Summary of Safety and Clinical Performance

Sperm Freeze

The purpose of this Summary of Safety and Clinical Performance (SSCP) is to offer public access to an updated summary of the main issues concerning the safety and clinical performance of the device. This document does not replace the Instructions for Use (IFU), which is the main document to ensure the safety of the device, and neither is intended to provide diagnostic or therapeutic suggestions to the intended users.

0 Abbreviations

ART Assisted Reproductive Technology
ED Egg Donation
EMA European Medicine Agency
EMDN European Medical Device Nomenclature
ESHRE European Society of Human Reproduction and Embryology
FER Frozen Embryo Replacement
HAS Human Albumin Solution
HEPES 4-(2-Hydroxy Ethyl)-1-Piperazine Ethane Sulfonic acid
HSA Human Serum Albumin
HSSA Human Sperm Survival Assay
ICSI Intra Cytoplasmatic Sperm Injection
IVF In Vitro Fertilization
IFU Instructions For Use
IUI Intra Uterine Insemination
MDR Medical Device Regulation
NB Notified Body
PGT Preimplantation Genetic Testing
PMCF Post-Market Clinical Follow-up
SRN Single Registration Number for an economic operator
SSCP Summary of Safety and Clinical Performance
UDI-DI Unique Device Identification - Device Identifier

1 Device identification and general information

1.1 Device trade name(s)

Kitazato Sperm Freeze:

- Sperm Freeze
- Sperm Freeze G-PLUS

1.2 Manufacturer’s name and address

Kitazato Corporation
Address: 100-10, Yanagishima, Fuji, Shizuoka 416-0932 Japan
Phone: (+81) 545 65 7122 Fax: (+81) 545 65 7128
E-mail : ce_registration@kitazato.co.jp

1.3 Manufacturer’s single registration number (SRN)

Kitazato Corporation SRN: JP-MF-000018374

1.4 Basic UDI-DI

Kitazato Sperm Freeze: 458223146SFZL8

1.5 Medical device nomenclature description/text

Applicable EMDN Code: U08020501: Materials/solutions for freezing/thawing for assisted reproduction

1.6 Class of device

Sperm Freeze products are considered medical devices Class III according to MDR (Regulation (EU) 2017/745) Annex VIII

1.7 Year when the first certificate (CE) was issued covering the device

Sperm Freeze	On-going

1.8 Authorised representative if applicable; name and the SRN

Biomedical Supply, S.L. (DIBIMED)
C/ Jorge Comín, 3
Valencia. 46015. Spain
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Fax +34 96 305 63 96
info@dibimed.com

SRN: ES-AR-000014358

1.9 NB's name and single identification number

BSI Group The Netherlands B.V.
Say Building, John M. Keynesplein 9
1066 EP Amsterdam
The Netherlands

NB identification number: 2797

2 Intended use of the device

2.1 Intended purpose

Sperm Freeze/ Sperm Freeze G-PLUS is a ready-to-use medium intended for cryopreservation of human spermatozoa sperm, for later use in Assisted Reproductive Technologies (ART). Sperm Freeze/ Sperm Freeze G-Plus is used in specialized laboratories performing fertilization techniques, including In Vitro Fertilization (IVF), Intra-Cytoplasmic Sperm Injection (ICSI) and sperm preparation/analysis.

2.2 Indication(s) and intended patient groups

Sperm Freeze/ Sperm Freeze G-PLUS indications and intended patient groups are related to its intended use and includes:

- Storage of donor and patient's spermatozoa before performing ART procedures (i.e., Intra Uterine Insemination (IUI), IVF and ICSI).
- Preservation of spermatozoa before therapy for malignant diseases, vasectomy, or surgical infertility treatments.
- Recovery of small number of spermatozoa in patients with severe male factor infertility.

Therefore, sperm cryopreservation is an important component of fertility management and is routinely used in ART laboratories.

2.3 Contraindications and/or limitations

No known contraindications and/or limitations have been identified for Sperm Freeze and Sperm Freeze G-PLUS.

