

Supplemental Table 1: Features overview

This table outlines each feature, accompanied by its respective description, across the Clinical, Biochemical, X-ray, and MRI datasets as part of the FNIH OA Biomarker Consortium.

Feature	Description
Clinical Data	
P01KPMEDCV	Either knee, used med for pain, aching or stiffness more than half the days of a month, past 12mo (calc, used for study eligibility)
P01BMI	Body mass index (calc)
P02SEX	Gender, male or female
P02RACE	Racial background, self-reported (calc)
XRJSM	(BU): joint space narrowing (OARSI grades 0-3) medial compartment
XRKL	(BU): Kellgren and Lawrence (grades 0-4)
XRJSL	(BU): joint space narrowing (OARSI grades 0-3) lateral compartment
MCMJSW	reading (JD): medial minimum JSW [mm]
WOMKP	WOMAC Pain Score
WOMADL	WOMAC Disability Score
AGE	Age
Xray data	
BTI_H0	Fractal Bone Trabecular Integrity Horizontal - constant
BTI_H1	Fractal Bone Trabecular Integrity Horizontal - slope
BTI_H2	Fractal Bone Trabecular Integrity Horizontal - quadratic
BTI_V0	Fractal Bone Trabecular Integrity Vertical - constant

BTI_V1	Fractal Bone Trabecular Integrity Vertical - slope
BTI_V2	Fractal Bone Trabecular Integrity Vertical - quadratic
Biochemical Data	
Serum_C1_2C_NUM	Serum C1,2C (numeric, interpolated research value if below lower limit)
Serum_C2C_NUM	Serum C2C (numeric, interpolated research value if below lower limit)
Serum_CPII_NUM	Serum CPII (numeric, interpolated research value if below lower limit)
Serum_PIIANP_NUM	Serum PIIANP (numeric, interpolated research value if below lower limit)
Serum_COLL2_1_NO2_NUM	Serum COLL2-1 NO2 (numeric, interpolated research value if below lower limit)
Serum_CS846_NUM	Serum CS846 (numeric, interpolated research value if below lower limit)
Serum_CTXI_NUM	Serum CTXI (numeric, interpolated research value if below lower limit)
Serum_Comp_NUM	Serum cartilage oligomeric matrix protein (COMP) (numeric, interpolated research value if below lower limit)
Serum_HA_NUM	Serum HA (numeric, interpolated research value if below lower limit)
Serum_MMP_3_NUM	Serum MMP-3 (numeric, interpolated research value if below lower limit)
Serum_NTXI_NUM	Serum NTXI (numeric, interpolated research value if below lower limit)
Urine_CTXII_NUM	Urinary CTXII (numeric, interpolated research value if below lower limit)
Urine_C1_2C_NUM	Urine C1,2C (numeric, interpolated research value if below lower limit)
Urine_C2C_NUM	Urine C2C (numeric, interpolated research value if below lower limit)
Urine_Creatinine_NUM	Urine Creatinine (numeric, interpolated research value if below lower limit)
Urine_NTXI_NUM	Urine NTXI (numeric, interpolated research value if below lower limit)
Urine_alpha_NUM	Urine CTX-1a (Urine_alpha) (numeric, interpolated research value if below lower limit)
Urine_beta_NUM	Urine CTX-1b (Urine_beta) (numeric, interpolated research value if below lower limit)

