

Recommended PAL - UAC - UVC - Central Catheter Clearance and Flush Volumes When Using Hummi Micro Draw

Peripheral - UAC - UVC Catheters				Catheter Location		Fluids Being Administered			Recommended Syringes Self Vent or Aspirating	Usable Length	Number of Lumens	Lumen Sizes		Approximate Volume of Draw Lumen	Clearance Guidelines For Obtaining Clean UAC / UVC / PICC Blood Sample When Using Hummi Micro Draw						Recommended Hummi Clearance & Flush	
Catheter Type	No. of Lumens	Cath French Size	Catheter Material PU Silicone Teflon	Arterial	Venous	Saline	Saline Heparin	TPN Lipids HyperAl Glucose Other				Blood Draw Lumen Gauge Size	Other (2nd) Lumen Gauge Size		French Size	3x Clearance ↓ Saline	4x Clearance ↓ Saline	5x Clearance ↓ Saline	6x Clearance ↓ TPN / Lipids / HyperAl Glucose / Other	8x Clearance ↓	Clearance Volume	Flush Volume
Radial Peripheral	Single		PU Teflon	X		X	X		SV	0.5" to 1.0"	1	24 ga. to 22 ga.		.002 to .004 mL					0.045 mL = 7 to 10x Clearance	NO FLUSH REQUIRED		
Umbilical	Single	2.5 Fr.	PU / SIL	X		X	X		Asp	30-40 cm	1	23 ga.		0.12 mL	2.5 Fr.	0.36 mL	0.48 mL	0.60 mL	0.72 mL	0.96 mL	0.5 mL	0.3 mL to 0.5 mL
Umbilical	Single	3.5 Fr.	PU / SIL	X		X	X		Asp or SV	30-40 cm	1	21 ga.		0.15 mL	3.5 Fr.	0.45 mL	0.6 mL	0.75 mL	0.9 mL	1.2 mL	0.5 mL	0.3 mL to 0.5 mL
Umbilical	Single	4.3 Fr.	PU	X		X	X		Asp or SV	30-40 cm	1	18 ga.		0.25 mL	4.3 Fr.	0.75 mL	1.0 mL	1.25 mL	1.5 mL	2.0 mL	0.75 mL	0.5 mL to 0.7 mL
Umbilical	Single	5.0 Fr.	PU / SIL	X		X	X		Asp or SV	30-40 cm	1	18 ga.		0.30 mL	5.0 Fr.	0.9 mL	1.2 mL	1.5 mL	1.8 mL	2.4 mL	1.0 mL to 1.5 mL	0.7 mL to 1.0 mL
Umbilical	Dual	3.5 Fr.	PU / SIL	X		X	X		Asp	30-40 cm	2	21 ga. or 20 ga.	23 ga. or 24 ga.	0.16 - 0.20 mL (21 ga. or 20 ga.)	3.5 Fr.	0.48 mL to 0.6 mL	0.64 mL to 0.8 mL	0.8 mL to 1.0 mL	0.96 mL to 1.2 mL	1.28 mL to 1.6 mL	0.5 mL to 0.8 mL	0.5 mL to 0.70 mL
Umbilical	Dual	5.0 Fr.	PU / SIL	X		X	X		Asp or SV	30-40 cm	2	20 ga. or 18 ga.	20 ga. or 21 ga.	0.15 - 0.20 mL (20 ga. or 18 ga.)	5.0 Fr.	0.45 mL to 0.6 mL	0.6 mL to 0.8 mL	0.75 mL to 1.0 mL	0.9 mL to 1.2 mL	1.2 mL to 1.6 mL	0.6 mL to 0.8 mL	0.6 mL
Umbilical	Single	2.5 Fr.	PU / SIL		X			X	Asp	30-40 cm	1	23 ga.		0.12 mL	2.5 Fr.	0.36 mL	0.48 mL	0.6 mL	0.72 mL	0.96 mL	0.8 mL to 1.0 mL	0.5 mL
Umbilical	Single	3.5 Fr.	PU / SIL		X			X	Asp	30-40 cm	1	21 ga.		0.15 mL	3.5 Fr.	0.45 mL	0.6 mL	0.75 mL	0.9 mL	1.2 mL	1.0 mL	0.5 mL
Umbilical	Single	4.3 Fr.	PU / SIL		X			X	Asp	30-40 cm	1	18 ga.		0.25 mL	4.3 Fr.	0.75 mL	1.0 mL	1.25 mL	1.5 mL	2.0 mL	1.5 mL	0.5 mL to 0.7 mL
Umbilical	Single	5.0 Fr.	PU / SIL		X			X	Asp	30-40 cm	1	18 ga.		0.30 mL	5.0 Fr.	0.9 mL	1.2 mL	1.5 mL	1.8 mL	2.4 mL	1.5 mL to 1.8 mL	0.7 mL to 1.0 mL
Umbilical	Dual	3.5 Fr.	PU / SIL		X	X	X	X	Asp	30-40 cm	2	21 ga. or 20 ga.	23 ga. or 24 ga.	0.16 - 0.20 mL (21 ga. or 20 ga.)	3.5 Fr.	0.48 mL to 0.6 mL	0.64 mL to 0.8 mL	0.8 mL to 1.0 mL	0.96 mL to 1.2 mL	1.28 mL to 1.6 mL	1.0 mL to 1.3 mL	0.5 mL to 0.75 mL
Umbilical	Dual	5.0 Fr.	PU / SIL		X	X	X	X	Asp	30-40 cm	2	20 ga. or 18 ga.	20 ga. or 21 ga.	0.15 - 0.20 mL (20 ga. or 18 ga.)	5.0 Fr.	0.45 mL to 0.6 mL	0.6 mL to 0.8 mL	0.75 mL to 1.0 mL	0.9 mL to 1.2 mL	1.2 mL to 1.6 mL	1.0 mL to 1.5 mL	0.7 mL to 1.0 mL