3 Device description

3.1 Description of the device

The products described in this summary are Sperm Freeze and Sperm Freeze G-PLUS, which are cell culture media for the cryopreservation (slow freezing) of human spermatozoa. The media are designed to ensure the recovery of sperm suitable for Assisted Reproductive Technologies (ART) upon cryopreservation. Sperm Freeze G-PLUS is a more concentrated cryopreservation medium than Sperm Freeze and allows lower dilution of the sperm samples before freezing.

Sperm Freeze and Sperm Freeze G-PLUS are HEPES buffered cryopreservation media which also contain physiologic salts, glycine, glucose, lactate and the cryoprotectants glycerol (15%), sucrose and Human Serum Albumin (HSA) (4.0g/l, a medicinal substance derived from human blood plasma) to protect the sperm from damage during the freezing procedure. The EMA (European Medicine Agency) has approved the inclusion of HSA in Sperm Freeze and Sperm Freeze G-PLUS.

Sperm Freeze contains approximately 15% glycerol, while Sperm Freeze G-PLUS contains a higher concentration of glycerol (27%). However, the final glycerol concentration in the sample to be cryopreserved is similar (i.e., 6.2% and 6.7%, respectively) due to the dilution factor applied, which is specified in the corresponding IFUs.

The lifetime of Sperm Freeze and Sperm Freeze G-PLUS has been set to at least 10 years.

Direct physical contact occurs between the media and human spermatozoa. There is no direct or indirect contact with the human body.

Sperm Freeze and Sperm Freeze G-PLUS are sterilized (SAL 10^{-3}) using aseptic processing techniques (filtration). The media are stable for at least 7 days after first opening if stored under aseptic conditions and between 2-8°C.

3.2 A reference to previous generation(s) or variants if such exist, and a description of the differences

No previous generations of the device have been brought on the European Union market by Kitazato Corporation.

3.3 Description of any accessories which are intended to be used in combination with the device

No accessories for Sperm Freeze and Sperm Freeze G-PLUS are identified.

3.4 Description of any other devices and products which are intended to be used in combination with the device

No devices and products for Sperm Freeze and Sperm Freeze G-PLUS are identified.

4 Risks and warnings

4.1 Residual risks and undesirable effects

The inclusion of Human Serum Albumin (HSA) in Sperm Freeze and Sperm Freeze G-PLUS is approved by the EMA. The only residual risk identified concerns the eventual transmission of viral or priori-carried diseases and the batch-to-batch variation associated with the inclusion of HSA in the media. A description of the residual risks and major benefits is shown below:

Residual risks of Human Serum Albumin (HSA)	Major benefits
1. Batch to batch variation The risk may arise due to the inherent variability in donor blood. Consequently, standardization of the procedures remains difficult. Therefore, Human Sperm Survival Assays are routinely performed as part of Sperm Freeze / Sperm Freeze G-PLUS batch release criteria. 2. Transmission of viral or prion-carried diseases due to the use of human derived protein source. Along 50 years of clinical use, HSA is manufactured with a pasteurization procedure that has led to an excellent viral safety. Only Plasbumin-25 or alternatively, Albunorm 25 will be used as a source of albumin, as these products are covered by a valid Plasma Master File, and the EMA has positively evaluated the usefulness, safety and benefit of the inclusion of these products in Kitazato Corporation ART-media. In addition to the rigorous quality controls, all cell culture media should still be treated as potentially infectious. At his moment, full assurance that products derived from human blood will not transmit infectious agents cannot be granted by any test method. The use of Sperm Freeze / Sperm Freeze G-PLUS is restricted to the sperm preparation and is not intended to be in direct contact with users or patients. Even so, the instructions for use / MSDS clearly warn that the medium contains Human Albumin Solution (HAS), and that protective clothing should be worn.	1. Inhibition of lipid peroxidation that can be damaging to sperm. 2. Detoxification by binding waste products from cell metabolism. 3. HSA prevents cell aggregation and adherence to laboratory equipment and promotes the ease of gamete handling and manipulation.

Based on the analysis above, it is concluded that the benefit of adding HSA to the media outweighs the risk and the overall residual risk related to the use of Sperm Freeze and Sperm Freeze G-PLUS with inclusion of HSA for semen preparation has been judged acceptable.

