1 TITLE

2 Association between timing of diagnosis of trisomy 21, 18 and 13 and maternal

3 socioeconomic status in Victoria, Australia: a population-based cohort study from 2015-16

4 Running title: Maternal socioeconomic status and timing of aneuploidy diagnosis

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DISCLOSURES OF POTENTIAL CONFLICT OF INTEREST

Dr Palma-Dias reports a commercial relationship with Roche Diagnostics, personal fees from Philips Ultrasound, outside the submitted work. Dr D Nisbet reports a commercial relationship with Roche Diagnostics, outside the submitted work.

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56 **BULLETED STATEMENTS**

What's already known? Sociodemographic factors influence whether pregnant women are 57 58 offered or utilise prenatal screening and diagnostic tests for fetal chromosome conditions.

What does this study add? Women from socioeconomically disadvantaged regions were less
likely to receive a prenatal diagnosis of a major autosomal trisomy before 17 weeks, and
more likely to have a livebirth of an infant with trisomy 21 than advantaged women. The
majority of trisomy 21 live births were not preceded by any prenatal genetic testing.

DATA AVAILABILITY STATEMENT

The raw datasets are not publicly available due to the conditions of ethics committee approvals.

ABSTRACT

Objectives: To explore the association between timing of diagnosis of common autosomal trisomies, maternal age and socioeconomic status (SES).

Design: Retrospective study of cytogenetic diagnoses of trisomy 21 (T21), trisomy 18 (T18) 72 and trisomy 13 (T13) in Victoria, Australia in 2015-16, stratified by timing (prenatal < 17 73 weeks (w), prenatal > 17w, postnatal < 12 months), maternal age and SES region. Utilisation 74 of prenatal testing following a liveborn T21 infant was ascertained via record linkage. 75 Results: Among 160,230 total births were 571 diagnoses of T21 and 246 of T18/T13. The 76 overall and livebirth prevalences of T21 were 3.56 and 0.47 per 1000 births respectively. Compared with women from disadvantaged SES regions, women from high SES regions 78 were more likely to have a prenatal diagnosis of a trisomy <17w than after (p<0.01), and less likely to have a liveborn T21 infant than a prenatal diagnosis (p<0.01). There was a 80 significant trend to higher livebirth rates of T21 with lower SES (p=0.004). The majority 81 (68.5%) of women who gave birth to a live infant with T21 did not utilise prenatal testing. Conclusion: There is a significant relationship between lower SES, later prenatal diagnosis 82 83 of trisomy and higher livebirth rate of T21 in Victoria.

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86 The autosomal trisomies, trisomy 21 (T21, Down Syndrome), trisomy 18 (T18, Edward syndrome) and trisomy 13 (T13, Patau syndrome) are among the most common birth defects, 87 88 and are associated with significant health and developmental consequences including 89 intellectual disability, congenital malformations and high rates of perinatal loss (miscarriage, 90 stillbirth, neonatal death). It is recommended practice in Australia for maternity clinicians to 91 offer all pregnant women prenatal screening for aneuploidy.¹ The three main screening tests 92 in use in Australia are: combined first trimester screening (CFTS) with the 11-13 week 93 ultrasound for nuchal translucency measurement plus serum biochemical markers, maternal 94 plasma cell-free DNA-based screening (also known as non-invasive prenatal testing or NIPT) from 10 weeks gestation, and second trimester serum screening (STSS) with maternal serum 95 biochemical markers at 15-20 weeks ('quad' screening). 96

97 In Australia, prenatal care is provided in a variety of public and private settings, Of women giving birth in Victoria in 2015, 73.4% were public patients and 26.3% were private -98 patients.¹⁴ Government rebates are available for CFTS, second trimester serum screening 99 (STSS) and the mid-trimester morphology ultrasound with variable out-of-pocket cost to the 100 101 patient (typically <AUD 200). CfDNA has been available on a patient funded basis since 102 2013 at an average cost of AUD500 and is not subsided by the government. Nevertheless, 103 NIPT has been rapidly adopted through individual patient choice and clinician practice and 104 was used by at least 20% of women as a primary screening test in 2015. The two diagnostic 105 tests, CVS and amniocentesis, are fully government-funded if performed in a public hospital, 106 but incur direct patient costs if performed in the private sector.