Urine_Col21N2_NUM	Urine Coll21NO2 (numeric, interpolated research value if below lower limit)
Urine_CTXII_NUMCA	Urinary CTXII creatinine adjusted (numeric, interpolated research value if below lower limit)
Urine_C1_2C_NUMCA	Urine C1,2C creatinine adjusted (numeric, interpolated research value if below lower limit)
Urine_C2C_NUMCA	Urine C2C creatinine adjusted (numeric, interpolated research value if below lower limit)
Urine_NTXI_NUMCA	Urine NTXI creatinine adjusted (numeric, interpolated research value if below lower limit)
Urine_alpha_NUMCA	Urine CTX-1a (Urine_alpha) creatinine adjusted (numeric, interpolated research value if below lower limit)
Urine_beta_NUMCA	Urine CTX-1b (Urine_beta) creatinine adjusted (numeric, interpolated research value if below lower limit)
Urine_Col21N2_NUMCA	Urine Coll21NO2 creatinine adjusted (numeric, interpolated research value if below lower limit)
MRI data	
MF_tAB	(iMorphics): total area of subchondral bone - femur medial (MF.tAB) [mm ²]
LF_tAB	(iMorphics): total area of subchondral bone - femur lateral (LF.tAB) [mm ²]
MT_tAB	(iMorphics): total area of subchondral bone - tibia medial (MT.tAB) [mm ²]
LT_tAB	(iMorphics): total area of subchondral bone - tibia lateral (LT.tAB) [mm ²]
MP_tAB	(iMorphics): total area of subchondral bone - patella medial (mP.tAB) [mm ²]
LP_tAB	(iMorphics): total area of subchondral bone - patella lateral (lP.tAB) [mm ²]
notch	(iMorphics): total area of subchondral bone - femoral notch (cTrF.tAB) [mm ²]
TrFlat	(iMorphics): total area of subchondral bone - femoral trochlea lateral (lTrF.tAB) [mm ²]
TrFMed	(iMorphics): total area of subchondral bone - femoral trochlea medial (mTrF.tAB) [mm ²]
nFemurOAVector	(iMorphics): vector of 3D shape - femur [normalized units +1 = mean OA shape, -1 = mean non-OA shape]
nTibiaOAVector	(iMorphics): vector of 3D shape - tibia [normalized units +1 = mean OA shape, -1 = mean non-OA shape]
nPatellaOAVector	(iMorphics): vector of 3D shape - patella [normalized units +1 = mean OA shape, -1 = mean non-OA shape]

MedialTibialCartilage	Cartilage Volume (mm ³) - Medial Tibia
LateralTibialCartilage	Cartilage Volume (mm ³) - Lateral Tibia
MedialFemoralCartilage	Cartilage Volume (mm ³) - Medial Femur
LateralFemoralCartilage	Cartilage Volume (mm ³) - Lateral Femur
PatellarCartilage	Cartilage Volume (mm ³) - Patella
MedialMeniscus	Meniscal Volume (mm ³) - Medial
LateralMeniscus	Meniscal Volume (mm ³) - Lateral
WMTVCL	(FE): volume of cartilage - medial tibia [mm ³]
WMTSBA	(FE): total area of subchondral bone - medial tibia [cm ²]
WMTVCN	(FE): normalized cartilage volume - medial tibia
WMTMTH	(FE): mean cartilage thickness - medial tibia [mm]
WMTACS	(FE): area of cartilage surface - medial tibia [cm ²]
WMTPD	(FE): % area of subchondral bone denuded of cartilage - medial tibia [%]
WMTCAAB	(FE): area of subchondral bone covered by cartilage - medial tibia
WMTMTC	(FE): mean cartilage thickness - medial tibia [mm]
WMTMAV	(FE): maximum cartilage thickness - medial tibia (MT.ThCtAB) [mm]
WMTCTS	(FE): SD of cartilage thickness - medial tibia
WMTACV	(FE): CV of cartilage thickness - medial tibia
CMTMAT	(FE): minimum cartilage thickness - medial tibia (center) [mm]
CMTMTH	(FE): mean cartilage thickness - medial tibia (center) [mm]
EMTMTH	(FE): mean cartilage thickness - medial tibia (external) [mm]

