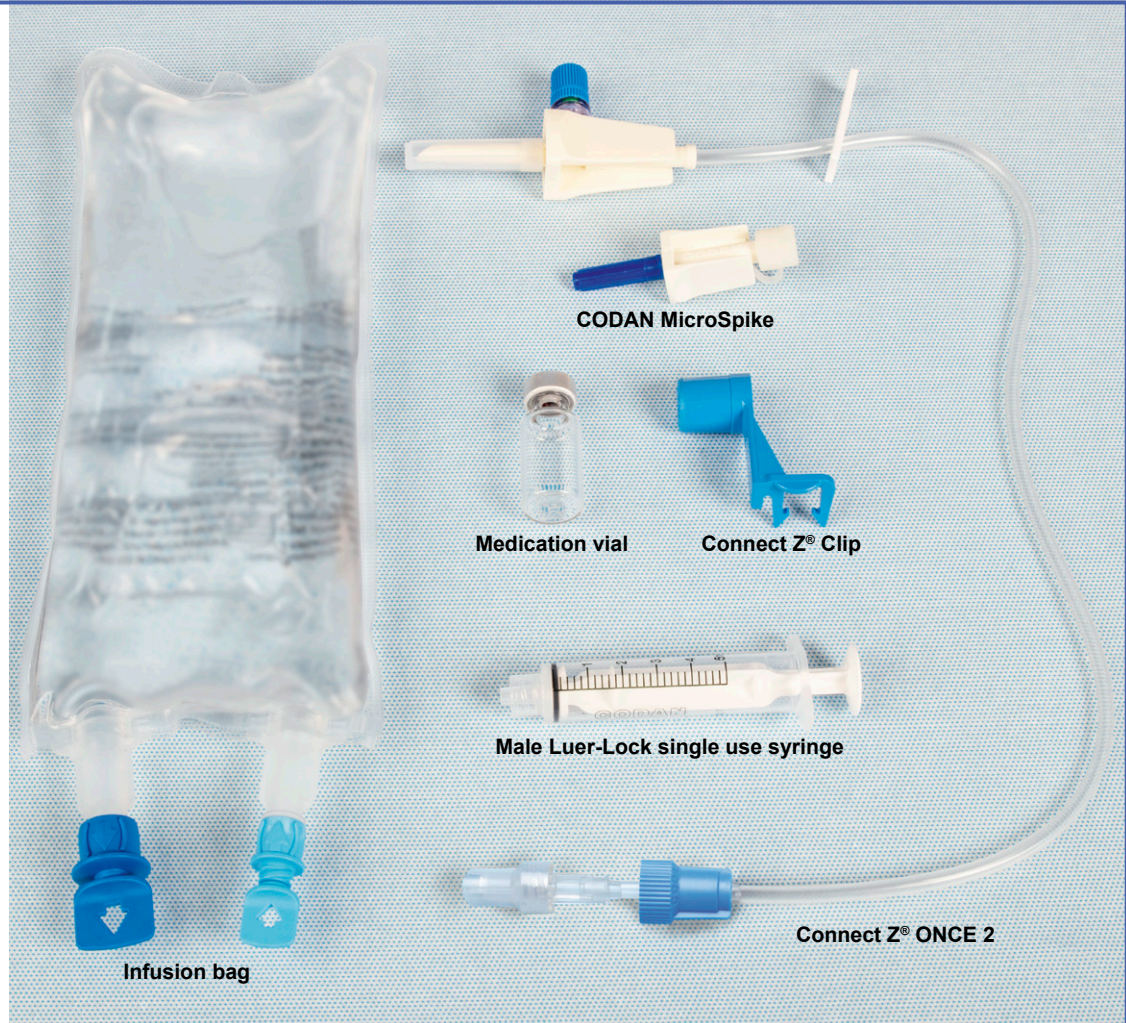
# CODAN CYTO<sup>®</sup>

## Safe preparation of cytostatics

Observing the generally applicable hygiene and occupational safety regulations is a prerequisite!

### Preparation:

- Connect Z<sup>®</sup> ONCE 2 (referred to as: Connect Z<sup>®</sup>),
- CODAN MicroSpike,
- Connect Z<sup>®</sup> Clip,
- Male Luer-Lock single use syringe,
- medication vial,
- infusion bag.



1

### Priming the Connect Z<sup>®</sup>

Insert the spike of the Connect Z<sup>®</sup> in the corresponding connection of the infusion bag. Prime the Connect Z<sup>®</sup> by gravity. The filter in the FlowStop protection cap allows air to escape and retains the fluid.

**i** Before this step, it should be clarified whether venting is thus necessary. Otherwise you can start with step 2.

2

### Closing the slide clamp

Close the slide clamp on the tube a fingerbreadth below the spike of the Connect Z<sup>®</sup>.

3

### Inserting the spike

Insert the CODAN MicroSpike through the septum of the medication vial straight and without rotation. After that the spike will move back a little. The pressure is equalised via a 0,2 µm ventilation filter integrated in the CODAN MicroSpike.

