

# SENSE

Optimise oocyte retrieval performance  
and improve patient comfort.



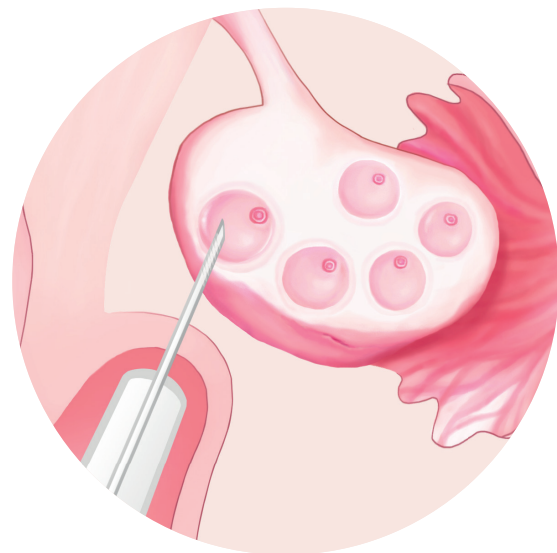
Vitrolife 



# A DELICATE PROCEDURE THAT REQUIRES GENTLE HANDLING

The oocyte is the largest cell in the human body and is extremely vulnerable. Retrieving an oocyte exposes it to considerable stress, including transfer from the follicle, passage through the needle and tubing, and exposure to the laboratory environment. It is also a critical procedure involving a lot of anxiety for the patient.

One way to help support a successful outcome is to use a needle that enables a fast and precise procedure. This will minimise stress and ensure that the maximum number of intact oocytes can be retrieved. Using a needle that causes minimal tissue damage also reduces complications and patient discomfort.



OD 20 G

OD 17 G

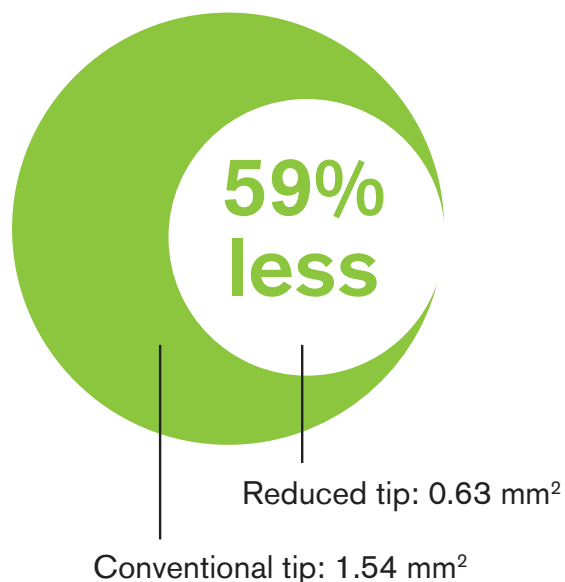
# SUCCESSFUL RETRIEVAL FOR THE PATIENT AND YOU

## Optimise performance with less tissue damage

The unique design of Sense provides ideal conditions for optimised control and aspiration time, as well as improved patient comfort.

The reduced tip gives you the advantages of a small sized needle: less bleeding and less pain<sup>1,2,3</sup>. The cross-section surface area of the Sense needle tip is 59% less than a conventional 17G needle tip. As only the tip is reduced, the rigidity and flow are maintained, ensuring accurate guidance while helping to maximise the number of oocytes collected.

With Sense you keep the benefits working with a conventional needle and gain the advantages of a thin needle. It makes sense.



## It makes sense, and results prove it

To prove the benefits of the unique design of Sense, a prospective, randomised, multicenter study was carried out.<sup>1</sup>

The results of the study were clear. Oocyte retrieval performed with Sense resulted in significantly less vaginal bleeding compared to a conventional needle. Using the Sense needle also resulted in a significantly reduced overall pain experience – 19% lower compared to a conventional needle. Most importantly, there were no differences in the number of oocytes with intact zona pellucida after aspiration, regardless of needle size.

