# Post-Market Clinical Follow-up Study to Provide Safety, Performance and Clinical Benefits Data of the Zimmer® Natural Nail® Antegrade and Retrograde Femoral Nail (Implants and Instrumentation) - A Retrospective Consecutive Series Study

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Protocol **ZNN: Antegrade and Retrograde**, date: 16-Feb-2023 Version 1.0 Page **1** of **31** 

## **Table of Contents**

1	STUI	DY SYNOPSIS	3
2	DAT	A COLLECTION OVERVIEW	6
3	INTR	ODUCTION	7
4	DESC	CRIPTION OF THE DEVICE	8
	4.1	PRODUCT SCOPE	10
5	STUI	DY OBJECTIVES	10
6	STUI	DY DESIGN	10
	6.1 6.2	GENERALSTUDY DURATION	
7	STUI	DY POPULATION	11
	7.1 7.2 7.3	INCLUSION CRITERIA	11
8	REG	ULATORY REQUIREMENTS	12
	8.1 8.2	ETHICS COMMITTEEPATIENTS PRIVACY AND CONSENT	
9	STUI	DY OUTCOME MEASURES/ENDPOINTS	13
10	DAT.	A COLLECTION AND MANAGEMENT	14
	10.1 10.2 10.3	MONITORING/ QUALITY ASSURANCE OF DATA	14
11	L MED	ICAL EVENTS/ADVERSE EVENTS/COMPLICATIONS	16
	11.1 11.2	DEFINITIONS REPORTING OF MEDICAL EVENTS/ADVERSE EVENTS AND ADVERSE DEVICE EFFECTS	
12	STA	TISTICAL CONSIDERATIONS/ EVALUATION	18
	12.1 12.2	SAMPLE SIZE CALCULATION	
13	B REFE	RENCES	19
14	APP	ENDIX I-PRODUCT SCOPE	20

# 1 Study Synopsis

Title	Post-Market Clinical Follow-up Study to Provide Safety, Performance and Clinical Benefits Data of the Zimmer® Natural Nail® Antegrade and Retrograde Femoral Nail (Implants and Instrumentation) — A Retrospective Consecutive Series Study		
CIP ID	MDRG2017-89MS-182T		
Manufacturer	Zimmer Inc.		
Study Objectives	The objective of this retrospective post-market clinical follow-up (PMCF) study is to collect data confirming safety, performance and clinical benefits of the Zimmer Natural Nail Antegrade and Retrograde Femoral Nail (implants and instrumentation) when used for temporary stabilization and fixation of femoral fractures and/or osteotomies.  The primary objective is the assessment of performance by analyzing fracture/osteotomy healing.		
	The secondary objective is the assessment of safety by recording and analyzing the incidence and frequency of complications and adverse events. Relation of the events to implant, instrumentation and/or procedure should be specified. Subjects' outcomes (clinical benefits) will also be assessed.		
Target Population	Consecutive series of subjects implanted with the Antegrade or the Retrograde Femoral Nail belonging to the Zimmer Natural Nail System according to the indications for use. Inclusion/exclusion criteria are based on the indications and contraindications listed in the Instructions for Use (IFU).		
Inclusion/Exclusion Criteria	Patients having received the Antegrade Femoral Nail for temporary stabilization and fixation of femoral fractures and osteotomies and patients having received the Retrograde Femoral Nail for temporary stabilization and fixation of femoral fractures.  Exclusion criteria are:  Off-label use Infection		
	<ul> <li>A medullary canal obliterated by a previous fracture or tumor.</li> <li>Bone shaft having excessive bow or deformity.</li> <li>Lack of bone substance or bone quality, which makes stable seating of the implant impossible.</li> <li>All concomitant diseases that can impair the functioning and the success of the implant.</li> <li>Insufficient blood circulation.</li> </ul>		

Protocol **ZNN: Antegrade and Retrograde**, date: 16-Feb-2023 Version 1.0 Page **3** of **31** 

	Skeletally immature patients.		
Study Design	Single-Center, Retrospective, Consecutive series of patients		
Clinical Phase	Post-market		
Sample Size	The goal is to collect data on a maximum of 94 consecutive cases treated with either an Antegrade or a Retrograde Femoral Zimmer Natural Nail. If possible, data for 42 consecutive cases treated with the Antegrade Femoral Nail and 52 consecutive cases treated with the Retrograde Femoral Nail should be acquired.		
Length of Study	<ul> <li>Ethics Committee approval</li> <li>Subject identification, consent and enrollment into the study</li> <li>Collection of baseline and follow-up information available in medical notes from the pre-operative condition to the last follow-up visit</li> <li>Conduct follow-up phone call</li> <li>Conduct data collection, analysis and write final report</li> </ul>		
Study Device	Zimmer Natural Nail Antegrade and Retrograde Femoral Nails (implants and instrumentation):  Antegrade Femoral Nail  Retrograde Femoral Nail		
Materials and Methods	Retrospective data will be collected from medical charts including baseline information from the preoperative, operative, immediate post operative and last consultation visit. In addition, a FUP phone call (min 2) year post-op) will be performed. All data will be entered into an Excel database.		

