Predefined confounding areas relevant to all or most studies	Predefined co-interventions that could be different between the intervention groups and that could impact the outcomes	Additional confounding areas
Abruptio placentae		
Præeklampsi/ gestationel hypertension / essentiel hypertension		
Polyhydramnios	Monitorering	
Tidligere abruptio		
Rygning		
Paritet		alder, føtal væksthæmning
Uterus ruptur		
Tidligere kejsersnit (sectio antea)		
Tidligere operation på uterus (inkl. udskrabning)	Monitorering	
Stort foster (>4000 g)		
BMI		
Paritet		alder, uterine misdannelse

#	Preliminary considerations	Target RCT	Confounding areas (predicts/associated with outcome and intervention)* (se øverst rækker 2 og 3)	Additional confounding areas * (se øverst rækker 2 og 3)	Co-interventions (different between groups and affects outcome)	Additional co-interventions
1	**Study 1, Rydahl 2019**					
	Outcome 1: Uterus ruptur	P: Kvinder med en forventet normal fødsel. Det vil sige kvinder med en rask og normal stor singleton graviditet i hovedstilling og uden medicinske, psykosomatiske eller graviditetsbetingede sygdomme. Førstegangs- så vel som – flergangsfødende omfattes. Kvinder under 40 år og med prægravid BMI under 35 omfattes. Kvinder med tidligere kejsersnit samt kvinder, som henvender sig med mindre fosterbevægelser, omfattes ikke. Gestationsalder bestemmes ved tidlig ultralydsscanning. I: Igangsættelse ved gestationsalder 41+0 (op til 4 C: Igangsættelse ved gestationsalder 42+0 eller ser O: Abruptio placentae, Uterus ruptur S: RCT:			No information	-
2	**Study 2, Kaczmarczyk 2007**					
	Outcome 1: Uterus ruptur	P: Kvinder med en forventet normal fødsel I: Igangsættelse ved gestationsalder 41+0 (op til 4 C: Igangsættelse ved gestationsalder 42+0 eller ser O: Abruptio placentae, Uterus ruptur S: RCT:				
3	**Study 3, Thisted 2015**					
	Outcome 1: Uterus ruptur	P: Kvinder med en forventet normal fødsel I: Igangsættelse ved gestationsalder 41+0 (op til 4 C: Igangsættelse ved gestationsalder 42+0 eller ser O: Abruptio placentae, Uterus ruptur S: RCT:			No information	
4	**Study 4, Morikawa 2014**					
	Outcome 1: Abruptio placentae	P: Kvinder med en forventet normal fødsel I: Igangsættelse ved gestationsalder 41+0 (op til 4 C: Igangsættelse ved gestationsalder 42+0 eller ser O: Abruptio placentae, Uterus ruptur S: RCT:				
6	**Study 5, Mya 2017**	P: Kvinder med en forventet normal fødsel I: Igangsættelse ved gestationsalder 41+0 (op til 4 C: Igangsættelse ved gestationsalder 42+0 eller ser				
	Outcome 1: Uterus ruptur	O: Abruptio placenta; Uterus ruptur S: RCT				
	Study 6, Zwart 2009	P: Kvinder med en forventet normal fødsel I: Igangsættelse ved gestationsalder 41+0 (op til 41+2).				
	Outcome 1: Uterus ruptur	C: Igangsættelse ved gestationsalder 42+0 eller senere O: Abruptio placenta; Uterus ruptur S: RCT				
	Study 7, Liu 2013	P: Kvinder med en forventet normal fødsel I: Igangsættelse ved gestationsalder 41+0 (op til 41+2).				
	Outcome 1: Uterus ruptur	C: Igangsættelse ved gestationsalder 42+0 eller senere O: Abruptio placenta; Uterus ruptur S: RCT				

