



# CODAN

## CYTO<sup>®</sup>

Safe preparation and  
administration of cytostatics

**The decisive connection**



# CODAN CYTO<sup>®</sup>

The Connect Z<sup>®</sup> and Cyto-Ad Z<sup>®</sup> systems have been specially developed for the reliable and safe preparation and administration of cytostatics

## Connect Z<sup>®</sup>

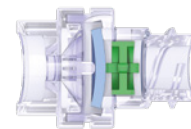
The Connect Z<sup>®</sup> system is used during the preparation of cytostatics with infusion bags in order to avoid the use of cannulae/needles. At the same time, the preparation and transmission of medication must be possible without leaks and contaminations. The Connect Z<sup>®</sup> satisfies both of these demands. Liquid can be safely needle-free withdrawn from the bag or added to it with a syringe via a Female Luer-Lock adapter with a special opening/closing mechanism.

## Automatic, simple, safe

The special Female Luer-Lock adapter of the injection port has been designed to open in both directions, activated by the Luer cone of the syringe. Liquid can both be withdrawn and added. The connection is automatically and immediately sealed once the syringe is removed.

### Connect Z<sup>®</sup> Clip

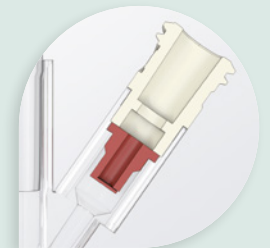
The Connect Z<sup>®</sup> Clip has been developed in order to ensure an absolutely safe connection between certain infusion bags and the spike of the Connect Z<sup>®</sup> system. The clip provides additional safety during the administration of cytostatics. The connection to the infusion bag is secure even during transportation and when subject



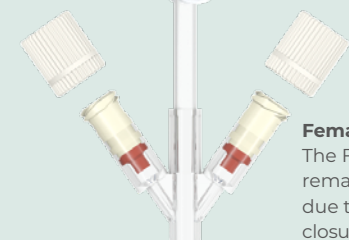
**Mixing adapter**  
Needle-free Female Luer-Lock adapter with special open-close mechanism.

**Secured and safe connection to the infusion bag**

**Integrated CODAN Check Valve**



**Cyto-Ad-Wing Z<sup>®</sup>**  
The Cyto-Ad-Wing Z<sup>®</sup> is available with 1, 2, 4 or 6 Female Luer-Lock adapters for a safe and low-risk administration of cytostatics and other medication.



**Female Luer-Lock adapter**  
The Female Luer-Lock adapters remain sterile prior to activation due to being equipped with closure plugs. The integrated CODAN Check Valves prevent leaks, retrograde infusion and interaction of medication.

to other loads; unintentional manipulation of the system is thus ruled out.

### ONCE-LOCK 2 adapter

This special Male Luer-Lock adapter has been developed in order to prevent disconnection of the Connect Z<sup>®</sup> following connection to an administration set (e. g. Cyto-Ad-Wing Z<sup>®</sup>). When administering cytostatics in particular, it is very important that disconnection is prevented during and after administration of the medication in order to avoid liquid and aerosol leakages. With the ONCE-LOCK 2 adapter, the complete medication unit is secured.