Statistical Reporting	Data collected in the study will be summarized descriptively. Continuous data (e.g. age) will be summarized through means, medians, standard deviation, minimum, maximum and 95% confidence intervals (CIs). Categorical data (e.g. gender) will be summarized using counts, percentages and 95% confidence limits. Summaries of fracture/osteotomy healing rates, implant related revision rates and complication data will be presented as frequencies and percentages.
Scores/Performance Assessments	VAS, Oxford Hip Score (OHS) for cases having received the ZNN Antegrade or Oxford Knee Score (OKS) for cases having received the ZNN Retrograde, Radiographic and clinical assessment of fracture/osteotomy healing, Adverse Events assessment
Data Collection	Paper/ Electronic
Standards	<ul> <li>The PMCF is compliant with the below:         <ul> <li>EN ISO 14155:2020 - Clinical investigation of medical devices for human subjects Good clinical practice [1]</li> <li>The Declaration of Helsinki (DoH) - Ethical principles for medical research involving human subjects [2]</li> <li>European Regulation (EU) 2017/745 [3]</li> <li>MDCG 2020-10/1 Safety reporting in clinical investigations for medical devices under the Regulation (EU) 2017/74 [4]</li> </ul> </li> </ul>

#### 2 Data Collection Overview

		Baseline			Follow-Up	
Evaluation	Prior to Study Enrollment	Prior to Surgery	Operative	Immediate Post- Operative	Last Consultation Visit	Follow-Up Phone Call (min. 1 year post-OP)
Patient Information and Informed Consent	х					
Inclusion/Exclusion Criteria in accordance with IFU		Х				
Demographic Evaluation		Х				
Operative Information/ Surgical Device Information			Х			
Immediate Post- Operative Evaluation				Х		
Radiographic assessment of Fracture/ Osteotomy Healing					Х	
Clinical assessment of Fracture/ Osteotomy Healing						Х
Visual Analog Scale (VAS)					X (if available)	Х
Oxford Hip Score (OHS) or Oxford Knee Score (OKS)						Х
Complications/ Adverse Events and their relation or not to the device, instrumentation and/ or procedure				As	required	

#### 3 Introduction

Long bone fractures are often a result of high-energy trauma which may result into comminuted or segmental fractures. Fractures following high-energy trauma are often associated with extensive soft tissue injuries. The state of the surrounding soft tissues and the local blood supply to the bone are the most important factors determining the tendency of the fracture to heal [5]. This is usually compromised in segmental fractures because of injury to the surrounding soft tissues in addition to the compromised blood supply to the middle segment. This often leads to nonunion or delayed union [6].

In the late 19th century surgeons began to treat fractured long bones by operative treatment methods instead of using a cast [7]. They started to use the so called technique of "open reduction and internal fixation (ORIF)". The fractured bone fragments are brought together to their former anatomical position and then fixed e.g. by plates and screws, intramedullary nails or external fixators. All these implants achieve stabilization according to the same principle: they are fixed at either side of the fracture line and bridge the fracture gap, stabilizing the broken bone and taking over the load.

Intramedullary nailing has become the standard of care for fractures of the long bones of the lower limbs according to various published studies describing their clinical outcomes [8-9]. The Zimmer Natural Nail System (ZNN) is a family of intramedullary (IM) nails, screws, instruments and other associated implants that are designed to provide stable internal fixation of fractured long bones. The nails have been designed for specific applications to help restore the shape of the fractured bone to its natural, pre-injured state.

The ZNN System consists of Antegrade Femoral Nails and Retrograde Femoral Nails among others. The Zimmer Natural Nail Antegrade Femoral Nails are CE marked since 2009, whereas the Zimmer Natural Nail Retrograde Femoral Nails are CE-marked since 2010. The Antegrade and Retrograde Femoral Nails are indicated for temporary stabilization and fixation of femoral fractures and osteotomies.

Protocol ZNN: Antegrade and Retrograde, date: 16-Feb-2023 Version 1.0 Page 7 of 31

The objective of this retrospective PMCF study is to collect data confirming safety, performance and clinical benefits of the Zimmer Natural Nail Antegrade and Retrograde Femoral Nail (implants and instrumentation) when used for temporary stabilization and fixation of femoral fractures and/or osteotomies.

#### 4 Description of the Device

The ZNN System consists of nails, bone screws, nail caps, cortical nuts and washers. Fixation and stabilization of fractures occurs through implantation of the nail into the intramedullary canal of the long bone and securing the nail with a series of screws that pass through the nail holes or a slot. The holes are utilized for static locking of the screws, creating a construct that does not allow further compression of a fracture. The slots are utilized for dynamic locking or dynamization, allowing axial compression of the bone fracture in cases where compression is beneficial. Nail caps are available to protect the nail threads from bony ingrowth and extend the nail length if necessary. A Cortical Washer is available for use with the Retrograde Femoral Nails to help to secure the bone screw.

The Antegrade Femoral Nails are designed to help treat various fractures of the femur. Different nails are available to be placed through the tip of the Greater Trochanter or through the Piriformis Fossa. Due to the anatomy and nail geometry, separate nails are available for the right and left femur for the Greater Trochanter nail (Figure 1a). Piriformis Fossa nails are universal with one nail usable in either the right or left femur (Figure 1b). Screws are placed through the nail to secure the implant in place and maintain length and alignment while healing occurs. The nails have multiple screw holes in the proximal body to allow surgeons to address different fracture types. Proximal and distal slots allow for compression or dynamization across a fracture, except for the 8.3mm Greater Trochanter nails which do not have dynamization slots.

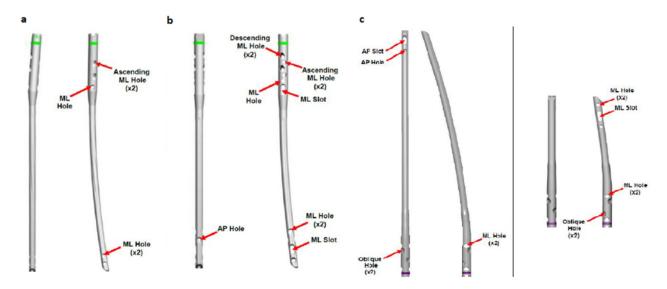
The Retrograde Femur nail is designed to help treat various fractures of the femur (Figure 1c). Screws are placed through the nail to secure the implant in place and maintain length and alignment while healing occurs. The nail has multiple screw holes in the distal body to allow surgeons to address different fracture types. The proximal slot allows for compression or dynamization across a fracture. Several lengths and diameters are available

Protocol ZNN: Antegrade and Retrograde, date: 16-Feb-2023 Version 1.0 Page 8 of 31

to match the individual anatomy of the patient. The cortical nut and washer may be used with a 6.0mm diameter screw placed through the most distal screw hole of either the short or the long Retrograde Femoral Nail. The cortical nut and washer help to secure the screw in order to minimize the potential for screw head pull through (washer) or screw pullout (nut) in poor quality bone.