1. Bias due to confounding

#	Study	Outcome	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	Risk of bias judgement	Comment and supporting quote	additional comment	Comment to ROBINS-I
1	Rydahl 2019		Y (counding may be a problem)	N	PY (Time-varying confounding occurs when time-varying factors that predict the	PY (confounders are expeted to be balanced between the two study	NI	N	N (There may be an issue regarding the lack of adjustment for the period effect, as it seems there is a secular trend in outcome that cannot be assigned to the change in practice. To help	NI	Serious (the study has some important problems)	It is assumed that all potential confounders are equally distributed in both groups, and hence that control for confounding is not needed. We cannot exclude the possibility that other societal, environmental or behavioural changes coinciding with the change in practice took place.	Changes over time for possible confounders and interruptions occurring simultaneously as the intervention of interest (2011) may have biassed the results. We explored the changes in maternal age >40 years, nulliparity, pre-eclampsia, previous CS, BMI ≥30 and smoking status. No changes in trend were noted after 2011. See online supplementary appendix 2.	
2	Kaczmarczyk 2007		Y (counding may be a problem)	N	-	PY (Covariates :Caesarean section in first delivery, Vaginal instrumental second	PN (subjective measures of most cofounders)	N	-	-	serious	(i) At least one known important domain was not appropriately measured, or not controlled for	Only variable not controlled for are "Tidligere operation på uterus (inkl. udskrabning))	
3	Thisted 2015		Y (counding may be a problem)	N	-	N (only adjust for parity)	-	N	-	-	Serious	Confounding inherently not controllable. Covariates (parity, Induction of labour, augmentation by oxytocin and epidural analgesia)		
4	Morikawa 2014		Y (counding may be a problem)	NA	-	N (Crude analysis)	-	NA	-	-	Critical	Confounding inherently not controllable		
6	Mya 2017		Y (counding may be a problem)	NA	NA	N (Crude analysis)	-	NA	-	-	Critical	Confounding inherently not controllable		
8														
9	Zwart 2009		Y (counding may be a problem)	NA	NA	N (Crude analysis)	-	NA	-	-	Critical	Confounding inherently not controllable		
10	Liu 2013		Y (counding may be a problem)	NA	NA	N (Crude analysis)	-	NA	-	-	Critical	Confounding inherently not controllable		

2. Bias in selection of participants into the study

#	Study	Outcome	2.1	2.2	2.3	2.4	2.5	Risk of bias judgement	Comment and supporting quote	additional comment	Comment to ROBINS-I
1	**Rydahl 2019**	Ruptur	N (This retrospective population based cohort study was based on data from the DMBR in the	-	-	PY (For each participant, start of follow up and start of		**LOW**	(i) All participants who would have been eligible for the target trial were included in the study; and (ii) For each participant, start of follow up and start of intervention coincided.		
2	**Kaczmarczyk 2007**		N (In all, there were 327 700 women who delivered first births beginning in 1983 and second consecutive live single births from 1992 through	-	-	PY (For each participant, start of follow up and start of intervention coincided	-	**LOW**	(i) All participants who would have been eligible for the target trial were included in the study; and (ii) For each participant, start of follow up and start of intervention coincided.		
3	**Thisted 2015**		N (This retrospective population based cohort study was based on data from the DMBR from January 1, 1997 to December 31, 2008	-	-	PY (For each participant, start of follow up and start of intervention coincided	-	**LOW**	(i) All participants who would have been eligible for the target trial were included in the study; and (ii) For each participant, start of follow up and start of intervention coincided.		
4	**Morikawa 2014**		N (exclusion criteria are observed prior to delivery)	-	-	PY (For each participant, start of follow up and start of intervention	-	**LOW**	(i) All participants who would have been eligible for the target trial were included in the study; and (ii) For each participant, start of follow up and start of intervention coincided.		
5	**Mya 2017**		PN(exclusion: women with GA <41 weeks or missing data were excluded. A total of 18,331 women from 233	-	-	PY (For each participant, start of follow up and start of intervention		**LOW**	(i) All participants who would have been eligible for the target trial were included in the study; and (ii) For each participant, start of follow up and start of intervention coincided.		
6	**Zwart 2009**		N (Eight cases were excluded because asymptomatic dehiscence of the uterine scar was found at elective caesarean, leaving 210 confirmed cases)	-	-	PY (For each participant, start of follow up and start of intervention coincided)	-	**LOW**	(i) All participants who would have been eligible for the target trial were included in the study; and (ii) For each participant, start of follow up and start of intervention coincided.		
7	**Liu 2013**		PN (some exclusion criteria may be were observed after delivery such as infant macrosomia, antepartum ICU)	-	-	PY (For each participant, start of follow up and start of intervention coincided)	-	**LOW**	(i) All participants who would have been eligible for the target trial were included in the study; and (ii) For each participant, start of follow up and start of intervention coincided.		

