Supplementary Table 1. Supplementary description of methods.

Diagnostic criteria for	r hypertensive disorders of	Missing confounder data		
pregnancy in The Net	herlands ^a			
Gestational	A diastolic blood pressure	Missing values on the sufficient set of		
hypertension	≥90 mmHg and/or a systolic	confounders were 0.3% for parity, 0.9% for		
	blood pressure ≥140 mmHg	pre-pregnancy BMI, 1.3% for asthma, 1.4%		
	after gestational week 20.	for depression, 2.1% for alcohol		
	The elevated blood pressure	consumption, 2.3% for smoking, and 24.2%		
	needs to be measures twice,	for use of calcium-containing supplements.		
	with a sphygmomanometer,	Overall, 27% of pregnancies had missing		
	and with an interval of at	data in at least one confounder. We		
	least 4 hours.	imputed missing values through multiple		
Preeclampsia	Hypertension in	imputation using chained equations (25		
	combination with	imputations) under the assumptions that		
	proteinuria of ≥300 mg/24 h	data were missing at random. We included		
		exposure and outcome variables, as well as		
		auxiliary variables (maternal age, country of		
		birth, level of education, use of multivitamin		
		supplements, and cohort) in the imputation		
		procedure. Imputed data were used in all		
		models.		

^a Source: De Boer J, Zeeman K, Verhoeven C. KNOV-standaard: Hypertensieve aandoeningen tijdens de zwangerschap, bevalling en kraamperiode. Koninklijke Nederlandse Organisatie van Verloskundigen; Utrecht, 2011. Available at:

https://assets.knov.nl/p/557056/none/PDF%20Vakkennis/KNOV_Standaard_Hypertensie_versie201 2.pdf. Accessed September 7, 2022. Supplementary Figure 1. Directed Acyclic Graphs (DAGs) for the identification of sufficient sets of confounders. Separate DAGs were compiled for the association between (panel A) calcium-based antacids and pre-eclampsia, (B) proton pump inhibitors (PPIs) and preeclampsia, (C) calcium-based antacids and gestational hypertension, and (D) PPIs and gestational hypertension.

AD, antidepressant; BMI, Body Mass Index; GERD, gastro-esophageal reflux disease; NSAID, non-steroidal anti-inflammatory drug



Supplementary Table 2. Characteristics of pregnancies included in the current study and pregnancies lost-to-follow-up.

