Transarterial Embolization (TAE)
Transarterial Chemoembolization (TACE)
Radioembolization (Y-90)
Arteriovenous Malformation (AVM)
Prostate Artery Embolization (PAE)
Gastrointestinal Bleeds
Renal Angiomyolipoma (AML)
Uterine Fibroid Embolization (UFE)

Lipiodol®
Glue (n-bCA)
Coils up to 0.018"
Gelfoam
Spherical particles up to 900 µm
Dimethyl Sulfoxide (DMSO)
Ethanol (EtOH)

Sniper Product Family

The Sniper is compatible with conventional diagnostic catheters, guidewires, and embolic agents allowing physicians to experience the Sniper’s high performance with no additional accessories.

Designed for arterial embolization procedures such as:
- Transarterial Embolization (TAE)
- Transarterial Chemoembolization (TACE)
- Radioembolization (Y-90)
- Arteriovenous Malformation (AVM)
- Prostate Artery Embolization (PAE)
- Gastrointestinal Bleeds
- Renal Angiomyolipoma (AML)
- Uterine Fibroid Embolization (UFE)

Compatible with the delivery of *:
- Lipiodol®
- Glue (n-bCA)
- Coils up to 0.018"
- Gelfoam
- Spherical particles up to 900 µm
- Dimethyl Sulfoxide (DMSO)
- Ethanol (EtOH)

Specifications

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Working Length</th>
<th>Dead Space Volume</th>
<th>Tip</th>
<th>Outer Diameter</th>
<th>Inner Diameter</th>
<th>Balloon Diameter</th>
<th>Guidewire</th>
<th>Injection Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC0629-STR-110</td>
<td>110 cm</td>
<td>0.32 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBC0629-STR-130</td>
<td>130 cm</td>
<td>0.36 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBC0629-STR-150</td>
<td>150 cm</td>
<td>0.41 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBC0629-KTP-110</td>
<td>110 cm</td>
<td>0.32 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBC0629-KTP-130</td>
<td>130 cm</td>
<td>0.36 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBC0629-KTP-150</td>
<td>150 cm</td>
<td>0.41 ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sniper is a registered trademark of Embolx, Inc.

INDICATIONS FOR USE
Sniper balloon occlusion microcatheter is intended for use in the blood vessels of the peripheral vasculature where temporary occlusion is desired and offers a vessel selective technique of temporary vascular occlusion for selectively stopping or controlling blood flow. The Sniper balloon occlusion microcatheter is also intended to assist in the delivery of diagnostic agents such as contrast media and therapeutic agents into the peripheral vasculature.

CONTRAINDICATIONS

REFERENCES

©2019 Embolx, Inc. All rights reserved.

Embolo, Inc.
530 Lakeside Dr. #200
Sunnyvale, CA 94085
www.embolx.com
To order product or for more information contact us at customercare@embolx.com or +1-408-990-2949

©2019 Embolx, Inc. All rights reserved.

Sniper is a registered trademark of Embolx, Inc.

MK-0315 revH
Liver Arterial Network (~60 mmHg)

These examples are based on liver tumors, but this therapy may be applied to other organs and tumor locations.

Tumor (~25 mmHg)
Flow redirected towards tumor
Occluded Supply Artery (~60 mmHg)
Sniper Supply Artery (~100 mmHg)

Selective Delivery

Nonselective Delivery

Conventional vs. Balloon Occluded Transcatheter Arterial Chemoembolization (TACE)*. (Two studies totaling 142 patients)3,4
(Meta-analysis of three studies totaling 221 patients)5,6,7,8 (One study with 62 patients)7

Clinical Summary

Conventional vs. Balloon Occluded Transcatheter Arterial Chemoembolization (TACE)*.

Lipiodol® Filling
Complete Tumor Response
Survival

Increases Lipiodol filling
2-6X
Increases complete tumor response by
41%
Increases 5-year survival by
53%

* Data on file. * Data is based on literature search of known balloon occlusion microcatheters to date.

Designing Performance.

Sniper® Balloon Occlusion Microcatheter allows for easy navigation through small complex vascular structures providing enhanced reach to distal target sites.

Occlusion Balloon
Silicone balloon fits in a low profile pocket and remains flush after repeated use.

Flexible Distal Shaft
The combination of pliable material, steel braiding and hydrophilic coating maximizes trackability.

Rigid Proximal Shaft
The steel braids and robust materials allow for optimal pushability.

Atraumatic Tip
All tip shapes are tapered for smooth entry and have radiopaque material for easy visualization.

K'-tip
Responsive one to one torqueability for navigating complex anatomy.

Thin Wall Technology
Exceptionally thin wall material, capable of holding 900 psi, allows for dual lumens and a larger inner lumen without compromising catheter size.

Occlusion Balloon
Silicone balloon fits in a low profile pocket and remains flush after repeated use.

Clinical Summary

The Sniper’s balloon occludes the vessel to alter blood flow-dynamics using pressure-directed embolization. This increases therapeutic agent delivery into target areas while protecting surrounding healthy tissue.1,2
**Liver Arterial Network (~60 mmHg)**

These examples are based on liver tumors, but this therapy may be applied to other organs and tumor locations.