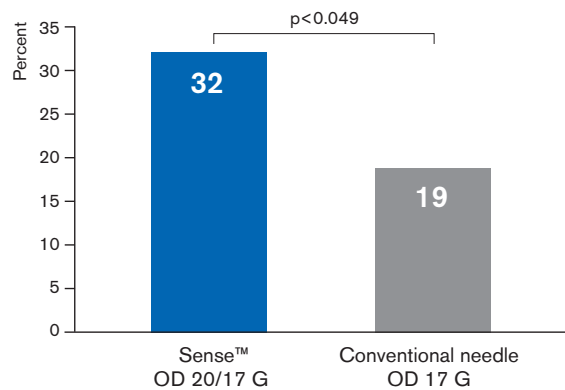
This clinical study involved 250 patients, randomised at four different clinics in Sweden. The oocyte retrieval procedure was performed under local anaesthesia according to each clinic's local procedures. The primary end-point was the overall pain experience registered by the patient on a visual analogue scale (VAS). To further demonstrate the benefits of the thin tip, the degree of vaginal bleeding was registered as one of the secondary end-points.

## Less area, less tissue damage

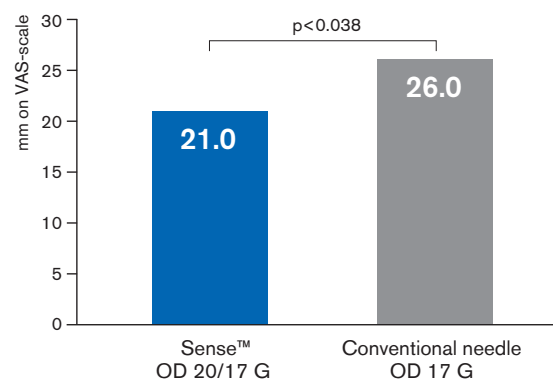
Cross-section areas,  
reduced tip 20 G vs.  
conventional tip OD 17 G

## Significantly less bleeding and pain

Percentage of patients with less bleeding than normal<sup>1</sup>



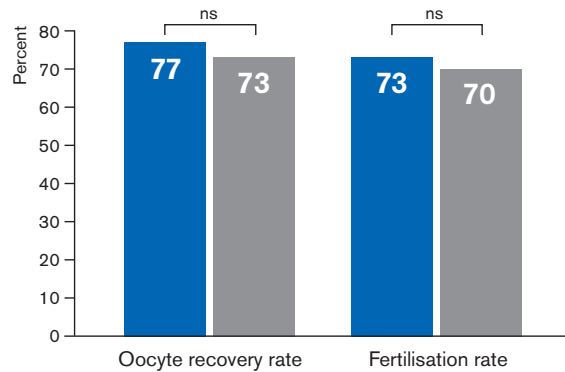
Level of overall pain experience, mean<sup>1</sup>



The overall pain experience was 19% less for the Sense group.