Accordingly, the Instructions for Use informs the customer about the product composition and contains the following precautions:

- All blood products should be treated as potentially infectious. Source material from which this product was derived was found negative when tested for antibodies to HIV-1/-2, HBV or HCV, and non-reactive for HbsAg. The known test methods cannot guarantee that products derived from human blood will not transmit infectious agents.
- Standard measures to prevent infections resulting from the implementation of medicinal products prepared from human blood or plasma include effective manufacturing steps for the inactivation/removal of viruses. When medicinal products prepared from human blood or plasma are administered, the possibility of transmitting infective agents cannot be totally excluded. This also applies to unknown or emerging viruses and other pathogens.

No other known undesirable side-effects are identified.

4.2 Warnings and precautions

Besides the above, attention should be paid to the following warnings and precautions (as described in the instructions for use):

Warnings	Precautions
• Do not re-sterilize. • Do not freeze the product. • Do not use after the expiration date. • Do not use if packing is damaged or broken. • Do not use if product becomes cloudy or shows evidence of microbial contamination.	• Aseptic technique should be used. Sperm Freeze/ Sperm Freeze G-PLUS does not contain any antibiotics. • Use sterilized equipment and materials only. • In case of eye or skin contact with Sperm Freeze/ Sperm Freeze G-PLUS, immediately flush eye/skin with water. • Observe all federal, state and local environmental regulations when discarding the product. • The user shall be responsible for any problems caused by incorrect use or not following the present IFU. • This product is intended to be used by medical specialists trained in fertility treatment. • All blood products should be treated as potentially infectious. Source material from which this product was derived was found negative when tested for antibodies to HIV-1/-2, HBV or HCV, and non-reactive for HbsAg. The known test methods cannot guarantee that products derived from human blood will not transmit infectious agents. • Standard measures to prevent infections resulting from the implementation of medicinal products prepared from human blood or plasma include effective manufacturing steps for the inactivation/removal of viruses. When medicinal products prepared from human blood or plasma are administered, the possibility of transmitting infective agents cannot be totally excluded. This also applies to unknown or emerging viruses and other pathogens. • Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

4.3 Summary of any field safety corrective action (FSCA including FSN) if applicable

No field safety corrective actions with regard to Sperm Freeze and Sperm Freeze G-PLUS were needed.

5 Summary of clinical evaluation and post-market clinical follow-up (PMCF)

5.1 Summary of clinical data related to similar/equivalent devices

Kitazato Corporation has performed a clinical evaluation to support Sperm Freeze approvals and registrations on the basis of equivalence. There is sufficient data available from its clinical use to demonstrate safety and performance.

Kitazato Sperm Freeze products are similar/equivalent to the following markets devices:

- Sydney IVF sperm cryopreservation buffer (Cook Medical)
- GM501 SpermStore (Gynemed)
- SpermCryo All-round and SpermTec Cryo (Gynotec)

- Freezing Medium - TEST Yolk Buffer (TYB) with Glycerol and Gentamicin, Sperm Maintenance Medium with Glycerol and Arctic Sperm Cryopreservation Medium (Irvine Scientific)
- Sperm Freezing (Life Global)
- Sperm CryoProtec (Nidacon)
- Sperm Freezing Medium and CryoSperm (Origio)
- Quinn's Advantage Sperm Freeze (SAGE)
- SpermFreeze Solution (Vitrolife)
- Extra Sperm Freeze™ and Extra Sperm Freeze 3™ (Medi-Con)
- V- SPERM FREEZE (Vitromed)
- SpermFreeze and SpermFreeze SSP (Ferti Pro) Basic UDI-DI: 5411967SPF152. SSCP of this device is available at Eudamed. The clinical data obtained is detailed in the following sections.