107

Major changes in the prenatal screening field have occurred since the commercial availability 108 109 of NIPT in Australia and elsewhere in 2013, introducing new ethical implications related to access.² There have been ongoing concerns regarding the equitable integration of genomic 110 advances into pregnancy care and recent calls for public funding of NIPT.³ Ideally, women 111 should be offered prenatal screening in the first trimester, as this maximises choice and facilitates subsequent genetic counselling and prenatal diagnosis of an affected pregnancy before 17 weeks gestation. Earlier prenatal diagnosis is not only psychologically preferable for women,⁴ but also improves access to surgical termination of pregnancy in Victoria if requested, as services are limited after 17 weeks gestation.⁵ Further opportunities for trisomy detection occur at the time of second trimester fetal morphology scan (typically performed at 18-22 weeks), but its sensitivity for T21 is lower. A prenatal diagnostic procedure prior to 17 weeks (typically via chorionic villus sampling (CVS) at 11-14 weeks, or amniocentesis at 15-16 weeks) can therefore be viewed as a marker of best practice for those women who choose to have prenatal testing.

Our prior research has demonstrated significant variation in indications for prenatal diagnosis according to socioeconomic status (SES), finding women in lower socioeconomic regions more likely to undergo invasive testing as a result of false positive screening results than their higher socioeconomic counterparts.⁶ In this study, we newly obtained state-wide postnatal cytogenetic data, in order to (1) to analyse the prenatal and postnatal diagnoses of the common autosomal trisomies in Victoria, (2) to explore the association between timing of diagnosis, maternal age and SES, and (3) to assess the utilisation of prenatal screening in women who gave birth to a live infant with T21.

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131 METHODS

132 **Population characteristics**

134 maternal age was 31.1 years, the total fertility rate was 1.79, and the mean weekly disposable

- 135 household income was AUD \$1,009.⁷⁻¹⁰
- 136

137 Data sources

All women with a Victorian postcode who received a prenatal or postnatal cytogenetic
diagnosis of T21, T18 and T13 in their fetus/infant from January 2015 to December 2016
were included in this analysis. A perinatal record linkage (PeRL) collaboration was formed
between the providers of screening and diagnostic services for this study (see
acknowledgements for full list of members).

(i) The Victorian Prenatal Diagnosis Database, which includes results of all amniocenteses
and CVS performed in Victoria. This dataset has been described in detail elsewhere.¹¹

145 (ii) The postnatal diagnosis dataset included chromosome results from all products of

146 conception, placenta/umbilical cord, cord blood, and infant samples performed in Victoria.

147 Infant samples up to 12 months of age were included.

(iii) State-wide CFTS and STSS results were obtained from the Victorian Clinical GeneticsService.

150 (iv) NIPT data were obtained from three pathology services and a number of major private

151 obstetric practices providing a range of NIPT assays (including perceptTM, GenerationTM,

152 PanoramaTM and HarmonyTM). These data did not include all NIPT referrals in Victoria due

to the fragmented and privatised nature of NIPT provision. However, the participating

services collectively represent the vast majority of NIPT referrals in our state. On the basis of

155 ongoing monitoring (unpublished), we estimate that our dataset contains over 80% of NIPT

156 performed in Victoria.

158 Victorian birth data were obtained from the Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM) and the Australian Bureau of Statistics (ABS). ^{7,12,13} 159 CCOPMM data were used to calculate overall prevalence as it incorporates data on 160 161 terminations of pregnancy, stillbirths and livebirths from > 20 weeks gestation. ABS birth

data was used to calculate the livebirth prevalence stratified by maternal SES.

Record linkage

- 1. Postnatal cases of T21, T18 and T13 that contained infant identifiers were submitted to the Victorian Infant Hearing Screening Program (VIHSP)¹⁴ to obtain the matched maternal identifiers. This newborn screening program collects maternal and infant identifiers on all live infants born in hospital for the purpose of auditory screening. Only abnormal postnatal results were submitted to the VHISP for retrieval of maternal identifiers to allow linkage to the prenatal screening and diagnosis dataset. 2. Duplicate prenatal and postnatal diagnostic tests for the same pregnancy were identified using probabilistic record linkage with LinkageWizTM (Version 5.5.1, Australia) and manual checking.
 - 3. Data sources (iii) and (iv) were combined to generate a total prenatal screening dataset
- 4. Manual linkage between the postnatal dataset and the total screening dataset was performed to determine whether women with a livebirth of a T21 infant had accessed any prenatal screening.