Bone screws are the mode of fixation for all Zimmer Natural Nail System nails. The screws are available in a variety of diameters and lengths. The screws are available in fixed angle (fully threaded) and partially threaded versions. Using the fixed angle option allows the surgeon to make use of the locking tab feature in the nail. Using the partially threaded version allows the surgeon to implement a traditional non-locked technique.

The Nail caps may be used with all Zimmer Natural Nail System nails. The nail caps are designed to mate with the distal end of the nails to protect the nail threads and prevent bony ingrowth into the nail thread. Each nail cap is available in a variety of heights to extend the nail length as necessary. The tibial nail cap is beveled to minimize soft tissue irritation. Nails, screws, nail caps, cortical washers and cortical nuts are made from Tivanium® alloy (Ti-6A-4V). The cortical nuts also contain ultra-high molecular-weight polyethylene (UHMWPE).



**Figure 1.** Antegrade Greater Trochanter Nail (a), Antegrade Piriformis Fossa Nail (b) and long and short Retrograde Femoral Nails (c)

Protocol ZNN: Antegrade and Retrograde, date: 16-Feb-2023 Version 1.0 Page 9 of 31

4.1 Product Scope

For simplicity purposes only the nails are listed in appendix I-Product Scope. However, the

study aims to collect data on all implants (incl. ancillary components) and instruments of

the Antegrade and Retrograde Femoral Nails belonging to the Zimmer Natural Nail System.

5 Study Objectives

The objective of this retrospective post-market clinical follow-up (PMCF) study is to collect

data confirming safety, performance and clinical benefits of the Zimmer Natural Nail

Antegrade and Retrograde Femoral Nail (implants and instrumentation) when used for

temporary stabilization and fixation of femoral fractures and/or osteotomies.

The primary objective is the assessment of performance by analyzing fracture/osteotomy

healing.

The secondary objective is the assessment of safety by recording and analyzing the

incidence and frequency of complications and adverse events. Relation of the events to

implant, instrumentation and/or procedure should be specified. Subjects' outcomes

(clinical benefits) will also be assessed.

6 Study Design

6.1 General

This is a retrospective and consecutive series post-market clinical study. Consecutive series

of patients treated between 2016 and 2022 at the William Harvey Hospital - East Kent

Hospitals University NHS Foundation Trust will be identified and invited to participate in

the study.

6.2 Study Duration

The study duration is expected to be 12 months overall, which corresponds to time

dedicated to:

Ethics Committee approval

- Subject identification, consent and enrollment into the study

- Collection of baseline information available in medical notes from the pre-operative

condition to the last follow-up visit

- Conduct follow-up phone call

- Conduct data collection, analysis and write final report

The study will be completed once the data for all enrolled cases are collected, have been

cleaned, a final report has been provided with all data included and accepted by Zimmer

Biomet.

7 Study Population

Consecutive series of subjects implanted with the Antegrade or the Retrograde Femoral

Nail belonging to the Zimmer Natural Nail System according to the indications for use.

Inclusion/exclusion criteria are based on the indications and contraindications listed in the

Instructions for Use (IFU).

7.1 Inclusion Criteria

Patients having received the Antegrade Femoral Nail for temporary stabilization and fixa-

tion of femoral fractures and osteotomies, and patients having received the Retrograde

Femoral Nail for temporary stabilization and fixation of femoral fractures.

7.2 Exclusion Criteria

The exclusion criteria of the Antegrade and Retrograde Femoral Zimmer Natural Nail are

the following:

• Off-label use

Infection

• A medullary canal obliterated by a previous fracture or tumor.

Bone shaft having excessive bow or deformity.

Lack of bone substance or bone quality, which makes stable seating of the implant

impossible.

 All concomitant diseases that can impair the functioning and the success of the implant.

Insufficient blood circulation.

• Skeletally immature patients.

7.3 Number of Subjects

The goal is to collect data on a maximum of 94 consecutive cases treated with either an Antegrade or a Retrograde Femoral Zimmer Natural Nail. If possible, the data for the following cases should be acquired:

42 consecutive cases treated with the Antegrade Femoral Nail

52 consecutive cases treated with the Retrograde Femoral Nail

8 Regulatory Requirements

The PMCF is compliant with the below:

EN ISO 14155: 2020 - Clinical investigation of medical devices for human subjects - Good clinical practice [1].

• The Declaration of Helsinki (DoH) - Ethical principles for medical research involving human subjects [2].

• European Regulation (EU) 2017/745 [3].

 MDCG 2020-10/1 Safety reporting in clinical investigations for medical devices under the Regulation (EU) 2017/74 [4].

8.1 Ethics Committee

Ethics Committee approval will be obtained prior to conducting this study.

8.2 Patients Privacy and Consent

All patient related data will be kept encoded.

Protocol ZNN: Antegrade and Retrograde, date: 16-Feb-2023 Version 1.0 Page 12 of 31

Consecutively, subjects will be identified according to the receipt of a Femoral Antegrade or Retrograde Zimmer Natural Nail and their date of operation. Medical records will be reviewed before sending the first contact letter out to ensure that mails will not be sent to deceased individuals. The identified alive patients will receive a letter to explore their interest and provide them additional information on the study.. In more detail, the study documentation will be sent to the patient by mail, as described above, and includes: the Patient Information Sheet, Consent Form, together with, the General Data Protection Regulation (GDPR) form as well as the Patient Reported Outcome Measures (PROM) and the Visual Analog Scale (VAS). Once ample time (3-4 weeks) has been given for the patient to review all documents, the Investigator will conduct a phone call, during which the patient will be able to ask any questions regarding the study participation. The investigator will do a maximum of 3 efforts to reach the patients by phone. Once all questions could be answered, the patient will decide on their study participation. If the patient would like to participate, they will consent orally. Only after this oral consent, which is mandatory for study participation, the patient is considered enrolled. The Investigator will then instruct the patient to complete the provided PROMs, will ask questions regarding complications and a question to assess fracture/osteotomy clinically since their last consultation visit.

