

# Innovative, Comprehensive, Proven



# Paragon 28<sup>®</sup> — Flatfoot Solved Comprehensive and Innovative Portfolio of Solutions to Address Flatfoot



# Flexible Flatfoot Solutions — Medial Displacement Calcaneal Osteotomies



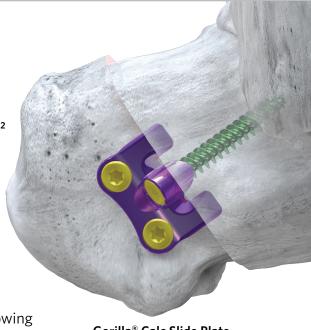
# Gorilla® Calc Slide Plate

#### **Medial Displacement Calcaneal Osteotomy**

- Plate size and shape optimized to prevent additional dissection and soft tissue disruption during plate insertion
  - Plate is inserted through same incision as osteotomy
    - No violation of posterior heel pad with an incision or screw
      - May result in fewer hardware removal cases than screw fixation<sup>1,2</sup>
- Interosseous plating provides a firm buttress to prevent displacement of the osteotomy and avoids the peroneal tendons
- Interosseous plates allow the surgeon to achieve patient specific correction — as opposed to traditional calc slide plates which are limited to the step off built within
- Five points of fixation (three screws and two fins) assist in stabilizing the construct
- Plate hood allows for compression of the posterior fragment with either a locking or non-locking screw and includes angulation allowing the surgeon to capture the sustentaculum tali
  - Hood height was minimized to 5 mm and is designed to limit soft tissue irritation in cases requiring minimal correction
  - Interosseous plating does not violate the growth plate of the calcaneus in pediatric patients
- Sharp arms ease insertion and provide rotational stability

# Monster® Hindfoot Screw System

- Designed specifically to meet the needs of the foot and ankle surgeon
  - 4.5, 5.5, and 7.0 mm diameters
    - 4.5 and 5.5 screws available in Short, Long, and Fully Threaded Options
    - 7.0 screws available in Short (16 mm), Medium (20 mm), Long (32 mm), and Fully Threaded Options
  - All screw families and instrumentation available within the Monster® Hindfoot Trav
  - Headed and Headless
  - For 7.0 mm screws
    - Available in 2 mm increments (36 50) to allow for optimal capture of subchondral bone in a calc slide procedure
- May be placed using the FLUOROBAND™ Guidewires
  - Patented technology helps select thread length based on location of FLUOROBAND™ with respect to the joint
    - First Groove: at 20 mm, directs medium thread length Second Groove: at 32 mm, directs long thread length
- Four different washer types including patented Slotted Bowl Washer
  - Patented Slotted Bowl Washer designed specifically to allow surgeon to place washer around screw without having to fully remove screw, preventing loss of purchase and saving intraoperative time



Gorilla® Calc Slide Plate



Monster® 7.0 Headless Screws



Monster® Washers

Slotted Bowl

Flat

# Flexible Flatfoot Solutions — Evans and Cotton Osteotomies



# PRESERVE™ Wedges



- Aseptically processed allograft harvested from the patella, talus, or femoral calcar
  - No gamma irradiation preserves graft strength<sup>3</sup>
  - No bleach preserves graft osteoinductivity<sup>4,5</sup>

#### PRESERVE™ Evans Wedge

- Patented procedure specific shape
  - Dorsal to plantar taper designed to relieve strain on the lateral band of the long plantar ligament
  - Lateral to medial taper designed to relieve strain on the periosteum and the spring ligament
- Available in 6, 8, 10, or 12 mm of built-in correction

#### PRESERVE™ Cotton Wedge

- Patented procedure specific shapes
  - Dorsal to plantar taper with a rounded medial edge to match the contour of the medial cuneiform
- Available in 5, 6, 7, or 8 mm of built-in correction





