

## Proven efficacy

### Non-Small-Cell-Lung-Cancer (NSCLC)

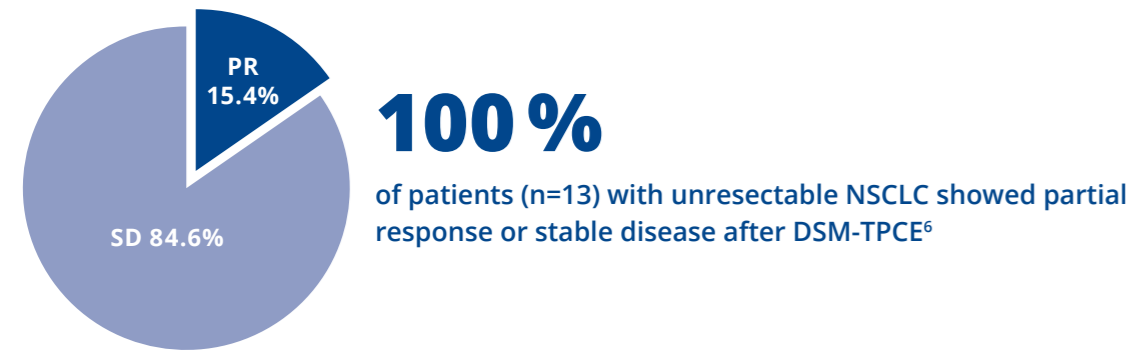


Figure 3: Tumor response (RECIST 1.1)<sup>8</sup> following DSM-TPCE in patients with NSCLC (modified from Vogl et al., 2020)<sup>6</sup>

### Lung metastases

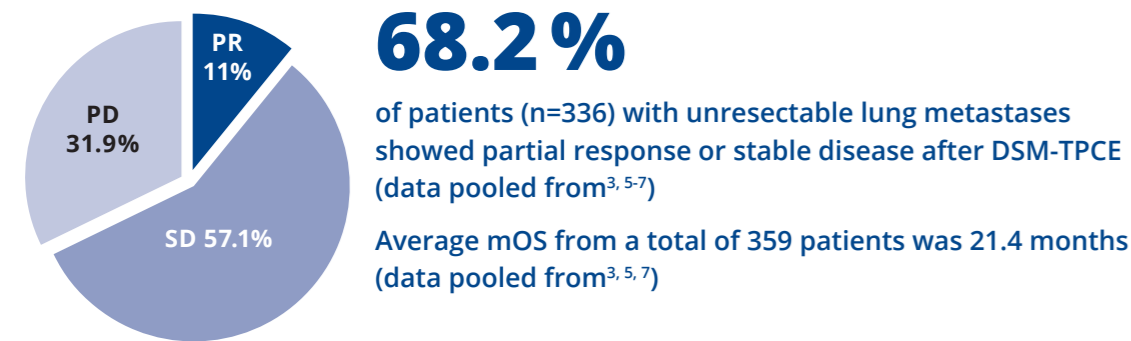


Figure 4: Tumor response (RECIST 1.1)<sup>8</sup> following DSM-TPCE in patients with unresectable lung metastases of different origin (modified from Vogl et al., 2008; 2019; 2020; 2023)<sup>3, 5-7</sup>



#### DSM-TPCE is safe and effective for patients with unresectable lung tumors

- Well tolerated<sup>3-7</sup>
- Reversible<sup>3</sup>
- Suitable for primary lung tumors and lung metastases<sup>3-7</sup>

PR = partial response ( $\geq 30\%$  decrease of tumor size)  
SD = stable disease ( $< 30\%$  decrease and  $< 20\%$  increase of tumor size)  
PD = progressive disease ( $\geq 20\%$  increase of tumor size)

