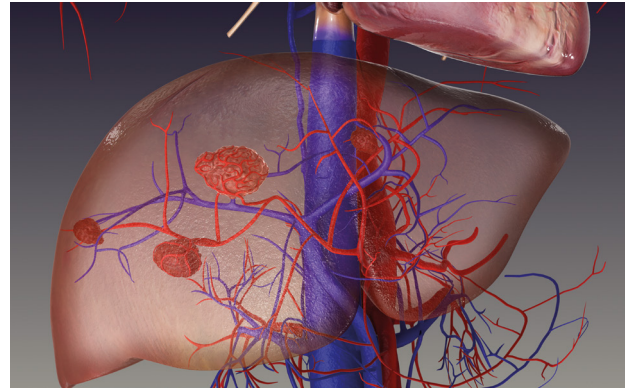
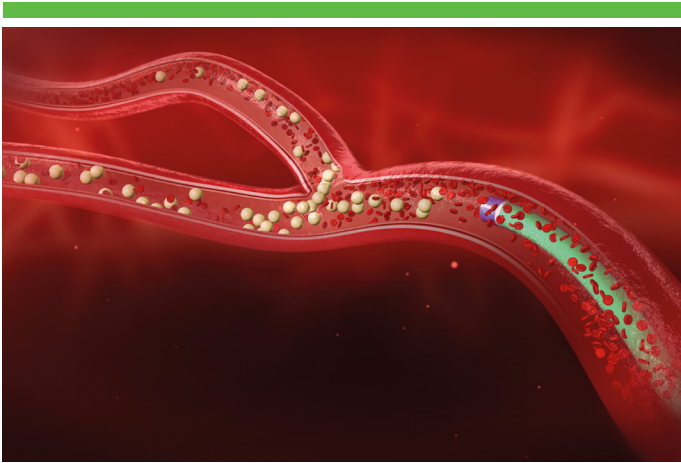


## What is SIRT?

- Selective Internal Radiation Therapy (SIRT), also known as Radioembolization, is a liver-directed therapy for unresectable liver tumors.
- SIRT is performed by specially trained Interventional Radiologists and Nuclear Medicine Physicians.
- A microcatheter is used to deliver millions of microspheres loaded with the radioactive isotope yttrium-90 (Y-90) into the liver through the hepatic arterial system, where they lodge in the tumor microvasculature.
- Tumor vasculature allows for a targeted, high activity delivered to the tumor aiming to spare healthy liver tissue.<sup>3</sup>



## What is SIRT with SIR-Spheres Y-90 resin microspheres?



- The high number of microspheres provides a rather uniform radiation distribution, enabling treatment of solitary and multifocal liver tumours.<sup>1-4</sup>
- With a specific density close to that of red-blood cells<sup>5</sup>, they are carried by the blood flow. A surrogate arterial model study found<sup>6</sup> that they are penetrating deep into the tumor microvasculature.
- Alternating injections of SIR-Spheres and contrast enable improved visualization and control, at any time during the procedure.
- Injections can be interrupted and restarted, and the catheter position can be verified and adjusted easily.
- Administration is performed using a specially designed acrylic box and a vial holder for beta-radiation shielding.



D-Vial and V-Vial with prepared activity, shipping vial and lead pot for shipment

# Product information

Product features	
Manufacturer	Sirtex Medical Pty Ltd
Approval	CE mark since 2002
Isotope	Yttrium-90
Composition	Resin
Specific density	1.125 g/ml (comparable to red blood cells)
Diameter	32.5 µm ± 2.5 µm (range 20-60 microns)
T <sub>1/2</sub>	64.1 h (95% decays within 11 days)
β-energy (max.)	2.27 MeV (I <sub>β</sub> = 100%)
Penetration in tissue	2.5 mm (mean), up to 11 mm
Radioactivity per sphere	68 Bq ± 10% at calibration date & time
Presentation of activity	Single dose size containing 3.0 GBq ± 10% of Y-90 at calibration date & time in 5 ml water for injection, steam sterilized
No. of microspheres per shipping vial	44.48 million in average (+/- 2.596 million)*
Administration features	
Nature of administration	Flow-directed, slow and controlled with full visibility
Flexibility of administration	Shipping vial can be divided into multiple treatment vials for a single patient with multiple injection points
Services	
Training	TEC** Program, Workshops (Center of Education), dosimetry and technical support

## Ordering information

Part number	Part name and Description
SIR-Y001	SIR-Spheres Y-90 resin microspheres (Available in various activities at time of delivery)
SIR-B001	Gen 1 Delivery Box (Reusable item)
SIR-K002	Gen 1 Accessories Pack Includes Delivery Set, V-Vial and V-Vial Holder
SIR-S001	Syringe Shield (Reusable item for both delivery systems)
SIR-10100	SIROST™ Delivery Dome (Reusable item)
SIR-10200	SIROST™ D-Vial Prep Set Includes D-Vial Transport Base (1), D-Vial Holder (1), D-Vial (1), 21G Drawing up Needle (1), 25G Vent Needles (2), 0.22 µm Needle Filter (2), Blue Caps (2)
SIR-10300	SIROST™ Delivery Set

### References:

1. Burrill J et al. J Nucl Med Radiat Ther 2011; 2:107. doi:10.4172/2155-9619.1000107. 2. Chiesa et al. J Nucl Med Mol Imaging 2011; 55: 168–197. 3. Garin E et al. CVIR 2022;45:1608–1621. 4. Villalobos A et al. JVIR 2023;34:1226–1234. 5. Sirtex internal data 6. Jernigan S et al. J Vasc Interv Radiol 2015; 26:897–904.

\*Data on file

\*\* Training, Education & Certification

**Intended Purpose:** SIR-Spheres® Y-90 resin microspheres are intended for Brachytherapy and are permanently implanted via the hepatic artery to deliver therapy to hepatic tumors. **Indications For Use:** SIR-Spheres® Y-90 resin microspheres are indicated for the treatment of unresectable hepatocellular carcinoma (HCC) or unresectable metastatic liver tumors from primary colorectal cancer (mCRC) in patients refractory to or intolerant of chemotherapy. **Consult the Instructions for Use ([www.sirtex.com](http://www.sirtex.com)) for a complete listing of indications, contraindications, warnings, precautions, adverse events and risks. [October 2024]**

### Manufacturer

Sirtex Medical Pty Ltd Shop 6, 207 Pacific Highway St Leonards, NSW 2065 Australia Tel: +61 2 9964 8400 Fax: +61 2 9964 8410  
Europe, Middle East & Africa Sirtex Medical Europe GmbH Joseph-Schumpeter-Allee 33 53227 Bonn Germany Tel: +49 228 1840 730

[www.sirtex.com](http://www.sirtex.com)

SIR-Spheres® is a registered trademark of Sirtex SIR-Spheres Pty Ltd. ©2024 Sirtex Medical Inc. APM-EMEA-002-09-22 V3