- **Tumor (~25 mmHg)**
  - Flow redirected towards tumor
  - Occluded Supply Artery (~60 mmHg)

- **Sniper Supply Artery (~100 mmHg)**

---

**Selective Delivery**

**Nonselective Delivery**

---

**Designing Performance.**

Intricate technical design of the **Sniper® Balloon Occlusion Microcatheter** allows for easy navigation through small complex vascular structures providing enhanced reach to distal target sites.

- **Occlusion Balloon**
  - Silicone balloon fits in a low profile pocket and remains flush after repeated use.

- **Flexible Distal Shaft**
  - The combination of pliable material, steel braiding and hydrophilic coating maximizes trackability.

- **Rigid Proximal Shaft**
  - The steel braids and robust materials allow for optimal pushability.

- **K™-tip**
  - Responsive one to one torqueability for navigating complex anatomy.

- **Atraumatic Tip**
  - All tip shapes are tapered for smooth entry and have radiopaque material for easy visualization.

- **Thin Wall Technology**
  - Exceptionally thin wall material, capable of holding 900 psi, allows for dual lumens and a larger inner lumen without compromising catheter size.

**Delivering Precision.**

The **Sniper’s balloon occludes the vessel to alter blood flow-dynamics using pressure-directed embolization.** This increases therapeutic agent delivery into target areas while protecting surrounding healthy tissue.

- **An isolated target zone is created.** Blood flow slows and redistributes away from non-target arterial networks, delivering embolic agents into the lowest pressure zone (tumor) allowing for improved tumor fill.

- **An isolated target zone is created.** As embolization progresses, increasing pressure enables embolic agents to penetrate into the tumor allowing for complete tumor fill.

---

**Clinical Summary**

Conventional vs. Balloon Occluded Transcatheter Arterial Chemoembolization (TACE)*.

**Lipiodol® Filling**

- Increases Lipiodol filling 2-6X

**Complete Tumor Response**

- Increases complete tumor response by 41%

**Survival**

- Increases 5-year survival by 53%

---

*Data on file.

*Data is based on literature search of known balloon occlusion microcatheters to date.

---

* [Meta-analysis of three studies totaling 221 patients] (3,4,5)
Transarterial Embolization (TAE)
Transarterial Chemoembolization (TACE)
Radioembolization (Y-90)
Arteriovenous Malformation (AVM)
Prostate Artery Embolization (PAE)
Gastrointestinal Bleeds
Renal Angiomyolipoma (AML)
Uterine Fibroid Embolization (UFE)

Specifications

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Working Length</th>
<th>Dead Space Volume</th>
<th>Tip</th>
<th>Outer Diameter</th>
<th>Inner Diameter</th>
<th>Balloon Diameter</th>
<th>Guidewire Injection Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC0629-STR-110</td>
<td>110 cm</td>
<td>0.32 ml</td>
<td>Straight tip</td>
<td>2.9F/0.038&quot;</td>
<td>0.020&quot;/0.5 mm</td>
<td>Up to 6 mm</td>
<td>0.014&quot; or 0.016&quot;</td>
</tr>
<tr>
<td>SBC0629-STR-130</td>
<td>130 cm</td>
<td>0.36 ml</td>
<td>Straight tip</td>
<td>2.9F/0.038&quot;</td>
<td>0.020&quot;/0.5 mm</td>
<td>Up to 6 mm</td>
<td>0.014&quot; or 0.016&quot;</td>
</tr>
<tr>
<td>SBC0629-STR-150</td>
<td>150 cm</td>
<td>0.41 ml</td>
<td>Straight tip</td>
<td>2.9F/0.038&quot;</td>
<td>0.020&quot;/0.5 mm</td>
<td>Up to 6 mm</td>
<td>0.014&quot; or 0.016&quot;</td>
</tr>
<tr>
<td>SBC0629-KTP-110</td>
<td>110 cm</td>
<td>0.32 ml</td>
<td>K-tip</td>
<td>2.2F/0.029&quot;</td>
<td>Up to 6 mm</td>
<td>Up to 900 psi</td>
<td></td>
</tr>
<tr>
<td>SBC0629-KTP-130</td>
<td>130 cm</td>
<td>0.36 ml</td>
<td>K-tip</td>
<td>2.2F/0.029&quot;</td>
<td>Up to 6 mm</td>
<td>Up to 900 psi</td>
<td></td>
</tr>
<tr>
<td>SBC0629-KTP-150</td>
<td>150 cm</td>
<td>0.41 ml</td>
<td>K-tip</td>
<td>2.2F/0.029&quot;</td>
<td>Up to 6 mm</td>
<td>Up to 900 psi</td>
<td></td>
</tr>
</tbody>
</table>

INDICATIONS FOR USE
Sniper balloon occlusion microcatheter is intended for use in the blood vessels of the peripheral vasculature where temporary occlusion is desired and offers a vessel selective technique of temporary vascular occlusion for selectively stopping or controlling blood-flow. The Sniper balloon occlusion microcatheter is also intended to assist in the delivery of diagnostic agents such as contrast media and therapeutic agents into the peripheral vasculature.

CONTRAINDICATIONS

REFERENCES

*See Sniper Chemical Compatibility Statement Letter MK-0351 at http://embolix.com/products/. Embolix does not make any claims; for information purposes only.