3. Bias in classification of interventions

#	Study	3.1	3.2	3.3	Risk of bias judgement	Comment and supporting quote	additional comment	Comment to ROBINS-I
1	**Rydahl 2019**	PY (The population of interest included all ongoing pregnancies	PY (No information on validation of register data)	PN (Assignments of intervention status were not	**Low**	Intervention status is well defined; and (ii) Intervention definition is based on information proberbly collected at the time of intervention.		
2	**Kaczmarczyk 2007**	N (Information about onset of second delivery was stratified into	PY (No information on validation of register	PN (Assignments of intervention status were	**Serious**	Intervention status is not well defined;		
3	**Thisted 2015**	N (Information about onset of second delivery was stratified into spontaneous or induced)	PY (No information on validation of register data, but low risk of	PN (Assignments of intervention status were not determined	**Serious**	Intervention status is not well defined;	Information on mode of induction (prostaglandin yes/no)	
4	**Morikawa 2014**	N (Intervention groups not cleary defined and it is not clear if women	**NI**	**NI**	**Critical**	Intervention status is not well defined and extremely high amount of misclassification of intervention status		
5	**Mya 2017**	PY (Women who delivered their babies following IOL at 41 completed	PY (No information on validation of register	N (We do not suspect that classificatio n of	**Low**	Intervention status is well defined; and (ii) Intervention definition is based solely on information collected at the time of intervention.		

6	**Zwart 2009**	**N** (Information about onset of second delivery was stratified into spontaneous or induced, however different induction medication methods was described. However, no information on reason for induction)	**PY** (low risk of misclassification and data are collected prospectively)	**N** (We do not suspect that classification of intervention status could have been affected by knowledge of the outcome)	**Serious**	Intervention definition is suspected to be on information collected at the time of intervention as it is a prosective cohort study. However, intervention status is not clearly defined and reason for induction is not described.	No information for reason for induction
7	**Liu 2013**	**PY** (Induction was defined as the use of oxytocin or prostaglandin to initiate labor	**PY** (validation of register data and low risk of misclassifica	**N** (We do not suspect that classification of intervention	**Low**	Intervention status is well defined; and (ii) Intervention definition is based solely on information collected at the time of intervention.	Obstetric deliveries were identified with the use of a prespecified algorithm of diagnostic codes that had been validated previously by the Canadian PerinatalSurveillance System.

4. Bias due to departures from intended interventions

#	Study	4.1	4.2	4.3	4.4	4.5	4.6	Risk of bias judgement	Comment and supporting quote	additional comment	Comment to ROBINS-I
1		PN (Participants will not change group and all co-intervention	-	-	-	-	-	NI	Any deviations from intended intervention reflected usual practice, however usual care was not defined. No information on which to base a judgement about risk of bias for this domain		
2	Kaczmarczyk 2007	PN (Participants will not change group and all co-interventions are likely	-	-	-	-	-	NI	Any deviations from intended intervention reflected usual practice, however usual care was not defined. No information on which to base a judgement about risk of bias for this domain		
3	Thisted 2015	PN (Participants will not change group and all co-interventions are likely to be part of usual care)	-	-	-	-	-	NI	Any deviations from intended intervention reflected usual practice, however usual care was not defined. No information on which to base a judgement about risk of bias for this domain		
4	Morikawa 2014	PN (Participants will not change group and	-	-	-	-	-	NI	Any deviations from intended intervention reflected usual practice, however usual care was not defined. No information on which to base a judgement about risk of bias for this domain		
5	Mya 2017	PN (Participants will not change group and all co	-	-	-	-	-	NI	Any deviations from intended intervention reflected usual practice, however usual care was not defined. No information on which to base a judgement about risk of bias for this domain		