n (%) n (%) Maternal age, mean (SD) 31.3 (3.7) 31.3 (4.0) Country of birth The Netherlands 8,625 (96.2) 983 (95.9) Other 341 (3.8) 42 (4.1) Missing 92 19 19 Level of education 2,095 (23.3) 333 (32.8) High 6,887 (76.7) 681 (67.2) Missing 76 30 72 72 Chronic conditions 76 30 73 (7.2) Asthma 566 (6.3) 73 (7.2) Chronic hypertension 28 (0.3) 4 (0.4) Depression 142 (1.6) 37 (3.7) Pre-pregnancy BMI, mean (SD) 23.7 (4.1) 24.2 (4.7) Parity 0 9 21 (2.1) 74 No 8,784 (98.1) 1,005 (98.0)	Characteristic	Inclu (N=9	uded ,058)	Lost-to-follow-up (N=1,044)		
Maternal age, mean (SD) 31.3 (3.7) 31.3 (4.0) Country of birth The Netherlands 8,625 (96.2) 983 (95.9) Other 341 (3.8) 42 (4.1) Missing 92 19 10 Level of education 2,095 (23.3) 333 (32.8) High 6,887 (76.7) 681 (67.2) Missing 76 30 2 10 Chronic conditions 76 30 7.2 Asthma 566 (6.3) 73 (7.2) Chronic hypertension 28 (0.3) 4 (0.4) Depression 142 (1.6) 37 (3.7) Pre-pregnancy BMI, mean (SD) 23.7 (4.1) 24.2 (4.7) Parity 0 previous deliveries 4,947 (54.8) 537 (51.7) 21 previous delivery 4,083 (45.2) 501 (48.3) Missing 103		n	(%)	n	(%)	
Country of birth The Netherlands 8,625 (96.2) 983 (95.9) Other 341 (3.8) 42 (4.1) Missing 92 19 19 Level of education 2,095 (23.3) 333 (32.8) High 6,887 (76.7) 681 (67.2) Missing 76 30 30 (7.2) Chronic conditions 28 (0.3) 4 (0.4) Depression 142 (1.6) 37 (3.7) Pre-pregnancy BMI, mean (SD) 23.7 (4.1) 24.2 (4.7) Parity 0 previous deliveries 4,947 (54.8) 537 (51.7) 21 previous delivery 4,083 (45.2) 501 (48.3) Missing 28 6 6 6 6 History of preeclampsia 28 6 6 6 6 6 Yes 171 (1.9) 21 (2.1) 0	Maternal age, mean (SD)	31.3	(3.7)	31.3	(4.0)	
The Netherlands 8,625 (96.2) 983 (95.9) Other 341 (3.8) 42 (4.1) Missing 92 19 19 Level of education 19 19 Low/intermediate 2,095 (23.3) 333 (32.8) High 6,887 (76.7) 681 (67.2) Missing 76 30 73 (7.2) Chronic conditions 341 (1.6) 37 (7.2) Chronic hypertension 28 (0.3) 4 (0.4) Depression 142 (1.6) 37 (3.7) Pre-pregnancy BMI, mean (SD) 23.7 (4.1) 24.2 (4.7) Parity 0 0 previous deliveries 4,947 (54.8) 537 (51.7) 21 previous deliveries 4,947 (54.8) 537 (51.7) 21 previous deliveries 4,947 (54.8) 537 (51.7) Yes 171<	Country of birth					
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Missing7630Chronic conditions30Asthma566Asthma566(6.3)73Chronic hypertension28(0.3)4Depression142(1.6)37Pre-existing diabetes22(0.2)4Pre-pregnancy BMI, mean (SD)23.7(4.1)24.2(4.7)Parity00 previous deliveries4,947(54.8)537≤1 previous delivery4,083(45.2)501(48.3)Missing286History of preeclampsiaYes171Yes11,005(98.0)Missing10318Smoking during pregnancyYes458(5.2)78(8.0)No8,369(94.8)894(92.0)Missing23172Alcohol during pregnancyYes1,418(16.0)144(15.0)No7,431(84.0)819Missing20981Calcium-containing supplementsYes5,386(78.4)563No1,482(21.6)98(14.8)Missing2.190383	High	6.887	(76.7)	681	(67.2)	
Chronic conditions Asthma 566 (6.3) 73 (7.2 Chronic hypertension 28 (0.3) 4 (0.4 Depression 142 (1.6) 37 (3.7 Pre-existing diabetes 22 (0.2) 4 (0.4 Pre-pregnancy BMI, mean (SD) 23.7 (4.1) 24.2 (4.7 Parity 0 0 previous deliveries 4,947 (54.8) 537 (51.7 ≥1 previous deliveries 4,947 (54.8) 537 (51.7 ≥1 previous delivery 4,083 (45.2) 501 (48.3 Missing 28 6	Missing	76	(-)	30	(-)	
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Depression142(1.6)37(3.7Pre-existing diabetes22(0.2)4(0.4Pre-pregnancy BMI, mean (SD)23.7(4.1)24.2(4.7Parity0previous deliveries4,947(54.8)537(51.7≥1 previous delivery4,083(45.2)501(48.3Missing2866History of preeclampsia286Yes171(1.9)21(2.1No8,784(98.1)1,005(98.0Missing1031818Smoking during pregnancy7278(8.0No8,369(94.8)894(92.0Missing2317272Alcohol during pregnancy7431(84.0)819Yes1,418(16.0)144(15.0No7,431(84.0)819(85.1Missing2098172Calcium-containing supplements78.4563(85.2No1,482(21.6)98(14.8Missing2.190383383	Chronic hypertension	28	(0.3)	4	(0.4)	
