### 倫理的な観点

The Mediterranean diet has many beneficial effects on preventing inflammation-associated diseases, and many of these effects have been attributed to the olive fruit and its oil. Our previous studies have demonstrated the anti-inflammatory effects of maslinic acid (MA) from olives in an arthritis mouse model. The present study investigated the effects of an orally administered MA supplement on subjects with mild knee joint pain.

### 方法と結果

**Materials & Methods:** This study was a randomized, double-blind, and placebo-controlled trial, and 20 subjects were included. The subjects received either 50 mg \((n = 12)\) of MA or placebo \((n = 8)\) daily for 3 months. Each subject was evaluated for pain and physical functions as the primary outcome measures using visual analog scale (VAS) scores and a standardized quality of life questionnaire (Short Form or SF-8). Secondary outcome measures included cartilage biomarkers and an inflammatory biomarker (hsCRP).

**Results & Findings:** Twenty subjects completed the study. Although both the MA and placebo groups exhibited improved pain scores on the VAS and quality of life on the SF-8 from before to after supplementation, the MA group exhibited slightly improved symptoms compared to the placebo group. The MA and placebo groups exhibited a 15% reduction and 13% increase, respectively, in hsCRP levels after supplementation. Furthermore, the MA group and not the placebo group exhibited significantly decreased body weight and body mass index in the subjects with mild joint pain at week 12 compared to the baseline level.

**Conclusion:** Olive fruit extract containing MA may improve joint health by controlling inflammatory responses and by promoting weight loss in subjects with mild knee joint pain.