

Supplementary File C

JADAS71 and cJADAS71 as a prognostic test predicting failure to respond without escalation to anti-TNF

We calculated sensitivity, specificity and accuracy for various cut-off values for the JADAS and cJADAS as a prognostic test for treatment-failure for OJIA and PJIA at 3 and 6 months. We used cJADAS for OJIA and PJIA taken together, and separate for OJIA and PJIA. A lower relative contribution of the patient-VAS scores and correction ("no need to escalate") for a >50% decrease in cJADAS at 3 months compared to baseline was also analysed.

3 MONTHS	ALL PATIENTS				OLIGOARTICULAR PATIENTS				POLYARTICULAR PATIENTS			
Rule: Patient VAS can be up to 100% of score	Sensitivity	Specificity	Sum	Accuracy	Sensitivity	Specificity	Sum	Accuracy	Sensitivity	Specificity	Sum	Accuracy
JADAS71 >4	81.8%	36.2%	118.0	50.7%	83.3%	47.1%	130.4	56.5%	81.3%	30.0%	111.3	47.8%
JADAS71 >5	81.8%	53.5%	135.3	63.1%	83.3%	68.8%	152.1	72.7%	81.3%	44.4%	125.7	58.1%
JADAS71 >6	71.4%	58.5%	129.9	62.9%	40.0%	73.3%	113.3	65.0%	81.3%	50.0%	131.3	61.9%
JADAS71 >7	71.4%	76.9%	148.3	75.0%	40.0%	85.7%	125.7	73.7%	81.3%	72.0%	153.3	75.6%
JADAS71 >8	66.7%	82.1%	148.8	76.7%	40.0%	92.9%	132.9	78.9%	75.0%	76.0%	151.0	75.6%
JADAS71 >9	57.1%	94.7%	151.8	81.4%	40.0%	100.0%	140.0	84.2%	62.5%	91.7%	154.2	80.0%
JADAS71 >10	38.1%	94.7%	132.8	74.6%	20.0%	100.0%	120.0	78.9%	43.8%	91.7%	135.5	72.5%
cJADAS >4	78.3%	39.6%	117.9	52.1%	71.4%	55.6%	127.0	20.0%	81.3%	30.0%	111.3	47.8%
cJADAS >5	78.3%	54.5%	132.8	62.7%	71.4%	70.6%	142.0	70.8%	81.3%	44.4%	125.7	58.1%
cJADAS >6	68.2%	64.3%	132.5	65.6%	33.3%	81.3%	114.6	68.2%	81.3%	53.8%	135.1	64.3%
cJADAS >7	68.2%	78.0%	146.2	74.6%	33.3%	87.5%	120.8	72.7%	81.3%	72.0%	153.3	75.6%
cJADAS >8	61.9%	82.9%	144.8	75.8%	33.3%	93.8%	127.1	77.3%	73.3%	76.0%	149.3	75.0%
cJADAS >9	-	-	-	-	-	-	-	-	46.7%	91.7%	138.4	74.4%
cJADAS >4 unless cJADAS 3 months <50% baseline*	46.7%	75.9%	122.6	65.5%	50.0%	80.0%	130.0	70.0%	45.0%	73.5%	118.5	63.0%
cJADAS >5 unless cJADAS 3 months <50% baseline*	46.7%	82.4%	129.1	69.1%	50.0%	84.2%	134.2	72.4%	45.0%	81.3%	126.3	67.3%
cJADAS >6 unless cJADAS 3 months <50% baseline*	37.9%	85.7%	123.6	67.9%	22.2%	88.9%	111.1	66.7%	45.0%	83.9%	128.9	68.6%
cJADAS >7 unless cJADAS 3 months <50% baseline*	37.9%	89.6%	127.5	70.1%	22.2%	94.4%	116.6	70.4%	45.0%	86.7%	131.7	70.0%
cJADAS >8 unless cJADAS 3 months <50% baseline*	34.5%	91.7%	126.2	70.1%	22.2%	100%	122.2	74.1%	40.0%	86.7%	126.7	68.0%