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Pre-pregnancy BMI, mean (SD)23.7(4.1)24.2(4.7Parity0 previous deliveries4,947(54.8)537(51.7≥1 previous delivery4,083(45.2)501(48.3)Missing2866History of preeclampsia286Yes171(1.9)21(2.1)No8,784(98.1)1,005(98.0)Missing1031818Smoking during pregnancy2317278Yes458(5.2)78(8.0)No8,369(94.8)894(92.0)Missing231727272Alcohol during pregnancy727273(8.1)Yes1,418(16.0)144(15.0)No7,431(84.0)819(85.1)Missing2098172Calcium-containing supplements785,386(78.4)Yes5,386(78.4)563(85.2)No1,482(21.6)98(14.8)Missing2.19038374.2	Pre-existing diabetes	22	(0.2)	4	(0.4)	
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Cartry0 previous deliveries4,947(54.8)537(51.7≥1 previous delivery4,083(45.2)501(48.3)Missing2866History of preeclampsia286Yes171(1.9)21(2.1)No8,784(98.1)1,005(98.0)Missing1031818Smoking during pregnancy78(8.0)Yes458(5.2)78(8.0)No8,369(94.8)894(92.0)Missing2317272Alcohol during pregnancy7272Yes1,418(16.0)144(15.0)No7,431(84.0)819(85.1)Missing2098120981Calcium-containing supplements725386(78.4)563Yes5,386(78.4)563(85.2)No1,482(21.6)98(14.8)Missing2,190383383	Parity	23.7	(4.1)	2712	(4.7)	
Solution deriveries4,047 (34.0) 337 (31.7) ≥ 1 previous delivery4,083 (45.2) 501 (48.3) Missing286History of preeclampsia72(2.1)No8,784 (98.1) $1,005$ (98.0) Missing1031818Smoking during pregnancy78 (5.2) 78 (8.0) No8,369 (94.8) 894 (92.0) Missing2317272Alcohol during pregnancy7273 (8.0) No7,431 (84.0) 819 (85.1) Missing20981100Calcium-containing supplements78 (78.4) 563 (85.2) No $1,482$ (21.6) 98 (14.8) Missing2.190 383 (92.0) (92.0)	0 previous deliveries	4 947	(54.8)	537	(517)	
L1 previous dentery 1,005 (10.1) Missing 28 6 History of preeclampsia 28 6 Yes 171 (1.9) 21 (2.1 No 8,784 (98.1) 1,005 (98.0 Missing 103 18 18 Smoking during pregnancy 458 (5.2) 78 (8.0 No 8,369 (94.8) 894 (92.0 Missing 231 72 72 Alcohol during pregnancy 458 (16.0) 144 (15.0 No 7,431 (84.0) 819 (85.1 Missing 209 81 72 Calcium-containing supplements Yes 5,386 (78.4) 563 (85.2 No 1,482 (21.6) 98 (14.8 Missing 2.190 383 383	>1 previous delivery	4 083	(45.2)	501	(48.3)	
History of preeclampsia Yes 171 (1.9) 21 (2.1 No 8,784 (98.1) 1,005 (98.0) Missing 103 18 103 18 Smoking during pregnancy Yes 458 (5.2) 78 (8.0) No 8,369 (94.8) 894 (92.0) Missing 231 72 72 Alcohol during pregnancy Yes 1,418 (16.0) 144 (15.0) No 7,431 (84.0) 819 (85.1) Missing 209 81 72 Calcium-containing supplements Yes 5,386 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8) Missing 2.190 383 38	Missing	28	(13.2)	6	(10.0)	
Yes 171 (1.9) 21 (2.1 No 8,784 (98.1) 1,005 (98.0) Missing 103 18 18 Smoking during pregnancy 458 (5.2) 78 (8.0) No 8,369 (94.8) 894 (92.0) Missing 231 72 72 Alcohol during pregnancy 72 72 72 Alcohol during pregnancy 7431 (84.0) 819 (85.1) No 7,431 (84.0) 819 (85.1) Missing 209 81 72 Calcium-containing supplements 72 73 74.1 Yes 5,386 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8) Missing 2.190 383 38	History of preeclampsia			C C		
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No 0,764 (30.1) 1,003 (30.0) Missing 103 18 Smoking during pregnancy 458 (5.2) 78 (8.0) No 8,369 (94.8) 894 (92.0) Missing 231 72 72 Alcohol during pregnancy 72 74 (15.0) Yes 1,418 (16.0) 144 (15.0) No 7,431 (84.0) 819 (85.1) Missing 209 81 100 144 (15.0) Calcium-containing supplements 74.31 (84.0) 819 (85.1) Yes 5,386 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8) Missing 2.190 383 38	No	8 784	(98.1)	1 005	(98.0)	