IMTMTH	(FE): mean cartilage thickness - medial tibia (internal) [mm]
AMTMTH	(FE): mean cartilage thickness - medial tibia (anterior) [mm]
PMTMTH	(FE): mean cartilage thickness - medial tibia (posterior) [mm]
CMPD	(FE): % area of subchondral bone denuded of cartilage - medial tibia (center) [%]
EMTPD	(FE): % area of subchondral bone denuded of cartilage - medial tibia (external) [%]
IMTPD	(FE): % area of subchondral bone denuded of cartilage - medial tibia (internal) [%]
AMTPD	(FE): % area of subchondral bone denuded of cartilage - medial tibia (anterior) [%]
PMTPD	(FE): % area of subchondral bone denuded of cartilage - medial tibia (posterior) [%]
BMFVCL	(FE): volume of cartilage - central medial femur [mm ³]
BMFSBA	(FE): total area of subchondral bone - central medial femur [cm ²]
BMFVCN	(FE): normalized cartilage volume - central medial femur
BMFMTH	(FE): mean cartilage thickness - central medial femur (internal) [mm]
BMFACS	(FE): area of cartilage surface - central medial femur
BMFPD	(FE): % area of subchondral bone denuded of cartilage - central medial femur (internal) [%]
BMFCAAB	(FE): area of subchondral bone covered by cartilage - central medial femur [cm ²]
BMFMTC	(FE): mean cartilage thickness (exclDAB) - central medial femur [mm]
BMFMAV	(FE): maximum cartilage thickness - central medial femur [mm]
BMFCTS	(FE): SD of cartilage thickness - central medial femur
BMFACV	(FE): CV of cartilage thickness - central medial femur [%]
CBMFMAT	(FE): minimum cartilage thickness - central medial femur (center) [mm]
CBMFMTH	(FE): mean cartilage thickness - central medial femur (center) [mm]

EBMFMTH	(FE): mean cartilage thickness - central medial femur (external) [mm]
IBMFMTH	(FE): mean cartilage thickness - central medial femur (internal) [mm]
CBMFPD	(FE): % area of subchondral bone denuded of cartilage - central medial femur (center) [%]
EBMFPD	(FE): % area of subchondral bone denuded of cartilage - central medial femur (external) [%]
IBMFPD	(FE): % area of subchondral bone denuded of cartilage - central medial femur (internal) [%]
WMTFVCL	(FE): cartilage volume - medial tib-fem compartment [mm ³]
WMTFVCN	(FE): normalized cartilage volume - medial tib-fem compartment [cm ²]
WMTFMTH	(FE): mean cartilage thickness - medial tib-fem compartment [mm]
WMTFMAV	(FE): maximum cartilage thickness - medial tib-fem compartment [mm]
BMTFMAT	(FE): minimum cartilage thickness - central medial tib-fem compartment (weight bearing) [mm]
BMTFMTH	(FE): mean cartilage thickness - central medial tib-fem compartment (weight bearing) [mm]
WLTVCL	(FE): volume of cartilage - lateral tibia (LT.VC) [mm ³]
WLTSBA	(FE): total area of subchondral bone - lateral tibia [cm ²]
WLTVCN	(FE): normalized cartilage volume - lateral tibia
WLTMTH	(FE): mean cartilage thickness - lateral tibia [mm]
WLTACS	(FE): area of cartilage surface - lateral tibia
WLTPD	(FE): % area of subchondral bone denuded of cartilage - lateral tibia [%]
WLTCAAB	(FE): area of subchondral bone covered by cartilage - lateral tibia [cm ²]
WLTMTC	(FE): mean cartilage thickness (excl dAB) - lateral tibia [mm]
WLTMAV	(FE): maximum cartilage thickness - lateral tibia [mm]
WLTCTS	(FE): SD of cartilage thickness - lateral tibia