179

180 Maternal socioeconomic status

181 Socioeconomic status was assigned to each case using the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) score associated with maternal postcode. The IRSAD 182

is a comprehensive metric incorporating data on income, occupation, education, employment
and housing, and is assigned by the Australian Bureau of Statistics from 2016 Census data.¹⁵
IRSAD scores were grouped into quintiles, with quintile 5 being the most advantaged and
quintile 1 being the least advantaged.

188 Statistical analysis

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We performed two analyses of the timing of diagnosis of trisomy: (i) early prenatal versus late prenatal diagnosis, and (ii) prenatal versus livebirth diagnosis. Postnatal diagnoses performed after perinatal loss were not included in these comparisons as these generally represent inevitable losses (miscarriage or stillbirth) or terminations for fetal structural abnormality where cytogenetic investigation was only performed after the termination. The 17 week cut off for defining 'early prenatal' diagnosis was chosen due to its clinical relevance. Diagnostic confirmation after a high risk first trimester screening result (CFTS or NIPT) should ideally be completed by 17 weeks, accounting for the timeline of referral for genetic counselling, scheduling of a diagnostic procedure, and laboratory turn-around time for fetal chromosome analysis.

χ2 test for trend and logistic regression for unadjusted and adjusted odds ratios was
performed. Confounders available for inclusion for analysis were maternal age (not available
for the postnatal diagnosis analysis) and IRSAD quintile. Statistical analysis was performed
with STATA v14 (Statacorp, LLC, College Station, TX, USA) and Prism 6 (Version 6.0 h
2015; GraphPad Software Inc., San Diego, CA, USA). A P value <0.05 was considered
statistically significant.

205 **Definitions**

A table of definitions is provided in Table 1.

208 This study was approved by the Royal Children's Hospital Human Research Ethics

209 Committee (reference numbers: 35171B and 31135A) and Monash Health (reference number210 12063B).

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212 **RESULTS**

Over the 24-month study period, there were 160,230 births and 817 confirmed diagnoses of T21, T18, and T13. Among the 571 total cases of T21, 386 (67.6%) were ascertained via prenatal diagnosis, 112 (12.8%) after a perinatal loss and 73 (19.6%) following a livebirth (Table 2). The vast majority of T18 and T13 cases were diagnosed during pregnancy or after perinatal loss, with only 0.7% and 2.8% of diagnoses made in livebirths respectively.

The overall prevalence of T21 was 3.56 per 1000 pregnancies (1 in 284) and 0.47 per 1000 livebirths (1 in 2714) (Table 2).

221 Early versus late prenatal diagnosis of T21/18/13

518 women received a prenatal diagnosis of T21/T18/T13 via amniocentesis or CVS, of
which 513 had a known gestational age at testing. The majority of prenatal diagnoses of T21
cases occurred before 17 weeks gestation (90.4%). Women who had a prenatal diagnosis of
T18 or T13 were significantly less likely to receive a prenatal diagnosis before 17 weeks
compared to those with a prenatal diagnosis of T21, after adjusting for maternal age and
IRSAD quintile (T18 - adjOR 0.41, p<0.02 and T13 - adjOR 0.26, p<0.01) (Table 3).

228

229 Younger women (19-29 years) were significantly less likely to receive an early prenatal

230 diagnosis, than the 40+ age group (adjOR 0.30, p=0.01). There was a significant trend

231 towards early prenatal diagnosis with greater maternal socioeconomic advantage (χ^2 trend = 232 6.23, p =0.01) (Table 3).

233

234 Prenatal versus livebirth diagnosis of T21

Due to the small number of livebirths with T18 or T13, this analysis was confined to T21. 236 Compared with women in IRSAD 5, the most disadvantaged women in IRSAD 1 were 4.6 237 times more likely to receive a T21 diagnosis in a live infant rather than during pregnancy 238 (unadjOR 4.62, p<0.01) (Table 4 and Figure 1).

Figure 2 shows the livebirth rate of T21 in Victoria by IRSAD quintile. There was a significant trend to higher livebirth rate of T21 with declining socioeconomic status (χ 2 trend = 15.6, p = 0.004).