#### 9 Study Outcome Measures/Endpoints

The outcome measures will be collected from the hospital charts and through a follow-up phone call.

#### **Primary Outcome Measures:**

The primary objective is the assessment of performance by analyzing fracture/ osteotomy healing.

#### **Secondary Outcome Measures:**

- Product safety assessed by recording and analysing the incidence and frequency of complications and adverse events. Relation of the events to implant, instrumentation and/or procedure should be specified.
- Performance and clinical benefits demonstrated by PROMs.

Protocol **ZNN:** Antegrade and Retrograde, date: 16-Feb-2023 Version 1.0 Page **13** of **31** 

#### 10 Data Collection and Management

#### 10.1 Monitoring/ Quality Assurance of Data

The Investigator is responsible for monitoring the study and for the verification and validation of the clinical data collected herein. In detail, the Investigator should ensure the accuracy, completeness, legibility and timeliness of all documented data for each individual case in the database and in all required reports.

#### 10.2 Methods

Data will be recorded in a standardized way electronically and/or on paper.

In case a subject has several fractures/osteotomies treated by one of the study devices, a dataset for each fracture or osteotomy will be recorded and counted as one case.

The following information will be collected and documented if available for each case:

- Preoperative:
  - o Demographics:
    - Age at operation
    - Gender
    - Weight
    - Height
    - Concomitant diseases
    - Medical History
  - o Diagnosis
    - Reason for fracture/ osteotomy
    - Fracture and osteotomy classifications

#### If fracture:

- Open or closed fracture
- Existence of additional injuries (i.e. polytrauma, medical history including previous operations/implants)
- Operative/Immediate post-OP:
  - o OP-Date
  - OP-Duration (skin-to-skin, min)

- o Product/instrument specifications (product description, reference number)
- Length of hospital stay
- Intra-operative and immediate post-OP adverse events and complications and date of occurrence (relation to implant, instrumentation and/or procedure should be specified)

#### - Last Consultation Visit:

- o Follow-up dates
- o Fracture/osteotomy healing (union/ non-union) evaluated by x-rays
- Adverse events and complications and date of occurrence (relation to implant, instrumentation and/or procedure should be specified)
- Revisions/implant removal date of revision and reason (relation to implant, instrumentation and/or procedure should be specified)
- Follow-up Phone Call (min. 1-year post-OP):
  - Follow-up phone call date
  - Fracture/osteotomy healing evaluated clinically by full weight bearing with no pain
  - Pain and functional performance as reported by PROMs. The Oxford Hip OHS, OKS and the VAS will be collected.
  - Adverse events and complications and date of occurrence (relation to implant, instrumentation and/or procedure should be specified)
  - Revisions/implant removal date of revision and reason (relation to implant, instrumentation and/or procedure should be specified)

**Note:** X-rays (pre- and post-OP) do not have to be provided to Zimmer Biomet but must be stored at the hospital and be available for consultation if required.

#### 10.3 Reporting of Data

Encoded data will be collected in a database and submitted to Zimmer Biomet. Zimmer Biomet will have the right to inquire about discrepancies identified in these reports and will contact the site for additional information, clarification and correction if needed. In case

Protocol **ZNN: Antegrade and Retrograde**, date: 16-Feb-2023 Version 1.0 Page **15** of **31** 

Zimmer Biomet needs additional information after study termination, the site will provide Zimmer Biomet this data without additional cost.

#### 11 Medical Events/Adverse Events/Complications

#### 11.1 Definitions

As defined by EN ISO 14155:2020 [1].

#### Adverse Event (AE)

Untoward medical occurrence, unintended disease or injury, or untoward clinical signs (including abnormal laboratory findings) in subjects, users or other persons, whether or not related to the investigational medical device and whether anticipated or unanticipated

Note 1 to entry: This definition includes events related to the investigational medical device or the comparator.

Note 2 to entry: This definition includes events related to the procedures involved.

**Note 3 to entry**: For users or other persons, this definition is restricted to events related to the use of investigational medical devices or comparators.

#### Serious Adverse Event (SAE)

Adverse event is defined as an adverse event that led to any of the following a) death,

- b) serious deterioration in the health of the subject, users, or other persons as defined by one or more of the following:
  - 1) a life-threatening illness or injury, or
  - 2) a permanent impairment of a body structure or a body function including chronic diseases, or
  - 3) in-patient or prolonged hospitalization, or
  - 4) medical or surgical intervention to prevent life-threatening illness or injury, or permanent impairment to a body structure or a body function,
- c) foetal distress, foetal death, a congenital abnormality, or birth defect including physical or mental impairment

Protocol **ZNN: Antegrade and Retrograde**, date: 16-Feb-2023 Version 1.0 Page **16** of **31** 

**Note 1 to entry**: Planned hospitalization for a pre-existing condition, or a procedure required by the CIP, without serious deterioration in health, is not considered a serious adverse event.

#### **Adverse Device Effect (ADE)**

Adverse event related to the use of an investigational medical device

**Note 1 to entry**: This definition includes adverse events resulting from insufficient or inadequate instructions for use, deployment, implantation, installation, or operation, or any malfunction of the investigational medical device.

**Note 2 to entry**: This definition includes any event resulting from use error or from intentional misuse of the investigational medical device.