WLTACV	(FE): CV of cartilage thickness - lateral tibia
CLTMAT	(FE): minimum cartilage thickness - lateral tibia (center) [mm]
CLTMTH	(FE): mean cartilage thickness - lateral tibia (center) [mm]
ELTMTH	(FE): mean cartilage thickness - lateral tibia (external) [mm]
ILTMTH	(FE): mean cartilage thickness - lateral tibia (internal) [mm]
ALTMTH	(FE): mean cartilage thickness - lateral tibia (anterior) [mm]
PLTMTH	(FE): mean cartilage thickness - lateral tibia (posterior) [mm]
CLTPD	(FE): % area of subchondral bone denuded of cartilage - lateral tibia (center) [%]
ELTPD	(FE): % area of subchondral bone denuded of cartilage - lateral tibia (external) [%]
ILTPD	(FE): % area of subchondral bone denuded of cartilage - lateral tibia (internal) [%]
ALTPD	(FE): % area of subchondral bone denuded of cartilage - lateral tibia (anterior) [%]
PLTPD	(FE): % area of subchondral bone denuded of cartilage - lateral tibia (posterior) [%]
BLFVCL	(FE): volume of cartilage - central lateral femur [mm ³]
BLFSBA	(FE): total area of subchondral bone - central lateral femur [cm ²]
BLFVCN	(FE): normalized cartilage volume - central lateral femur
BLFMTH	(FE): mean cartilage thickness - central lateral femur
BLFACS	(FE): % area of subchondral bone denuded of cartilage - central lateral femur (external) [%]
BLFPD	(FE): % area of subchondral bone denuded of cartilage - central lateral femur [%]
BLFCAAB	(FE): area of subchondral bone covered by cartilage - central lateral femur [cm ²]
BLFMTC	(FE): mean cartilage thickness (excl dAB) - central lateral femur
BLFMAV	(FE): maximum cartilage thickness - central lateral femur

BLFCTS	(FE): SD of cartilage thickness - central lateral femur
BLFACV	(FE): CV of cartilage thickness - central lateral femur
CBLFMAT	(FE): minimum cartilage thickness - central lateral femur (center) [mm]
CBLFMT	(FE): mean cartilage thickness - central lateral femur (center) [mm]
EBLFMT	(FE): mean cartilage thickness - central lateral femur (external) [mm]
IBLFMT	(FE): mean cartilage thickness - central lateral femur (internal) [mm]
CBLFPD	(FE): % area of subchondral bone denuded of cartilage - central lateral femur (center) [%]
EBLFPD	(FE): % area of subchondral bone denuded of cartilage - central lateral femur (external) [%]
IBLFPD	(FE): % area of subchondral bone denuded of cartilage - central lateral femur (internal) [%]
WLTFVCL	(FE): cartilage volume - lateral tib-fem compartment [mm ³]
WLTFVCN	(FE): normalized cartilage volume - lateral tib-fem compartment
WLTFMTH	(FE): mean cartilage thickness - lateral tib-fem compartment [mm]
WLTFMAV	(FE): maximum cartilage thickness - lateral tib-fem compartment [mm]
BLTFMAT	(FE): minimum cartilage thickness - central lateral tib-fem compartment (weight bearing) [mm]
BLTFMTH	(FE): mean cartilage thickness - central lateral tib-fem compartment (weight bearing) [mm]
SubBArea_MedFem	(Qmetrics): central medial femur subchondral bone plate (SBP) area
CurAverage_SubB_MedFem	(Qmetrics): central medial femur average SBP mean curvature
CurSD_SubB_MedFem	(Qmetrics): central medial femur standard deviation SBP mean curvature
Cur_5pc_SubB_MedFem	(Qmetrics): central medial femur 5% percentile SBP mean curvature
Cur_95pc_SubB_MedFem	(Qmetrics): central medial femur 95% percentile SBP mean curvature
SCRAverage_SubB_MedFem	(Qmetrics): central medial femur average SBPMRI signal contrast ratio (MRI signal contrast ratio: DESS signal contrast)