Utilisation of prenatal testing among women with T21 livebirth

Of the 73 women who had a livebirth with T21, 50 (68.5%) had not utilised any prenatal screening or diagnosis, 13 (17.8%) had a false negative prenatal screening result, and 7 (9.6%) had a high-risk screening result without confirmation via prenatal diagnosis. 3 (4.1%) women directly accessed invasive prenatal diagnosis, without undergoing prior prenatal screening.

250 251

DISCUSSION 252

253 This study is the first of its kind to link prenatal and postnatal cytogenetic databases in 254 Australia in order to analyse the timing of the diagnosis of common autosomal trisomies by maternal socioeconomic status. We have shown that women residing in socioeconomically 255 256 disadvantaged regions are more likely to have a prenatal diagnosis of a trisomy after 17

weeks, and to give birth to a live infant with T21, compared with women fromsocioeconomically advantaged regions.

259

Australian women have previously indicated that they value early prenatal diagnosis,⁴ 260 preferring first trimester over second trimester screening.¹⁶ The significant relationship 261 262 between higher SES and early prenatal diagnosis before 17 weeks reflects known differences in screening indications for prenatal diagnosis in our population, with disadvantaged women 263 264 more likely to undergo STSS-indicated invasive prenatal diagnosis, and less likely to have NIPT-indicated prenatal diagnosis than advantaged women.⁶ Timely presentation for 265 266 antenatal care and financial capacity are the most likely socioeconomic influences on a 267 women's choice of first or second trimester screening. The fact that disadvantaged women 268 are more likely to have a prenatal diagnosis of a major trisomy after 17 weeks has important 269 management, as well as ethical implications, as surgical termination of pregnancy is less 270 available and less affordable in Victoria after 17 weeks, and entails higher surgical risks to 271 the woman.⁵

272

Sociodemographic factors such as income, education, maternal age, rurality and ethnicity 273 274 significantly influence whether women are offered or utilise prenatal screening tests in the first instance.¹⁷⁻²⁰ We found that the likelihood of a livebirth with T21 was almost five times 275 276 as high in the most disadvantaged women compared to the least; and the majority of these women had not utilised any prenatal screening. This was associated with a significant trend 277 278 towards higher livebirth rates of T21 for women residing in lower SES regions. These could 279 be explained by patient factors such as differences in ethical, cultural or religious beliefs 280 among women of different SES regions. Maternal age may also be a factor, but as these data 281 were not available for the livebirth cases, we were unable to adjust for this potential

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282 confounder. It is also possible that discrepancies in the utilisation of medical services may 283 have contributed to our results as both lower socioeconomic status and younger maternal age are known to influence engagement with healthcare systems.²¹ 284

285

We also observed that women with a fetal diagnosis of T13 or T18 were less likely to receive an early prenatal diagnosis than women with a fetal diagnosis of T21. This is probably best explained by the fact that all current screening tests have a lower sensitivity for identifying T18 and T13 compared with T21,^{22,23} while STSS does not screen for T13 at all.

As expected, there were a higher number of autosomal trisomies in the older maternal age groups, in keeping with their known association with advanced maternal age.^{24,25} The greater number of diagnoses of T21 in the higher SES quintiles was because these quintiles have more births overall and more women of a higher maternal age, compared to lower quintiles.⁶ Younger women were significantly less likely to receive an early prenatal diagnosis compared to older women, even after adjustment for SES and trisomy type. Maternal age is an intrinsic component of the CFTS risk algorithm, and CFTS is known to have a lower detection rate in younger women.²⁶ Other possible explanations for this finding include differences in the offer or acceptance of first trimester screening due to varying perceptions of risk in younger women, and differences in post-test counselling by clinicians following a high-risk screening result.²⁰

302

The main strength of this study was the complete case ascertainment of prenatal and postnatal 303 304 trisomy cases from all pathology providers in Victoria, and the ability to perform individual 305 record linkage of the postnatal T21 cases to prenatal screening data, including NIPT. This 306 allowed us to measure the utilisation of prenatal testing by women with a live infant

307 diagnosed with T21, and to assess the association between maternal SES and fetal/infant 308 diagnoses of a major autosomal trisomy.