5.2 Real-world evidence analysis

It is expected that the outcomes of Clinical data of ART procedures from IVF centers in which Sperm Freeze or equivalent devices are used, are consistent with the ART outcomes as published in an annual peer-reviewed benchmark report of the European Society of Human Reproduction and Embryology (ESHRE). The ESHRE report yearly collects and analyzes ART data generated in Europe. The most recent report (Wyns et al. 2022) includes data from 1,422 institutions in 39 countries with a total of 1,007,598 treatment cycles (covering the period from 1 January to 31 December 2018). The table below summarizes the calculated mean ART outcomes and ranges based on the results presented in the supplementary data of the ESHRE article:

ART in Europe, 2018: results generated from European registries by ESHRE A total of 1,007,598 treatment cycles, involving 162,837 with IVF, 400,375 with ICSI, 309,475 with frozen embryo replacement (FER), 48,294 with preimplantation genetic testing (PGT), 80,641 with egg donation (ED), 532 with IVM of oocytes and 5,444 with FOR (frozen oocyte replacement) were recorded. European data on IUI using husband / partner's semen (IUI-H) and donor semen (IUI-D) were reported from 1,271 institutions offering IUI in 31 countries and 25 countries, respectively. A total of 148,143 treatments with IUI-H and 50,609 treatments with IUI-D were included.	**In vitro fertilization (IVF):** Clinical pregnancy rate per aspiration: **26.2%** *(range: 7.8 – 47.2%)* Clinical pregnancy rate per transfer: **35.9%** *(range: 21.1 – 50.5%)* Delivery rate per aspiration: **19.0%** *(range: 6.3 – 27.8%)* Delivery rate per transfer: **26.4%** *(range: 14.2 – 38.7%)*	**Intra cytoplasmic sperm injection (ICSI):** Clinical pregnancy rate per aspiration: **24.9%** *(range: 13.8 – 37.3%)* Clinical pregnancy rate per transfer: **35.3%** *(range: 14.8 – 58.3%)* Delivery rate per aspiration: **18.5%** *(range: 8.7 – 31.3%)* Delivery rate per transfer: **26.2%** *(range: 9.3 – 37.3%)*	**Frozen embryo replacement (FER):** Pregnancy rate per thawing: **34.6%** *(range: 24.4 – 49.5%)* Pregnancy rate per transfer: **35.5%** *(range: 23.4 – 50.4%)* Delivery rate per thawing: **25.2%** *(range: 17.8 – 40.6%)* Delivery rate per transfer: **25.7%** *(range: 17.1 – 41.4%)*	**Intrauterine insemination(IUI):** **using husband semen (IUI-H):** Delivery rate per cycle: **9.5%** *(range: 3.3 – 31.6%)* **using donor semen (IUI-D):** Delivery rate per cycle: **14.9%** *(range: 3.2 – 31.4%)*
	Since multiple factors can have an influence on the ART outcomes (ART policy, approach of the clinic, patients characteristics), a value within the range of the ESHRE value is acceptable.			

The following acceptable outcomes of the sperm parameters are set (based on results found in the literature):
- a reduction in sperm motility is set on 50-60% after cryopreservation with Sperm Freeze media*
- a reduction in sperm vitality is set on 50% after cryopreservation with Sperm Freeze media*
- effect on sperm DNA fragmentation is comparable with that of similar devices with identical intended use as Sperm Freeze media on the market
- fertilization potential of sperm cryopreserved with Sperm Freeze media is comparable with that of fresh sperm

* In case of a comparative study with similar devices with identical intended use as Sperm Freeze media: the reduction of sperm motility/vitality is not significantly lower than the reduction in sperm motility/vitality of the cryopreservation media of competitors.

Sperm vitality, motility and Sperm DNA fragmentation are important parameters to evaluate the quality of the spermatozoa upon cryopreservation, but importantly, reduction of these parameters does not exclude that the thawed semen sample will result in a successful ART procedure. Based on these parameters, the physician will determine which ART, i.e. IUI, IVF or ICSI, will be used to have the highest chance to succeed. As indicated above, the ICSI technique circumvents the natural selection process in fertilization and enables the successful use of spermatozoa with severely impaired characteristics to achieve clinical pregnancy. The devices included in this clinical evaluation report are for professional use only and do need the knowledge of these professionals to interpret the semen samples upon thawing.