Recommended PICC Catheter Clearance and Flush Volumes When Using Hummi Micro Draw

Central Catheters				Catheter Location		Fluids Being Administered			Recommended Syringes Self Vent or Aspirating	Usable Length	Number of Lumens	Lumen Sizes		Approximate Volume of Draw Lumen	Clearance Guidelines For Obtaining Clean PICC Catheter Blood Sample When Using Hummi Micro Draw					Recommended Hummi Clearance & Flush		
Catheter Type	No. of Lumens	Cath French Size	Catheter Material PU Silicone Teflon	Arterial	Venous	Saline	Saline Heparin	TPN Lipids HyperAl Glucose Other				Blood Draw Lumen Gauge Size	Other (2nd) Lumen Gauge Size		French Size	3x Clearance ↓ Saline	4x Clearance ↓ Saline	5x Clearance ↓ Saline	6x Clearance ↓ TPN / Lipids / HyperAl Glucose / Other	8x Clearance ↓	Clearance Volume	Flush Volume
PICC Cath	Dual	2.6 Fr.	PU / SIL		X	X	X	X	Asp	20 cm	2	21 ga.	23 ga. or 24 ga.	0.12 mL	2.6 Fr.	0.36 mL	0.48 mL	0.6 mL	0.72 mL	0.96 mL	0.7 mL to 0.8 mL	0.6 mL
PICC Cath	Single	2.8 Fr.	SIL		X			X	Asp	50 cm	1	22 ga.		0.20 mL	2.8 Fr.	0.60 mL	0.80 mL	1.0 mL	1.2 mL	1.6 mL	1.2 mL	1.0 mL
PICC Cath	Dual	2.6 Fr.	SIL		X	X	X	X	Asp	60 cm	2	22 ga.	23 ga.	0.18 mL	2.6 Fr.	0.54 mL	0.72 mL	0.9 mL	1.08 mL	1.44 mL	1.2 mL	1.0 mL
Power PICC	Single	4.0 Fr.	PU		X			X	Asp	55 cm	1	18 ga.		0.67 mL	4.0 Fr.	2.01 mL	2.68 mL	3.35 mL	4.02 mL	5.36 mL	3.5 mL to 4.0 mL	2.0 mL