309

310 The major limitation was the lack of pregnancy outcome data for women receiving a prenatal diagnosis of a major trisomy. It was noted that even after both probabilistic and manual linkage, very few cases appeared in both the prenatal and postnatal datasets. Those that are unaccounted for in the postnatal dataset may have either ended in a perinatal loss (termination of pregnancy, miscarriage or stillbirth) or a livebirth without postnatal cytogenetic testing. We do, however, expect that a livebirth of an infant with T21 would be documented with a formal postnatal karyotype within the first year of life.

The other major limitation is that we were unable to define the factors contributing to the differences in prenatal diagnosis between advantaged and disadvantaged women in Victoria. Analyses were restricted by the range of data collected, hence confounding factors known to influence choices regarding prenatal testing (such as ethnicity, religion and cultural background) were unable to be accounted for. Equity of access to medical care is an important principle underlying our universal health care model, and the high patient cost for accessing NIPT has been identified as a major ethical issue for Australia practitioners.²⁷ Whether our observed differences in outcomes are due to patient factors, practitioner-based factors or systemic barriers to access, particularly economic factors, will be important areas of future research.

328

329 **CONCLUSION**

Maternal residence in an area of socioeconomic disadvantage is significantly associated with 330 331 later prenatal diagnosis of major autosomal trisomies and higher livebirth rates of T21. These

findings are of particular relevance to health policy makers and clinicians when evaluating
the performance of population-based prenatal screening programs. Further research into the
potential factors contributing to these differences in outcomes, particularly systemic barriers
to accessing healthcare and qualitative research to further characterise women's preferences,
is urgently needed.

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418 TABLES

419 **Table 1 – Table of definitions**

Term	Definition
Prenatal diagnosis	the results of a karyotype or microarray from a chorionic
	villus sampling or amniocentesis at any gestation
Early prenatal diagnosis	prenatal diagnosis <17 weeks gestation
Late prenatal diagnosis	prenatal diagnosis \geq 17 weeks gestation
Postnatal diagnosis	karyotype or microarray of any pregnancy tissue
	(placenta, cord, infant saliva, infant blood, 'products of
	conception') obtained after any birth (miscarriage,
	termination of pregnancy, livebirth, stillbirth), without a
	prior prenatal diagnosis in the same pregnancy
Miscarriage samples	postnatal samples performed on 'products of conception'
	referred under the maternal identifier with the indication
	'miscarriage'
Livebirth samples	infant blood and buccal swab specimens
Perinatal loss	miscarriage, stillbirth or termination of pregnancy at any
	gestation
Total births	births at 20 weeks gestation or more, including
	terminations of pregnancy, stillbirths and livebirths
T21 livebirth prevalence	the number of postnatal T21 diagnoses from infant blood
	or buccal swab sample divided by the total registered
	livebirths > 20 weeks from the Australian Bureau of
	Statistics
T21 overall prevalence	the total number of prenatal and postnatal diagnoses,
	divided by the total births including terminations and
	stillbirths from the Consultative Council on Obstetric
	and Paediatric Mortality and Morbidity

422 Table 2 –Number of prenatal and postnatal diagnoses and prevalence rates of T21, T18

423 and T13 in Victoria, 2015-16

	Trisomy 21		Trisomy 18		Trisomy 13		Total	
Timing of				n/100		n/1000		n/1000
diagnosis	n (%)	n/1000	n (%)	0	n (%)		n (%)	
Prenatal	386		88		44			
diagnosis	(67.6%)	2.40	(63.3%)	0.55	(41.1%)	0.27	518 (63.4%)	3.23
Diagnosis								
following	112		50		60			
perinatal loss	(19.6%)	0.70	(36.0%)	0.31	(56.1%)	0.37	222 (27.3%)	1.39
Livebirth								
diagnosis	73 (12.8%)	0.46	1 (0.7%)	< 0.01	3 (2.8%)	0.19	77 (9.4%)	0.48
Total diagnoses,								
n (%)	571 (100	0%)	139 (10	0%)	107 (1	00%)	817 (100	0%)
Overall								
prevalence (rate								
per 1000								
pregnancies)	3.56		0.87		0.66		5.10	
Livebirth								
prevalence (rate								
per 1000								
livebirths)	0.47		< 0.01		0.02		0.49	