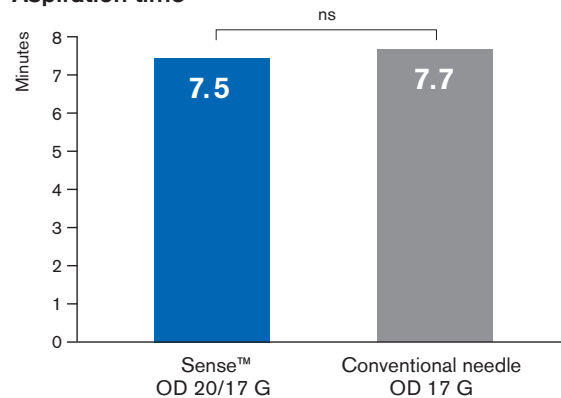
## Uncompromised performance

Oocyte recovery and fertilisation rate<sup>1</sup>



■ Sense™ OD 20/17 G  
■ Conventional needle OD 17 G

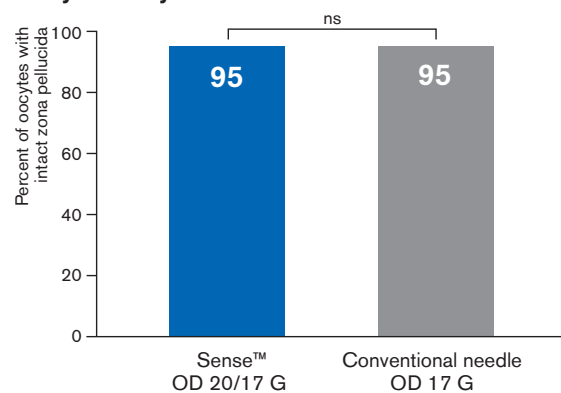
Aspiration time<sup>1</sup>



The time of the whole aspiration procedure was measured, from introduction through the needle guide to withdrawal of the aspiration needle.

The Sense needle gives you the best of two worlds. The results of the clinical study demonstrate that the reduced tip in combination with the larger sized body work together in a unique way for the oocyte, the patient and you. You get improved patient comfort with uncompromised performance.

Oocyte safety<sup>1</sup>



# DESIGNED TO DELIVER

Optimise control and retrieval time. Improve patient comfort.

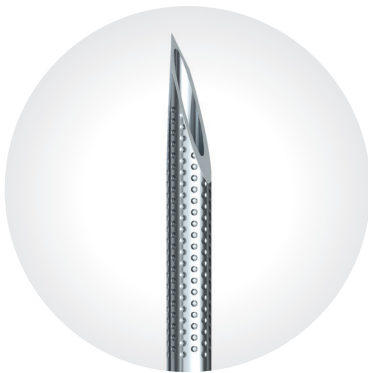


**Reduced needle tip for less bleeding and pain, larger sized body for optimal control, precision and retrieval time**

Note! Only Sense needles have reduced needle tips

## Easy to handle

Carefully designed in every detail, the Sense needle is a safe and convenient tool in your hands. The bevel mark on the handle indicates the needle position, while the soft tube and bent cannula prevent kinking and oocyte damage.



## Innovative echomarking for perfect control

The echomarking is created through innovative laser etching, giving you the high visibility you need during oocyte retrieval.

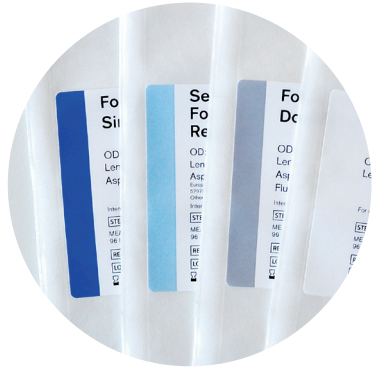


**Ultra-sharp design for low penetration resistance and high precision**

The needle tip is designed to meet your needs by providing extraordinary sharpness, high precision and the utmost safety. The bevel grinding ensures low resistance penetration, and distinctive backpoint grinding prevents deviation.

## Vacuum tubing that suits you

For your convenience, we provide a wide range of vacuum pump tubings with different connections.