**i** The closure plug can be removed optionally as shown below.





4



#### Withdrawing into the syringe

Disconnect the blue closure plug and keep it safe. Connect the syringe up to the mixing adapter of the Connect Z<sup>®</sup> and draw the amount of fluid required for dissolving the dry substance into the syringe. The mechanism of the mixing adapter opens when the syringe is connected. The system closes again when the syringe is disconnected from the mixing adapter.

5



#### Dissolving the dry substance

The vial must not be placed on the workbench during injection so that the spike is not pushed back. Connect the syringe onto the CODAN MicroSpike. Inject the liquid into the vertical medication vial. Leave the syringe on the CODAN MicroSpike.

The excess pressure which builds up in the vial is released by the 0,2 µm ventilation filter in the CODAN MicroSpike. Aerosols are reliably retained.

Afterwards, gently swirl the medication vial (not shaking!).



6



**i** If only a partial quantity is to be removed, just follow the workstep on the right.

#### Withdrawing of complete quantity into the syringe

For a complete withdrawal, hold the vial with the syringe vertically. This ensures that the fluid channel is at its lowest point and you can empty the vial completely.



#### Withdrawing of partial quantity into the syringe

Draw some medication into the syringe. Slowly push the existing air back into the vial until no more air rises. Then draw as much medication into the syringe until air bubbles rise again. At this point, the pressure is equalised.

If you need more of the medication, draw further.

If you need less, turn the vial downwards and inject the medication back.

7



#### Drawing off remaining amounts

The filter surface of the CODAN MicroSpike faces upwards. Before disconnecting the syringe, draw 3 ml of sterile air into the syringe.

8



#### Disconnecting the syringe

Disconnect the syringe from the CODAN MicroSpike in the horizontal position.

**i** For partial withdrawing, it is recommended to use a protective cap for storage.



9

### Transferring medication to the bag

Connect the syringe in a semi-horizontal position to the mixing adapter of the Connect Z<sup>®</sup>. Inject the fluid in a vertical position.



10

### Dissolving the concentration in the bag

In order to achieve better mixing, a part of the injected volume is then drawn back into the syringe.



To remove the cytostatic from the mixing adapter, the remaining air (3 ml) in the syringe is injected into the system.



11

### Disconnecting the syringe

Disconnect the syringe in a horizontal position and screw the blue closure plug back onto the mixing adapter.



12

### Connecting the Connect Z<sup>®</sup> Clip for additional transport safety

The Connect Z<sup>®</sup> Clip from CODAN provides an additional means of ensuring a secure connection between certain infusion bags and the spike.



13

### Preparation complete

The tube of the Connect Z<sup>®</sup> system is now primed with basic solution. The medication to be administered is in the bag and is secured by the slide clamp.



**i** For transport of prepared cytostatics, the usage of a Chemoprotect<sup>®</sup> Transport safety bag is recommended.

The cytostatic unit can now be labelled and packed for transport (recommended in a Chemoprotect<sup>®</sup> Transport safety bag).





# CODAN CYTO<sup>®</sup>

## Safe administration of cytostatics

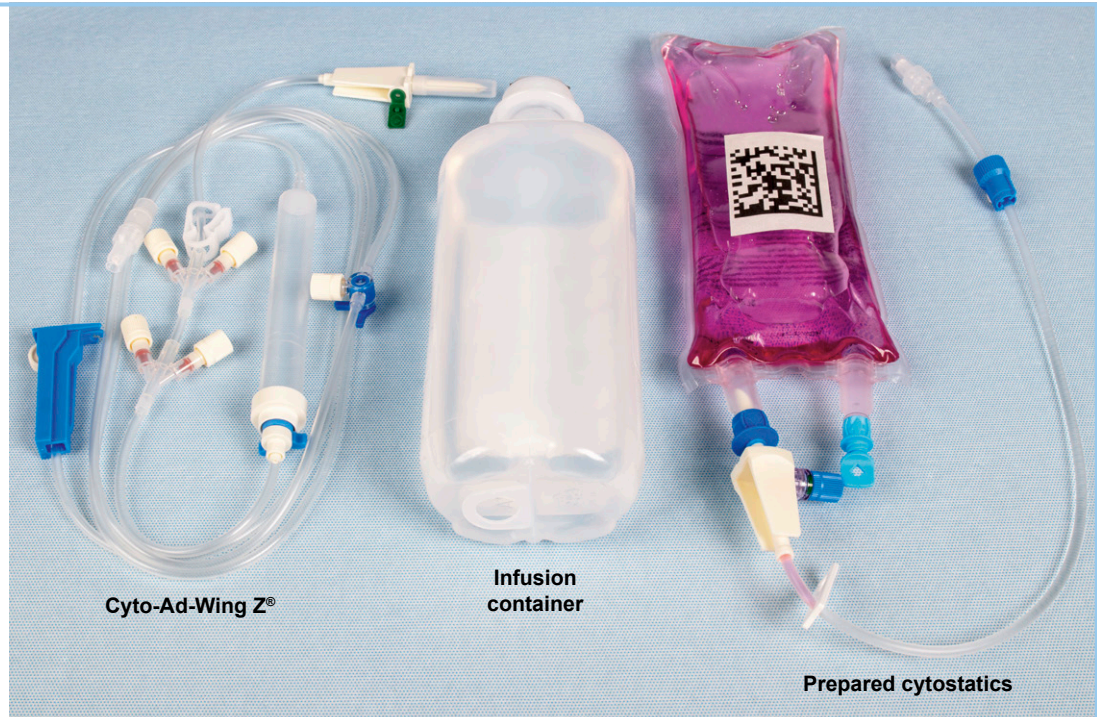
Observing the generally applicable hygiene and occupational safety regulations is a prerequisite!