## DSM-TACE quick facts

- Simple application<sup>9</sup>
- Well tolerated<sup>3-7</sup>
- Boosts tumor necrosis due to temporary ischemia<sup>10</sup>
- Preserves lung function over time<sup>5, 11</sup>
- Degradability of DSM allows vascular reperfusion after ca. 90 minutes<sup>12</sup>
- Can be combined with any chemotherapeutic drug<sup>9</sup>
- Repeated application possible at short intervals<sup>3-7</sup>



### References

1. Schneider P, Kampfer S, Lodenkemper C et al. 2002. Clin. Cancer Res. 8(7):2463-2468. PMID: 12114454<sup>A</sup>
2. Data on file: Product file of EmboCept® S DSM 50 µm
3. Vogl TJ, Lehnert T, Zangos S et al. 2008. Eur. Radiol. 18(11):2449-2455. Doi: 10.1007/s00330-008-1056-0<sup>A</sup>
4. Vogl TJ, Nour-Eldin NE, Naguib NN et al. 2016. Br. J. Radiol. 89(1062):20150244. Doi: 10.1259/bjr.20150244<sup>B</sup>
5. Vogl TJ, Mekkawy AIA, Thabet DB et al. 2019. Eur. Radiol. 29(4):1939-1949. Doi: 10.1007/s00330-018-5757-8<sup>B</sup>
6. Vogl TJ, Hoppe AT, Gruber-Rauh T et al. 2020. J. Vasc. Interv. Radiol. 31(2):301-310. Doi: 10.1016/j.jvir.2019.08.027<sup>B</sup>
7. Vogl TJ, Hammann L, Adwan H. 2023. J. Clin. Med. 10;12(10):3394. Doi: 10.3390/jcm12103394<sup>B</sup>
8. Schwartz LH, Litière S, de Vries E et al. 2016. Eur. J. Cancer. 62:132-7. Doi: 10.1016/j.ejca.2016.03.081
9. Magle Chemoswed AB. EmboCept® S DSM 50 µm instructions for use. Date of information: 2020-05-15
10. Ziemann C, Roller J, Malter MM et al. 2019. BMC Cancer 19:938. Doi: 10.1186/s12885-019-6135-x<sup>B</sup>
11. Schaarschmidt BM, Slama A, Collaud S et al. 2022. Eur. Radiol. Exp. 4;6(1):6. Doi: 10.1186/s41747-021-00255-9<sup>B</sup>
12. Wiggemann P, Wohlgemuth WA, Heibl M, et al. 2013. Clin. Hemorheol. Microcirc. 53(4):337-348. Doi: 10.3233/CH-2012-1555<sup>B</sup>

<sup>A</sup> Concerns the former product Spherox®, manufactured by Pharmacia AB

<sup>B</sup> Concerns the former products EmboCept® or EmboCept® S, manufactured by Serumwerk Bernburg AG



Magle PharmaCept GmbH, Bessemerstr. 82, 12103 Berlin, Germany  
Phone: +49-(0)30-7565985-0 · Fax: +49-(0)30-7565985-11  
www.maglepharmaceut.com · info@maglepharmaceut.com

Magle PharmaCept GmbH is part of Magle Group. © 2023 Magle PharmaCept GmbH.  
EmboCept® is a registered trademark of Magle PharmaCept GmbH

