

# PAE FAQs

## ■ What is the indication for Embosphere® Microspheres in the European Union (EU)?

Embosphere Microspheres are indicated for the occlusion of blood vessels, for therapeutic or preoperative purposes, in the following procedures: Embolisation of hypervascular tumors and processes, including uterine fibroids, meningiomas, etc; embolisation of arteriovenous malformations; and hemostatic embolisation. 40-120 µm microspheres are more specifically designed for embolisation of meningiomas and liver tumors.

## ■ What is Prostatic Artery Embolisation (PAE)?

PAE selectively blocks blood flow to the prostate, resulting in reduced prostate volume and reduced urethral stricture.

## ■ Are Embosphere Microspheres indicated for Prostatic Artery Embolisation (PAE) due to symptomatic Benign Prostatic Hyperplasia (BPH)?

Embosphere Microspheres recently received CE mark approval for embolisation of the prostate gland for relief of symptoms related to BPH in the EU.

## ■ What is Benign Prostatic Hyperplasia (BPH)?

BPH refers to benign prostatic hyperplasia. It is the normal, ongoing growth of the prostate gland that happens naturally in most men as they age. Because this normal growth constrains the urethra, which passes through the prostate gland, men experience symptoms such as difficult urination as they age.

## ■ What data is currently available for the Embosphere Microsphere BPH indication?

Carnevale, FC, Antunes AA, da Motta Leal Filho JM, et al. Prostatic artery embolisation as a primary treatment for benign prostatic hyperplasia: Preliminary results in two patients. *Cardiovasc Intervent Radiol.* 2010; 33(2): 355-361.

Carnevale, FC, da Motta Leal Filho JM, Antunes AA, et al. Midterm follow-up after prostate embolisation in two patients with benign prostatic hyperplasia. *Cardiovasc Intervent Radiol.* 2011; 34(6): 1330-1333.

Carnevale, FC, da Motta Leal Filho JM, Antunes AA, et al. Quality of life and clinical symptom improvement support PAE for patients with acute urinary retention caused by benign prostatic hyperplasia. *J Vasc Interv Radiol.* Epub 2013: Feb 20 (Epub ahead of print)

## ■ How does PAE embolisation compare to other embolisation procedures like Uterine Artery Embolisation (UAE)?

PAE procedures take longer to complete because the arteries are smaller and more tortuous.

PAE patients are men, typically between the ages of 50 and 70.

The arteries feeding the prostate tend to be 200-400 µm. The smaller the artery, the more difficult it is to catheterize.

Because PAE patients are older, their arteries often reflect normal signs of aging, such as atherosclerosis. Atherosclerosis can make vessel catheterization very difficult.

By comparison, UAE is performed on relatively young, healthy women. The uterine artery is larger and much easier to catheterize than the arteries feeding the prostate.

Normally, one 2 mL syringe of embolic is required for bilateral PAE.

UAE typically requires 4-5 syringes of embolic.

## ■ Where can I learn more about PAE?

Plenary sessions at major congresses. Most congresses worldwide now offer several presentations on PAE.

Symposia at international congresses. Merit sponsors symposia at congresses outside the US for PAE.

Presentations by Francisco Carnevale, MD, PhD and others at GEST, AIM, CIRSE, SIR and ISET.

In 2013, presentations are expected at SIR, GEST, CIRSE and AIM.

## ■ Are there any Centers of Excellence for PAE?

Merit is developing Centers of Excellence in the EU to offer observation and training opportunities.