**Note 3 to entry**: This includes 'comparator' if the comparator is a medical device.

#### Serious Adverse Device Effect (SADE)

Adverse device effect that has resulted in any of the consequences characteristic of a serious adverse event.

#### **Device Deficiency (DD)**

Inadequacy of a medical device with respect to its identity, quality, durability, reliability, usability, safety or performance

**Note 1 to entry**: Device deficiencies include malfunctions, use errors, and inadequacy in the information supplied by the manufacturer including labelling.

**Note 2 to entry**: This definition includes device deficiencies related to the investigational medical device or the comparator.

# 11.2 Reporting of Medical Events/Adverse Events and Adverse Device Effects

All adverse events which occur during the study period shall be documented, reported as required and will identify the following:

- Description of symptoms
- Date of onset
- Type of Event

Protocol ZNN: Antegrade and Retrograde, date: 16-Feb-2023 Version 1.0 Page 17 of 31

- Severity of symptoms: mild, moderate, severe

- Relation to device, instrumentation and/or procedure: not related, possible

(uncertain), probable, causal relationship (definitely related)

- Treatment (incl. reoperation of affected joint, study device removal and other

surgery)

- Outcome of adverse event: resolved, resolved with sequelae, resolving\*, not

resolved\*, fatal\*, unknown\*

Additional comments

\*Per Regulation (EU) 2017/745, all serious adverse events will be classified according to

event status outlined in MDCG 2020-10/1 when used to support MDR reporting require-

ments. These event statuses include Resolved, Resolved with Sequelae, Death, and On-go-

ing. In order to comply with this reporting requirement, all serious adverse events or Device

Deficiency (DD) with outcomes classified as 'Resolving', 'Not Resolved', or 'Unknown', will

be reclassified as 'On-going' and all serious adverse events classified as 'Fatal' will be re-

classified as 'Death'.

In the study, it is also important to document all device deficiencies that could have led to

a medical occurrence but did not lead to an adverse event.

12 Statistical Considerations/ Evaluation

12.1 Sample Size Calculation

The overall success rate will be calculated based on the percentage of subjects who have

successful bone union. The following hypothesis will be tested by exact binomial test

H0:  $E1 - E0 \le - \delta E$ 

Ha: E1 – E0 > -  $\delta$ E

Where:

E0 = 90%, the expected success rate of similar devices to the Antegrade and the Retrograde

Zimmer Natural Nail [8]

E1 = the success rate in the Antegrade and Retrograde Zimmer Natural Nail treatment

group

In addition, one-sided 95% exact confidence Interval (CI), lower limit of the success rate, will be calculated.

Based on the hypothesis test above, 83 subjects per variant will provide approximately 80% power for the one-sided exact binomial test at 0.05 significant level. The sample size was calculated using SAS for Windows version 9.4.

In this study 42 consecutive cases treated with the Antegrade Femoral Nail and 52 consecutive cases treated with the Retrograde Femoral Nail will be collected. These cases will be combined with the Antegrade and Retrograde Femoral Zimmer Natural Nail cases collected as part of other PMCF studies (MDRG2017-89MS-120T, MDRG2017-89MS-25T, MDRG2017-89MS-125T).

#### 12.2 General Statistical Methods

Data collected in the study will be summarized descriptively. Descriptive summaries will be the basis of study reports to participants, as well as to generate an overall summary of the radiological evaluation of the Antegrade and Retrograde Femoral Zimmer Natural Nail.

Continuous data (e.g. age) will be summarized through means, medians, standard deviation, minimum, maximum and 95% confidence intervals (CIs) over time periods of interest. Categorical data (e.g. gender) will be summarized using counts, percentages and 95% confidence limits over time periods of interest. Summaries of fracture/osteotomy healing rates, implant related revision rates and complication data will be presented as frequencies and percentages. Subgroup summaries will be generated as needed either by strata within the study population (e.g. male vs. female) or by different cut-points (e.g. body mass index (BMI) ranges). Patient confidentiality will be protected at all times, and patient identifiers will not be included in data summaries.

#### 13 References

 EN ISO 14155:2020 Clinical Investigation of Medical Devices for Human Subjects -Good clinical practice (EN ISO 14155:2020)

Protocol ZNN: Antegrade and Retrograde, date: 16-Feb-2023 Version 1.0 Page 19 of 31

- 2. WIN\_7\_EX\_WMA Declaration of Helsinki Ethical Principles for Medical Research Involving Human subjects Revision: 2008 31 May-2017
- 3. Regulation (EU) 2017/745 Of The European Parliament and of The Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC
- 4. MDCG 2020-10/1 Safety reporting in clinical investigations for medical devices under the Regulation (EU) 2017/74
- 5. Nayagam, S., Principles of fractures, in Apley's System of Orthopaedics and Fractures, L. Solomon, D. Warwick, and S. Nagayam, Editors. 2010, Hodder Arnold: London. p. 695
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- 8. Anglen, J.O. and J.N. Weinstein, Nail or plate fixation of intertrochanteric hip fractures: changing pattern of practice: a review of the american board of orthopaedic surgery database. The Journal of Bone & Joint Surgery, 2008. 90(4): p. 700-707
- 9. Vallier, H.A., T.T. Le, and A. Bedi, Radiographic and clinical comparisons of distal tibia shaft fractures (4 to 11 cm proximal to the plafond): plating versus intramedullary nailing. Journal of Orthopaedic Trauma, 2008. 22(5): p. 307-311
- 10. PMSP\_TMZW\_TF410b\_5

#### 14 Appendix I-Product Scope

#### Antegrade Femoral Nail-Greater Trochanter Femoral Nail

Product Description, Left	Reference Number	P
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 8.3mm Diameter, 26cm Length	47-2492-261-08	Zi G N D
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 8.3mm Diameter, 28cm Length	47-2492-281-08	Zi G N D