Dorsal to Plantar Taper

Lateral to Medial Taper

**PRESERVE™** Evans Wedge



Anatomic shape designed to match the medial cuneiform

**PRESERVE™ Cotton Wedge** 

## Titan 3-D™ Wedge





**Evans Small** 



- Anatomically shaped medical grade titanium alloy (Ti-6AI-4V)
- Open geometry with three-dimensional scaffold allows for blood entry, bone through growth and the incorporation of biologic products, if used
- PRECISION™ Guided screw across the osteotomy increases the stability of the construct
   3.5 or 4.0 mm Mini-Monster® Screws are used in conjunction with either implant
- Tapered nose helps to aid in implant insertion
- Smooth back surface and corners designed to minimize soft tissue irritation
- Spikes on both sides of implant designed to help prevent expulsion from osteotomy site and provide a bridge for biologic through growth
- Product specific inserters attach to the back of the implant and are designed to facilitate accurate implant insertion and placement
- Resection Guides are available to aid in implant removal and minimize over-resection

#### Titan 3-D™ Evans Wedge

- Small and Large Sizes available to accommodate differences in height
- 6, 8, 10, or 12 mm of built-in correction
- Patented procedure specific shape

#### Titan 3-D™ Cotton Wedge

- 5, 6, 7, 8 mm of built-in correction
- Patented procedure specific shape



Titan 3-D™ Cotton

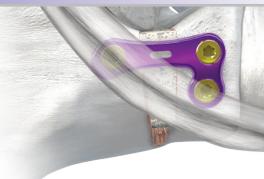


# Flexible Flatfoot Solutions — Evans and Cotton Osteotomies



### Gorilla® HEvans® Plate

- Designed specifically to be used in conjunction with patented shaped PRESERVE™ Evans Graft
- Low profile plate (1.1 mm) intended to minimize soft tissue irritation
  - Posterior ramp (0.5 mm) intended to minimize irritation to the peroneals
- Two points of fixation anteriorly designed to prevent subluxation of the graft
  - Intended to stabilize anterior calcaneal fragment and maintain correction during graft incorporation



Gorilla® HEvans® Plate with proximal ramped portion designed to limit irritation to the peroneals

#### Gorilla® BOW & ARROW® Plates

- Low profile plate (1.1 mm) with ramps intended to minimize soft tissue irritation
- Patented "ARROW" spacer hooks around proximal cortex designed to prevent expulsion of plate
  - "ARROW" spacer matches the patented geometry of the PRESERVE™ Evans Grafts
  - "ARROW" spacer is short, allowing the plates to be used in combination with the PRESERVE™ Evans grafts

#### **BOW & ARROW® Evans**

 Tapered dorsal to plantar and lateral to medial bow designed to ease insertion and offload medial and plantar soft tissue structures

- 6, 8, 10, or 12 mm of built in correction

Arrow on "BOW" hooks around proximal cortex and is designed to prevent dislocation

Gorilla® BOW & ARROW® Evans Plate

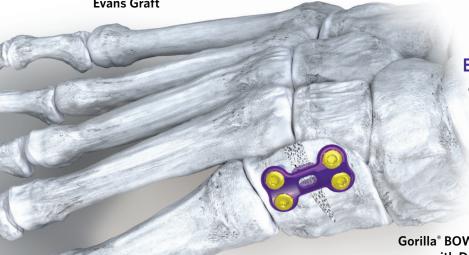


Osteotomy spacer matches geometry of PRESERVE™

Evans Graft



- Tapered plate back matches each available size of the patented PRESERVE™ Cotton wedge
  - 5, 6, 7, or 8 mm of built-in correction



Gorilla® BOW & ARROW® Cotton Plate used with Demineralized Bone Matrix



# Grappler<sup>™</sup> Interference Screw System

|              | Grappler™ Interference Screw System (20 Unique Implants) |         |         |         |         |         |         |  |  |  |
|--------------|--|---------|---------|---------|---------|---------|---------|--|--|--|
|              | Grappler <sup>™</sup> Interference Screw Diameter        |         |         |         |         |         |         |  |  |  |
| Screw Length | Ø4.0 mm  | Ø4.5 mm | Ø5.0 mm | Ø5.5 mm | Ø6.0 mm | Ø7.0 mm | Ø8.0 mm |  |  |  |
| 10 mm        |  |         |         |         |         |         |         |  |  |  |
| 15 mm        |  |         |         |         |         |         |         |  |  |  |
| 20 mm        |  | •       | •       | •       | •       | •       |         |  |  |  |
| 25 mm        |  |         | •       | •       | •       |         |         |  |  |  |
|              |  |         |         |         |         |         |         |  |  |  |

