Appendix S4. Risk of bias assessment results of the 30 studies included in the analysis

First Author: Abdallah et al., 2018

**ID:** 68614233

Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	х				
	Baseline study sample [i.e., individuals entering the study and their key characteristics and sampling frame are adequately described]	х				
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Lo	w risk of	bias	
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate				X	
	Participants lost to follow-up are adequately described for key characteristics				X	
	Statement as to the possible effect on the results from missing data				X	
	Loss to follow-up is not associated with key characteristics		Mode	rate risk	of bias	
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g imaging modality method, measurement, and timing described).	х				
	Specified instrument and personnel for measurement of predictive factors	х				
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х				
	Blinding: were estimators of risk factor status and of outcomes blinded?			x		
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Lo	w risk of	bias	
Outcome measurement	Is the outcome(s) clearly defined?			x		
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Mode	rate risk	of bias	
Study confounding	Do the authors address potential confounders?	х				
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.		Lo	w risk of	bias	
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		х			
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results  Note: The above table was adapted from: Hayden et al. 2		Mode	rate risk	of bias	

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

irst Author: Agbaje et al., 2018		<b>ID:</b> 637	7433						
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*			
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	х							
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]		X						
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Mode	rate risk	of bias				
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate					х			
	Participants lost to follow-up are adequately described for key characteristics					X			
	Statement as to the possible effect on the results from missing data					X			
	Loss to follow-up is not associated with key characteristics	Low risk of bias							
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	X							
	Specified instrument and personnel for measurement of predictive factors	х							
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х							
	Blinding: were estimators of risk factor status and of outcomes blinded?		х						
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias	Low risk of bias							
Outcome measurement	Is the outcome(s) clearly defined?		X						
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Mode	rate risk	of bias				
Study confounding	Do the authors address potential confounders?		x						
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Moderate risk of bias							
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		X						
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of		Mode	rate risk	of bias				

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Alanwar et al., 2018

**ID:** 6377464

Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	х					
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]	х					
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results	Low risk of bias					
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate					X	
	Participants lost to follow-up are adequately described for key characteristics					x	
	Statement as to the possible effect on the results from missing data					х	
	Loss to follow-up is not associated with key characteristics		Lo	w risk of	bias		
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	х					
	Specified instrument and personnel for measurement of predictive factors	X					
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х					
	Blinding: were estimators of risk factor status and of outcomes blinded?				X		
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Lo	w risk of	bias		
Outcome measurement	Is the outcome(s) clearly defined?	х					
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Lo	w risk of	bias		
Study confounding	Do the authors address potential confounders?	х					
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.		Lo	w risk of	bias		
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting	х					
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Lo	w risk of	bias		

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Allam et al., 2013

**ID:** 6377480

	11 Ct al., 2013	<b>ID.</b> 037	1.00	1		
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]		х			
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]	х				
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Lo	w risk of	bias	
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate	х				
	Participants lost to follow-up are adequately described for key characteristics				X	
	Statement as to the possible effect on the results from missing data					Х
	Loss to follow-up is not associated with key characteristics		Lo	w risk of	bias	
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	х				
	Specified instrument and personnel for measurement of predictive factors	х				
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х				
	Blinding: were estimators of risk factor status and of outcomes blinded?				X	
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Lo	w risk of	bias	
Outcome measurement	Is the outcome(s) clearly defined?	X				
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Lo	w risk of	bias	
Study confounding	Do the authors address potential confounders?		х			
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.		Moderate risk of bias			
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		х			
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results  Note: The above table was adapted from: Hayden et al.		Mode	rate risk	of bias	

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Anshul et al., 2010

**ID:** 6377837

First Autnor: Ansn	iui et al., 2010	ID: 03/	1031			
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*
		165	1 at try	110	Clisure	11/1
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	X				
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]	х				
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Lo	w risk of	bias	
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate				Х	
	Participants lost to follow-up are adequately described for key characteristics				X	
	Statement as to the possible effect on the results from missing data				X	
	Loss to follow-up is not associated with key characteristics		Hig	th risk of	bias	
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).		X			
	Specified instrument and personnel for measurement of predictive factors			X		
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х				
	Blinding: were estimators of risk factor status and of outcomes blinded?					x
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Mode	rate risk	of bias	
Outcome measurement	Is the outcome(s) clearly defined?			x		
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Hig	th risk of	bias	
Study confounding	Do the authors address potential confounders?	x				
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.		Low risk of bias			
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting			х		
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Hig	th risk of	bias	
NA*· not applicable	Note: The above table was adapted from: Hayden et al., 2	2013				

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Bano et al., 2010

**ID:** 74903018

	ct al., 2010		03016		1	
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]		х			
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]			х		
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Mode	rate risk	of bias	
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate					х
	Participants lost to follow-up are adequately described for key characteristics					X
	Statement as to the possible effect on the results from missing data					х
	Loss to follow-up is not associated with key characteristics		Lo	w risk of	bias	
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	х				
	Specified instrument and personnel for measurement of predictive factors			х		
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х				
	Blinding: were estimators of risk factor status and of outcomes blinded?			x		
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Mode	rate risk	of bias	
Outcome measurement	Is the outcome(s) clearly defined?			х		
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Hig	h risk of	bias	
Study confounding	Do the authors address potential confounders?			х		
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	High risk of bias				
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		X			
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Mode	rate risk	of bias	