Product Description, Right	Reference
	Number
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 8.3mm Diameter, 26cm Length	47-2492-260-08
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 8.3mm Diameter, 28cm Length	47-2492-280-08

Protocol ZNN: Antegrade and Retrograde, date: 16-Feb-2023 Version 1.0 Page 20 of 31

	1		
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 8.3mm Diameter, 30cm Length	47-2492-301-08	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 8.3mm Diameter, 30cm Length	47-2492-300-08
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 8.3mm Diameter, 32cm Length	47-2492-321-08	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 8.3mm Diameter, 32cm Length	47-2492-320-08
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 8.3mm Diameter, 34cm Length	47-2492-341-08	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 8.3m Diameter, 34cm Length	47-2492-340-08
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 8.3mm Diameter, 36cm Length	47-2492-361-08	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 8.3mm Diameter, 36cm Length	47-2492-360-08
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 8.3mm Diameter, 38cm Length	47-2492-381-08	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 8.3mm Diameter, 38cm Length	47-2492-380-08
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 8.3mm Diameter, 40cm Length	47-2492-401-08	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 8.3mm Diameter, 40cm Length	47-2492-400-08
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 26cm Length	47-2492-261-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 26cm Length	47-2492-260-09
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 28cm Length	47-2492-281-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 28cm Length	47-2492-280-09
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 30cm Length	47-2492-301-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 30cm Length	47-2492-300-09
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 32cm Length	47-2492-321-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 32cmLength	47-2492-320-09
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 34cm Length	47-2492-341-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 34cm Length	47-2492-340-09
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 36cm Length	47-2492-361-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 36cm Length	47-2492-360-09
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 38cm Length	47-2492-381-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 38cm Length	47-2492-380-09
Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-401-09	Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-400-09

Nail-Green, Left, 9.3mm Diameter, 40cm Length		Nail-Green, Right, 9.3mm Diameter, 40cm Length	
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 42cm Length	47-2492-421-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 42cm Length	47-2492-420-09
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 44cm Length	47-2492-441-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 44cm Length	47-2492-440-09
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 9.3mm Diameter, 46cm Length	47-2492-461-09	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 9.3mm Diameter, 46cm Length	47-2492-460-09
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 26cm Length	47-2492-261-10	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 10mm Diameter, 26m Length	47-2492-260-10
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 28cm Length	47-2492-281-10	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 10mm Diameter, 28cm Length	47-2492-280-10
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 30cm Length	47-2492-301-10	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 10mm Diameter, 30cm Length	47-2492-300-10
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 32cm Length	47-2492-321-10	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 10mm Diameter, 32cm Length	47-2492-320-10
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 34cm Length	47-2492-341-10	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 10mm Diameter, 34cm Length	47-2492-340-10
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 36cm Length	47-2492-361-10	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 10mm Diameter, 36cm Length	47-2492-360-10
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 38cm Length	47-2492-381-10	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 10mm Diameter, 38cm Length	47-2492-380-10
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 40cm Length	47-2492-401-10	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 10mm Diameter, 40cm Length	47-2492-400-10
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 42cm Length	47-2492-421-10	Zimmer Natural Nail System Greater Trochanter, Femoral Nail-Green, Right, 10mm Diameter, 42m Length	47-2492-420-10
Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-441-10	Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-440-10

Nail-Green, Left, 10mm Diameter, 44cm Length		Nail-Green, Right, 10mm Diameter, 44cm Length	
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 10mm Diameter, 46cm Length	47-2492-461-10	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 10mm Diameter, 46cm Length	47-2492-460-10
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 26cm Length	47-2492-261-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 26cm Length	47-2492-260-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 28cm Length	47-2492-281-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 28cm Length	47-2492-280-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 30cm Length	47-2492-301-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 30cm Length	47-2492-300-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 32cm Length	47-2492-321-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 32cm Length	47-2492-320-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 34cm Length	47-2492-341-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 34cm Length	47-2492-340-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 36cm Length	47-2492-361-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 36cm Length	47-2492-360-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 38cm Length	47-2492-381-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 38cm Length	47-2492-380-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 40cm Length	47-2492-401-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 40cm Length	47-2492-400-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 42cm Length	47-2492-421-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 42cm Length	47-2492-420-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 44cm Length	47-2492-441-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 44cm Length	47-2492-440-11
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 11mm Diameter, 46cm Length	47-2492-461-11	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 11mm Diameter, 46cm Length	47-2492-460-11
Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-261-12	Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-260-12

Nail-Green, Left, 12mm Diameter, 26cm Length		Nail-Green, Right, 12mm Diameter, 26cm Length	
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 28cm Length	47-2492-281-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 28cm Length	47-2492-280-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 30cm Length	47-2492-301-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 30cm Length	47-2492-300-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 32cm Length	47-2492-321-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 32cm Length	47-2492-320-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 34cm Length	47-2492-341-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 34cm Length	47-2492-340-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 36cm Length	47-2492-361-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 36cm Length	47-2492-360-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 38cm Length	47-2492-381-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 38cm Length	47-2492-380-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 40cm Length	47-2492-401-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 40cm Length	47-2492-400-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 42cm Length	47-2492-421-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 42cm Length	47-2492-420-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 44cm Length	47-2492-441-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 44cm Length	47-2492-440-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 12mm Diameter, 46cm Length	47-2492-461-12	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 12mm Diameter, 46cm Length	47-2492-460-12
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 26cm Length	47-2492-261-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 26cm Length	47-2492-260-13
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 28cm Length	47-2492-281-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 28cm Length	47-2492-280-13
Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-301-13	Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-300-13