- Novel Trilobe Driver Engagement
  - Extension through the cannulation of the implant designed to facilitate accurate implant insertion
  - Maximizes torque transfer between driver and implant reducing the likelihood of strippage
  - Driver is electropolished and designed to minimize stick following implant insertion
- One to one sizing
  - The tendon size, drill and implant diameters are one to one no necessary calculations to be completed
- Instrumentation is offered to facilitate "Through and Through" as well as "Blind Tunnel" techniques
- Implant specific cannulated drills and tissue protectors
  - Designed for optimal fit and positioning of implant and tendon
- Drills offered in Ø0.5 mm increments to accommodate varying bone density and allow for a snug fit of implant and tendon

# **Hypermobile Flexible Flatfoot Solutions**

#### **Gorilla® NC Fusion — NC Fusion Plate**



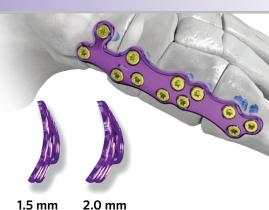
- Dedicated PRECISION<sup>™</sup> Guided System designed to allow for reproducible fixation across the entire NC joint complex
  - Allows for a crossing screw that passes from the medial cuneiform to the lateral aspect of the navicular
    - Accommodates a 3.5 mm, 4.0 mm, 4.5 mm or 5.5 mm Mini-Monster® or Monster® crossing screw
    - Plantar positioning of this screw in the medial cuneiform is designed to minimize plantar gapping ensuring balance in the construct
- The proximal dorsal locking pocket hole allows for fixation of the navicular to the intermediate cuneiform
- The plantar locking screw in the navicular aids in minimizing plantar gapping
- The distal screws in the medial cuneiform have the ability to be placed across the entire cuneiform construct
- Anatomically Contoured Plate
  - Dorsal to plantar curvature to match medial column
  - Anterior to posterior curvature to mitigate adductory forces distally
- Low profile 1.5 mm plate designed to avoid soft tissue irritation
- Built in alignment templating designed to ensure best fit of plate to the anatomy

# **Hypermobile Flexible Flatfoot Solutions**



# Gorilla® Medial Column Plates

- Comprehensive offering of plates to span select portions of or the entire medial column
  - 36 total plates in five different families
- Two thicknesses (1.5 and 2.0 mm thick)
- Most plates contoured to match standard anatomy of the midfoot
  - Rescue plates available to address malformed anatomy or revision procedures



| 1.5 mm | 2.0 mm |
|--------|--------|
| Thick  | Thick  |

Monster® 7.0 Screws and

PRESERVE™ STJDA Wedge

| F3CON PLATING SYSTEM | Arch Plate       | Distal Arch Plate | Extended Arch<br>Plate | Rescue Plate             | Proximal Arch<br>Plate |
|----------------------|------------------|-------------------|------------------------|--------------------------|------------------------|
| Hole Configurations  | 10 Hole; 12 Hole | 8 Hole; 10 Hole   | 15 Hole; 17 Hole       | 9 Hole; 11 Hole; 15 Hole | 7 Hole; 9 Hole         |
| Plate Thickness      | 1.5; 2.0 mm      | 2.0 mm            | 2.0 mm                 | 1.5, 2.0 mm              | 1.5 mm                 |
| <b>Total Plates</b>  | 12               | 6                 | 6                      | 6                        | 6                      |

# **Rigid Flatfoot Solutions**

### **Subtalar Joint Fusion**

#### Monster® 7.0 Screws

- Short thread (16 mm), Medium thread (20 mm), Long thread (32 mm), and fully threaded lengths
- Available in 2 mm increments (70 mm- 90 mm) to allow for optimal capture of bone across entire length of the talus

#### PRESERVE™ STJDA Wedge

- Patented round graft restores height and allows for a varus or valgus correction
- Trialing system allows for interoperative assessment of correction of height as well as the position of the graft