The following minimal competency limits concerning embryology outcomes are reported by the ESHRE expert group:

Competency limits reported by the ESHRE Special Interest Group of Embryology and Alpha Scientists in Reproductive Medicine in 2017. The Vienna consensus: report of an expert meeting on the development of art laboratory performance indicators (ESHRE Special Interest Group of Embryology 2017)	ICSI normal fertilization rate:	≥65% (lower range: 55%)
	IVF normal fertilization rate:	≥60% (lower range: 50%)
	Note: Since multiple factors can have an influence on the embryology outcomes, (ART policy, approach of the clinic, patients' characteristics), a value 10% lower than the competency limit is acceptable.	

Additionally, Kitazato established as a clinical safety endpoint for Sperm Freeze that the studied papers and clinical data from IVF centers using the equivalent device should not report side-effects, contra-indications, toxicity for gametes or embryos, or risk for mutagenity, oncogenicity, teratogenity, carcinogenity, cytotoxicity, allergenicity and irritancy (for patients and users).

As there are no alternative treatment options that can be used for cryopreservation of sperm from seminal fluid during ART procedures, all data included in the ESHRE report are generated using equivalent media or a similar device available on the market. Reported outcomes in the benchmark report can therefore be considered as benchmark data for ART procedures. Nevertheless, when comparing clinical data, one should be aware that:

- ✓ During ART processes, sperm come into contact with several (other) ART media and undergo a lot of manipulations that all can have an influence on the reported outcomes.
- ✓ Depending on the patient characteristics, different outcomes can be obtained.

Clinical data from equivalent media obtained from real-world evidence are consistent with the outcomes described in this benchmark report to assess clinical safety and performance as well as benefit-risks of Sperm Freeze and Sperm Freeze G-PLUS.

According to the multiple manuscripts available in the literature, the use of products on the market similar or equivalent to Sperm Freeze demonstrates their performance and safety. Additionally, papers where these devices have been implemented have reported ART outcomes comparable with the ART outcomes published by the European Society of Human Reproduction and Embryology (ESHRE).

Selected articles describing the performance and/or safety of Sperm Freeze family:

(Donnelly et al. 2001)
(Saritha and Bongso 2001)
(Donnelly et al. 2001)
(Bandularatne and Bongso 2002)
(O'Connell et al. 2002)
(Desrosiers et al. 2006)
(Bhattacharya et al. 2006)
(Punyatanasakchai et al. 2008)
(Konc et al. 2008)
(Thomson et al. 2009)
(Menon et al. 2009)
(Zribi et al. 2010)
(Vutyavanich et al. 2010)
(Prisant et al. 2010)
(Ahmad et al. 2010)
(Rahana et al. 2011)
(Freour et al. 2012)
(Satirapod et al. 2012)
(Zribi et al. 2012)
(Bizet et al. 2012)
(Boitrelle et al. 2012)
(Moubasher et al. 2013)
(Gatimel et al. 2013)
(Karacan et al. 2013)

(Philippon et al. 2015)
(Tongdee et al. 2015)
(Montagut et al. 2015)
(Fabozzi et al. 2016)
(Lusignan et al. 2018)
(El-Ahwany et al. 2018)
(Reignier et al. 2018)
(Awaga et al. 2019)
(O'Neill et al. 2019)
(Karthikeyan et al. 2019)
(Falah 2019)
(Taher-Mofrad et al. 2020)
(Valipour et al. 2020)
(Tvrda et al. 2020)
(Seifi et al. 2020)
(Lierman et al. 2021)
(Hezavehei et al. 2021)
(Santonastaso et al. 2021)
(Kumari et al. 2021)
(Tvrda et al. 2021)
(Dayal et al. 2021)
(Valipour et al. 2021)
(Hosseinmardi et al. 2021)
(Androni et al. 2021)
(Ghantabpour et al. 2022)
(Ali and Al-Essawe 2022)
(Moungala 2022)
(Hezavehei et al. 2022)
(Arciero et al. 2022)
(Juanpanich et al. 2022)
(Evgeni et al. 2022)
(Cakrasana et al. 2022)
(Al-Obeidy et al. 2023)
(Albari et al., 2023)
(Khosronezhad et al. 2023)
(Cheredath et al. 2023)
(Moungala 2023)

Thus, from the literature data it could be concluded that devices with the same intended use than Sperm Freeze and Sperm Freeze G-PLUS support the cryopreservation of human spermatozoa, and the damaging effects on sperm motility, vitality, DNA fragmentation and fertilizing potential are within acceptable limits and are inherent to the cryopreservation process and comparable with other products on the market.