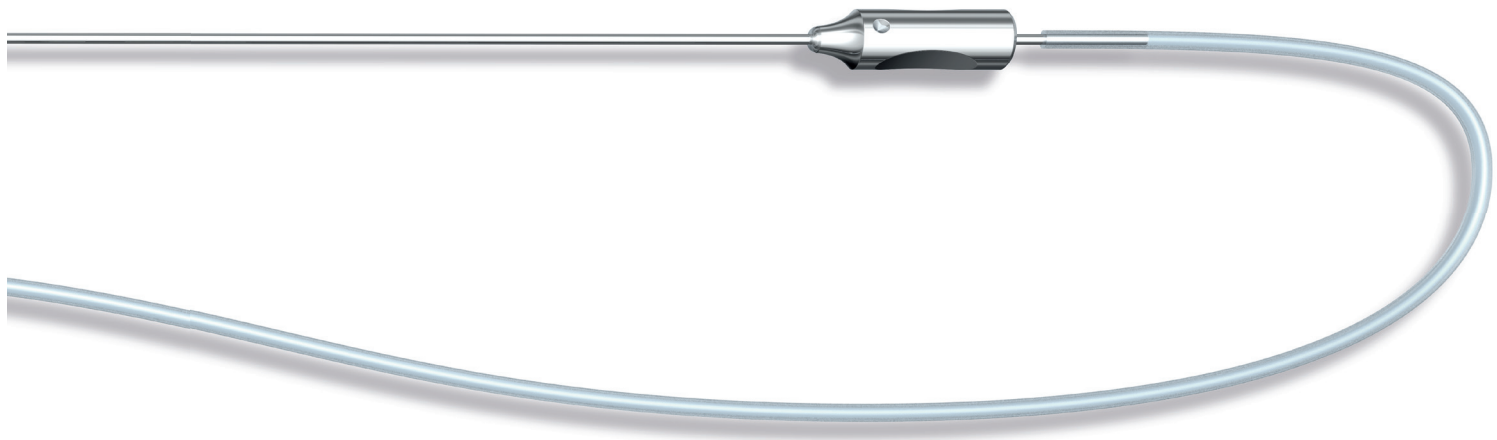
### Colour coded peel-off labels

All needle labels are colour coded to simplify identification of needle type. The peel-off labels facilitate patient journal handling.



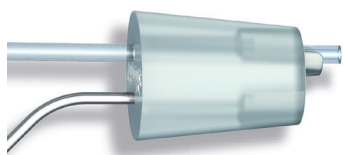
### Double sterile pack to meet surgical standards

Each needle is individually packaged in a double sterile barrier to avoid contamination in the surgical theatre.



**“I use the Sense needle for all patients and recognise its value for my patients and myself. The clear view of the needle tip enables my control of the procedure at all times, whilst the thinner needle tip hasn’t altered the timing for each egg collection. I have also seen much less bleeding and pain in my patients when using Sense, which is clearly positive for all involved!”**

*Dr. Andrew Kan, MD., IVF Australia*



# INDUSTRY LEADING QUALITY. ALL THE WAY.

To safeguard robust product performance, the Vitrolife quality control system covers both the manufacturing process and the aspiration needles. By ensuring consistent high quality, we help you to maximise your success rate.



**Every needle you  
receive has been  
visually inspected**

To guarantee the function of our needles, our experienced technicians perform visual inspection of all products before release.





## Controlled manufacturing

Our manufacturing environment and processes meet the highest standards to ensure consistent high quality of the final product. All needles are manufactured in a cleanroom where particle levels are thoroughly monitored daily.



## Inspection of all needles

An experienced technician performs microscopical inspection of every needle before release, ensuring the function and performance you expect and securing consistent quality.



## Guaranteed sterility

All needles are sterilised using a validated process that is verified regularly to ensure patient safety.



## MEA tested

To detect toxic materials, Vitrolife has developed a very sensitive 1-cell mouse embryo assay (MEA) that follows the development of single-cell mouse embryos to hatching blastocysts. This assay is far more sensitive than the widely used 2-cell MEA.



## Lot-to-lot consistency

Lot-to-lot consistency is secured by adhering to rigorous validated specifications and protocols. The quality of each lot is certified by a signed protocol to guarantee traceability. All stages of production are controlled, from the raw materials to the final product.



**“I have been using the Sense needle since its introduction in 2008. This is a unique needle in its design and function. The thin needle tip makes for less bleeding and pain for my patients, while the combination of a thin tip and larger body allows me to perform a quick and gentle procedure.”**

*A/Prof. Peter Illingworth, MD., Medical Director IVF Australia*

# Product list

## Reduced tip – Sense

Product	Description	Outer Diameter (mm)	(GAUGE)	Inner Diameter (mm)	Needle Length (mm)	Aspiration tubing (mm)	Flush tubing (mm)	Size	REF
Single lumen, reduced tip – Sense	Aspiration needle	1.4/0.9	17/20	1.2/0.6	300	600	-	10-pack	17175
					300	900	-	10-pack	17176
					350	600	-	10-pack	17177
					350	900	-	10-pack	17178

PATENT NO: EP 2114270, NZ 579752, CN 200880014446.2, RU 2463977, JP 5342554, US application 12/532,362 pending. Canadian Patent Application No. 2681165 based on International Application No. PCT/GB2008/000251 Sampling Needle. Other patent applications pending. European Community Design Registration No 000994553.