Smoking during pregnancy 458 (5.2) 78 (8.0 No 8,369 (94.8) 894 (92.0 Missing 231 72 Alcohol during pregnancy 72 72 Yes 1,418 (16.0) 144 (15.0 No 7,431 (84.0) 819 (85.1 Missing 209 81 81 100 Calcium-containing supplements 78 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8 Missing 2.190 383 383	Missing	103	(50.1)	18	(50.0)	
Yes 458 (5.2) 78 (8.0 No 8,369 (94.8) 894 (92.0 Missing 231 72 Alcohol during pregnancy 72 72 Yes 1,418 (16.0) 144 (15.0 No 7,431 (84.0) 819 (85.1 Missing 209 81 72 Calcium-containing supplements 74.31 (84.0) 819 (85.1 No 7,431 (84.0) 819 (85.1 Missing 209 81 72 Calcium-containing supplements 74.31 (84.0) 819 (85.1 No 1,482 (21.6) 98 (14.8 Missing 2.190 383 383	Smoking during programov	200				
No 8,369 (94.8) 894 (92.0 Missing 231 72 Alcohol during pregnancy 1,418 (16.0) 144 (15.0 No 7,431 (84.0) 819 (85.1 Missing 209 81 100 100 100 Calcium-containing supplements 72 72 100 100 100 No 1,418 (16.0) 144 (15.0 100		158	(5.2)	78	(8 0)	
No 0,303 (34.0) 034 (32.0) Missing 231 72 Alcohol during pregnancy 72 72 Yes 1,418 (16.0) 144 (15.0) No 7,431 (84.0) 819 (85.1) Missing 209 81 72 Calcium-containing supplements 7431 (84.0) 819 (85.1) No 1,482 (21.6) 98 (14.8) Missing 2.190 383 383	No	8 369 8 369	(94.8)	894	(92.0)	
Alcohol during pregnancy Yes 1,418 (16.0) 144 (15.0) No 7,431 (84.0) 819 (85.1) Missing 209 81 Calcium-containing supplements Yes 5,386 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8) Missing 2.190 383	Missing	231	(54.0)	72	(52.0)	
Yes 1,418 (16.0) 144 (15.0) No 7,431 (84.0) 819 (85.1) Missing 209 81 81 Calcium-containing supplements 5,386 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8) Missing 2.190 383 383	Alcohol during programa	201		, -		
No 7,431 (10.0) 144 (13.0) No 7,431 (84.0) 819 (85.1) Missing 209 81 209 81 Calcium-containing supplements 5,386 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8) Missing 2.190 383 383		1 /10	(16.0)	111	(15.0)	
No 7,451 (64.0) 615 (65.1) Missing 209 81 Calcium-containing supplements 5,386 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8) Missing 2,190 383	No	7/21	(10.0)	144 810	(15.0)	
Calcium-containing supplements 200 01 Yes 5,386 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8) Missing 2,190 383	Missing	209	(04.0)	81	(05.1)	
Yes 5,386 (78.4) 563 (85.2) No 1,482 (21.6) 98 (14.8) Missing 2,190 383	Calcium containing supplements	205		01		
Yes 5,560 (78.4) 565 (83.2) No 1,482 (21.6) 98 (14.8) Missing 2,190 383		E 206	(70 /)	EC2	(0E 2)	
Missing 2.190 383	No	5,500 1 /192	(70.4)	202	(05.2)	
1VII.331118 2.1.77	Missing	2 100	(21.0)	383	(14.0)	
Emerand		2,150		505		
EXPOSED	Exposed	1 960	(21 1)	262	(21 0)	
Calcium based antacids GW 0.35 $1,800$ (21.1) 203 (31.8)	Calcium based antacids GW 0-33	1,80U 726	(ZI.I) (Q 1)	203 110	(31.8) (11 E)	
Calcium-based antacids GW 17-22 (8.1) 118 (11.5 Calcium-based antacids GW 17-22 (8.0) (19.2) 191 (22.2)	Calcium-based antacids GW U-16	1 602	(ö.⊥) (10.2)	11ð 101	(11.5) (22.2)	
Calcium-based antacius GW 17-55 1,002 (10.2) 181 (23.2 Proton numn inhibitors GW 0.33 232 (2.9) 20 /5.0	Proton numn inhibitors GW 0.22	1,002 222	(3 8) (10.2)	50 TOT	(23.2) (5 M)	
Proton numn inhibitors GW 0-16 171 (1 0) 22 (2 2	Proton pump inhibitors GW $0-35$	171	(3.0) (1.0)	39 72	(J.U) (J.Z)	
Proton numn inhibitors GW 17-33 291 (3.3) 21 (4.0	Proton nump inhibitors GW 17-33	291	(33)	25	(2.3) (4 0)	