20230802-01/2023



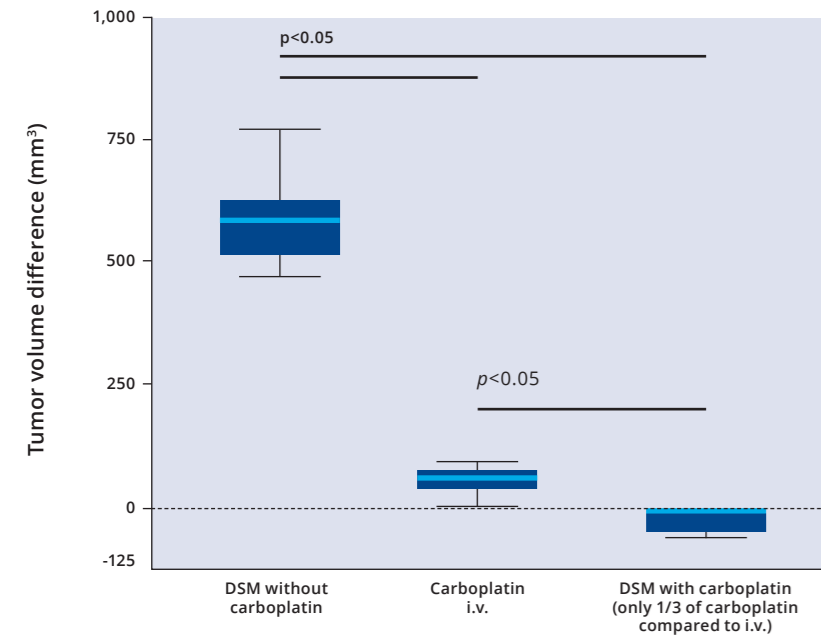
## Fight primary and secondary lung tumors with Transpulmonary Chemoembolization using Degradable Starch Microspheres

EmboCept® S DSM 50 µm: Degradable starch microspheres for temporary transpulmonary chemoembolization (TPCE)



## Unlocking the benefits of DSM-TPCE

Thanks to excellent tolerability and high efficacy, transpulmonary chemoembolization (TPCE) with DSM helps to **achieve a significant reduction in tumor volume**



**Figure 1:** Tumor volume differences before and after treatment in a solitary lung metastasis rat model of CC531 adenocarcinoma (modified from Schneider et al. 2002)<sup>1</sup>

### Temporary embolization

Half-life of 30 – 40 minutes<sup>2</sup>

### Precisely calibrated

At least 95% of microspheres are between 20-90 µm, with 50 µm mean size<sup>2</sup>

### Well tolerated

- No major complications<sup>3-7</sup>
- No pulmonary hemorrhage, cardiac failure, or pneumothorax<sup>4</sup>
- No non-target embolization, e.g., to the brain<sup>4</sup>

## How to perform TPCE with Degradable Starch Microspheres



### 1. Preinterventional evaluation

Control of lab parameters, clinical status, and CT/MRI scans



### 2. Regional anesthesia

Application of 1% mepivacain via 7F sheath into right femoral vein



### 3. Catheter insertion

Insertion of 5F headhunter catheter into left or right pulmonary artery via transvenous access



### 4. Angiography

Injection of 20 ml of contrast medium to survey arterial system



### 5. Balloon catheter (optional)

Insertion of catheter (diameter: 6–8 mm, length: 100–300 mm) into segmental pulmonary artery



### 6. Catheter advancement

Using guidewire, catheter is advanced further into subsegmental pulmonary arteries



### 7. Angiography

Contrast-enhanced angiographic series (with catheter blocked) for detection of arteriovenous shunts



### Who is eligible for DSM-TPCE?<sup>5-7</sup>

- Patients in good general condition
- Without or with only minor cardiovascular comorbidities
- With sufficient lung function
- Non-thrombosed A. pulmonalis



### 8. Chemoembolization

To achieve blood flow stasis: injection of chemotherapeutic agent mixed with DSM under fluoroscopic guidance

