

Update 15

SAMSAS Prenatal Screening for Down syndrome

Revised Age Specific Performance

1st & 2nd Trimester Screening

at time of screen with risk cut off 1:250



SA PATHOLOGY

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HOW TO READ THIS TABLE

For a 30 year old screened using the 1st Trimester Combined Screen, there would be a **3.5%** chance of being screened “at increased risk” and a **75.1%** chance of detecting an affected pregnancy. For a pregnancy screened “at increased risk” there would be a **1 in 34** chance that the pregnancy is affected by Down syndrome and for a pregnancy screened “not at increased risk”, the chance would be **1 in 2,789**. Comparative performance figures for a second trimester screen are provided in the last 4 columns.

1 st Trimester Combined Screen						2 nd Trimester Screen				
Maternal age in years at time of screen	Maternal age risk at 12 weeks 1:n	% of pregnancies screened at increased risk	% of affected pregnancies detected	Odds of having an affected pregnancy following		Maternal age risk at 18 weeks 1:n	% of pregnancies screened At increased risk	% of affected pregnancies detected	Odds of having an affected pregnancy following	
				Increased risk report 1:n	Not at increased risk report 1:n				Increased risk report 1:n	Not at increased risk report 1:n
20	1131	2.4	73.6	37	4186	1330	4.4	59.3	99	3126
21	1118	2.4	73.6	37	4137	1316	4.4	59.3	98	3093
22	1102	2.5	73.6	37	4076	1297	4.5	59.3	99	3045
23	1081	2.5	73.6	37	3997	1273	4.5	59.3	97	2989
24	1054	2.5	74.1	36	3971	1243	4.6	60.0	96	2964
25	1020	2.6	74.6	35	3916	1203	4.7	60.0	94	2866
26	978	2.7	74.6	36	3749	1155	5.0	60.0	96	2743
27	926	2.9	74.6	36	3543	1096	5.3	61.3	94	2685
28	866	3.0	74.6	35	3310	1026	5.8	62.7	94	2590
29	796	3.2	74.6	34	3037	945	6.1	64.0	91	2464
30	719	3.5	75.1	34	2789	855	6.7	64.7	89	2257
31	636	3.6	78.6	29	2865	759	7.3	65.3	85	2030
32	552	4.0	81.1	27	2803	659	8.3	67.3	81	1851
33	468	4.3	84.6	24	2903	561	9.3	68.7	76	1624
34	390	4.9	86.1	22	2662	468	10.7	70.7	71	1425
35	318	5.7	88.1	20	2513	383	12.2	74.0	63	1293
36	256	6.6	88.6	19	2089	308	14.9	78.7	58	1229
37	203	7.7	91.0	17	2092	245	18.0	81.3	54	1077
38	159	9.5	92.5	16	1929	191	22.0	83.3	50	894
39	123	11.7	93.0	15	1559	149	26.5	88.7	45	966
40	94	14.4	95.0	14	1616	114	32.6	91.3	41	887
41	72	17.3	97.5	13	2394	88	38.3	92.7	36	740
42	55	21.6	98.0	12	2167	66	44.7	96.0	31	913
43	42	26.2	98.0	11	1557	51	52.4	96.7	28	728
44	31	31.5	99.0	10	2135	39	58.3	98.0	23	813
45	28	33.2	99.0	9	1879	33	61.6	99.3	20	1902

We believe these data will assist in counselling and decision making by providing health professionals and patients with odds that better reflect outcomes. They demonstrate improved sensitivity and specificity resulting from refinements made to the SAMSAS program since Update 12, December 2003, and reinforce the differential performance across age groups. The 1st Trimester Combined screen remains the primary population screen of choice.

The data presented and the performances quoted in this Update are those of the SAMSAS program, SA Pathology and do not apply to other software or testing centres.

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