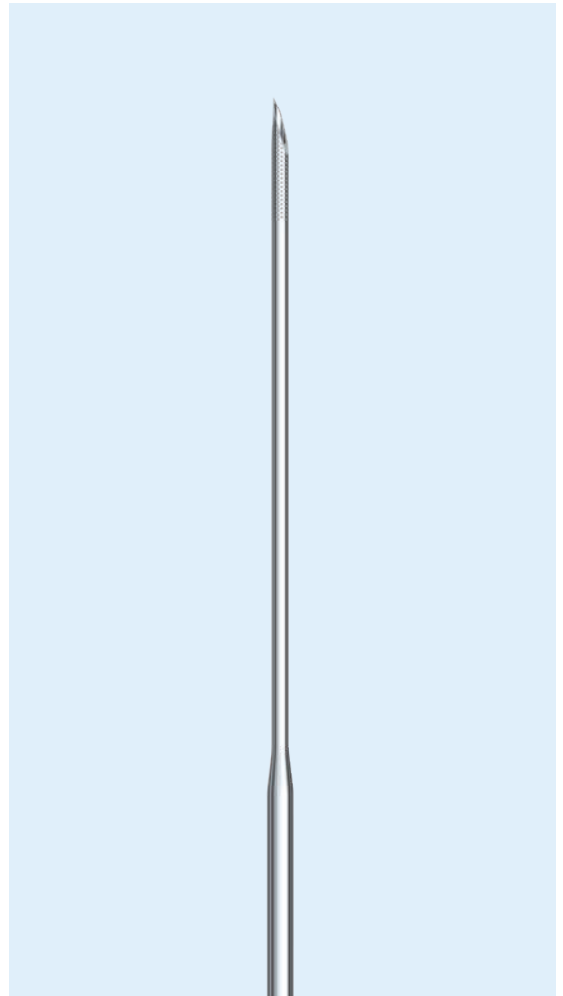


Sense

Optimise oocyte retrieval performance and improve patient comfort



Successful retrieval for the patient and you

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 facilitate a successful outcome is to use a needle that enables a fast and precise procedure. This will minimise stress and ensure the retrieval of the maximum number of intact oocytes. Using a needle that causes minimal tissue damage also reduces complications and patient discomfort.

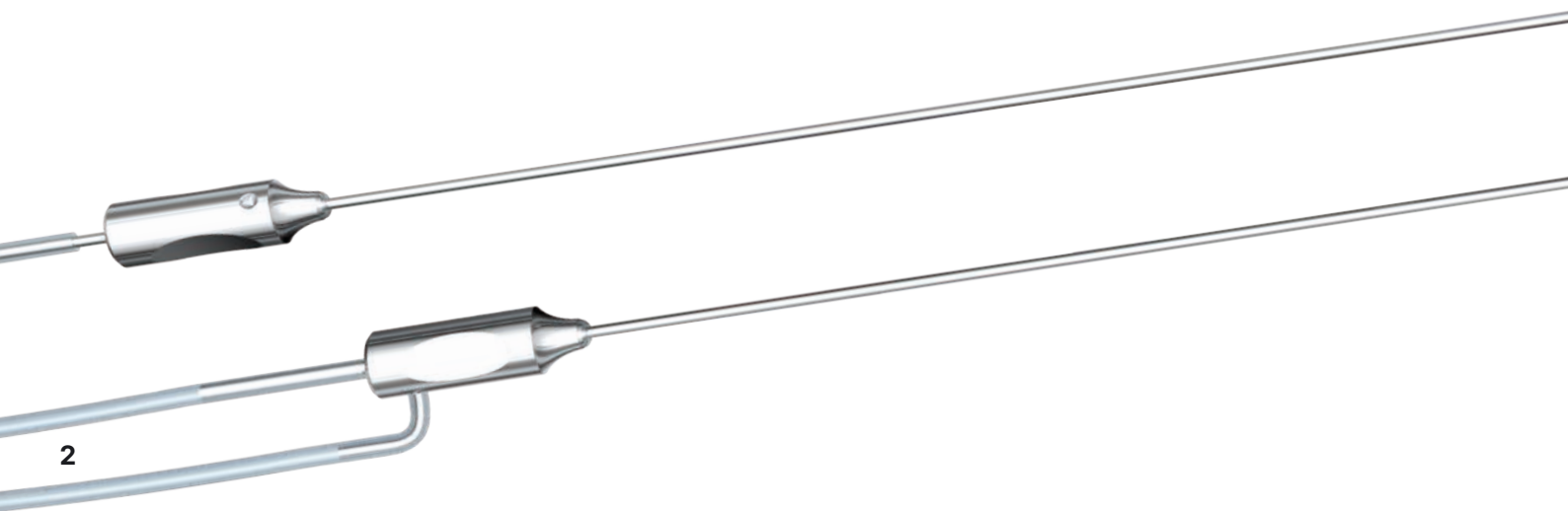
Optimise performance with less tissue damage