## Cyto-Ad-Wing Z<sup>®</sup>

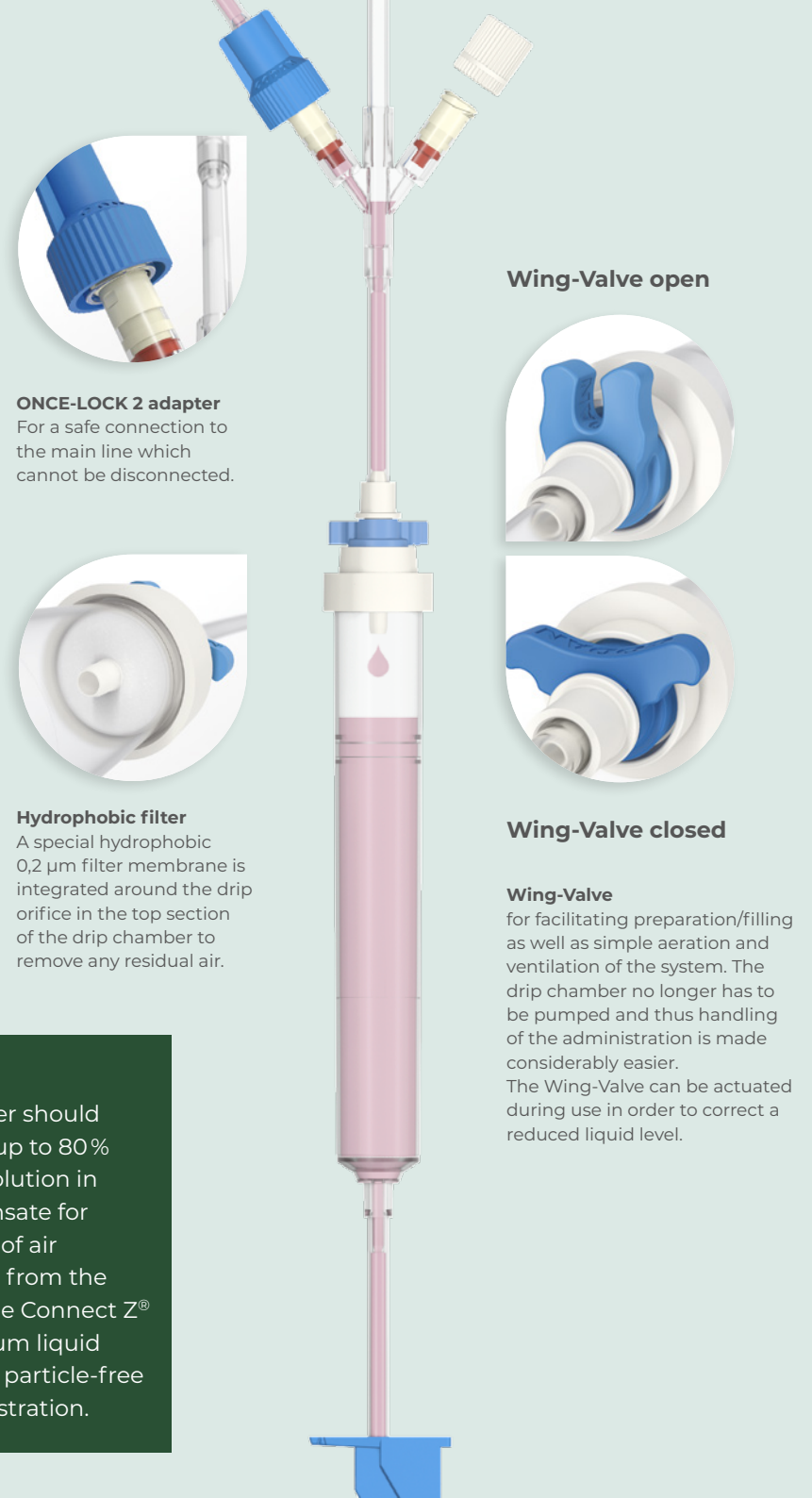
### Systematic safety

The Cyto-Ad-Wing Z<sup>®</sup> is the most important component of the CODAN system for the safe and low-risk administration of cytostatics and other medication. The Cyto-Ad-Wing Z<sup>®</sup> features a vented spike with integrated check valve. This provides a safe and problem-free use of the Cyto-Ad-Wing Z<sup>®</sup> system with infusion bottles and bags. At the same time, the medication lines are securely connected to the system's Female Luer-Lock adapters with CODAN Check Valves and thus protected against leaks and retrograde infusion.

An inline drip chamber with a large liquid reservoir is centrally integrated in the main line. Small amounts of air which are created during administration collect here. Thanks to the hydrophobic 0,2 µm filter membrane integrated in the top part of the drip chamber (which is activated using the Wing-Valve), the air which has collected can be safely eliminated and the liquid level in the drip chamber can be refilled. This function can also be used when priming the administration system. A 15 µm liquid filter for particle filtration is integrated in the bottom of the drip chamber. The desired infusion flow to the patient can be set using the CODAN Precision roller clamp.

