



# QuiremSpheres®

## REVEALING THE UNSEEN DIMENSION OF SIRT

*Treat what you see,  
see what you treat.*



QuiremSpheres® is the first and only commercially available SIRT microsphere product based on the isotope holmium-166. Holmium-166 decays under emission of beta as well as gamma radiation. The gamma photons enable visualization of a broad range of QuiremSpheres® concentrations with SPECT. Additionally, holmium can be visualized with MRI. QuiremSpheres® is delivered to your hospital as a patient-specific, ready-to-use product.

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### PRODUCT CHARACTERISTICS

<b>Isotope</b>	Holmium-166
<b>Radiation</b>	$\beta$ : 1.77 MeV (48.7%) $\beta$ : 1.86 MeV (50.0%) $\gamma$ : 81 keV (6.7%)
<b>Half-life</b>	26.8 hours
<b>Material</b>	Poly(L-lactic acid)
<b>Diameter</b>	30 (15-60) $\mu\text{m}$ <b>3.7</b>
<b>Number of spheres</b>	$30 \times 10^6$
<b>Density</b>	1.4 g/cm <sup>3</sup> <b>3.8</b>



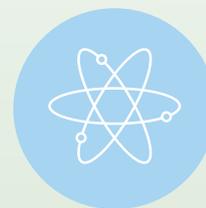
#### UNIQUE

The first and only commercial SIRT solution based on holmium-166.



#### PROVEN\*

QuiremSpheres® is based on more than 15 years of technological advancement and clinical research.



#### IMAGEABLE

QuiremSpheres® can be quantitatively imaged with SPECT and MRI.

Visit [www.terumo-europe.com](http://www.terumo-europe.com)  
or contact your local Terumo representative for more information.

QuiremSpheres® and Q-suite™ have CE-mark.  
QuiremSpheres® and Q-Suite™ are not available for sale in all countries. This information is provided only in respect to markets where both products are approved or cleared. QuiremSpheres® and Q-Suite™ are not FDA cleared in the US for sale.  
QuiremSpheres® and Q-Suite™ are not approved in Canada.

\* Smits et al, Journal of Experimental & Clinical Cancer Research 2010, 29:70  
Smits et al, Lancet Oncol. 2012, Oct;13(10):1025-34  
PhD thesis of J.F. Prince; ISBN 978-90-393-6489-5; 2016.

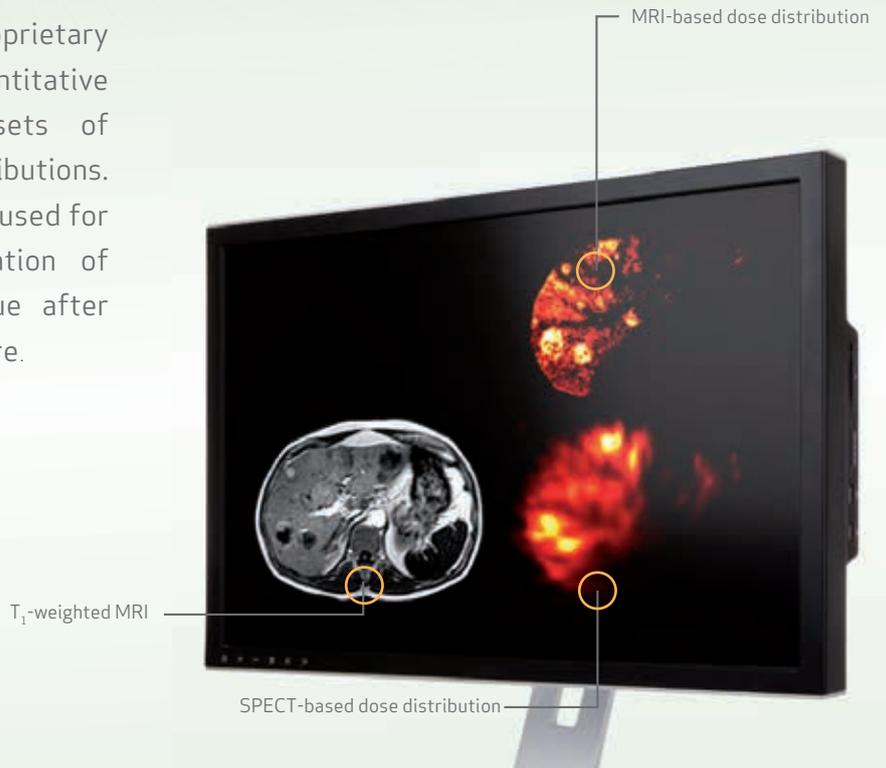
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Q-Suite™ is a CE-marked proprietary software tool to convert quantitative SPECT and MR image datasets of QuiremSpheres® into 3D dose distributions. The 3D dose distributions may be used for image-based dosimetric verification of dose-to-tumor and dose-to-tissue after the QuiremSpheres® SIRT procedure.

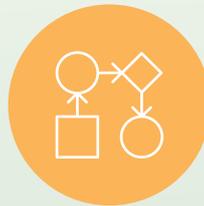
## PRODUCT FEATURES

<b>Operating system</b>	Windows (7 and 10)
<b>Image modalities:</b>	SPECT MRI (MGE)
<b>File formats:</b>	DICOM Images DICOM RTSTRUCT DICOM RTDOSE
<b>Supported SIRT product</b>	QuiremSpheres®



### EFFICIENT

A clean interface, 'one-click to calculate' approach and short calculation times.



### CONNECTED

Q-Suite™ seamlessly interfaces with other software in your clinic through the DICOM RT standard.



### EVOLVING

Continuous expansion of functionality to become the leading treatment planning platform for Holmium-166 SIRT.

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