



Williams, A., Lampasona, V., Michael, S., Mueller, P., Pittman, D., Winter, W., Akolkar, B., Wyatt, R., Brigatti, C., Krause, S., & Achenbach, P. (2015). Detection of antibodies directed to the N-terminal region of GAD is dependent on assay format and contributes to differences in the specificity of GAD autoantibody assays for type 1 diabetes. *Diabetes*, 64(9), 3239-3246. <https://doi.org/10.2337/db14-1693>

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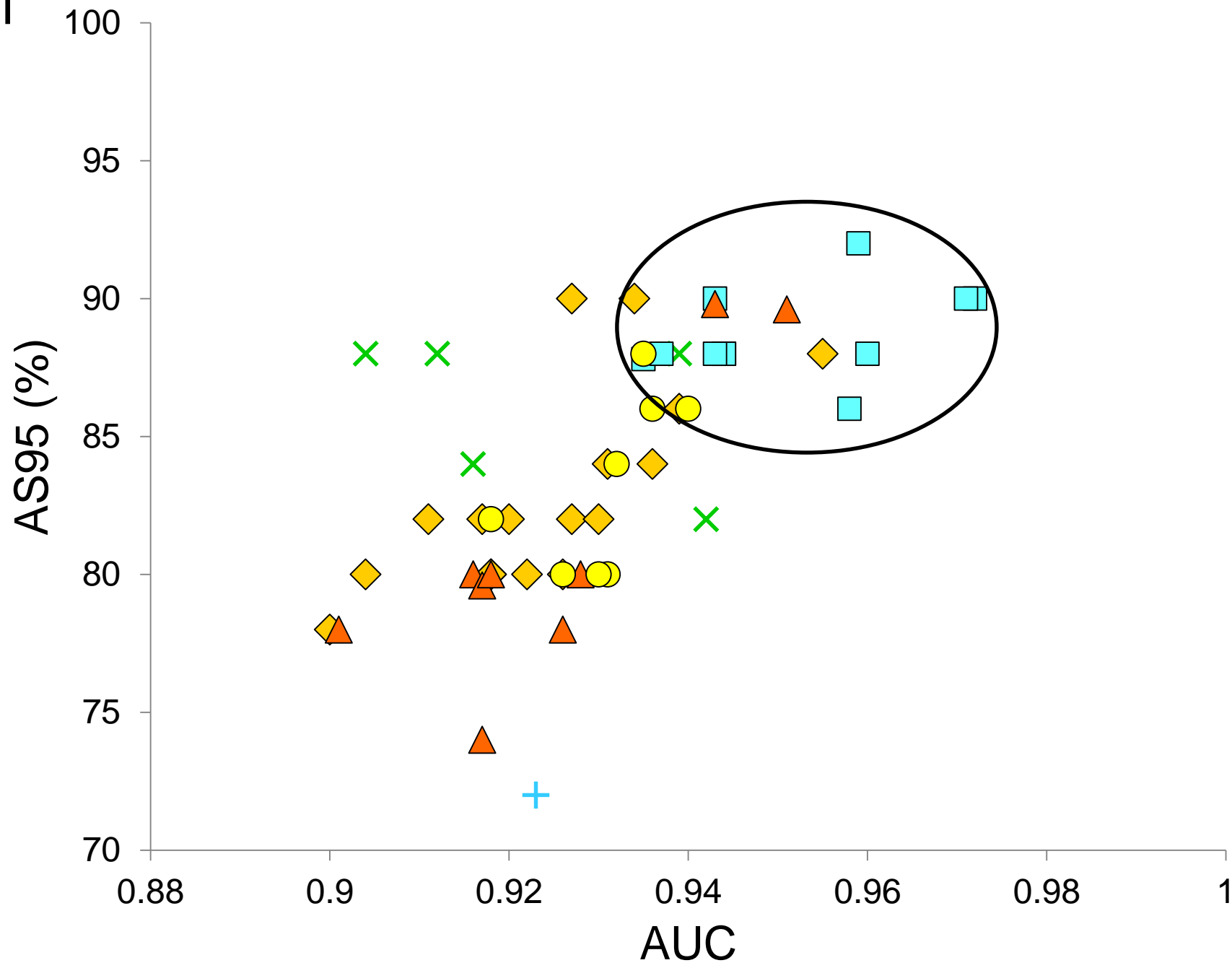
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1