## Conventional tip

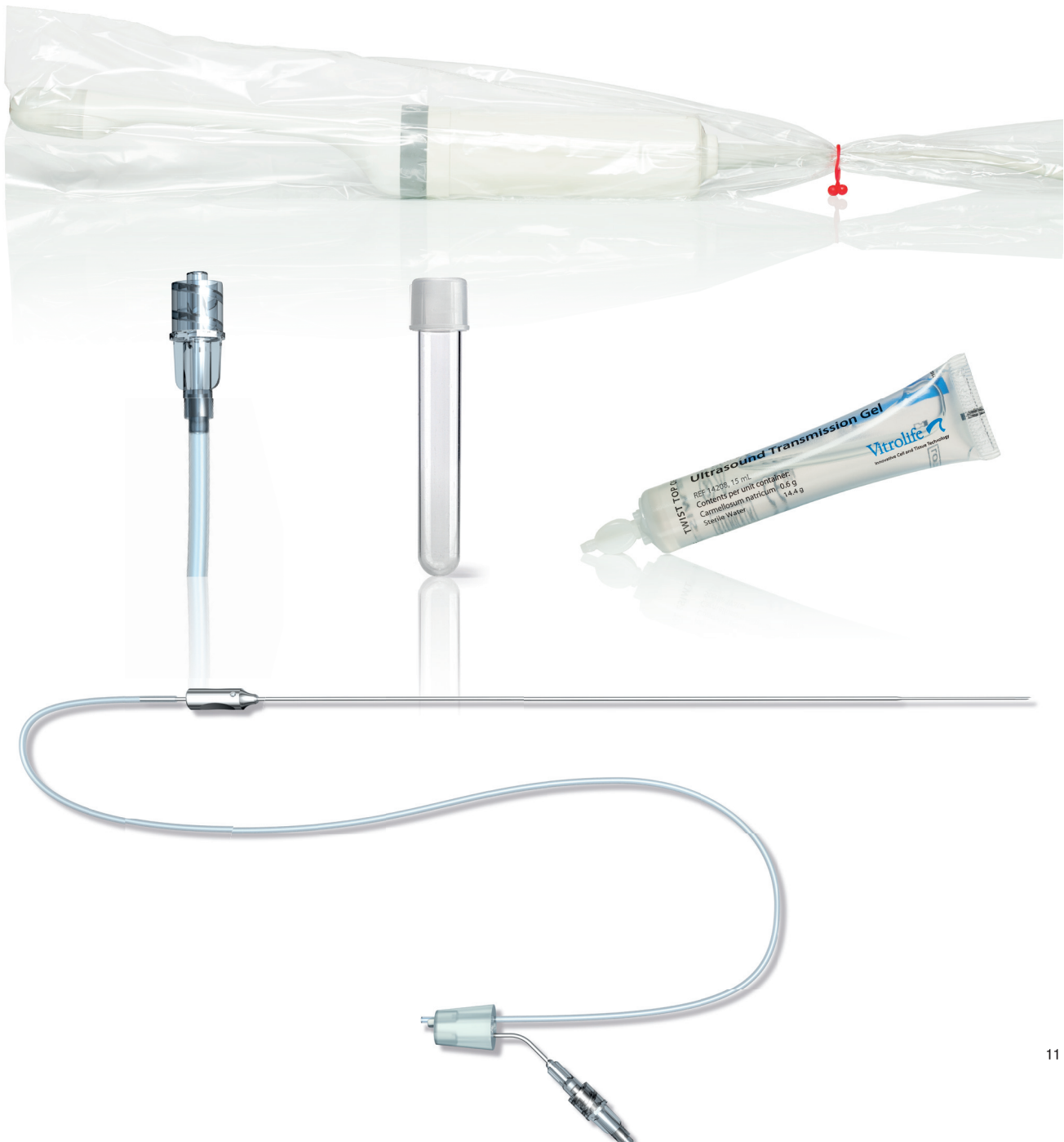
Product	Description	Outer Diameter (mm)	(GAUGE)	Inner Diameter (mm)	Needle Length (mm)	Aspiration tubing (mm)	Flush tubing (mm)	Size	REF			
Single lumen, conventional tip	Aspiration needle	1.4	17	1.0	300	400	-	10-pack	17103			
					300	600	-	10-pack	17107			
					300	900	-	10-pack	17112			
					330	900	-	10-pack	17125			
					350	600	-	10-pack	17156			
Single lumen, conventional tip	Aspiration needle	1.6	16	1.1	350	900	-	10-pack	17130			
					300	600	-	10-pack	17116			
					300	900	-	10-pack	17120			
					350	600	-	10-pack	17157			
Single lumen, conventional tip <sup>1</sup>	Aspiration needle	1.4	17	1.2	250	-	-	10-pack	17152			
					1.4	17	1.2	300	-	-	10-pack	17140
					1.6	16	1.3	350	-	-	10-pack	17137
Single lumen, conventional tip <sup>2</sup>	Aspiration needle	1.6	16	1.1	350	600	-	10-pack	17123			
Double lumen, conventional tip	Aspiration needle	1.5	17	0.9	350	600	600	10-pack	17151			
					350	1000	1000	10-pack	17102			
					1.65	16	1.0	250	400	400	10-pack	17150
		1.65	16	1.0	300	400	400	10-pack	17108			
					300	600	600	10-pack	17111			
					300	900	900	10-pack	17105			
					350	600	600	10-pack	17109			
					350	900	600	10-pack	17148			
					350	900	900	10-pack	17114			
1.65	16	1.0	350	1000	1000	10-pack	17168					