5.3 Vigilance analysis and customer/market feedback

The clinical evaluation also included data from the state-of-the-art and verification and validation testing, device registries, vigilance activities and client feedback and complaints of equivalent devices. No emerging risks, systematic missuse, previously unknown side effects or contra-indications were identified. Additionally, there were no incidents and/or field safety corrective actions taken related to the clinical use of the device.

5.4 An overall summary of the clinical performance and safety

According to the information exposed in the clinical evaluation, it can be concluded that Sperm Freeze and Sperm Freeze G-PLUS function as stated by the manufacturer and that no complications, incidents or adverse events have been reported for the equivalent device. There is no evidence that the device has any risk for toxicity of embryos and gametes or for cytotoxicity, allergenicity, irritancy, mutagenity, carcinogenity, oncogenicity or teratogenity for patients and users.

The remaining risks identified in the Risk Assessment or other risks associated with the cryopreservation of human spermatozoa with Sperm Freeze, cannot be mitigated further and are considered acceptable when weighed against the benefits to the patient. All harms have been defined with their potential causes of failure and associated mitigation activities. The only considerable residual risk identified is associated with the fact that these media contain a human blood derivative (Human Albumin Solution, HAS).

Based on this analysis it is concluded that the benefit of adding HAS to the media outweighs the risk, and therefore the residual risk of adding HAS is acceptable.

Kitazato Corporation has taken all necessary steps to ensure that residual risks associated with the use of Sperm Freeze are reduced as far as possible through application of existing state of the art techniques in the design and manufacture of these medical devices to ensure safe usage. Kitazato Corporation concludes that the overall medical benefits of Sperm Freeze, outweigh the possible risks when used according to the intended use.

There is sufficient evidence to establish the safety and performance of Sperm Freeze when used in accordance with the IFU. The data are adequate to assess the benefits and risks associated with the subject device, concluding that the benefit-risk profile is acceptable. Therefore, this initial clinical evaluation demonstrates that the available clinical data are sufficient to establish conformity with all applicable General Safety and Performance Requirements (Annex I) of the Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices (MDR) and confirm the safety and performance of the Sperm Freeze. The Sperm Freeze Instructions for Use (IFU) clearly demonstrates safe usage of the device and mandatory physician training ensures all users are fully conversant with all aspects of device use.

Sperm Freeze and Sperm Freeze G-PLUS have been confirmed to be within the current state-of-the-art practice.

5.5 Ongoing or planned post-market clinical follow-up

On a year basis, Kitazato Corporation will perform literature search for Sperm Freeze / Sperm Freeze G-PLUS and equivalent devices. Additionally, clinical data retrieved from In Vitro Fertilization (IVF) centers using Sperm Freeze and Sperm Freeze G-PLUS and equivalent devices will be evaluated.

This Summary of Safety and Clinical Performance will be updated with data from the post-market clinical follow-up if required, to guarantee that any clinical and/or safety information described in this summary stays right and complete.

6 Possible diagnostic or therapeutic alternatives

Cryopreservation is a necessary technique in ART procedures. Two different methods, i.e. conventional slow-freezing and vitrification of spermatozoa exist. Conventional slow-freezing is the method performed with Sperm Freeze and is still the most commonly used technique. In fact, almost all products currently available on the market are based on this technique. Sperm vitrification is described in literature but is still under development, and does have some remaining challenges to tackle (for further reading see reviews (Sharma et al. 2015) and (Li et al. 2019)). This is reflected in the fact that no commercial media are currently available on the market for sperm vitrification.

Multiple articles available in the literature demonstrate comparable results among the different Sperm Freeze media on the market, reporting ART outcomes comparable with the ART outcomes published annually by the European Society of Human Reproduction and Embryology (ESHRE).