6	**Zwart 2009**	**PN** (Participants will not change group and all co-interventions are likely to be part of usual care**)**	-	-	-	-	-	**NI**	Any deviations from intended intervention reflected usual practice, however usual care was not defined. No information on which to base a judgement about risk of bias for this domain
7	**Liu 2013**	**PN** (Participants will not change group and all co-interventions are likely to be part of usual care**)**	-	-	-	-	-	**NI**	Any deviations from intended intervention reflected usual practice, however usual care was not defined. No information on which to base a judgement about risk of bias for this domain

5. Bias due to missing data

#	Study	5.1	5.2	5.3	5.4	5.5	Risk of bias judgement	Comment and supporting quote	additional comment	Comment to ROBINS-I
1		Y (We included a variable if at least 95% of cases were coded, we excluded 2712	N (No participants were excluded due to missing	Y (participants excluded due to missing information	NI	NI (However, very few missing data - the results are most	LOW	Data were reasonably complete	When health providers do the documentation, some information must be registered by ticking off a checkbox, if a given event occurs (eg, epidural). In this case, missing values cannot be determined, because the extent to which the provider may have left out a code is unknown (particularly if it does not involve a billing code). Other types of information are mandatory to report (eg, weight	
2	Kaczmarczyk 2007	Y (all participants have information on rupture)	N (No participants were excluded due to missing information on	Y (Analysis is based on 244 875 deliveries with complete information on	NI	NI	No information is reported about missing data or the potential for data to be missing.	No information on wether the results were robust to the presence of missing data.	ca. 55.000 deltager har manglende information om confoundere	
3	Thisted 2015	Y (nearly all participants have information on rupture (n=95))	N (No participants were excluded due to missing information on	PY (0.6% has missing information on parity in the background population)	NI (However, only 0.6 % missing - the results are most likly robust)	NI (However, only 0.6 % missing - the results are most likly robust	Low	Data were reasonably complete	Obviously, when relying on the reporting of ICD-10 codes for both previous caesarean section and uterine ruptur to a national birth registry, there is a risk of missing cases with uterine rupture and no previous caesarean section [3]. Also, it should be acknowledged that a number of women, delivering vaginally, in the background population could have experienced a	
4	Morikawa 2014	Y (all participants have information on rupture)	N (No participants were excluded due to missing	PY (0.4% has missing information on age, GW and/or parity)	NI (However, only 0.4 % missing - the results are most likly robust)	NI (However, only 0.4 % missing - the results are most likly robust)	Low	Data were reasonably complete		
5	Mya 2017	N (At the individual level, women with GA <41 weeks or missing data were excluded)	Y (participants were excluded due to missing information	Y (participants also excluded on other vaiables)	NI	NI	NI	No information on if missing information is balanced between groups and missing data were not addressed in the analysis.		
6	Zwart	Y (all participants have information on rupture)	N (No participants were excluded due to missing information on intervention status)	NA (analysis not adjusted for any covariates)	-	-	Low	Data were reasonably complete		

7	**Liu 2013**	**Y** (all participants have information on rupture)	**N** (No participants were excluded due to missing information on intervention status)	**N** (Is seems that no information is missing on potential confounders)	-	-	**Low**	Data were reasonably complete

6. Bias in measurement of outcomes

#	Study	6.1	6.2	6.3	6.4	Risk of bias judgement	Comment and supporting quote	additional comment	Comment to ROBINS-I
1	**Rydahl 2019**	N	Y (Outcome assesors not blinded to intervention status)	Y	N	**Low**	(i) The methods of outcome assessment were comparable across intervention groups; and (ii) The outcome measure was unlikely to be influenced by knowledge of the intervention received by study participants (i.e. is objective) or the outcome assessors were unaware of the intervention received by study participants; and (iii) Any error in measuring the outcome is unrelated to intervention status.		
2	**Kaczmarczyk 2007**	N	Y (Outcome assesors not blinded to intervention status)	Y	N	**Low**	(i) The methods of outcome assessment were comparable across intervention groups; and (ii) The outcome measure was unlikely to be influenced by knowledge of the intervention received by study participants (i.e. is objective) or the outcome assessors were unaware of the intervention received by study participants; and (iii) Any error in measuring the outcome is unrelated to intervention status.		
3	**Thisted 2015**	N	Y (Outcome assesors not blinded to intervention status)	Y	N	**Low**	(i) The methods of outcome assessment were comparable across intervention groups; and (ii) The outcome measure was unlikely to be influenced by knowledge of the intervention received by study participants (i.e. is objective) or the outcome assessors were unaware of the intervention received by study participants; and (iii) Any error in measuring the outcome is unrelated to intervention status.	Outcome measures has been validatet	
4	**Morikawa 2014**	N	Y (Outcome assesors not blinded to intervention status)	Y	N	**Low**	(i) The methods of outcome assessment were comparable across intervention groups; and (ii) The outcome measure was unlikely to be influenced by knowledge of the intervention received by study participants (i.e. is objective) or the outcome assessors were unaware of the intervention received by study participants; and (iii) Any error in measuring the outcome is unrelated to intervention status.		
5	**Mya 2017**	N	Y (Outcome assesors not blinded to intervention status)	PN (Moreover, the two surveys used slightly different	N	**Moderate**	There is the possiblity of misclassification of the outcome, howerver not suspected to be differential between groups.		