# Talonavicular (TN) and Calcaneocuboid (CC) Fusion

#### Gorilla® Universal Plating System

- Teddy Bear Plate
  - Stable arrow shape designed specifically to address TN fusion
  - Small, Medium, and Large
- Trapezoid Plate
  - Leverages strength of the trapezoid shape and is curved to match the contouring of the lateral wall
  - May be used to address CC or TN fusions
  - Four size options





Gorilla® Universal Trapezoid Plate



Gorilla® Universal Teddy Bear Plate



# Talar Navicular (TN) and Calcaneal Cuboid (CC) Fusion

#### Gorilla® Universal Plating System

- Dogbone Plate
  - Compression and locking options
  - Versatile applications throughout the midfoot and hindfoot
  - Eight size options





Gorilla® Universal Dogbone Plate and PRESERVE™ Calc-Cuboid Wedge



#### JAWS™ Midfoot and Hindfoot Staple System

- Available in 15, 18, 20, and 25 mm offerings to address indications of the midfoot and hindfoot
- All instrumentation for the JAWS<sup>™</sup> Nitinol Staple System comes in a simple disposable, sterile kit
- The staple comes pre-loaded on the inserter to help facilitate a quick and simple surgery
  - Staple sits flush upon deployment from inserter minimizing the need to tamp following insertion
- If necessary, the JAWS<sup>™</sup> instrument kit provides surgeons a compressor/distractor to aid in preparation of the fusion site and closure prior to deployment of staple

### Monster® 4.5 and 5.5 Screw System

- Headed and Headless
- Short, Long, and Fully Threaded Options
  - 4.5 (2 mm increments 18 50 mm; 5 mm increments 55 70 mm)
  - 5.5 (2 mm increments 26 60 mm; 5 mm increments; 5 mm increments 65 90 mm)



4.5 mm Monster® Screws



#### Instrumentation

• The Gorilla® Plating System includes a robust offering of specialty foot & ankle instrumentation including the Cartilage Removal Tool, Subchondral Drill, Periosteal Elevator, Curved and Straight Osteotomes, and Pin Distractor

#### **Cartilage Removal Tool**

• Provides "Reverse Cutting" functionality



#### Ø20 **1**

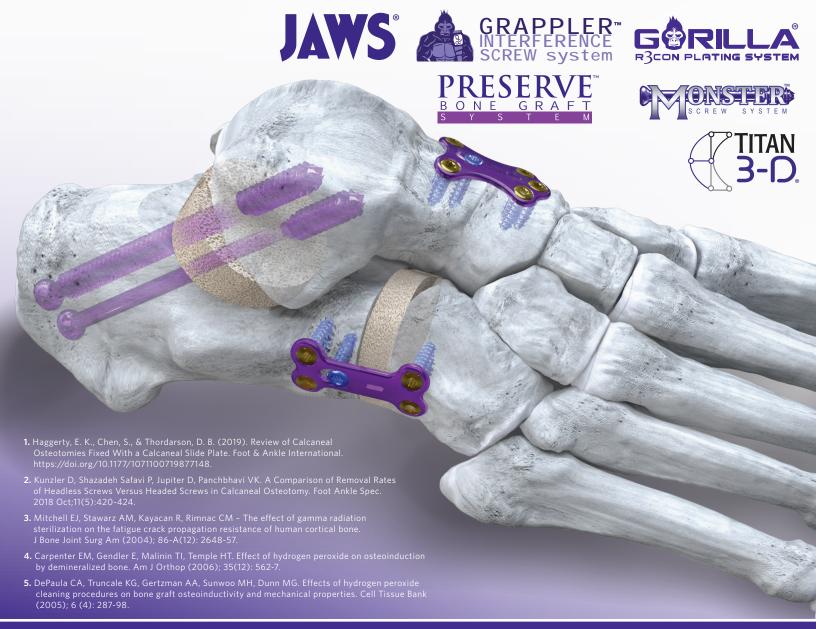
#### Subchondral Drill

 Provides approximately 10 mm of controlled drilling of subchondral bone

#### **Pin Distractor**

Accommodates both a 1.6 mm and 2.3 mm K-Wires

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# www.paragon28.com

P28FL-02 Rev B

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For the contraindications, potential complications and adverse reactions, warnings and precautions associated with this device, please refer to the device-specific instruors for use at http://www.paragon28.com/ifu

