NEXUS TKO®

THE FIRST AND ONLY ANTI-REFLUX NEEDLELESS CONNECTOR

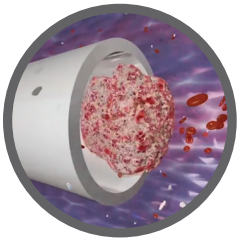
Proven to reduce occlusions, extend catheter dwell time, and improve patient outcomes [1-18]

NEXUS® MEDICAL

nexusmedical.com

BLOOD REFLUX CAN CAUSE SERIOUS PROBLEMS
FOR HEALTHCARE PROFESSIONALS AND PATIENTS

In 2000, Nexus Medical was formed to solve catheter failures on the battlefield. A primary cause of venous catheter failure is intraluminal thrombotic occlusions from blood reflux.[4] Blood reflux can lead to IV therapy complications like occlusions, infiltrates, catheter restarts, and central-line associated bloodstream infections (CLABSI).[4,7]



Animation of an occlusion caused by blood reflux

"Theoretically, Blood Reflux into either the IV catheter or the needleless connector increases both the risk of occlusion and biofilm formation."[19]

WILLIAM R. JARVIS, MD

MECHANICAL CAUSES OF REFLUX[4]
Syringe connection/ disconnection
Syringe plunger rebound
Venous pressure changes
IV bag runs dry
Low KVO/flow rates

PHYSIOLOGICAL CAUSES OF REFLUX[4]
Patient movement
Crying
Coughing
Respiration
Vomiting

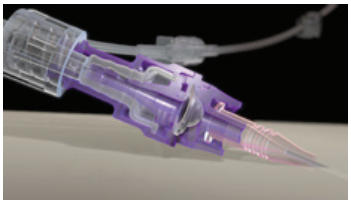
THE SOLUTION: NEXUS TKO® (TO KEEP OPEN) ANTI-REFLUX TECHNOLOGY

NEXUS TKO® REQUIRES NO CHANGE IN PRACTICE OR CLAMPING SEQUENCE AND PROVIDES BLOOD REFLUX PROTECTION 24/7™.

NEXUS TKO®-6P

NEEDLELESS CONNECTOR

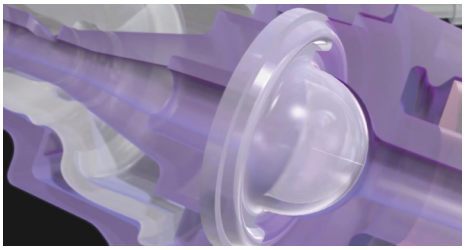
TKO PRESSURE-ACTIVATED ANTI-REFLUX DIAPHRAGM



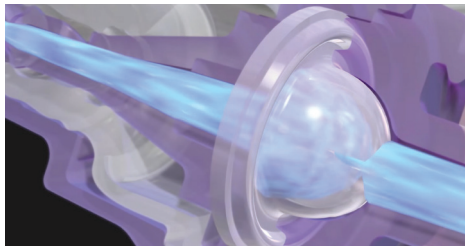
Cross sectional view of Nexus TKO®

HOW NEXUS TKO® WORKS

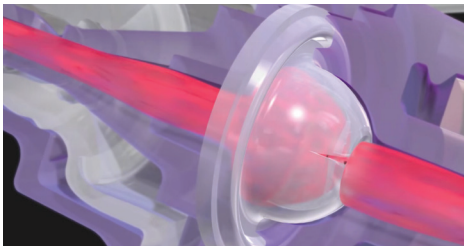
The Nexus TKO® anti-reflux diaphragm opens and closes based upon fluid pressure. A micro slit in the diaphragm opens towards the patient with fluid pressure from sources such as an IV or syringe pump, IV bag, or medication syringe. When the fluid pressure drops the Nexus TKO® diaphragm instantly and automatically closes preventing blood reflux into the catheter.



1. DIAPHRAGM IS NORMALLY CLOSED



2. DIAPHRAGM OPENS TOWARD PATIENT WITH INFUSION



3. DIAPHRAGM OPENS IN REVERSE WITH ASPIRATION

CLINICAL AND FINANCIAL BENEFITS OF USING NEXUS TKO®

"Nexus TKO® has 18 published studies demonstrating its effectiveness at improving safety and outcomes while reducing costs and complications. Our hospital has benefited from these results."