BMI, Body Mass Index; GW, gestational week; SD, standard deviation

Supplementary Table 3. Maternal and pregnancy characteristics by cohort.

Characteristic	PRIDE (N=6	Study ,741)	The Dutch Pregnancy Drug Register (N=2,317)		
	n	(%)	n	(%)	
Maternal age, mean (SD)	31.3	(3.7)	31.6	(3.8)	
Country of birth					
The Netherlands	6,425	(95.3)	2,200	(95.0)	
Other	237	(3.5)	104	(4.5)	
Missing	79	(1.2)	13	(0.6)	
Level of education					
Low/intermediate	1,533	(22.7)	562	(24.3)	
High	, 5,135	(76.2)	1,752	(75.6)	
Missing	73	(1.1)	3	(0.1)	
Chronic conditions					
Asthma	445	(6.6)	121	(5.2)	
Chronic hypertension	11	(0.2)	17	(0.7)	
Depression	93	(1.4)	49	(2.1)	
Pre-existing diabetes	8	(0.1)	14	(0.6)	
Pre-pregnancy BMI					
Underweight	203	(3.0)	65	(2.8)	
Normal weight	4.637	(68.8)	1.581	(68.2)	
Overweight	1,318	(19.6)	442	(19.1)	
Obese	524	(7.8)	207	(8.9)	
Missing	59	(0.9)	22	(0.9)	
Parity					
0 previous deliveries	3.683	(54.6)	1.264	(54.6)	
≥1 previous delivery	3,058	(45.4)	1,025	(44.2)	
Missing	0	(0.0)	28	(1.2)	
History of preeclampsia					
Yes	124	(1.8)	47	(2.0)	
No	6,559	(97.3)	2,225	(96.0)	
Missing	58	(0.9)	45	(1.9)	
Smoking during pregnancy					
Yes	316	(4.7)	142	(6.1)	
No	6.217	(92.2)	2.152	(92.9)	
Missing	208	(3.1)	23	(1.0)	
Alcohol during pregnancy					
Yes	897	(13.3)	521	(22.5)	
No	5.650	(83.8)	1.781	(76.9)	
Missing	194	(2.9)	15	(0.6)	
Calcium-containing supplements		· · /			
Yes	5.304	(78.7)	82	(3.5)	
No	1.153	(17.1)	329	(14.2)	
Missing	284	(4.2)	1,906	(82.3)	
Exposure status		ζ, γ	,	、	
Calcium-based antacids GW 0-33	1,368	(20 3)	495	(21 4)	
Calcium-based antacids GW 0-16	577	(8.6)		(6.5)	
Calcium-based antacids GW 17-33	1,193	(17.7)	411	(17.7)	
Proton pump inhibitors GW 0-33	220	(3.3)	112	(4.8)	
Proton pump inhibitors GW 0-16	114	(1.7)	56	(2.4)	
Proton pump inhibitors GW 17-33	200	(3.0)	89	(3.8)	

BMI, Body Mass Index; GW, gestational week; SD, standard deviation

	Calcium-based antacid trajectory group ^a								
Characteristic	No	use	Low	use	High	use			
	(N=6,	964)	(N=992)		(N=123)				
Maternal age, mean (SD)	31.4	(3.7)	31.5	(3.7)	31.7	(3.4)			
Maternal country of birth, n (%)									
The Netherlands	6,629	(95.2)	958	(96.6)	116	(94.3)			
Other	264	(3.8)	29	(2.9)	5	(4.1)			
Level of education, n (%)									
Low/intermediate	1,629	(23.4)	168	(16.9)	27	(22.0)			
High	5,278	(75.8)	818	(82.5)	93	(75.6)			
Chronic conditions, n (%)									
Asthma	398	(5.7)	72	(7.3)	11	(8.9)			
Chronic hypertension	19	(0.3)	7	(0.7)	0	(0.0)			
Depression	113	(1.6)	9	(0.9)	4	(3.3)			
Pre-existing diabetes	16	(0.2)	2	(0.2)	1	(0.8)			
Pre-pregnancy BMI, mean (SD)	23.6	(4.0)	23.7	(4.0)	24.6	(5.2)			
Parity, n (%)									
0 previous deliveries	3,764	(54.0)	572	(57.7)	68	(55.3)			
≥1 previous delivery	3,179	(45.6)	417	(42.0)	55	(44.7)			
History of preeclampsia, n (%)									
Yes	131	(1.9)	16	(1.6)	6	(4.9)			
No	6,746	(96.9)	968	(97.6)	116	(94.3)			
Smoking during pregnancy, n (%)									
Yes	330	(4.7)	47	(4.7)	8	(6.5)			
No	6,470	(92.9)	932	(94.0)	112	(91.1)			
Alcohol during pregnancy, n (%)									
Yes	1,095	(15.7)	165	(16.6)	22	(17.9)			
No	5,722	(82.2)	819	(82.6)	97	(78.9)			
Calcium-containing supplements, n (%)									
Yes	4,073	(58.5)	608	(61.3)	77	(62.6)			
No	1,211	(17.4)	156	(15.7)	16	(13.0)			

Supplementary Table 4. Maternal and pregnancy characteristics by trajectory group of calciumbased antacid use in gestational weeks 0-33.