Nail-Green, Left, 13mm Diameter, 30cm Length		Nail -Green, Right, 13mm Diameter, 30cm Length	
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 32cm Length	47-2492-321-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 32cm Length	47-2492-320-13
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 34cm Length	47-2492-341-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 34cm Length	47-2492-340-13
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 36cm Length	47-2492-361-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 36cm Length	47-2492-360-13
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 38cm Length	47-2492-381-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 38cm Length	47-2492-380-13
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 40cm Length	47-2492-401-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 40cm Length	47-2492-400-13
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 42cm Length	47-2492-421-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 42cm Length	47-2492-420-13
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 44cm Length	47-2492-441-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 44cm Length	47-2492-440-13
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 13mm Diameter, 46cm Length	47-2492-461-13	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 13mm Diameter, 46cm Length	47-2492-460-13
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 26cm Length	47-2492-261-14	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 26cm Length	47-2492-260-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 28cm Length	47-2492-281-14	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 28cm Length	47-2492-280-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 30cm Length	47-2492-301-14	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 30cm Length	47-2492-300-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 32cm Length	47-2492-321-14	Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 32cm Length	47-2492-320-14
Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-341-14	Zimmer Natural Nail System Greater Trochanter Femoral	47-2492-340-14

Nail-Green, Left, 14mm Diameter, 34cm Length	
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 36cm Length	47-2492-361-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 38cm Length	47-2492-381-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 40cm Length	47-2492-401-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 42cm Length	47-2492-421-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 44cm Length	47-2492-441-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Left, 14mm Diameter, 46cm Length	47-2492-461-14

Nail-Green, Right, 14mm Diameter, 34cm Length	
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 36cm Length	47-2492-360-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 38cm Length	47-2492-380-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 40cm Length	47-2492-400-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 42cm Length	47-2492-420-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 44cm Length	47-2492-440-14
Zimmer Natural Nail System Greater Trochanter Femoral Nail-Green, Right, 14mm Diameter, 46cm Length	47-2492-460-14

## Antegrade Femoral Nail-Piriformis Fossa Femoral Nail

Product Description	Reference	Product Description	Reference
	Number		Number
Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 9.3mm Diameter, 30cm Length	47-2491-300-09	Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 12mm Diameter, 30cm Length	47-2491-300-12
Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 9.3mm Diameter, 32cm Length	47-2491-320-09	Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 12mm Diameter, 32cm Length	47-2491-320-12
Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 9.3m Diameter, 34cm Length	47-2491-340-09	Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 12mm Diameter, 34cm Length	47-2491-340-12
Zimmer Natural Nail System Piriformis Fossa Femoral	47-2491-360-09	Zimmer Natural Nail System Piriformis Fossa Femoral	47-2491-360-12

Protocol **ZNN: Antegrade and Retrograde**, date: 16-Feb-2023 Version 1.0 Page **26** of **31** 

Nail-Green, 9.3mm		Nail-Green, 12mm Diameter,	
Diameter, 36cm Length		36cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral	47-2491-380-09	Piriformis Fossa Femoral	47-2491-380-12
Nail-Green, 9.3mm		Nail-Green, 12mm Diameter,	
Diameter, 38cm Length		38cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral		Piriformis Fossa Femoral	
Nail-Green, 9.3mm	47-2491-400-09	Nail-Green, 12mm Diameter,	47-2491-400-12
Diameter, 40cm Length		40cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral	47-2491-420-09	Piriformis Fossa Femoral	47-2491-420-12
Nail-Green, 9.3mm		Nail-Green, 12mm Diameter,	
Diameter, 42cm Length		42cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral	47 2404 440 00	Piriformis Fossa Femoral nail-	47 2404 440 42
Nail-Green, 9.3mm	47-2491-440-09	Green, 12mm Diameter,	47-2491-440-12
Diameter, 44cm Length		44cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral		Piriformis Fossa Femoral	
	47-2491-460-09		47-2491-460-12
		Nail-Green, 12mm Diameter,	
Diameter, 46cm Length		46cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral	47-2491-300-10	Piriformis Fossa Femoral	47-2491-300-13
Nail-Green, 10mm Diameter,	47 2431 300 10	Nail-Green, 13mm Diameter,	47 2431 300 13
30cm Length		30cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral		Piriformis Fossa Femoral	
Nail-Green, 10mm Diameter,	47-2491-320-10	Nail-Green, 13mm Diameter,	47-2491-320-13
32cm Length		32cm Length	
		_	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral	47-2491-340-10	Piriformis Fossa Femoral	47-2491-340-13
Nail-Green, 10mm Diameter,		Nail-Green, 13mm Diameter,	
34cm Length		34cm Length	
Zimmer Natural Nail System	47 2404 262 42	Zimmer Natural Nail System	47 2404 252 45
Piriformis Fossa Femoral	47-2491-360-10	Piriformis Fossa Femoral	47-2491-360-13
		-	

Nail-Green, 10mm Diameter,		Nail-Green, 13mm Diameter,	
36cm Length		36cm Length	
		-	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral	47-2491-380-10	Piriformis Fossa Femoral	47-2491-380-13
Nail-Green, 10mm Diameter,		Nail-Green, 13mm Diameter,	
38cm Length		38cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral		Piriformis Fossa Femoral	47.0404.400.40
Nail-Green, 10mm Diameter,	47-2491-400-10	Nail-Green, 13mm Diameter,	47-2491-400-13
40cm Length		40cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral		Piriformis Fossa Femoral	
	47-2491-420-10		47-2491-420-13
Nail-Green, 10mm Diameter,		Nail-Green, 13mm Diameter,	
42cm Length		42cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral	47-2491-440-10	Piriformis Fossa Femoral	47-2491-440-13
Nail-Green, 10mm Diameter,	47-2431-440-10	Nail-Green, 13mm Diameter,	47-2431-440-13
44cm Length		44cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral		Piriformis Fossa Femoral	
Nail-Green, 10mm Diameter,	47-2491-460-10	Nail-Green, 13mm Diameter,	47-2491-460-13
46cm Length		46cm Length	
		-	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral	47-2491-300-11	Piriformis Fossa Femoral	47-2491-300-14
Nail-Green, 11mm Diameter,		Nail-Green, 14mm Diameter,	
30cm Length		30cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral	47 2401 220 44	Piriformis Fossa Femoral	47 2401 220 44
Nail-Green, 11mm Diameter,	47-2491-320-11	Nail-Green, 14mm Diameter,	47-2491-320-14
32cm Length		32cm Length	
Zimmer Natural Nail System		Zimmer Natural Nail System	
Piriformis Fossa Femoral		Piriformis Fossa Femoral	
Nail-Green, 11mm Diameter,	47-2491-340-11	Nail-Green, 14mm Diameter,	47-2491-340-14
34cm Length		34cm Length	
		-	
Zimmer Natural Nail System	47-2491-360-11	Zimmer Natural Nail System	47-2491-360-14
Piriformis Fossa Femoral		Piriformis Fossa Femoral	