- x LIPS
- ◇ In-house RBA
- Commercial ELISA
- △ Commercial RBA
- Standard RBA
- + In-house ELISA

# 2a

Commercial  
ELISA

ELISA

Commercial  
RBA

Standard  
RBA

In-house  
RBA

LIPS

Laboratory  
ID

132
518
109
505
113
503
604
119
703
704

150
-----

305
702
402
305
501
132
305
209

109
133
123
118
116
118
121
213

114
137
221
507
134
213
156
129
155
153
116
120
301
133
504

153
150
150

AUC

0.97  
0.97  
0.96  
0.95  
0.94  
0.94  
0.94  
0.94  
0.93  
0.93

0.92

0.94  
0.94  
0.93  
0.92  
0.92  
0.92  
0.90  
0.90

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0.92  
0.92  
0.92  
0.92  
0.91  
0.91

0.94  
0.91  
0.90

% of assays scoring +

Laboratory ID	Commercial ELISA	ELISA	Commercial RBA	Standard RBA	In-house RBA	LIPS	% of assays scoring +
LQ21235	+ + - + + + - + + +	- -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	17
LQ19277	+ + - + + + + + + +	- -	- - - - - + - -	- - - - - - + -	- - - - - - - -	- - - - - - - -	26
TS23727	+ + + + + + + + + +	- -	- - - - - - - -	- - - + + + + +	+ - - - - - + +	- + - - - - - -	43
LQ22058	+ + - + + + - + - +	- -	- + + + + + + +	- - - - + - - -	- - - + - - + +	- + + - - - + -	50
N51532	- - - - - - - - - -	- -	+ + + + + + + +	- - - + + + + +	- + - - - + - -	- - - - - + - -	43
N56575	- - - - - - - - - -	- -	+ + + + + + + +	- - - + + + + -	- + - - - + + +	- - - - - + - -	41
N59932	- - - - - - - - - -	- -	+ + + + + + + +	- - - - - + - -	- + - - - + + +	- - - - - - - -	30
S8531	- - - - - - - - - -	- -	- - - - + + - -	- + - - + + + +	- - - + + - - -	- - - - - - - -	22
N53371	- - - - - - - - - -	- -	- - - - - - - -	- - - + - + + +	+ + - - - + + +	- - - - - - - -	22
N54357	- - - - - - - - - -	- -	- - + + + + + +	- - - - - - - -	- - - - - - - -	- - - - - - - -	15

# 2b

Commercial  
ELISA

Commercial  
RBA

Standard  
RBA

In-house  
RBA

LIPS

Laboratory  
ID

132
136
505
518
518
602
110
109
519

501
136
602
603
132
111
111
113
607
402
209

213
121
116
133
109
504
133
118

152
114
156
116
120
126
221
137
213
150
304
133
115
126
301
155
129
153
507
148

153
405

AUC

0.96  
0.96  
0.95  
0.95  
0.94  
0.93  
0.92  
0.91  
0.91

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0.85

0.95  
0.94  
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0.96  
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0.92  
0.92  
0.91  
0.91  
0.90  
0.90  
0.89  
0.89  
0.85  
0.85

0.89  
0.86

% of assays scoring +

Laboratory ID	Commercial ELISA	Commercial RBA	Standard RBA	In-house RBA	LIPS	% of assays scoring +						
LQ21235	+	+	+	+	+	+	+	+	-	-	-	18
LQ19277	+	+	+	+	+	+	+	+	-	-	-	26
TS23727	+	+	+	+	+	+	+	+	-	-	-	52
LQ22058	-	+	+	-	-	+	+	+	-	+	+	48
N51532	-	-	-	-	-	-	-	-	-	+	+	58
N56575	-	-	-	-	-	-	-	-	-	+	+	56
N59932	-	-	-	-	-	-	-	-	-	+	+	42
S8531	-	-	-	-	-	-	-	-	-	+	+	18
N53371	-	-	-	-	-	-	-	-	-	+	+	20
N54357	-	-	-	-	-	-	-	-	-	+	-	14