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 benefits of a small-sized needle: less bleeding and less pain^{1,2,3,4}. Carefully designed in every detail, Sense is a safe and convenient tool in your hands. The needle makes flushing easy, while the soft tube and bent cannula prevent kinking and oocyte damage.



“My first choice is Sense and the reason is simple: The Sense needles are superior for patients and have minimal side effects. It is clear that there is less bleeding and less pain for the patient when using the Sense needle. When the doctor has learnt the technique, it is very easy to use. I have no doubt that the Sense needles, both single lumen and double lumen, are the best available at the moment.”

*Dr Negjyp Sopa, Head of Clinic,
Aleris-Hamlet Fertility, Søborg, Denmark*



Sense the difference

There are two types of Sense needles: single lumen and double lumen. That means you can choose the needle that best suits your handling preferences while still ensuring high quality and performance.

Sense single lumen

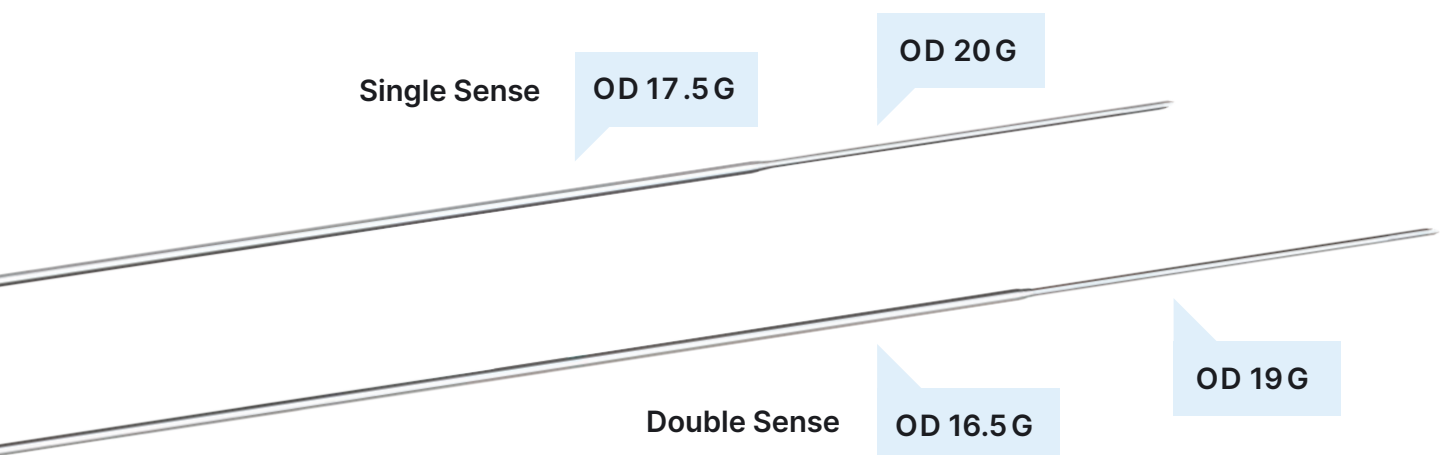
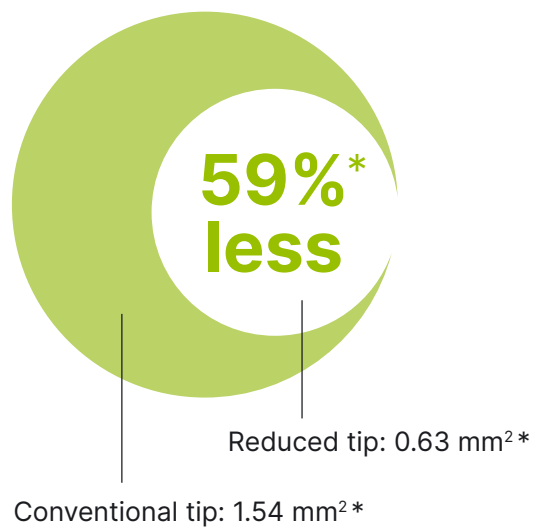
The cross-section surface area of the Sense single lumen needle tip is 59% less than a conventional 17G needle tip. As only the tip is reduced, rigidity and flow are maintained, ensuring accurate guidance while helping to maximise the number of oocytes collected. Sense combines the benefits of a conventional needle with the advantages of a thin one.