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Dhand et al., 2011 **ID:** 6379383

ind ct al., 2011		7303			
Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*
Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	х				
study and their key characteristics and sampling frame are adequately described]	х				
Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Lo	w risk of	bias	
Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate				Х	
for key characteristics				X	
missing data				x	
Loss to follow-up is not associated with key characteristics		Mode	rate risk	of bias	
Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).		X			
Specified instrument and personnel for measurement		х			
Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori		Х			
Blinding: were estimators of risk factor status and of outcomes blinded?				X	
The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Hig	gh risk of	bias	
Is the outcome(s) clearly defined?			х		
The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Hig	gh risk of	bias	
Do the authors address potential confounders?	х				
Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Low risk of bias				
There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting			X		
The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Hig	gh risk of	bias	
	Items to be considered for assessment of potential opportunity for bias  Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome (s) clearly defined?  The outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Items to be considered for assessment of potential opportunity for bias  Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome (s) clearly defined?  The outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  x  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Items to be considered for assessment of potential opportunity for bias   Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]   Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]   Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results   Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate   Participants lost to follow-up are adequately described for key characteristics   Statement as to the possible effect on the results from missing data   Loss to follow-up is not associated with key characteristics   Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).   Specified instrument and personnel for measurement of predictive factors   Continuous variables are reported or appropriate (i.e. not data-dependent) cut-off points are used and specified a priori   Blinding: were estimators of risk factor status and of outcomes blinded?   The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias   Is the outcome (s) clearly defined?   High the outcome of the prognostic factor of interest is (are) adequately accounted for, limiting potential confounders?   X   Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.   Lo the prognostic factor of interest.   There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting   The statistical analysis is appropriate for the study design, limiting potential for the presentation of   High the prognostic factor of interest.   The statistical analysis is appropriate for the study design, limiting potential for the present	Items to be considered for assessment of potential opportunity for bias   Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]   Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]   Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results   Low risk of results   Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate   Participants lost to follow-up are adequately described for key characteristics   Statement as to the possible effect on the results from missing data   Loss to follow-up is not associated with key characteristics   Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described)   Specified instrument and personnel for measurement of predictive factors   Continuous variables are reported or appropriate (i.e. not data-dependent) cut-off points are used and specified a priori   Blinding: were estimators of risk factor status and of outcomes blinded?   The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias   Is the outcome(s) clearly defined?   X   The outcome measure and method used are adequately walid and reliable to limit misclassification bias   Do the authors address potential confounders?   X   Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.   Low risk of the prognostic factor of interest.   Low risk of the prognostic factor of interest.   There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting   The statistical analysis is appropriate for the study design, limiting potential for the presentation of   High risk of the prognostic	Items to be considered for assessment of potential opportunity for bias   Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]   Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described   Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results   Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate   Participants lost to follow-up are adequately described for key characteristics. Statement as to the possible effect on the results from missing data   Loss to follow-up is not associated with key characteristics   Moderate risk of bias

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Dorman et al., 2002 **ID:** 6377862

First Author: Dor	ID: 6377862						
	Items to be considered for assessment of potential						
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population	Inclusion and exclusion criteria are adequately						
/sample selection	described [including explicit diagnostic criteria,	X					
_	start/finish date of recruitment]						
	Baseline study sample [i.e. individuals entering the						
	study and their key characteristics and sampling frame	X					
	are adequately described]						
	Study sample represents population of interest on key						
	characteristics, sufficient to limit potential bias to		Lov	w risk of	bias		
	results						
Study attrition	Response rate (i.e., proportion of study sample						
	completing the study and providing outcome data) is	X					
	adequate						
	Participants lost to follow-up are adequately described	v					
	for key characteristics	X					
	Statement as to the possible effect on the results from	v					
	missing data	X					
	Loss to follow-up is not associated with key		Los	v rick of	bioc		
	characteristics		Low risk of bias				
Prognostic factor	Clear definition of the prognostic factors measured is						
measurement	provided (e.g. imaging modality method,	X					
	measurement, and timing described).						
	Specified instrument and personnel for measurement	v					
	of predictive factors	X					
	Continuous variables are reported or appropriate (i.e.						
	not data- dependent) cut-off points are used and	X					
	specified a priori						
	Blinding: were estimators of risk factor status and of	X					
	outcomes blinded?	Λ					
	The prognostic factor(s) of interest is (are) adequately						
	measured in study participants to sufficiently limit		Lov	w risk of	bias		
	potential bias		1		1		
Outcome	Is the outcome(s) clearly defined?	x					
measurement							
	The outcome measure and method used are adequately		Lov	w risk of	bias		
	valid and reliable to limit misclassification bias						
Study confounding	Do the authors address potential confounders?	x					
	Important potential confounders are appropriately		J				
	accounted for, limiting potential bias with respect to		Lo	w risk of	bias		
	the prognostic factor of interest.			ı	T	ı	
Analysis and	There is sufficient presentation of data to assess the						
reporting	adequacy of the analysis strategy and there is no	X					
	selective reporting						
	The statistical analysis is appropriate for the study			. 1 . 0	1.		
	design, limiting potential for the presentation of		Lov	w risk of	bias		
ATAW 11 11	invalid results	1012					
INA": not applicable.	Note: The above table was adapted from: Hayden et al., 2	W13.					