DSM-TPCE can be combined with various chemotherapeutic agents<sup>2-5</sup>

- Mitomycin C
- Cisplatin
- Gemcitabine
- Irinotecan



### 9. Pressure dressing

Application following removal of catheters



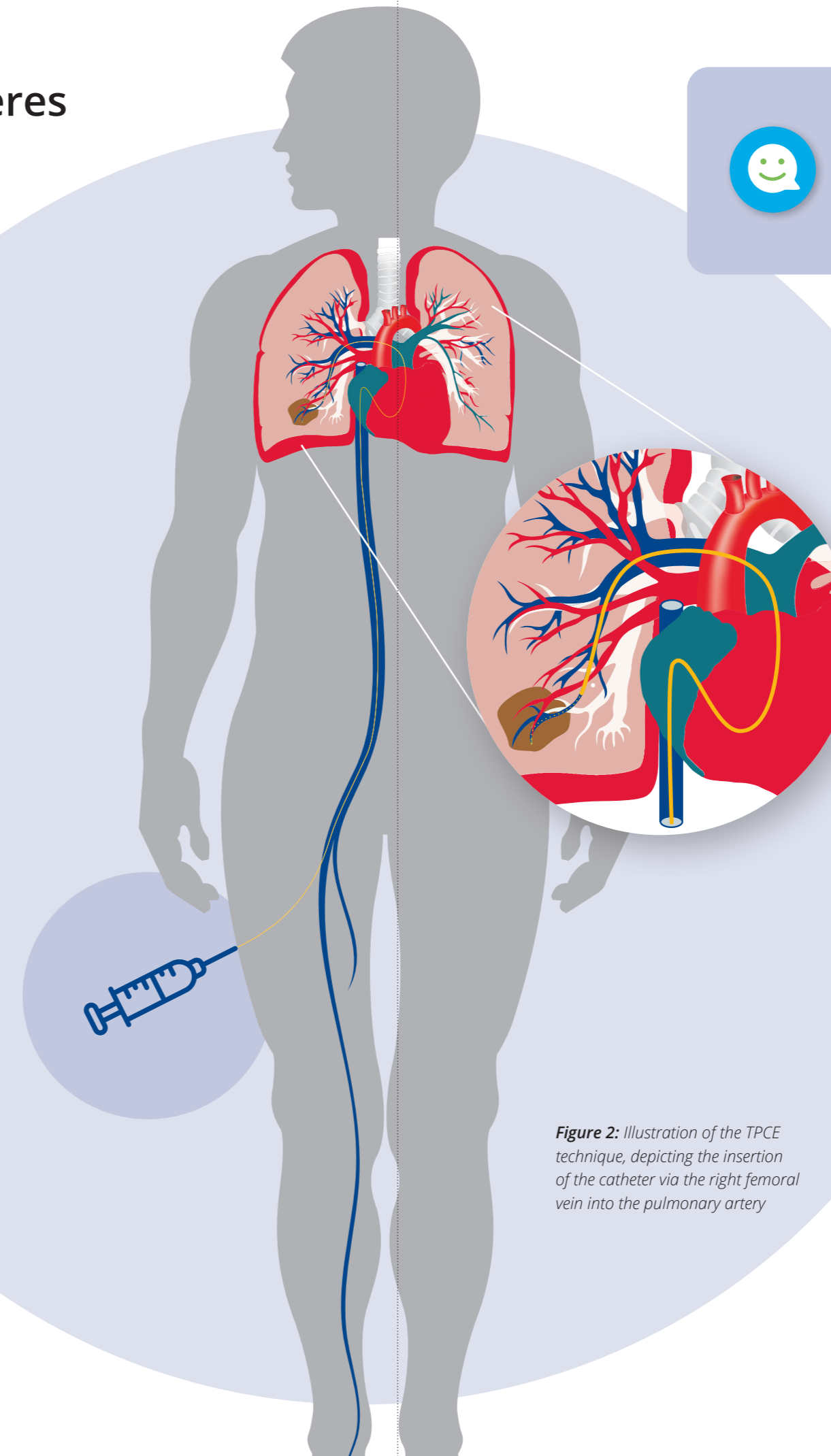
### 10. Postinterventional evaluation

Control of lab parameters, clinical status, and CT/MRI scans



### 11. Repetition of treatment

At least 2–3 rounds of treatment, with intervals of four weeks



**Figure 2:** Illustration of the TPCE technique, depicting the insertion of the catheter via the right femoral vein into the pulmonary artery