BMI, Body Mass Index; SD, standard deviation

^aNumbers may not add up to totals due to missing values, ranging from 0.3% to 0.9% (level of education, chronic hypertension, pre-existing diabetes, pre-pregnancy BMI, and parity), 1.0% to 1.4% (country of birth, asthma, depression, and history of preeclampsia), and 2.1% to 2.3% (smoking and alcohol during pregnancy. For calcium-containing supplement use, missing value was 24.2%, because details on multivitamin use were unavailable in The Dutch Pregnancy Drug Register.

Supplementary Table 5. Associations between calcium-based antacid and proton pump inhibitor use in gestational weeks 0-19 and gestational hypertension. Data from the PRIDE Study (2012-2019) and The Dutch Pregnancy Drug Register (2014-2019).

Exposure group	Total	N (%) with GH		Crude RR (95% CI)	Adjusted RR (95% CI) ^a
Calcium-based antacids					
No use	7,612	526	(6.9)	Reference	Reference
Any use	843	79	(9.4)	1.4 (1.1-1.7)	1.2 (1.0-1.5)
Low dose (<1 g/day)	399	22	(5.5)	0.8 (0.5-1.2)	0.7 (0.5-1.1)
High dose (≥1 g/day)	444	57	(12.8)	1.9 (1.4-2.4)	1.6 (1.2-2.1)
Proton pump inhibitors					
No use	8,553	614	(7.2)	Reference	Reference
Any use	183	14	(7.7)	1.1 (0.6-1.8)	0.8 (0.5-1.4)
Low dose (≤1 DDD/day)	121	9	(7.4)	1.0 (0.6-2.0)	0.8 (0.4-1.6)
High dose (>1 DDD per day)	59	5	(8.5)	1.2 (0.5-2.7)	0.9 (0.4-2.3)

CI, confidence interval; DDD, Defined Daily Dose; GH, gestational hypertension; RR, relative risk ^a Inverse probability of censoring weights; all models are adjusted for maternal age, asthma, pre-pregnancy BMI, parity, smoking during pregnancy, alcohol use during pregnancy, and use of calcium-containing supplements. Models for proton pump inhibitors are additionally adjusted for depression. Supplementary Table 6. Associations between calcium-based antacid and proton pump inhibitor use after gestational week 19 and gestational hypertension. Data from the PRIDE Study (2012-2019) and The Dutch Pregnancy Drug Register (2014-2019).

Time-dependent exposure after GW19	N	GH	Person weeks	Rate (per 1000/week)	Crude HR (95% Cl)	Adjusted HR (95% CI) ^a
Calcium-based antacids						
No use	8,070	617	138,143	4.5	Reference	Reference
Any use	1,260	90	14,176	6.3	1.3 (1.0-1.6)	1.2 (1.0-1.5)
Low dose (<1 g/day)	698	40	7,255	5.5	1.2 (0.9-1.7)	1.2 (0.9-1.6)
High dose (≥1 g/day)	680	50	6,921	7.2	1.3 (1.0-1.8)	1.2 (0.9-1.7)
Proton pump inhibitors						
No use	8,674	743	163,147	4.6	Reference	Reference
Any use	279	21	3,354	6.3	1.2 (0.8-1.9)	1.1 (0.7-1.7)
Low dose (≤1 DDD/day)	230	16	2,602	6.1	1.2 (0.7-2.0)	1.1 (0.7-1.8)
High dose (>1 DDD /day)	63	5	752	6.6	1.3 (0.6-3.2)	1.1 (0.4-2.7)

CI, confidence interval; DDD, Defined Daily Dose; GH, gestational hypertension; GW, gestational week; HR, hazard ratio.

^a Inverse probability of censoring weights; all models are adjusted for maternal age, asthma, pre-pregnancy BMI, parity, smoking during pregnancy, alcohol use during pregnancy, and use of calcium-containing supplements. Models for proton pump inhibitors are additionally adjusted for depression.

Supplementary Table 7. Associations between calcium-based antacid and proton pump inhibitor use in gestational weeks 0-33 and late-onset preeclampsia among women at high risk of developing preeclampsia. Data from the PRIDE Study (2012-2019).