Nail-Green, 11mm Diameter,		Nail-Green, 14mm Diameter,	
36cm Length		36cm Length	
Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 11mm Diameter,	47-2491-380-11	Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 14mm Diameter,	47-2491-380-14
38cm Length		38cm Length	
Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 11mm Diameter, 40cm Length	47-2491-400-11	Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 14mm Diameter, 40cm Length	47-2491-400-14
Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 11mm Diameter, 42cm Length	47-2491-420-11	Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 14mm Diameter, 42cm Length	47-2491-420-14
Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 11mm Diameter, 44cm Length	47-2491-440-11	Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 14mm Diameter, 44cm Length	47-2491-440-14
Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 11mm Diameter, 46cm Length	47-2491-460-11	Zimmer Natural Nail System Piriformis Fossa Femoral Nail-Green, 14mm Diameter, 46cm Length	47-2491-460-14

#### Retrograde Femoral Nail

Product Description	Reference Number
Zimmer Natural Nail System Retrograde Femoral Nail - short- purple 10 mm diameter 16 cm length	47-2494-160-10
Zimmer Natural Nail System Retrograde Femoral Nail - short - purple 11.5 mm diameter 16 cm length	47-2494-160-11
Zimmer Natural Nail System Retrograde Femoral Nail - short - purple 13 mm diameter 16 cm length	47-2494-160-13
Zimmer Natural Nail System Retrograde Femoral Nail -	47-2494-200-10

Product Description	Reference Number
Zimmer Natural Nail System Retrograde Femoral Nail - long- purple 10 mm diameter 34 cm length	47-2494-340-10
Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 11.5 mm diameter 34 cm length	47-2494-340-11
Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 13 mm diameter 34 cm length	47-2494-340-13
Zimmer Natural Nail System Retrograde Femoral Nail -	47-2494-360-10

short- purple 10 mm diameter 20 cm length		long- purple 10 mm diameter 36 cm length	
Zimmer Natural Nail System Retrograde Femoral Nail - short - purple 11.5 mm diameter 18 cm length	47-2494-200-11	Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 11.5 mm diameter 36 cm length	47-2494-360-11
Zimmer Natural Nail System Retrograde Femoral Nail - short - purple 13 mm diameter 20 cm length	47-2494-200-13	Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 13 mm diameter 36 cm length	47-2494-360-13
Zimmer Natural Nail System Retrograde Femoral Nail - short- purple 10 mm diameter 24 cm length	47-2494-240-10	Zimmer Natural Nail System Retrograde Femoral Nail - long- purple 10 mm diameter 38 cm length	47-2494-380-10
Zimmer Natural Nail System Retrograde Femoral Nail - short - purple 11.5 mm diameter 20 cm length	47-2494-240-11	Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 11.5 mm diameter 38 cm length	47-2494-380-11
Zimmer Natural Nail System Retrograde Femoral Nail - short - purple 13 mm diameter 24 cm length	47-2494-240-13	Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 13 mm diameter 38 cm length	47-2494-380-13
Zimmer Natural Nail System Retrograde Femoral Nail - long- purple 10 mm diameter 28 cm length	47-2494-280-10	Zimmer Natural Nail System Retrograde Femoral Nail - long- purple 10 mm diameter 40 cm length	47-2494-400-10
Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 11.5 mm diameter 24 cm length	47-2494-280-11	Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 11.5 mm diameter 40 cm length	47-2494-400-11
Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 13 mm diameter 28 cm length	47-2494-280-13	Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 13 mm diameter 40 cm length	47-2494-400-13
Zimmer Natural Nail System Retrograde Femoral Nail - long- purple 10 mm diameter 30 cm length	47-2494-300-10	Zimmer Natural Nail System Retrograde Femoral Nail - long- purple 10 mm diameter 42 cm length	47-2494-420-10
Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 11.5 mm diameter 28 cm length	47-2494-300-11	Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 11.5 mm diameter 42 cm length	47-2494-420-11
Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 13 mm diameter 30 cm length	47-2494-300-13	Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 13 mm diameter 42 cm length	47-2494-420-13
Zimmer Natural Nail System Retrograde Femoral Nail - long- purple 10 mm diameter 32 cm length	47-2494-320-10	Zimmer Natural Nail System Retrograde Femoral Nail - long- purple 10 mm diameter 44 cm length	47-2494-440-10
Zimmer Natural Nail System Retrograde Femoral Nail -	47-2494-320-11	Zimmer Natural Nail System Retrograde Femoral Nail -	47-2494-440-11

long - purple 11.5 mm diameter 32 cm length	
Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 13 mm diameter 32 cm length	47-2494-320-13

long - purple 11.5 mm diameter 44 cm length	
Zimmer Natural Nail System Retrograde Femoral Nail - long - purple 13 mm diameter 44 cm length	47-2494-440-13

Protocol **ZNN: Antegrade and Retrograde**, date: 16-Feb-2023 Version 1.0 Page **31** of **31**