3 MONTHS	ALL PATIENTS				OLIGOARTICULAR PATIENTS				POLYARTICULAR PATIENTS			
Rule: Patient VAS at most 50% of score	Sensitivity	Specificity	Sum	Accuracy	Sensitivity	Specificity	Sum	Accuracy	Sensitivity	Specificity	Sum	Accuracy
cJADAS >4	56.7%	53.1%	109.8	54.4%	40.0%	68.4%	108.4	58.6%	65.0%	43.3%	108.3	52.0%
cJADAS >5	56.7%	66.0%	122.7	62.3%	40.0%	78.9%	118.9	65.5%	65.0%	57.1%	122.1	60.4%
cJADAS >6	48.3%	77.1%	125.4	66.2%	22.2%	94.7%	116.9	71.4%	60.0%	65.5%	125.5	63.3%
cJADAS >7	48.3%	84.0%	132.3	70.9%	22.2%	95.0%	117.2	72.4%	60.0%	76.7%	136.7	70.0%
cJADAS >8	42.9%	90.4%	133.3	73.8%	22.2%	100%	122.2	76.7%	52.6%	83.9%	136.5	72.0%
cJADAS >4 unless cJADAS 3 months <50% baseline*	43.3%	75.9%	119.2	64.3%	40.0%	80.0%	120.0	66.7%	45.0%	73.5%	118.5	63.0%
cJADAS >5 unless cJADAS 3 months <50% baseline*	43.3%	82.7%	126.0	68.3%	40.0%	85.0%	125.0	70.0%	45.0%	81.3%	126.3	67.3%
cJADAS >6 unless cJADAS 3 months <50% baseline*	37.9%	88.2%	126.1	70.0%	22.2%	94.7%	116.9	71.4%	45.0%	84.4%	129.4	69.2%
cJADAS >7 unless cJADAS 3 months <50% baseline*	37.9%	90.4%	128.3	71.6%	22.2%	95.0%	117.2	72.4%	45.0%	87.5%	132.5	71.1%
cJADAS >8 unless cJADAS 3 months <50% baseline*	34.5%	92.5%	127.0	72.0%	22.2%	100%	122.2	76.7%	40.0%	87.5%	127.5	69.2%
Patient VAS at most 0% of score (i.e. just PGA+AJC)												
PGA+AJC >3	53.3%	57.6%	110.9	56.2%	40.0%	78.3%	118.3	66.7%	60.0%	44.4%	104.4	50.0%
PGA+AJC >4	50.0%	72.9%	122.9	65.2%	30.0%	87.0%	117.0	69.7%	60.0%	63.9%	123.9	62.5%
PGA+AJC >5	46.7%	86.4%	133.1	73.0%	20.0%	91.3%	111.3	69.7%	60.0%	83.3%	143.3	75.0%
PGA+AJC >6	36.7%	89.8%	126.5	71.9%	0.0%	95.7%	95.7	66.7%	55.0%	86.1%	141.1	75.0%
PGA+AJC >7	30.0%	93.2%	123.2	71.9%	0.0%	100%	100.0	69.7%	45.0%	88.9%	133.9	73.2%
PGA+AJC >3 unless PGA+AJC 3 months <50% baseline	46.7%	71.2%	117.9	62.9%	40.0%	78.3%	118.3	66.7%	50.0%	66.7%	116.7	60.7%
PGA+AJC >4 unless PGA+AJC 3 months <50% baseline	43.3%	79.7%	123.0	67.4%	30.0%	87.0%	117.0	69.7%	50.0%	75.0%	125.0	66.1%
PGA+AJC >5 unless PGA+AJC 3 months <50% baseline	40.0%	88.1%	128.1	71.9%	20.0%	91.3%	111.3	69.7%	50.0%	86.1%	136.1	73.2%
PGA+AJC >6 unless PGA+AJC 3 months <50% baseline	30.0%	91.5%	121.5	70.8%	0.0%	95.7%	95.7	66.7%	45.0%	88.9%	133.9	73.2%
PGA+AJC >7 unless PGA+AJC 3 months <50% baseline	23.3%	94.9%	118.2	70.8%	0.0%	100%	100.0	69.7%	35.0%	91.7%	126.7	71.4%
PGA+AJC >8 unless PGA+AJC 3 months <50% baseline	16.7%	94.9%	111.6	68.5%	0.0%	100%	100.0	69.7%	25.0%	91.7%	116.7	67.9%
Other rules												
cJADAS 3 months >50% baseline*	78.9%	50%	128.9	58.5%	100%	47.4%	147.4	58.3%	71.4%	51.9%	123.3	58.5%
PGA+AJC 3 months >50% baseline	46.7%	64.4%	111.1	58.4%	50.0%	60.9%	110.9	57.6%	45.0%	66.7%	111.7	58.9%