1. The needle is equipped with a Luer-lock to connect a syringe.
2. The tubing fitted on the needle is equipped with a Luer-lock to connect a syringe.



## Accessories

Product	Description	Width (mm)	Length (cm)	Volume (mL)	Size	REF
Vacuum Pump Tubing	Male Luer connection and open end		180		10-pack	14205
	Female and male Luer connections		200		10-pack	14211
	Male and male Luer connections		200		10-pack	14212
Transducer Cover	Latex-free cover	70	800		25-pack	14201
		100	800		25-pack	14202
		150	800		25-pack	14204
Ultrasound Transmission Gel	Sterile contact gel			15	25-pack	14203
Oocyte collection tube	IVF certified collection tube			14	10 units/sleeve: 500/case	16101



# TOGETHER. ALL THE WAY™

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Phone: +46 31 721 81 00  
Email: [order@vitrolife.com](mailto:order@vitrolife.com)

### Japan office

Phone: +81(0)3-6459-4437  
Email: [japan@vitrolife.com](mailto:japan@vitrolife.com)

### US office

Phone: +1 866 848 7687  
Email: [order.us@vitrolife.com](mailto:order.us@vitrolife.com)

### China office

Phone: +86 10 6403 6613  
Email: [order.asia@vitrolife.com](mailto:order.asia@vitrolife.com)

### Australia office

Phone: +61 03 9329 1212  
Email: [order.au@vitrolife.com](mailto:order.au@vitrolife.com)

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Vitrolife · Box 9080 · SE-400 92 Göteborg · Sweden · Tel +46 31 721 80 00 · Fax +46 31 721 80 90 · [fertility@vitrolife.com](mailto:fertility@vitrolife.com) · [www.vitrolife.com](http://www.vitrolife.com)

REFERENCES 1. Wikland M et al. Pain experience during oocyte aspiration: comparison between a newly designed reduced needle and a standard needle. Hum Reprod. 2010;25 (Suppl. 1), O-226 2. Nakagawa, et al. The effect of a newly designed needle on the pain and bleeding of patients during oocyte retrieval of a single follicle. J Reprod Infertil. 2015;16(4):207-211 3. Bing, et al. Study on the application of oocyte aspiration needle of different diameters in IVF-ET egg retrieval. Journal of Minimally Invasive MEicine, Oct 2018, Vol 7 No.5

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