	between cartilage tissue and bone tissue at the subchondral bone plate)
SCRSD_SubB_MedFem	(Qmetrics): central medial femur standard deviation SBP MRI signal contrast ratio
SCR_5pc_SubB_MedFem	(Qmetrics): central medial femur 5% percentile SBP MRI signal contrast ratio
SCR_95pc_SubB_MedFem	(Qmetrics): central medial femur 95% percentile SBP MRI signal contrast ratio
SubBArea_LatFem	(Qmetrics): central lateral femur subchondral bone plate (SBP) area
CurAverage_SubB_LatFem	(Qmetrics): central lateral femur average SBP mean curvature
CurSD_SubB_LatFem	(Qmetrics): central lateral femur standard deviation SBP mean curvature
Cur_5pc_SubB_LatFem	(Qmetrics): central lateral femur 5% percentile SBP mean curvature
Cur_95pc_SubB_LatFem	(Qmetrics): central lateral femur 95% percentile SBP mean curvature
SCRAverage_SubB_LatFem	(Qmetrics): central lateral femur average SBPMRI signal contrast ratio (MRI signal contrast ratio: DESS signal contrast between cartilage tissue and bone tissue at the subchondral bone plate)
SCRSD_SubB_LatFem	(Qmetrics): central lateral femur standard deviation SBP MRI signal contrast ratio
SCR_5pc_SubB_LatFem	(Qmetrics): central lateral femur 5% percentile SBP MRI signal contrast ratio
SCR_95pc_SubB_LatFem	(Qmetrics): central lateral femur 95% percentile SBP MRI signal contrast ratio
SubBArea_MedTib	(Qmetrics): medial tibia subchondral bone plate (SBP) area
CurAverage_SubB_MedTib	(Qmetrics): medial tibia average SBP mean curvature
CurSD_SubB_MedTib	(Qmetrics): medial tibia standard deviation SBP mean curvature
Cur_5pc_SubB_MedTib	(Qmetrics): medial tibia 5% percentile SBP mean curvature
Cur_95pc_SubB_MedTib	(Qmetrics): medial tibia 95% percentile SBP mean curvature
SCRAverage_SubB_MedTib	(Qmetrics): medial tibia average SBP MRI signal contrast ratio (MRI signal contrast ratio: DESS signal contrast between cartilage tissue and bone tissue at the subchondral bone plate)
SCRSD_SubB_MedTib	(Qmetrics): medial tibia standard deviation SBP MRI signal contrast ratio

SCR_5pc_SubB_MedTib	(Qmetrics): medial tibia 5% percentile SBP MRI signal contrast ratio
SCR_95pc_SubB_MedTib	(Qmetrics): medial tibia 95% percentile SBP MRI signal contrast ratio
SubBArea_LatTib	(Qmetrics): lateral tibia subchondral bone plate (SBP) area
CurAverage_SubB_LatTib	(Qmetrics): lateral tibia average SBP mean curvature
CurSD_SubB_LatTib	(Qmetrics): lateral tibia standard deviation SBP mean curvature
Cur_5pc_SubB_LatTib	(Qmetrics): lateral tibia 5% percentile SBP mean curvature
Cur_95pc_SubB_LatTib	(Qmetrics): lateral tibia 95% percentile SBP mean curvature
SCRAverage_SubB_LatTib	(Qmetrics): lateral tibia average SBP MRI signal contrast ratio (MRI signal contrast ratio: DESS signal contrast between cartilage tissue and bone tissue at the subchondral bone plate)
SCRSD_SubB_LatTib	(Qmetrics): lateral tibia standard deviation SBP MRI signal contrast ratio
SCR_5pc_SubB_LatTib	(Qmetrics): lateral tibia 5% percentile SBP MRI signal contrast ratio
SCR_95pc_SubB_LatTib	(Qmetrics): lateral tibia 95% percentile SBP MRI signal contrast ratio
MCMPM	(BI): MOAKS: cartilage morphology - patella medial
MCMPL	(BI): MOAKS: cartilage morphology - patella lateral
MCMFMA	(BI): MOAKS: cartilage morphology - femur medial anterior (trochlear)
MCMFLA	(BI): MOAKS: cartilage morphology - femur lateral anterior (trochlear)
MCMFMP	(BI): MOAKS: cartilage morphology - femur medial posterior
MCMFLP	(BI): MOAKS: cartilage morphology - femur lateral posterior
MCMFMC	(BI): MOAKS: cartilage morphology - femur medial central
MCMFLC	(BI): MOAKS: cartilage morphology - femur lateral central
MCMTMA	(BI): MOAKS: cartilage morphology - tibia medial anterior