### Transfer tubing

CODAN CYTO<sup>®</sup> systems for the administration of various



**ONCE-LOCK 2 adapter**  
For a safe connection to the main line which cannot be disconnected.

**Wing-Valve open**

**Hydrophobic filter**  
A special hydrophobic 0,2 µm filter membrane is integrated around the drip orifice in the top section of the drip chamber to remove any residual air.

**Wing-Valve closed**

**Wing-Valve**  
for facilitating preparation/filling as well as simple aeration and ventilation of the system. The drip chamber no longer has to be pumped and thus handling of the administration is made considerably easier. The Wing-Valve can be actuated during use in order to correct a reduced liquid level.

### Drip chamber

The drip chamber should always be filled up to 80% with the basic solution in order to compensate for small quantities of air which can result from the connection of the Connect Z<sup>®</sup> systems. The 15 µm liquid filter safeguards particle-free infusion administration.

cytostatics are available with PVC tubing in which the plasticiser TOTM is used or with green line® tubing (completely PVC-free).

### SWAN-LOCK®

The integrated 3-way stopcock with easily disinfectable SWAN-LOCK® can be used for the administration of adjuvant medication. The needle-free adapter keeps the system closed even when connecting or disconnecting a syringe or infusion set.

### FlowStop protection cap

The FlowStop protection cap on the Rotating Male Luer-Lock adapter with SELF-LOCK safeguards leakage-free ventilation of the Cyto-Ad Z® systems, thus allowing this 'critical' procedure to be performed particularly safe and simple.

### Complete closed system

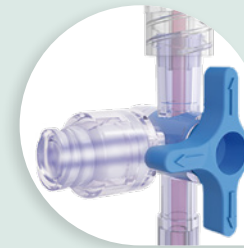
The Connect Z® systems are directly connected to the Cyto-Ad-Wing Z® under consideration of aseptic requirements. This results in a complete closed unit without the risk of leakage. In order to avoid incompatibilities, only one medication should be administered at a time. The system must be rinsed using the basic solution each time the medication is changed. After administration of all medication, the system should be rinsed once again. This safeguards a safe disconnection from the catheter without the risk of contamination. The whole system should be disposed of as prescribed without removing the empty infusion bags and Connect Z® systems.

### Compatibility with volumetric infusion pumps

The Cyto-Ad-Wing Z® can be used for gravity and in combination with volumetric infusion pumps (e. g. CODAN ARGUS 717 V / A717V), which require standard tubing with the measurements 3,0/4,1 mm (ID/OD) as a pump segment.

### SWAN-LOCK®

The disinfectable connection to the 3-way stopcock enables the safe administration of medication close to the patient.



### Rotating Male Luer-Lock adapter

Male Luer-Lock adapter with SELF-LOCK feature for a safe and comfortable connection to the catheter or patient line.



### FlowStop protection cap

The FlowStop protection cap developed by CODAN safeguards easy ventilation of the system without the risk of leaks. The hydrophobic filter allows the air to escape whilst retaining the liquid.



## Product-Highlights

### Cyto-Ad-Wing Z® Inline

The Cyto-Ad Z® Inline from CODAN is designed for use in combination with a dedicated pump administration set incorporating a special pump segment.

Cyto-Ad Z® Inline sets are available in different variants, equipped with 1, 2, 4 or 6 Female Luer-Lock adapters with integrated CODAN Check Valve to prevent leakage and retrograde infusion. The Inline Spike Adapter at the end of set is suitable for the connection to all standard spikes of dedicated pump administration sets.

In addition to the Cyto-Ad Z® Inline products, CODAN offers also special IVIP® administration systems (e. g. IVIP® 708/718 Cyto-Ad-Wing Z® with patented Anti-Free-Flow clamp) to administer cytostatics and other medication with specific pump systems. These systems are equipped with e. g. special conveying and retention segment or silicon segments.