7 Suggested profile and training for users

Sperm Freeze and Sperm Freeze G-PLUS are used in specialized laboratories performing fertilization techniques, including In Vitro Fertilization (IVF), Intra-Cytoplasmic Sperm Injection (ICSI) and sperm preparation/analysis. The intended users are medical specialists trained in fertility treatments (lab technicians, embryologists, or medical doctors).

8 Reference to any applicable common specification(s), harmonized standard(s) or applicable guidance document(s)

The following guidance documents were used:

- MDCG 2019-09: Summary of safety and clinical performance. A guide for manufacturers and notified bodies (August 2019, fully applicable).
- EN ISO 13408-1:2015: Aseptic processing of health care products – Part 1: general requirements (fully applicable)
- EN ISO 13408-2:2018: Aseptic processing of health care products – Part 2: Filtration (fully applicable)
- EN ISO 13408-6:2021: Aseptic processing of health care products – Part 6: Isolator systems (fully applicable)

- EN ISO 13485:2016 / Amd 11: 2021: Medical devices – Quality management systems – Requirements for regulatory purposes (fully applicable)
- MDR 2017/745: European Medical Device Regulation 2017/745 of 5 April 2017 (fully applicable)
- EN 556-2:2015: Sterilization of medical devices – Requirements for medical devices to be designated 'STERILE' – Part 2: Requirements for aseptically processed medical devices.
- EN ISO 20417:2021: Medical Devices: information supplied by the manufacturer
- EN ISO 23640:2015: In vitro diagnostic medical devices - Evaluation of stability of in vitro diagnostic reagents (Applicable with exclusion of the following sections: No standard is available for the evaluation of stability of Medical Devices, therefore this standard is used as guideline for the set-up of the stability testing in line with the EU list of harmonized standards drafted in support of Council Directive 93/42/EEC)
- EN ISO 10993-1:2020: Biological evaluation of medical devices – Part 1: Evaluation and testing (fully applicable)
- EN ISO 10993-18:2020 / Amd 1:2022: Biological evaluation of medical devices – Part 18: Chemical characterization of medical device materials within a risk management process (fully applicable)
- EN ISO 14644-1:2015: Cleanrooms and associated controlled environments – Part 1: Classification of air cleanliness (fully applicable)
- EN ISO 14644-3:2019: Cleanrooms and associated controlled environments - Part 3: Test methods (fully applicable)
- EN ISO 14971:2019 / Amd 11:2021: Medical devices – Application of risk management to medical devices (fully applicable)
- EN ISO 15223-1:2021: Medical devices - Symbols to be used with medical device labels, labelling and information to be supplied - Part 1: General requirements (fully applicable)
- EN ISO 17665-1:2006: Sterilization of health care products – Moist heat – Part 1: Requirements for the development, validation and routine control of a sterilization process for medical devices (fully applicable)
- EN ISO 11737-1: 2018+A1:2021: Sterilization of health care products - Microbiological methods - Part 1: Determination of a population of microorganisms on products (fully applicable)
- IEC 62366-1:2015 / Amd 1:2020: Medical devices - Part 1: Application of usability engineering to medical devices (fully applicable)
- NBOG BPG 2014-3: Guidance for manufacturers and Notified Bodies on reporting of Design Changes and Changes of the Quality System (fully applicable)
- EMA/CHMP/578661/2010 rev .1 EMA recommendation on the procedural aspects and dossier requirements for the consultation to the EMA by a notified body on an ancillary medicinal substance or an ancillary human blood derivate incorporated in a medical device or active implantable medical device (fully applicable)

9 Revision history

SSCP revision number	Date issued	Change description	Revision validated by the Notified Body
V.0	20/07/2020	Initial version	Date: not yet Validation language: English
V.1	11/10/2023	Amendment as per BSI input during MDR conformity assessment	Date: Not yet Validation language: English
V.2	16/11/2023	Amendment as per BSI input during MDR conformity assessment	Date: Not yet Validation language: English
V.3	11/06/2024	Amendment as per BSI input during MDR conformity assessment	Date: 11/06/2024 Validation language: English This version has been approved by the Notified Body

10 Summary of the safety and clinical performance for patients

As the device is for professional use only, a Summary of the Safety and Clinical Performance of the device intended for patients is not applicable.

11 References

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