Exposure group	Total	N (%)	with PE	Crude RR (95% CI)	Adjusted RR (95% CI) ^a
Calcium-based antacids in GW 0-33					
No use	1,563	75	(4.8)	Reference	Reference
Any use	493	31	(6.3)	1.3 (0.9-2.0)	1.2 (0.8-1.9)
Low dose (<1 g/day)	257	16	(6.2)	1.3 (0.8-2.2)	1.2 (0.7-2.1)
High dose (≥1 g/day)	231	15	(6.5)	1.4 (0.8-2.3)	1.3 (0.7-2.2)
Low use trajectory	262	16	(6.1)	1.3 (0.8-2.1)	1.3 (0.8-2.1)
High use trajectory	35	2	(5.7)	1.2 (0.3-4.7)	N/A
Calcium-based antacids in GW 0-16					
No use	1,859	90	(4.8)	Reference	Reference
Any use	203	14	(6.9)	1.4 (0.8-2.5)	1.3 (0.8-2.3)
Low dose (<1 g/day)	82	10	(12.2)	2.5 (1.4-4.7)	2.3 (1.2-4.4)
High dose (≥1 g/day)	56	1	(1.8)	N/A	N/A
Calcium-based antacids in GW 17-33					
No use	1,623	83	(5.1)	Reference	Reference
Any use	427	23	(5.4)	1.1 (0.7-1.6)	1.0 (0.6-1.6)
Low dose (<1 g/day)	232	8	(3.5)	0.7 (0.3-1.4)	0.7 (0.3-1.3)
High dose (≥1 g/day)	172	13	(7.6)	1.5 (0.8-2.6)	1.3 (0.8-2.4)
Proton pump inhibitors in GW 0-33					
No use	1,986	97	(4.9)	Reference	Reference
Any use	74	9	(12.2)	2.5 (1.3-4.7)	2.2 (1.2-4.3)
Low dose (≤1 DDD/day)	56	7	(12.5)	2.6 (1.2-5.3)	2.3 (1.1-4.8)
High dose (>1 DDD per day)	18	2	(11.1)	2.3 (0.6-8.5)	N/A
Proton pump inhibitors in GW 0-16					
No use	2,039	103	(5.1)	Reference	Reference
Any use	35	3	(8.6)	1.7 (0.6-5.1)	1.4 (0.5-4.3)
Low dose (≤1 DDD/day)	15	2	(13.3)	2.6 (0.7-9.7)	N/A
High dose (>1 DDD/day)	13	0	(0.0)	N/A	N/A
Proton pump inhibitors in GW 17-33					
No use	1,991	97	(4.9)	Reference	Reference
Any use	69	9	(13.0)	2.7 (1.4-5.1)	2.4 (1.2-4.7)
Low dose (≤1 DDD/day)	48	6	(12.5)	2.6 (1.2-5.6)	2.4 (1.1-5.1)
High dose (>1 DDD/day)	13	2	(15.4)	3.2 (0.9-11.4)	N/A

CI, confidence interval; DDD, Defined Daily Dose; GW, gestational week; PE, preeclampsia; RR, relative risk ^a Inverse probability of censoring weights; all models are adjusted for maternal age, asthma, pre-pregnancy BMI, parity, smoking during pregnancy, alcohol use during pregnancy, and use of calcium-containing supplements. Models for proton pump inhibitors are additionally adjusted for depression. Supplementary Table 8. Associations between calcium-based antacid and proton pump inhibitor use after gestational week 33 and late-onset preeclampsia among women at high risk of developing preeclampsia. Data from the PRIDE Study (2012-2019).

Time-dependent exposure after GW33	Ν	PE	Person weeks	Rate (per 1000/week)	Crude HR (95% Cl)	Adjusted HR (95% CI) ^a
Calcium-based antacids						
No use	1,810	88	9,224	9.5	Reference	Reference
Any use	292	9	1,343	6.7	0.7 (0.4-1.4)	0.7 (0.3-1.3)
Low dose (<1 g/day)	136	3	602	5.0	0.5 (0.2-1.6)	N/A
High dose (≥1 g/day)	169	6	741	8.1	0.8 (0.4-1.9)	0.8 (0.3-1.8)
Proton pump inhibitors						
No use	2,045	97	10,789	9.0	Reference	Reference
Any use	62	5	263	19.0	2.2 (0.9-5.4)	2.1 (0.8-5.2)
Low dose (≤1 DDD/day)	49	3	204	14.7	1.7 (0.5-5.4)	N/A
High dose (>1 DDD/day)	16	2	59	33.9	4.1 (1.0-15.8)	N/A

CI, confidence interval; DDD, Defined Daily Dose; GW, gestational week; HR, hazard ratio; PE, preeclampsia. ^a Inverse probability of censoring weights; all models are adjusted for maternal age, asthma, pre-pregnancy BMI, parity, smoking during pregnancy, alcohol use during pregnancy, and use of calcium-containing supplements. Models for proton pump inhibitors are additionally adjusted for depression. Supplementary Table 9. Associations between calcium-based antacid and proton pump inhibitor use in gestational weeks 0-33 and late-onset preeclampsia, restricted to women who did not use calcium-containing supplements. Data from the PRIDE Study (2012-2019) and The Dutch Pregnancy Drug Register (2014-2019).