6	**Zwart 2009**	**N**	**Y** (Outcome assesors not blinded to intervention status)	**Y**	**N**	**Low**	(i) The methods of outcome assessment were comparable across intervention groups; and (ii) The outcome measure was unlikely to be influenced by knowledge of the intervention received by study participants (i.e. is objective) or the outcome assessors were unaware of the intervention received by study participants; and (iii) Any error in measuring the outcome is unrelated to intervention status.	Outcome measures has been validatet (To control for underreporting, we cross-matched our database with the LVR-2 database. During a 5-month period, cases of uterine rupture reported to this database but not to us, were identified and
7	**Liu 2013**	**N**	**Y** (Outcome assesors not blinded to intervention status)	**Y**	**N**	**Low**	(i) The methods of outcome assessment were comparable across intervention groups; and (ii) The outcome measure was unlikely to be influenced by knowledge of the intervention received by study participants (i.e. is objective) or the outcome assessors were unaware of the intervention received by study participants; and (iii) Any error in measuring the outcome is unrelated to intervention status.	Information in the database had been validated previously and extensively used in perinatal health surveillance and research

7. Bias in selection of the reported result

#	Study	7.1	7.2	7.3	Risk of bias judgement	Comment and supporting quote	additional comment	Comment to ROBINS-I
1	**Rydahl 2019**	N (multiple mesurements were not made)	PY (No pre-defined statistical analysis plan were described and different ways of	N (no sub groups)	Moderate	No pre-registered protocol or statistical analysis plan were available. There is a risk of selective reporting from among multiple results on the same outcome		
2	**Kaczmarczyk 2007**	N (multiple mesurements were not made)	N	N	Low	No pre-registered protocol or statistical analysis plan were available. All reported results seems to correspond to all intended outcomes, analyses and sub-cohorts.		
3	**Thisted 2015**	N (multiple mesurements were not made)	N	N (no sub-analysis)	Low	No pre-registered protocol or statistical analysis plan were available. All reported results seems to correspond to all intended outcomes, analyses and sub-cohorts.		
4	**Morikawa 2014**	N (multiple mesurements were not made)	PY (No pre-defined statistical analysis plan were described and different	PN (probably no sub-analysis)	Serious	No pre-registered protocol or statistical analysis plan were available. There is a high risk of selective reporting from among multiple results on the same outcome		

5	**Mya 2017**	**N** (multiple mesurements were not made)	**PY** (sensitivity analysis presented in result section are	**N**	Moderate	No pre-registered protocol or statistical analysis plan were available. There is a risk of selective reporting from among multiple results on the same outcome
6	**Zwart 2009**	**N** (multiple mesurements were not made)	**PY** (No pre-defined statistical analysis plan were described and different ways of presenting results on outcome of interest)	**PN** (sub-groups are defined based on induction methods)	Moderate	No pre-registered protocol or statistical analysis plan were available. There is a risk of selective reporting from among multiple results on the same outcome
7	**Liu 2013**	**N** (multiple mesurements were not made)	**N**	**N** (sub-groups are defined based on GW)	**LOW**	No pre-registered protocol. All reported results seems to correspond to all intended outcomes, analyses and sub-cohorts