MCMTLA	(BI): MOAKS: cartilage morphology - tibia lateral anterior
MCMTMC	(BI): MOAKS: cartilage morphology - tibia medial central
MCMTLC	(BI): MOAKS: cartilage morphology - tibia lateral central
MCMTMP	(BI): MOAKS: cartilage morphology - tibia medial posterior
MCMTLP	(BI): MOAKS: cartilage morphology - tibia lateral posterior
MBMSFMA	(BI): MOAKS: BML size - femur medial anterior (trochlear)
MBMPFMA	(BI): MOAKS: BML (% lesion that is edema) - femur medial anterior (trochlear)
MBMNFMA	(BI): MOAKS: number of BML lesions - femur medial anterior (trochlear)
MBMSFLA	(BI): MOAKS: BML size - femur lateral anterior (trochlear)
MBMPFLA	(BI): MOAKS: BML (% lesion that is edema) - femur lateral anterior (trochlear)
MBMNFLA	(BI): MOAKS: number of BML lesions - femur lateral anterior (trochlear)
MBMSFMC	(BI): MOAKS: BML size - femur medial central
MBMPFMC	(BI): MOAKS: BML (% lesion that is edema) - femur medial central
MBMNFMC	(BI): MOAKS: number of BML lesions - femur medial central
MBMSFLC	(BI): MOAKS: BML size - femur lateral central
MBMPFLC	(BI): MOAKS: BML (% lesion that is edema) - femur lateral central
MBMNFLC	(BI): MOAKS: number of BML lesions - femur lateral central
MBMSFMP	(BI): MOAKS: BML size - femur medial posterior
MBMPFMP	(BI): MOAKS: BML (% lesion that is edema) - femur medial posterior
MBMNFMP	(BI): MOAKS: number of BML lesions - femur medial posterior
MBMSFLP	(BI): MOAKS: BML size - femur lateral posterior

MBMPFLP	(BI): MOAKS: BML (% lesion that is edema) - femur lateral posterior
MBMNFLP	(BI): MOAKS: number of BML lesions - femur lateral posterior
MBMSSS	(BI): MOAKS: BML size - tibia sub-spinous
MBMPSS	(BI): MOAKS: BML (% lesion that is edema) - tibia sub-spinous
MBMNSS	(BI): MOAKS: number of BML lesions - tibia sub-spinous
MBMSTMA	(BI): MOAKS: BML size - tibia medial anterior
MBMPTMA	(BI): MOAKS: BML (% lesion that is edema) - tibia medial anterior
MBMNTMA	(BI): MOAKS: number of BML lesions - tibia medial anterior
MBMSTLA	(BI): MOAKS: BML size - tibia lateral anterior
MBMPTLA	(BI): MOAKS: BML (% lesion that is edema) - tibia lateral anterior
MBMNTLA	(BI): MOAKS: number of BML lesions - tibia lateral anterior
MBMSTMC	(BI): MOAKS: BML size - tibia medial central
MBMPTMC	(BI): MOAKS: BML (% lesion that is edema) - tibia medial central
MBMNTMC	(BI): MOAKS: number of BML lesions - tibia medial central
MBMSTLC	(BI): MOAKS: BML size - tibia lateral central
MBMPTLC	(BI): MOAKS: BML (% lesion that is edema) - tibia lateral central
MBMNTLC	(BI): MOAKS: number of BML lesions - tibia lateral central
MBMSTMP	(BI): MOAKS: BML size - tibia medial posterior
MBMPTMP	(BI): MOAKS: BML (% lesion that is edema) - tibia medial posterior
MBMNTMP	(BI): MOAKS: number of BML lesions - tibia medial posterior
MBMSTLP	(BI): MOAKS: BML size - tibia lateral posterior