Exposure group	Total	N (%)	with PE	Crude RR (95% CI)	Adjusted RR (95% CI) ^a
Calcium-based antacids in GW 0-33					
No use	1,211	30	(2.5)	Reference	Reference
Any use	266	10	(3.8)	1.5 (0.8-3.1)	1.3 (0.6-2.6)
Low dose (<1 g/day)	138	3	(2.2)	0.9 (0.3-2.8)	N/A
High dose (≥1 g/day)	125	7	(5.6)	2.3 (1.0-5.0)	1.9 (0.9-4.4)
Low use trajectory	156	4	(2.6)	1.0 (0.4-2.9)	N/A
High use trajectory	16	1	(6.3)	N/A	N/A
Calcium-based antacids in GW 0-16					
No use	1,379	36	(2.6)	Reference	Reference
Any use	101	3	(3.0)	1.1 (0.4-3.6)	N/A
Low dose (<1 g/day)	48	2	(4.2)	1.6 (0.4-6.4)	N/A
High dose (≥1 g/day)	29	1	(3.5)	N/A	N/A
Calcium-based antacids in GW 17-33					
No use	1,240	32	(2.6)	Reference	Reference
Any use	237	8	(3.4)	1.3 (0.6-2.8)	1.2 (0.6-2.5)
Low dose (<1 g/day)	124	2	(1.6)	0.6 (0.2-2.6)	N/A
High dose (≥1 g/day)	102	6	(5.9)	2.3 (1.0-5.3)	2.1 (0.9-4.9)
Proton pump inhibitors in GW 0-33					
No use	1,433	39	(2.7)	Reference	Reference
Any use	48	1	(2.1)	N/A	N/A
Low dose (≤1 DDD/day)	31	1	(3.2)	N/A	N/A
High dose (>1 DDD per day)	17	0	(0.0)	N/A	N/A
Proton pump inhibitors in GW 0-16					
No use	1,455	40	(2.8)	Reference	Reference
Any use	26	0	(0.0)	N/A	N/A
Low dose (≤1 DDD/day)	13	0	(0.0)	N/A	N/A
High dose (>1 DDD/day)	11	0	(0.0)	N/A	N/A
Proton pump inhibitors in GW 17-33					
No use	1,441	39	(2.7)	Reference	Reference
Any use	40	1	(2.5)	N/A	N/A
Low dose (≤1 DDD/day)	24	0	(0.0)	N/A	N/A
High dose (>1 DDD/day)	13	0	(0,0)	N/A	N/A

Cl, confidence interval; DDD, Defined Daily Dose; GW, gestational week; PE, preeclampsia; RR, relative risk ^a Inverse probability of censoring weights; all models are adjusted for maternal age, asthma, pre-pregnancy BMI, parity, smoking during pregnancy, and alcohol use during pregnancy. Supplementary Table 10. Associations between calcium-based antacid and proton pump inhibitor use after gestational week 33 and late-onset preeclampsia, restricted to women who did not use calcium-containing supplements. Data from the PRIDE Study (2012-2019) and The Dutch Pregnancy Drug Register (2014-2019).

Time-dependent exposure after GW19	Ν	PE	Person weeks	Rate (per 1000/week)	Crude HR (95% Cl)	Adjusted HR (95% CI)
Calcium-based antacids				-		
No use	1,358	36	7,218	5.0	Reference	Reference
Any use	170	3	789	3.8	0.7 (0.2-2.3)	N/A
Low dose (<1 g/day)	79	2	350	5.7	1.1 (0.3-4.4)	N/A
High dose (≥1 g/day)	97	1	439	2.3	N/A	N/A
Proton pump inhibitors						
No use	1,484	39	8,048	4.8	Reference	Reference
Any use	40	0	172	0.0	N/A	N/A
Low dose (≤1 DDD/day)	28	0	117	0.0	N/A	N/A
High dose (>1 DDD /day)	13	0	55	0.0	N/A	N/A

CI, confidence interval; DDD, Defined Daily Dose; GW, gestational week; HR, hazard ratio; PE, preeclampsia.