

# ADVANCE CLINICAL DECISION-MAKING WITH KNEEKG PRO

Because the Cost of Sitting on  
the Sidelines is Too High!

BETTER DATA → BETTER DECISION → HEALTHY ATHLETES ON THE FIELD

## OPTIMIZE YOUR ATHLETES' KNEE HEALTH

- Build baselines for all athletes pre-season to help maintain knee health throughout the season
- Support the athlete's return to full performance with reduced pain and instability
- Identify biomechanical markers that may be precursors to injury, thus helping to keep athletes healthier and on the field

### Prevention/Baseline



### Return to On-Field Training



### Post-Injury Decisions Surgical/Non-surgical



### Return to Competition

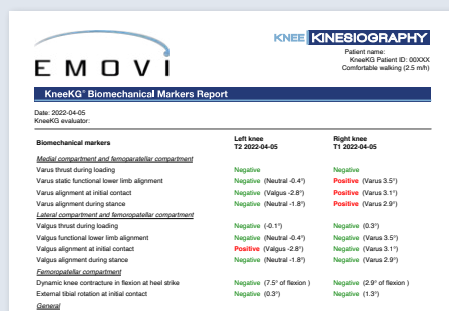


**KNEEKG PRO**  
**A COMPETITIVE EDGE**  
**FOR KNEE HEALTH**  
From baseline to return  
to competition

Unlike video analysis, inertial sensors and GPS based tracking devices, **KneeKG's precision** has proven **high accuracy**<sup>1</sup> providing objective, **dynamic data** to aid clinical decision-making. Class II Medical Device FDA Cleared, Health Canada and CE Marked.

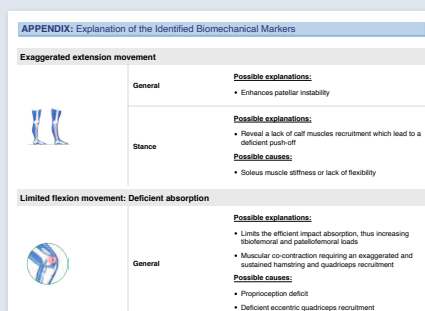
## DATA GENERATED IMMEDIATELY ON-SITE, WHEN AND WHERE YOU NEED IT MOST!

Report showing results comparing  
left/right and over time



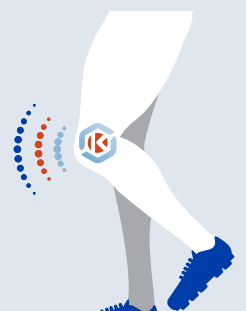
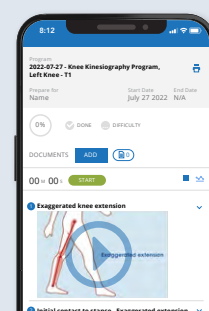
| Biomechanical markers                                     | Left knee<br>T2 2022-04-05 | Right knee<br>T1 2022-04-05 |
|---|----------------------------|-----------------------------|
| <b>Medial compartment and femoropatellar compartment</b>  |                            |                             |
| Varus thrust during loading                               | Negative                   | Negative (Varus 3.5°)       |
| Varus static functional lower limb alignment              | Negative (Neutral -0.4°)   | Positive (Varus 3.1°)       |
| Varus alignment at initial contact                        | Negative (Valgus -2.8°)    | Positive (Varus 2.8°)       |
| Varus alignment during stance                             | Negative (Neutral -1.8°)   |                             |
| <b>Lateral compartment and femoropatellar compartment</b> |                            |                             |
| Valgus thrust during loading                              | Negative (-0.1°)           | Negative (0.3°)             |
| Valgus functional lower limb alignment                    | Negative (Neutral -0.4°)   | Negative (Varus 3.5°)       |
| Valgus alignment at initial contact                       | Positive (Valgus -2.8°)    | Negative (Varus 3.1°)       |
| Valgus alignment during stance                            | Negative (Neutral -1.8°)   |                             |
| <b>Femoropatellar compartment</b>                         |                            |                             |
| Dynamic knee contracture in flexion at heel strike        | Negative (7.5° of flexion) | Negative (2.9° of flexion)  |
| External tibial rotation at initial contact               | Negative (0.3°)            | Negative (1.3°)             |
| <b>General</b>  |                            |                             |

Explanations of pain-related  
causes and symptoms



| APPENDIX: Explanation of the Identified Biomechanical Markers |   |
|---|---|
| <b>Exaggerated extension movement</b>                         |   |
| General   | <b>Possible explanations:</b> <ul style="list-style-type: none"> <li>Enhances patellar instability</li> </ul>   |
| Stance  | <b>Possible explanations:</b> <ul style="list-style-type: none"> <li>Reveal a lack of calf muscles recruitment which lead to a deficient push-off</li> </ul> <b>Possible causes:</b> <ul style="list-style-type: none"> <li>Soleus muscle stiffness or lack of flexibility</li> </ul>   |
| <b>Limited flexion movement: Deficient absorption</b>         |   |
| General   | <b>Possible explanations:</b> <ul style="list-style-type: none"> <li>Limits the efficient impact absorption, thus increasing tibiofemoral and patellofemoral loads</li> <li>Muscular co-contraction requiring an exaggerated and sustained hamstring and quadriceps recruitment</li> </ul> <b>Possible causes:</b> <ul style="list-style-type: none"> <li>Proprioception deficit</li> <li>Deficient eccentric quadriceps recruitment</li> </ul> |

Target program to  
restore function





## OUR VISION

To deliver relevant athlete-specific actionable data to medical professionals working with elite athletes through advanced technology, accelerating decision-making and empowering the medical team to better envision solutions for their athletes.

## OUR GOAL

To help sports teams to keep their athletes on the field and performing at their best. Emovi prioritizes short- and long-term knee health and safety.

## CONCIERGE PRO SPORTS PACKAGE

- Onsite testing of your athletes pre- and post-season\*
- Electronic reports regarding each athlete's bilateral test
- Follow-up Zoom meeting to review and consult on action plans
- In-season Zoom consultation with our experts, as requested by your team

## ALSO AVAILABLE

- In-season injury testing, including Zoom consultations to discuss results\*\*
- Value pricing for multi seasons contracts

## EMOVI PROVIDES A VALUE-BASED SERVICE

**Giving your Team a Technical Advantage with our AI-Powered KneeKG PRO Service**

**Athlete case examples, scan here ↓**

Lateral Meniscal Tears

Unhappy Triad



\* For pre/post season testing, pricing includes operating expenses, such as travel, shipping, etc. A minimum of 20 athletes must be tested.

\*\* For in-season injury testing or any testing not done during pre/post testing visits, operating expenses will be calculated separately. A full quotation of services will be provided.

1. KneeKG lower-limb alignment correlates to both robotic assisted system and long film X-Ray measurements 10= Deroche, E., et al. Arch Orthop Trauma Surg 142, 1645–1651 (2022)

**EMOVI**  
—AI POWERED SOLUTIONS—  
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**CONTACT US!**

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