# 04 XA INDICATIONS / CONTRAINDICATIONS OF KNEE JOINT

### 1 XA Total Knee System main apply to:

- Indications / contraindications of knee joint;
- Non inflammatory lesions of joints and inflammatory lesions of joints;
- Correction of functional deformity;
- Refurbishment caused by failure of other treatments or devices.

#### 2 Contraindications include:

- Dominant infection;
- Distant infection focus (may cause blood borne transmission to the prosthesis);
- Obvious joint collapse or bone resorption under X-ray;
- Patients with immature bone structure;
- Neuromuscular insufficiency, poor bone mass or low periarticular skin coverage.



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XA Knee System
Squatting Knee

Beijing Chunlizhengda Medical Instruments Co., Ltd

# 01 DESIGN IDEA

According to the Asian bone measurement data, it is conducive to the knee joint of deep flexion and squat.

AP(mm)

AP(mm)

Female Male

#### Femoral AP/ML

#### Data Value:

- (1) AP Mainly distribute at :50mm-70mm;
- (2) ML Mainly distribute at: 63mm-80mm.

#### **Tibial AP/ML**

#### Data Value:

- (1) AP Mainly distribute at: 40mm-53mm;
- (2) ML Mainly distribute at: 65mm-80mm.

## • Metal compensation for back side of anterior condyler

#### • Optimize the design of femoral column

Increase triangular ridge, increase the stability of femoral condyle and reduce.

Provide CR/ PS prosthesis design.



#### Tibial Tray

#### Anatomical design

The pressure was evenly distributed in the proximal tibia.

#### High polished titanium alloy platform

Reduce the fretting wear between the insert and the contact surface of the tibial tray.

#### Back structure Design

Increase the locking of bracket and bone cement and reduce the loosening of tibial plateau.

#### Extension stem

Cemented extension stem and cementless extension stem could be matched.

Tibial tray can be equipped with CR or PS tibial insert.



#### Tibial Insert

#### • Improved PS cam design

The column is properly moved backward, and the double joint surface design between the cam column and the beam reduces the pressure of the beam on the column and reduces wear.

#### Various Inserts Choice

PS-Plus insert, widen, increase the internal and external restrictions;

Vit PE insert, More wear resistance and oxidation resistance. Provide CR / PS prosthesis design, in which CR prosthesis includes standard type and deep disc type.



#### Patella

 Provide round and anatomical prostheses to optimize patellar trajectory.



# 03 SPECIFICATION

#### Condyle (Unit:mm)

Size	1#S	1#M	1#	2#	3#	3#N	4#	4#N	5#	5#N	6#	6#N	7#	7#N	8#	9#	10#	10# M	10# L	10# +	10# M+	10# L+
ML	49	52	55	58	61	58	64	61	67	64	70	67	73	70	76	79	82	85	88	91	94	97
AP	44	47	48	50.5	53	53	55.5	55.5	58.5	58.5	61.5	61.5	65	65	68	71	72.5	75.5	78.5	81.5	84.5	87.5

#### Tibial Insert (Unit:mm)

Size	1#S	1#M	1#	2#	3#	4#	5#	6#	7#	8#	9#	10#	10# M	10# L	10# +	10# M+	10# L+
ML	52	55	58	60	63	65	69	72	75	78	81	85	88	91	94	97	100
AP	33	35	37	38.5	40.5	41.5	43.5	46	47.5	49	51.5	53	55.5	58	61	63	65

#### **Tibial Tray** (Unit:mm)

Size	1#S	1#M	1#	2#	3#	4#	5#	6#	7#	8#	9#	10#	10# M	10# L	10#	10# M+	10# L+
ML	53	56.5	60	63	66	69	72	75	78	81	84	88	91	94	97	100	103
AP	35.5	38	40.5	42	43.5	45	47	49	51	54	57	56.5	59	61.5	64	66.5	68

#### Patella (Unit:mm)

Size	26	28	30	32
Length	26	28	30	32

# 02 PRODUCT FEATURES

#### Condyle

#### • Gradient radius design

still enough safe contact area when it reaches 150 degrees.



#### Anterior condyle thinning, optimized patellar pulley design

The patellofemoral joint surface is smoother; the tension of surrounding soft tissue becomes smaller; the patellar clunk syndrome and anterior knee pain have reduced, and more conducive to deep flexion and squatting.