### Administration:

- Cyto-Ad-Wing Z<sup>®</sup>/4 (referred to as: Cyto-Ad-Wing Z<sup>®</sup>),
- infusion container,
- prepared cytostatics (from the Chemoprotect<sup>®</sup> Transport safety bag).

**i** For disposal, the usage of a Chemoprotect<sup>®</sup> Transport-/Waste bag is recommended.

**!** Do not disconnect the Connect Z<sup>®</sup> during or after the infusion in order to maintain the closed system.



1

### Checking the Cyto-Ad-Wing Z<sup>®</sup>

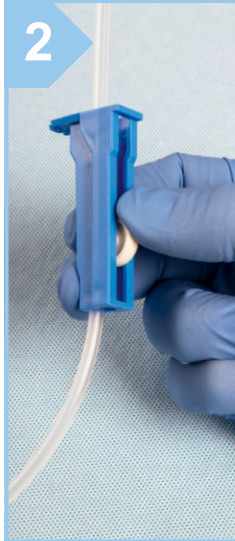
Take the Cyto-Ad-Wing Z<sup>®</sup> and close the pinch clamp. Check that the closure plugs of the Female Luer-Lock adapters are tight and tighten if necessary.



2

### Closing the roller clamp

Close the roller clamp of the Cyto-Ad-Wing Z<sup>®</sup>.



3

### Priming the set

Insert the spike of the Cyto-Ad-Wing Z<sup>®</sup> into the bag with the rinsing fluid. Open the pinch clamp. Fill the drip chamber up to the upper marking by pressing the blue Wing-Valve, then open the roller clamp slowly and vent the remaining part of the Cyto-Ad-Wing Z<sup>®</sup>. The Flow-Stop protection cap allows air to escape, thus completely venting the system.



4

### Connecting the Connect Z<sup>®</sup>

Now connect the infusion bag and the prepared Connect Z<sup>®</sup>, checking its identity and intactness. The slide clamp must be closed, then the FlowStop protection cap can be removed. Connect the prepared cytostatics and tighten the ONCE-LOCK 2 on the Female Luer-Lock adapter.

**i** It is optionally possible to connect additional prepared cytostatics.



5

### Closing the pinch clamp

Close the pinch clamp of the Cyto-Ad-Wing Z<sup>®</sup> system.







## Manufacturer

CODAN Medizinische Geräte GmbH  
Stig Husted-Andersen Straße 11 · 23738 Lensahn, Germany  
Tel. +49 (0) 43 63 · 51 11 · Fax +49 (0) 43 63 · 51 12 14  
codan@codan.de · www.codancompanies.com

**The decisive connection**

6



### Administering of the prepared cytotostatics by opening the slide clamp

For administration of prepared cytotostatics, open the slide clamp of the Connect Z®. Only the cytotostatics is administered; the main line remains closed.

7



### Administering of the prepared cytotostatics

The basic solution with which the drip chamber was previously filled now mixes with the medication. Gravity infusions are regulated via the roller clamp. Otherwise, the speed is regulated via an infusion pump with a connected drip counter.



8



### Complete administering of the prepared cytotostatics via the Connect Z®

The empty bag collapses, the Connect Z® also drains and the infusion stops. Then close the slide clamp of the Connect Z® one finger wide at the bottom.

9



### Rinsing the system before administering of next cytotostatics

Before administering further medication, we recommend rinsing the system with 50 ml.

To do this, open the pinch clamp on the Cyto-Ad-Wing Z® and open the roller clamp.

The next medication or cytotostatic agent can then be connected to the Cyto-Ad-Wing Z® (see step 4).

10



### Refilling the drip chamber

When the fluid level in the drip chamber is too low, close the roller clamp of the Cyto-Ad-Wing Z®. Press the blue Wing-Valve to raise the fluid level up to level ring.

11



### Administering of further medication

For administration of further medication, close the pinch clamp of the Cyto-Ad-Wing Z® and connect the next prepared cytotostatics to another connection port. Follow instructions as indicated above. This procedure can be repeated until all Cyto-Ad-Wing Z® connections are occupied.

12



### Final flushing and disposal

After the last medication unit is given, we recommend flushing the main line with at least 100 ml of rinsing solution to exclude the possibility of medication remaining in the system. Then close the roller clamp, disconnect the Cyto-Ad-Wing Z® from the intravenous access and dispose of the whole set.