Sense double lumen

Sense double lumen is based on the tried and trusted Sense single lumen needle, which features a reduced tip for less bleeding and pain and a larger body for optimal precision and retrieval time. Sense double lumen has the same reduced tip and larger body, while also adding the option of easy follicle flushing during pick up. The cross-section surface area of the Sense needle tip is 56% less than a conventional 17G needle tip.

Less area, less tissue damage

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



* Refers to single lumen. Double lumen has 56% less cross-section surface area.

It makes sense, and results prove it

The Sense needle gives you the best of two worlds. The results of two clinical studies 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.^{1,4}

30% less pain according to Buisman et al.

2020 saw a randomised controlled trial involving 95 patients, the objective of which was to study pain in women undergoing oocyte retrieval with a reduced needle (20/17 G) compared to a standard needle (16 G)⁴. It concluded that the use of a thinner needle results in significantly lower (and clinically relevant) pain scores during oocyte retrieval.

Using single Sense, patients experienced 30% less pain, compared to the group using a standard needle. Patients in the reduced needle group requested significantly less analgesia during oocyte retrieval than patients in the standard needle group. Pain scores remained significantly lower up to until 2 days after the procedure.

Significantly less bleeding and pain according to Wikland et al.

To prove the benefits of the unique design of Sense, a prospective, randomised, multi-centre study was carried out in 2010.¹

The results were clear. Oocyte retrieval performed with the single Sense needle 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.

Patients experienced less pain, less bleeding and in need of less pain relief compared to the group using a standard needle⁴.



1 OUT OF **20**

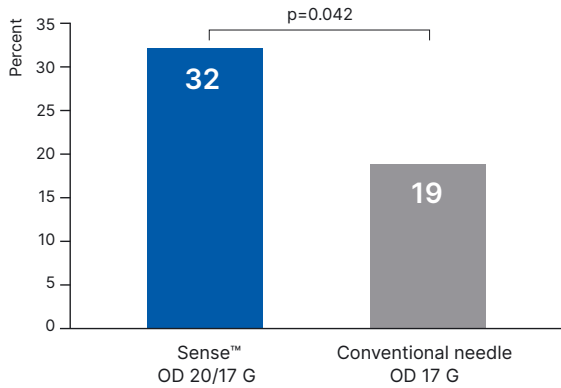
With Sense only 1 out of 20 requests more pain relief*



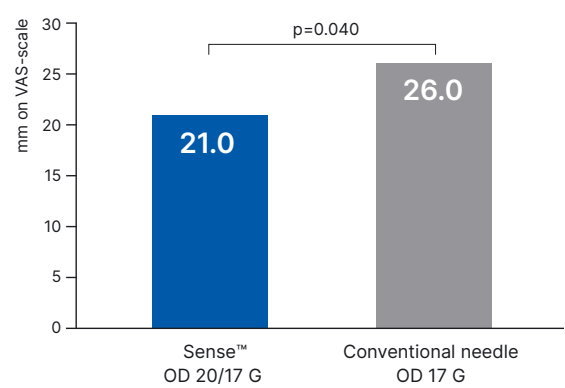
3 out of 4 women have less bleeding with Sense