MBMPTLP	(BI): MOAKS: BML (% lesion that is edema) - tibia lateral posterior
MBMNTLP	(BI): MOAKS: number of BML lesions - tibia lateral posterior
MBMSPM	(BI): MOAKS: BML size - patella medial
MBMPPM	(BI): MOAKS: BML (% lesion hat is edema) - patella medial
MBMNPM	(BI): MOAKS: number of BML lesions - patella medial
MBMSPL	(BI): MOAKS: BML size - patella lateral
MBMPPL	(BI): MOAKS: BML (% lesion that is edema) - patella lateral
MBMNPL	(BI): MOAKS: number of BML lesions - patella lateral
MMTMA	(BI): MOAKS: medial meniscal morphology - anterior horn
MMTLA	(BI): MOAKS: lateral meniscal morphology - anterior horn
MMTMB	(BI): MOAKS: medial meniscal morphology - body
MMTLB	(BI): MOAKS: lateral meniscal morphology - body
MMTMP	(BI): MOAKS: medial meniscal morphology - posterior horn
MMTLP	(BI): MOAKS: lateral meniscal morphology - posterior horn
MMHMA	(BI): MOAKS: medial meniscal hypertrophy - anterior horn
MMHLA	(BI): MOAKS: lateral meniscal hypertrophy - anterior horn
MMHMB	(BI): MOAKS: medial meniscal hypertrophy - body
MMHLB	(BI): MOAKS: lateral meniscal hypertrophy - body
MMHMP	(BI): MOAKS: medial meniscal hypertrophy - posterior horn
MMHLP	(BI): MOAKS: lateral meniscal hypertrophy - posterior horn
MMSMA	(BI): MOAKS: medial meniscal signal abnormality - anterior horn

MMSLA	(BI): MOAKS: lateral meniscal signal abnormality - anterior horn
MMSMB	(BI): MOAKS: medial meniscal signal abnormality - body
MMSLB	(BI): MOAKS: lateral meniscal signal abnormality - body
MMSMP	(BI): MOAKS: medial meniscal signal abnormality - posterior horn
MMSLP	(BI): MOAKS: lateral meniscal signal abnormality - posterior horn
MMXMM	(BI): MOAKS: medial meniscal extrusion - medially
MMXMA	(BI): MOAKS: medial meniscal extrusion - anteriorly
MMXLA	(BI): MOAKS: lateral meniscal extrusion - anteriorly
MMXLL	(BI): MOAKS: lateral meniscal extrusion - laterally
MMRTM	(BI): MOAKS: medial meniscal morphology - posterior root tear
MMRTL	(BI): MOAKS: lateral meniscal morphology - posterior root tear
MOSPS	(BI): MOAKS: osteophyte size - patella superior
MOSPI	(BI): MOAKS: osteophyte size - patella inferior
MOSPM	(BI): MOAKS: osteophyte size - patella medial
MOSPL	(BI): MOAKS: osteophyte size - patella lateral
MOSFMA	(BI): MOAKS: osteophyte size - femur medial anterior (trochlear)
MOSFLA	(BI): MOAKS: osteophyte size - femur lateral anterior (trochlear)
MOSFMP	(BI): MOAKS: osteophyte size - femur medial posterior
MOSFLP	(BI): MOAKS: osteophyte size - femur lateral posterior
MOSFMC	(BI): MOAKS: osteophyte size - femur medial central
MOSFLC	(BI): MOAKS: osteophyte size - femur lateral central

MOSTM	(BI): MOAKS: osteophyte size - tibia medial
MOSTL	(BI): MOAKS: osteophyte size - tibial lateral
MACLTR	(BI): MOAKS: ACL tear
MACLBML	(BI): MOAKS: BML associated with ACL insertion
MACLRP	(BI): MOAKS: ACL repair
MPCLTR	(BI): MOAKS: PCL tear
MPCLBML	(BI): MOAKS: BML associated with PCL insertion
MPCLRP	(BI): MOAKS: PCL repair
MPTSIG	(BI): MOAKS: patella tendon signal abnormality
MGCACL	(BI): MOAKS: ACL ganglion cyst
MGCPCL	(BI): MOAKS: PCL ganglion cyst
MGCTIB	(BI): MOAKS: tibial ganglion cyst
MGCSM	(BI): MOAKS: semimembranosus ganglion cyst
MGSST	(BI): MOAKS: semitendinosus ganglion cyst
MGCOTH	(BI): MOAKS: other ganglion cyst
MANSBUR	(BI): MOAKS: pes anserine bursa
MIPBUR	(BI): MOAKS: infrapatellar bursa
MPPBUR	(BI): MOAKS: prepatella bursa
MSYIC	(BI): MOAKS: inter-condylar synovitis
MEFFWK	(BI): MOAKS: whole knee effusion
MPOPCYS	(BI): MOAKS: popliteal cyst