#### ▲ Wing-Valve

The Wing-Valve at the top end of the drip chamber is used to prepare, fill and also simply aerate and ventilate the system whilst medication is being administered. During administration, air collects in the drip chamber and the liquid level is reduced accordingly. In order to correct the liquid level, the drip chamber can be refilled to the normal level by pressing the wings of the valve.

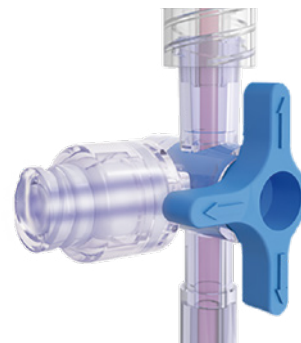
#### ▼ SWAN-LOCK®

Additional medication can be administered close to the patient via the easily disinfectable connection on the 3-way stopcock.



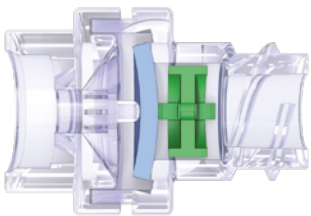
#### ▲ Rotating Male Luer-Lock adapter

Adapter with rotating collar and SELF-LOCK feature for a safe and comfortable connection to the catheter or the patient line.



#### ◀ Needle-free mixing adapter

The special Female Luer-Lock mixing adapter of the injection port has been designed to open in both directions, activated by the Luer cone of the syringe. Liquid can both be withdrawn and added. The connection is automatically and immediately sealed once the syringe is removed.



#### ONCE-LOCK 2 adapter ▶

After connection to the main line, the ONCE-LOCK 2 adapter can no longer be disconnected and the possibility of contamination is thus ruled out. This safeguards the safe administration of the medication.

#### ▲ Hydrophobic filter

A special hydrophobic 0,2 µm filter membrane is integrated around the drip orifice in the top section of the drip chamber.



# CODAN Worldwide

CODAN is known internationally as a manufacturer and supplier of medical transfer systems. The CODAN Companies have more than 1500 employees around the world.

The name CODAN is synonymous with reliability, quality and precision based on the know-how and experience gained from more than 60 years of research and development. Company-owned production facilities and sales companies around the world are a guarantee for efficient production, a tight-knit sales network and a first-class service for customers in the healthcare sector.

## CODAN Product range

- Infusion sets
- Transfusion sets
- Extension sets & Manifold connectors
- Infusion & Transfusion accessories
- Infusion filters & Filter systems
- Neonatology & Paediatrics products
- Withdrawal, Preparation & Administration systems
- CODAN CYTO®
- Chemoprotect® products
- Urology & Gynaecology products
- Single use syringes
- Invasive Blood Pressure Monitoring
- Infusion Technology Solutions
- Volumetric & Syringe pumps
- Software
- CODAN COMPONENTS

## CODAN Companies

CODAN Medizinische Geräte GmbH · Deutschland  
CODAN pvb Critical Care GmbH · Deutschland  
CODAN pvb Medical GmbH · Deutschland  
CODAN II, S.A. · Portugal  
CODAN US Corporation · USA  
CODAN Inc. · USA  
CODAN NORGE AS · Norge  
CODAN TRIPLUS AB · Sverige  
CODAN Limited · United Kingdom  
CODAN FRANCE Sarl · France  
CODAN Medical AG · Schweiz  
CODAN ARGUS AG · Schweiz  
arcomed AG · Schweiz  
CODAN BV · Nederland  
CODAN s.r.l. · Italia  
CODAN Medical GmbH · Österreich  
CODAN Medical ApS · Danmark  
CODAN DEHA ApS · Danmark  
CODAN MEDITECH s.r.o. · Česká republika  
arcomed Pty Ltd · Australia  
arcomed Limited · New Zealand

Compliance of the established quality management systems with the provisions of EN ISO 13485, the Council Directive 93/42/EEC and/or Regulation (EU) 2017/745 has been certified by the relevant, competent notified bodies:

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