Summary of exposure to macrolide antibiotics during trimester 0 or 1 for deliveries and births occurring in 2018 in New Zealand



Congenital conditions among babies exposed in trimester 0 or 1

Number of liveborn babies	Congenital condition	No congenital	Total	%
exposed to:		condition		
Erythromycin ethyl succinate	44	436	480	9%
Erythromycin stearate	1	24	25	4%
Roxithromycin	21	360	381	6%
Clarithromycin	4	23	27	15%
Azithromycin	59	588	647	9%
Any macrolide antibiotics	126	1 402	1 528	8%

Congenital conditions among babies NOT exposed in trimester 0 or 1

Number of liveborn babies exposed to:	Congenital condition	No congenital condition	Total	%
No macrolide	3 914	53 291	57 205	7%

Notes:

Exposure during trimester 0 or 1 counts as an earliest dispensing date between: 30 days before estimated conception date, up to 13 weeks gestation age.

Pregnancy exposure data includes all pregnancies regardless of delivery outcome (includes live and stillbirths). Counts of babies are of liveborns only.

Congenital conditions include primary and secondary diagnoses involving any ICD10 version11 codes between 'Q00' and 'Q99'.

For each baby, all publicly funded hospitalisations up to a year of age are considered.

A mother may have had more than one type of macrolide antibiotic and would be counted more than once. Babies born to mothers who had more than one type of macrolide antibiotic will be counted more than once.

Source: National Maternity Collection, Pharmaceutical Collection, National Minimum Dataset extracted 3 September 2020

Exposure to macrolide antibiotics during pregnancy among women delivering in 2018

	Number of pregnancies exposed							
Earliest trimester of dispensing	6026	6027	2790	2809	1178			
	0 104	4	137	13	254			
	1 377	20	242	15	387			
	2 467	30	130	4	297			
	3 517	65	107	1	258			
Unexposed	57096	58442	57945	58528	57365			

diam'r dub	Character Laboratory
Chemical ID	Chemical Name
6026	Erythromycin ethyl succinate
6027	Erythromycin stearate
2790	Roxithromycin
2809	Clarithromycin
1178	Azithromycin

Sources:

National Maternity Collection, Pharmaceutical Collection Date extracted: 3rd September 2020 Notes: Date of birth and gestational age are used to calculate an estimated conception date This date is used to calculate the trimester dates as follows: Trimester 0 begins 30 days before conception date Trimester 1 begins at conception date Trimester 2 begins at 13 weeks Trimester 3 begins at 27 weeks

Where there is no gestational age recorded, a default age of 40 weeks is applied All pregnancies are included in exposure data, regardless of delivery outcome (live or still)

Where multiple dispensings per pharmaceutical, per pregnancy have occurred, the earliest dispensing has been used A mother may have had more than one type of macrolide antibiotic and would be counted more than once. Congenital conditions among babies born in 2018 who were exposed to macrolide antibiotics during pregnancy Chemical ID and outcome

	chemical ib and outcome									
	60	126		6027		2790	1	2809		1178
Earliest trimester of dispensing	Congenital condition	No congenital condition	Congenital condition	No congenital condition	Congenital condition	No congenital condition	Congenital condition	No congenital condition	Congenital condition	No congenital condition
0	10	92		4	7	131	1	11	34	224
1	34	344	1	20	14	229	3	12	25	364
2	38	439	2	28	8	123		4	25	268
3	39	470	5	61	8	99		1	14	236
Unexposed	3919	53348	4032	54580	4003	54111	4036	54665	3942	53601

Chemical Name Erythromycin ethyl succinate Erythromycin stearate Roxithromycin Clarithromycin Azithromycin Chemical ID 6026 6027 2790 2809 1178 Sources: National Maternity Collection, Pharmaceutical Collection, National Minimum Dataset Date extracted: 3rd September 2020 Note: Date of Dirth and gestational age are used to calculate an estimated conception date This date is used to calculate the trimester dates as follows: Trimestor **Degins** 3 days before conception date Trimestor **Degins** at 30 days before conception date Trimestor **Jeagens** at 13 weeks

Where there is no gestational age recorded, a default age of 40 weeks is applied Where multiple dispensings per pharmaceutical, per pregnancy have occurred, the earliest dispensing has been used

Counts of bables are of liveborns only Congenital conditions include primary and secondary diagnoses involving any ICD10 version 11 codes between 'QQ0' amd 'Q99' For each bably, all publicly funded hospitalizations upto a year of age are considered Bables born to mothers who had more than one type of macrolide antibiotic will be counted more than once.

Summary of exposure to macrolide antibiotics during trimester 0 or 1 for deliveries and births occuring in 2018

Number of pregnancies exposed in trimester 0 or 1 to:	
6026 (Erythromycin ethyl succinate)	481
6027 (Erythromycin stearate)	24
2790 (Roxithromycin)	379
2809 (Clarithromycin)	28
1178 (Azithromycin)	641
Any macrolide antibiotics	1521

Congenital conditions among babies exposed in trimester 0 or 1

Number of liveborn babies exposed to:	Congenital condition	No congenital condition	Total	%
6026 (Erythromycin ethyl succinate)	44	43	4 4	80 9%
6027 (Erythromycin stearate)	1	2	4	25 4%
2790 (Roxithromycin)	21	36	i0 3	81 6%
2809 (Clarithromycin)	4	2	3	27 15%
1178 (Azithromycin)	59	58	8 6	47 9%
Any macrolide antibiotics	126	140	12 15	28 8%

Congenital conditions among babies NOT exposed in trimester 0 or 1	Congenital condition	No congenital condition	Total	%	
No exposure to any macrolide antibiotics during trimester 0 or 1	3914	1	53291	57205	7%

Notes: Exposure during trimester 0 or 1 counts as an earliest dispensing date between: 30 days before estimated conception date, upto 13 weeks gestation age Pregnancy exposure data includes all pregnancies regardless of delivery outcome (includes live and stillbirths) Counts of babies are of liveborns only Congenital conditions include primary and secondary diagnoses involving any ICD10 version 11 codes between 'Q00' amd 'Q99' For each baby, all publicly funded hospitalisations upto a year of age are considered A mother may have had more than one type of macrolide antibiotic and would be counted more than once. Babies born to mothers who had more than one type of macrolide antibiotic will be counted more than once.