Significantly less bleeding and pain

Percentage of patients with less bleeding than normal¹



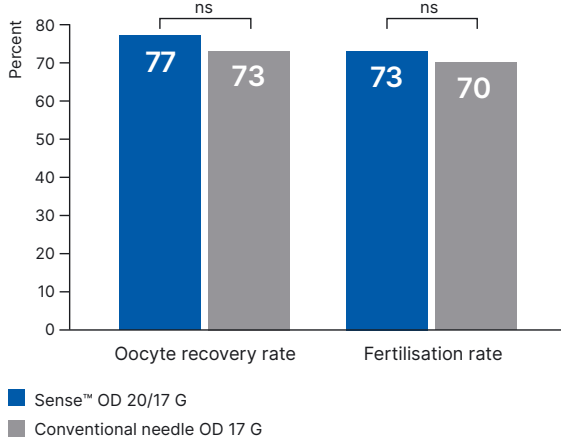
Level of overall pain experience, mean¹



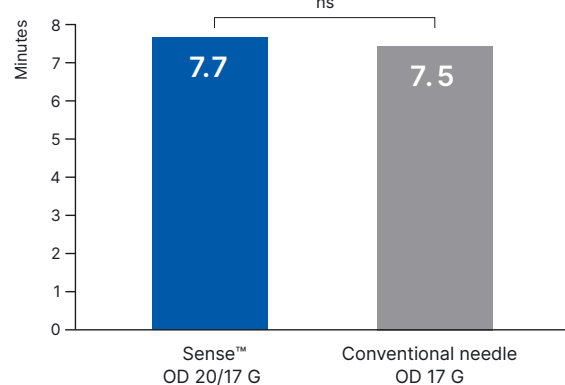
The overall pain experience was 19% lower for the Sense group.

Uncompromised performance

Oocyte recovery and fertilisation rate¹



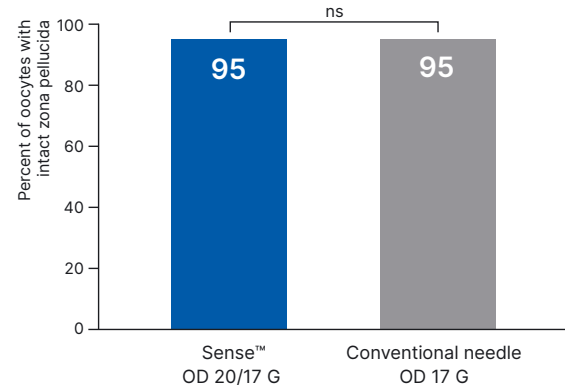
Aspiration time¹



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

The clinical study by Wikland et al. (2010) 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.

Oocyte safety¹



Designed to deliver

Optimise control and retrieval time. Improve patient comfort.

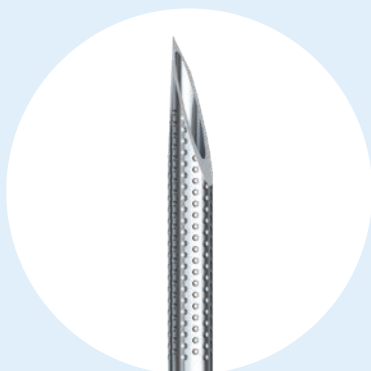


Reduced needle tip for less bleeding and pain, larger sized body for optimal control, precision and retrieval time

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, while 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.