* Or just PGA+AJC <50% baseline in case of missing VAS

6 MONTHS	ALL PATIENTS				OLIGOARTICULAR PATIENTS				POLYARTICULAR PATIENTS			
Rule: Patient VAS can be up to 100% of score	Sensitivity	Specificity	Sum	Accuracy	Sensitivity	Specificity	Sum	Accuracy	Sensitivity	Specificity	Sum	Accuracy
JADAS71 >2	82.6%	40.0%	122.6	53.3%	100.0%	45.5%	145.5	58.6%	75.0%	36.7%	111.7	50.0%
JADAS71 >3	78.3%	58.0%	136.3	64.4%	100.0%	52.4%	152.4	64.2%	68.8%	62.1%	130.9	64.4%
JADAS71 >4	68.2%	74.0%	142.2	72.2%	66.7%	71.4%	138.1	70.4%	68.8%	75.9%	144.7	73.3%
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JADAS71 >6	50.0%	85.4%	135.4	75.0%	40.0%	85.7%	125.7	76.9%	53.3%	85.2%	138.5	73.8%
JADAS71 >7	31.6%	87.5%	119.1	71.6%	0%	85.7%	85.7	72.0%	40.0%	88.9%	128.9	71.4%
JADAS71 >8	31.6%	89.6%	121.2	73.1%	0%	85.7%	85.7	72.0%	40.0%	92.6%	132.6	73.8%
cJADAS >2	83.3%	42.3%	125.6	55.3%	100%	50.0%	150.0	62.1%	76.5%	36.7%	113.2	51.1%
cJADAS >3	79.2%	61.2%	140.4	67.1%	100%	57.1%	157.1	67.9%	70.6%	64.3%	134.9	66.7%
cJADAS >4	69.6%	75.5%	145.1	73.6%	66.7%	71.4%	138.1	70.4%	70.6%	78.6%	149.2	75.6%
cJADAS >5	59.1%	79.2%	138.3	72.9%	66.7%	76.2%	142.9	74.1%	56.3%	81.5%	137.8	72.1%
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cJADAS >7	35.0%	89.6%	124.6	73.5%	0.0%	85.7%	85.7	72.0%	43.8%	92.6%	136.4	74.4%
Patient VAS at most 50% of score												
cJADAS >2	69.2%	58.6%	127.8	61.9%	66.7%	69.6%	136.3	68.8%	70.6%	51.4%	122.0	57.7%
cJADAS >3	59.3%	76.4%	135.7	70.7%	55.6%	77.3%	132.9	71.0%	61.1%	75.8%	136.9	70.6%
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cJADAS >6	37.5%	89.7%	127.2	74.4%	14.3%	91.3%	105.6	73.3%	47.1%	88.6%	135.7	75.0%
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Patient VAS at most 0% of score (i.e. just PGA + AJC)												
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PGA+AJC >3	51.9%	83.1%	135.0	73.2%	33.3%	87.0%	120.0	71.9%	61.1%	80.6%	141.7	74.1%
PGA+AJC >4	37.0%	88.1%	125.1	72.1%	22.2%	91.3%	113.5	71.9%	44.4%	86.1%	130.5	72.2%
PGA+AJC >5	22.2%	93.2%	115.4	70.9%	22.2%	91.3%	113.5	71.9%	22.2%	94.4%	116.6	70.4%