IV TEAM LEAD, NORTHEAST LEVEL 1 TRAUMA CENTER

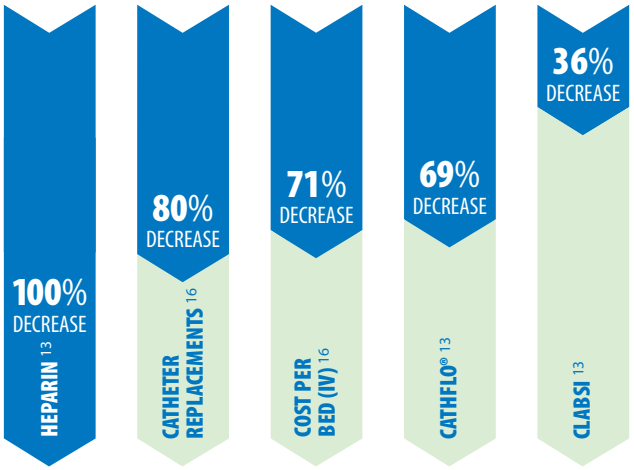
CLINICAL BENEFITS

- Decrease in preventable catheter occlusions and CLABSIs which cause delays in treatment
- Increase in catheter dwell time
- Fewer catheter replacements and patient re-sticks

FINANCIAL BENEFITS

- Reduce pharmacy and IV supply costs
- Substantially reduce the cost of tPA (Cathflo®) and Heparin
- Reduce nursing time

RESULTS WITH NEXUS TKO® INTERVENTION



"The adjusted odds of developing a CLABSI was 3.59 times greater in those patients with PICC lines who received tPA compared with those who did not receive tPA (95% CI [1.86, 6.94], p<0.001)." [20]

K. THAKARAR

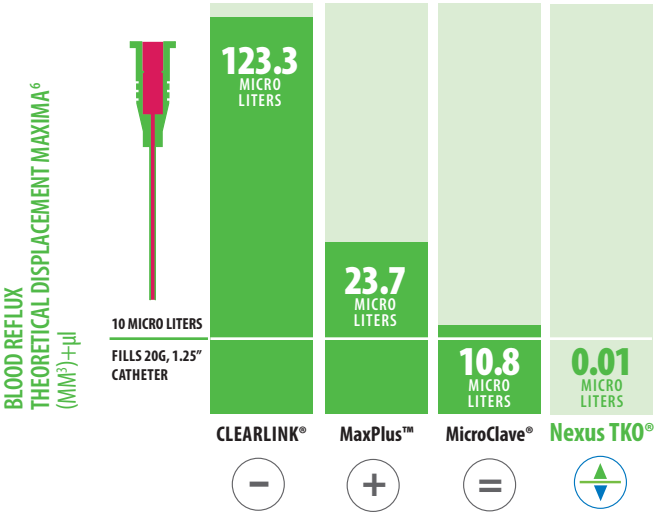
69% REDUCTION IN tPA USAGE [13]

36% REDUCTION IN CLABSI [13]

$100K CVAD SAVINGS [13]

NEXUS TKO® VS. OTHER NEEDLELESS CONNECTORS

REFLUX PERFORMANCE COMPARISON



TOTAL BENEFIT COMPARISON

	CLEARLINK®	MaxPlus™	MicroClave®	Nexus TKO®
Reduces occlusions / CLABSIs				✓
Decreases costs / consumption				✓
Improves catheter dwell time				✓
No clamping sequence to prevent blood reflux				✓
Eliminates heparin use				✓
Straight, non-tortuous fluid path			✓	✓
Clear fluid path	✓	✓	✓	✓
Swabable surface	✓	✓	✓	✓
Microbial barrier protection	✓	✓	✓	✓

TECHNICAL SPECIFICATIONS [21-27]

Nexus TKO®-6P (510K: K130416)
Polycarbonate/Silicone Materials

POWER INJECTABLE	Yes (325 psi, 10 ml/sec)
FLOW RATE @ GRAVITY	75 ml/min or 4500 ml/hr
APPROXIMATE PRIMING VOLUME	0.13 ml
FUNCTIONAL ACTIVATIONS	100
FLUSHING EFFICACY	10 ml
CLAMPING SEQUENCE	None Required
7-DAY USE	Yes
SWABBABLE, MICROBIAL BARRIER	Yes
CONTAINS NO LATEX, NO DEHP	Yes
BIOCOMPATIBLE MATERIALS	Yes
BLOOD, LIPID, MRI COMPATIBLE	Yes
MECHANICAL HEMOLYSIS	Yes

NEXUS TKO®-6P
(SKU:NX4650)

STRAIGHT CRYSTAL CLEAR FLUID PATHWAY

BI-DIRECTIONAL FLOW CONTROL

MICROBIAL BARRIER PROTECTION TRI-SEAL™ DESIGN WITH SLIT-LOCK™ TECHNOLOGY

NEXUS TKO®-6PHV (SKU: NX4650HV)
HIGH VISIBILITY FOR HOME INFUSION PATIENTS

DESCRIPTION		SKU		PRIMING	CLAMP STYLE	
		NON-BONDED	BONDED	VOLUME	PINCH	SLIDE
6" Microbore Extension Set with Nexus TKO®-6P		N4685MN	N4685MN-B	0.4mL		X
6" Standardbore Extension Set with Nexus TKO®-6P		N4685N	N4685N-B	0.72mL		X
6" Standardbore Extension Set with Nexus TKO®-6P		N4685P	N4685P-B	0.72mL	X	

Various pressure rated sets and configurations of the Nexus TKO® are available. See catalog for ordering details.

NEXUS TKO®

FOR MORE INFORMATION VISIT nexusmedical.com

To schedule a demonstration, email tkocustserv@nexusmedical.com or call Nexus Medical Customer Service at 866.336.3987.

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