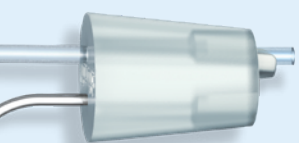
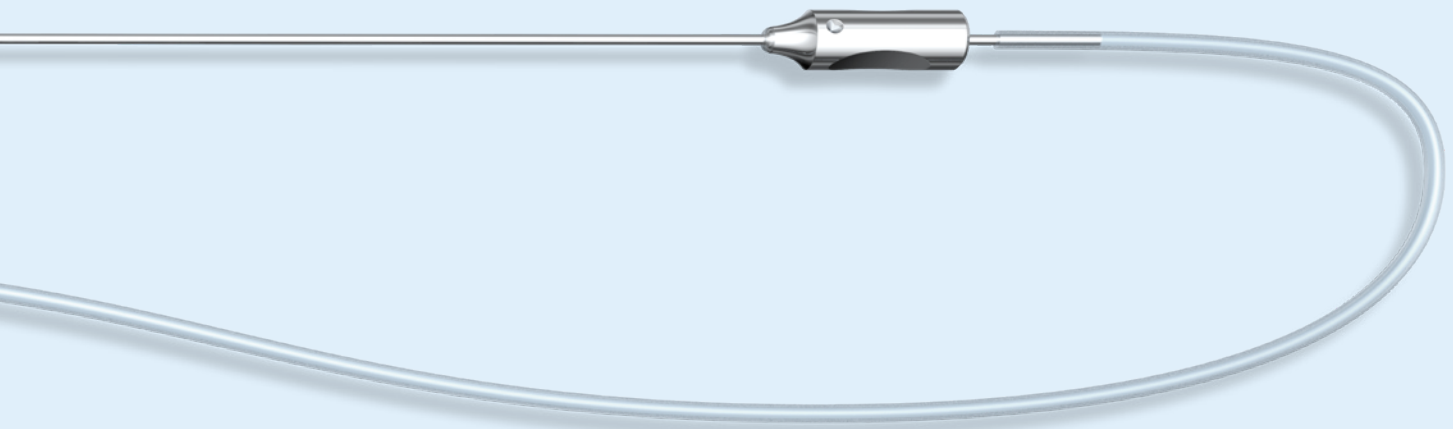
Colour coded peel-off labels

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.



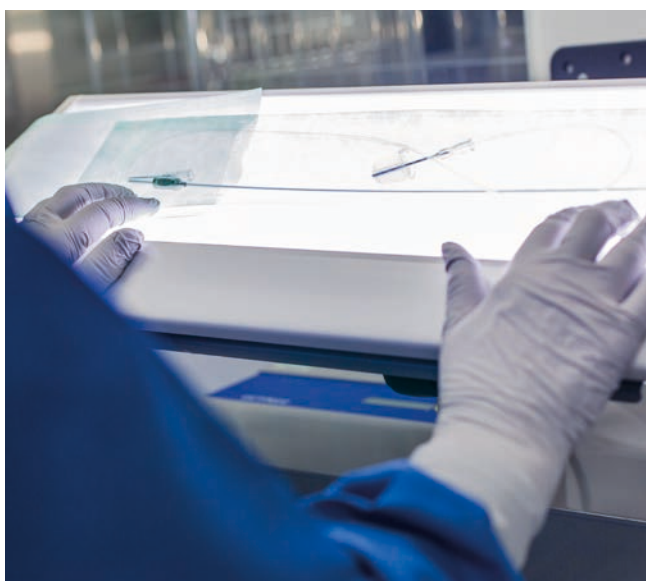
“I really like using the Sense needle and since I first picked it up a couple of years ago, we have gradually introduced it for all oocyte retrievals. The reason why we switched to the Sense needle from other follicle aspiration needles is two-fold: firstly, the narrow tip means less vaginal bleeding and less trauma to the vaginal wall and ovary, and, because of this, the patients have less pain and less post-procedural ache.”

Professor William Ledger, Head of Obstetrics & Gynaecology, UNSW Director of Reproductive Medicine, RHW Sydney



Every needle you receive has been visually inspected

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



“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*

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 consistently high quality, we help you to maximise your success rate.



Controlled manufacturing

Our manufacturing environment and processes meet the highest standards – to ensure consistently 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 a 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 highly 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 raw materials to final product.

Product list

Reduced tip – Sense

Product	Description	REF	Outer diameter		Inner diameter mm	Needle length mm	Aspiration tubing mm	Flush tubing mm	Size
			mm	Gauge					
Single lumen, reduced tip, Sense	Aspiration needle	17175	1.4/0.9	17.5/20	1.2/0.6	300	600		10-pack
		17176				300	900		10-pack
		17177				300	600		10-pack
		17178				350	900		10-pack
		17188	1.6/1.1	16.5/19	1.4/0.8	350	900		10-pack
Single lumen, reduced tip, Sense	Luer connection	17179*	1.4/0.9	17.5/20	1.2/0.6	300			10-pack
Double lumen, reduced tip, Sense	Aspiration needle	17187	1.6/1.1	16.5/19	1.4/0.8	350	1000	1000	10-pack