426 Perinatal loss includes miscarriage, stillbirth or termination of pregnancy in the absence of a 427 prenatal karyotype at any gestation. Overall prevalence = the total number of diagnoses, 428 divided by the total births (including terminations and stillbirths from CCOPMM reports (n = 429).^{12,13} Livebirth prevalence = the number of postnatal T21 diagnoses from infant blood 430 or buccal swab sample divided by the total registered livebirths > 20 weeks from the ABS 431 $(n=156460)^7$

442 Table 3 – Association between early prenatal vs late prenatal diagnosis of T21, T18 and

443 T13 by diagnosis, maternal age and Index of Relative Socio-economic Advantage and

444 Disadvantage (IRSAD), 2015-16

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-		Farly propotal	Lata propatal	Unadjusted OR of	Adjusted OR [‡]		
C	Variable (n=513) [*]	diagnosis n (%)	diagnosis_n (%)	(95% CI)	(95% CI)		
. —	Trisomy (total n=51	3)	-		-		
5	T21(n=386)	349 (90.4%)	35 (9.1%)	Reference	Reference		
C	T18 (n=88)	70 (79.6%)	15 (17.1%)	0.47 (0.24-0.90)	0.41 (0.20-0.84)		
11	T13 (n=44)	33 (75.0%)	11 (25.0%)	0.30 (0.14-0.65)	0.26 (0.11-0.60)		
	Maternal age at diagnosis (total n=457) [†]						
_	40+ (n=108)	98 (90.7%)	10 (9.3%)	Reference	Reference		
	35-40 (n=189)	172 (91.0%)	17 (9.0%)	1.03 (0.45-2.34)	0.88 (0.38-2.01)		
	30-34 (n=113)	99 (87.6%)	14 (12.4%)	0.72 (0.31-1.70)	0.74 (0.30-1.80)		
σ	19-29 (n=47)	34 (72.3%)	13 (27.7%)	0.27 (0.11-0.66)	0.30 (0.11-0.77)		
\mathcal{A})	χ 2 trend = 8.30, p = 0.004*					
	IRSAD quintile (total n=513)						
>	5 (n=166)	153 (92.2%)	13 (7.8%)	Reference	Reference		
	4 (n=183)	163 (89.1%)	20 (10.9%)	0.69 (0.33-1.44)	0.70 (0.31-1.56)		
	3 (n=65)	55 (84.6%)	10 (15.4%)	0.47 (0.19-1.13)	0.51 (0.20-1.30)		
5	2 (n=59)	47 (79.7%)	12 (20.3%)	0.33 (0.14-0.78)	0.30 (0.12-0.74)		
	1 (n=40)	34 (85.0%)	6 (15.0%)	0.48 (0.17-1.36)	0.54 (0.16-1.86)		
C)	χ^2 trend = 6.23, p = 0.01					

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447 IRSAD = Index of Relative Socio-economic Advantage and Disadvantage, 5 is more

advantaged, 1 is less advantaged. *5 gestational ages missing in the prenatal dataset. † 56
maternal ages missing in the prenatal dataset. ‡ covariates in the model: maternal age,
IRSAD quintile & diagnosis.

457 Table 4 – Association between IRSAD quintile and timing of diagnosis of trisomy 21,

458 **2015-16**

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	Livebirth	Prenatal	Unadjusted [*] Odds Ratio of		
IRSAD quintile	diagnosis (n=73) n	diagnosis (n=385)	livebirth diagnosis (95%		
(n=458)	(%)	n (%)	CI)		
5	9 (6.9%)	121 (93.1%)	Reference		
4	28 (16.2%)	145 (83.8%)	2.60 (1.18-5.71)		
3	11 (19.6%)	45 (80.4%)	3.29 (1.28-8.46)		
2	14 (25.0%)	42 (75.0%)	4.48 (1.81-11.11)		
1	11 (25.6%)	32 (74.4%)	4.62 (1.76-12.11)		

IRSAD = Index of Relative Socio-economic Advantage and Disadvantage, 5 is more advantaged, 1 is less advantaged. * Unable to adjust for maternal age due to missing data on maternal ages for livebirths of trisomy 21

- 463 FIGURES (attached)464
- 465 Figure 1 Prenatal diagnosis vs livebirth diagnosis of T21 by IRSAD quintile (2015-16)
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 467 Figure 2 Livebirth rate of T21 per 1000 livebirths in Victoria by IRSAD quintile (2015-16)