* Made to order

Conventional tip

Product	Description	REF	Outer diameter		Inner diameter mm	Needle length mm	Aspiration tubing mm	Flush tubing mm	Size
			mm	Gauge					
Single lumen, conventional tip	Aspiration needle	17107	1.4	17.5	1.0	300	600		10-pack
		17112				300	900		10-pack
		17125				330	900		10-pack
		17156				350	600		10-pack
		17130				350	900		10-pack
		17116	1.6	16.5	1.1	300	600		10-pack
		17120				300	900		10-pack
		17157				350	600		10-pack
		17104				350	900		10-pack
Single lumen, conventional tip ¹	Aspiration needle	17140	1.4	17.5	1.2	300			10-pack
		17137	1.6	16.5	1.3	350			10-pack
Single lumen, conventional tip ²	Aspiration needle	17123	1.5	17	1.2	300	600		10-pack
Double lumen conventional tip	Aspiration needle	17151	1.5	17	0.9	350	600	600	10-pack
		17102				350	1000	1000	10-pack
		17111	1.65	16	1.0	300	600	600	10-pack
		17105				300	900	900	10-pack
		17109				350	600	600	10-pack
		17148				350	900	600	10-pack
		17168				350	1000	1000	10-pack

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.

CE 2460

Accessories

Product	Description	REF	Width		Volume	Size
			mm	cm		
Vacuum Pump Tubing	Male and hydrophobic Filter Luer connection	17201		250		10-pack
	Male and Female Luer connections	17202		200		10-pack
	Male and Open end Luer connections	17203		200		10-pack
Transducer Cover	Latex-free cover	14201	70	800		25-pack
		14202	100	800		25-pack
		14204	150	800		25-pack
Ultrasound Transmission Gel	Coupling gel, bottle, non-sterile	14213			250 g	12 bottles
	Coupling gel, pouch, sterile	14214			20 g	50-pack (pouches)
Oocyte collection tube	IVF certified collection tube	16101			14 mL	10 units/ sleeve: 500/case

Vacuum Pump Tubing

Intended for connecting needle and vacuum pump during oocyte pick up and works as a natural extension between all Vitrolife follicle aspiration sets and most medical vacuum pumps on the market.

Transducer cover

The cover comes in three different lengths – to suit different ultrasound transducers. It is made of polyethylene and designed with a welded seam along its length to inhibit accidental breakage. Each cover is individually wrapped and packaged in a sterile barrier with two cable clips. The covers are e-beam sterilised.

Oocyte collection tube

Our oocyte collection tube is certified and quality tested at all stages of manufacture from the raw materials to the finished product – to ensure the right conditions for gametes and embryos.

Sterile ultrasound transmission gel

The ultimate combination of safety, performance and convenience. This unique new formula is free from latex, bisphenol A and phthalates. High viscosity ensures ease of application and precise imaging, and the easy-to-open single-use pack eliminates mess and fuss.

- Surgically sterile for total confidence in every situation, CE-marked
- Thick, clear gel for easy application and excellent control
- Easy-to-open single-use pack
- Convenient storage carton gives quick access to 50 packs, 20 g each
- Water-based, water-soluble formula



Orders & customer support

Contact your local sales representative for prices and availability. Orders can be placed through our website at www.vitrolife.com. You can also contact us by email and phone:

Sweden office: Phone: +46 31 721 81 00 Email: order@vitrolife.com	Japan office: Phone: +81 03 6459 4437 Email: japan@vitrolife.com
US office: Phone: +1 866 848 7687 Email: order.us@vitrolife.com	China office: Phone: +86 10 6403 6613 Email: order.asia@vitrolife.com
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Asia: support.asia@vitrolife.com
Japan & Pacific: info@vitrolife.co.jp



Learn more about our Sense needles and their unique design. Our needles are designed to optimise control and retrieval time and improve patient comfort. The needles feature a reduced tip for less bleeding and pain, and a larger body for optimal precision and retrieval time.

This material is intended for a non US audience.
All products in this brochure might not be available in all markets.



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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.

REFERENCES 1. Wikland M et al. Hum Reprod. 2010;25 (Suppl. 1), O-226 2. Nakagawa, et al. J Reprod Infertil. 2015;16(4):207-211 3. Bing, et al. Journal of Minimally Invasive Medicine, Oct 2018, Vol 7 No.5 4. Buisman E et al. 2020 In press <https://pubmed.ncbi.nlm.nih.gov/33077240>

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