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Ebrashy et al., 2005 **ID:** 6377887

First Author: Ebra	ID: 6377887					
	Items to be considered for assessment of potential					
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*
Study population	Inclusion and exclusion criteria are adequately					
/sample selection	described [including explicit diagnostic criteria,	X				
•	start/finish date of recruitment]					
	Baseline study sample [i.e. individuals entering the					
	study and their key characteristics and sampling frame	X				
	are adequately described]					
	Study sample represents population of interest on key					
	characteristics, sufficient to limit potential bias to		Lov	w risk of	bias	
	results					
Study attrition	Response rate (i.e., proportion of study sample					
	completing the study and providing outcome data) is	X				
	adequate					
	Participants lost to follow-up are adequately described					
	for key characteristics	X				
	Statement as to the possible effect on the results from					_
	missing data					X
	Loss to follow-up is not associated with key		Τ	w risk of	1.1	
	characteristics		Lov	w fisk oi	bias	
Prognostic factor	Clear definition of the prognostic factors measured is					
measurement	provided (e.g. imaging modality method,	X				
	measurement, and timing described).					
	Specified instrument and personnel for measurement					
	of predictive factors	X				
	Continuous variables are reported or appropriate (i.e.					
	not data- dependent) cut-off points are used and	X				
	specified a priori					
	Blinding: were estimators of risk factor status and of	v				
	outcomes blinded?	X				
	The prognostic factor(s) of interest is (are) adequately					
	measured in study participants to sufficiently limit		Lov	w risk of	bias	
	potential bias					
Outcome	Is the outcome(s) clearly defined?	x				
measurement		Λ				
	The outcome measure and method used are adequately		Lov	w risk of	hise	
	valid and reliable to limit misclassification bias		LO	W 115K OI	Ulas	
Study confounding	Do the authors address potential confounders?	x				
		Λ				
	Important potential confounders are appropriately					
	accounted for, limiting potential bias with respect to		Lov	w risk of	bias	
	the prognostic factor of interest.		1			
Analysis and	There is sufficient presentation of data to assess the					
reporting	adequacy of the analysis strategy and there is no		X			
	selective reporting		<u> </u>	<u> </u>		<u></u>
	The statistical analysis is appropriate for the study					
	design, limiting potential for the presentation of		Mode	rate risk	of bias	
	invalid results					
MAX. not applicable	Note: The above table was adapted from: Hayden et al. 2	Ω12				

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Geerts et al., 2007 **ID:** 6378017

First Author: Gee	ID: 03/801/						
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria,	X	1 2 3 2 2 3	210	Casure	1112	
	start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]	X					
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Lo	w risk of	bias		
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate	х					
	Participants lost to follow-up are adequately described for key characteristics					x	
	Statement as to the possible effect on the results from missing data					х	
	Loss to follow-up is not associated with key characteristics		Lo	w risk of	bias	•	
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).		X				
	Specified instrument and personnel for measurement of predictive factors	X					
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х					
	Blinding: were estimators of risk factor status and of outcomes blinded?	х					
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Lo	w risk of	bias		
Outcome measurement	Is the outcome(s) clearly defined?		х				
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Mode	rate risk	of bias		
Study confounding	Do the authors address potential confounders?		х				
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Moderate risk of bias					
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting	Х					
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Lo	w risk of	bias		
NA*: not applicable.	Note: The above table was adapted from: Hayden et al., 2	2013.					

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Khanduri et al., 2013 ID: 6378321

First Author: Kha	<b>ID:</b> 637	8321						
	Items to be considered for assessment of potential							
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*		
Study population	Inclusion and exclusion criteria are adequately							
/sample selection	described [including explicit diagnostic criteria,	X						
	start/finish date of recruitment]							
	Baseline study sample [i.e. individuals entering the							
	study and their key characteristics and sampling frame	X						
	are adequately described]							
	Study sample represents population of interest on key							
	characteristics, sufficient to limit potential bias to		Lov	v risk of	bias			
	results							
Study attrition	Response rate (i.e., proportion of study sample							
	completing the study and providing outcome data) is	X						
	adequate							
	Participants lost to follow-up are adequately described	v						
	for key characteristics	X						
	Statement as to the possible effect on the results from					x		
	missing data					Λ		
	Loss to follow-up is not associated with key	Low risk of bias						
	characteristics		LO	W IISK OI	Ulas			
Prognostic factor	Clear definition of the prognostic factors measured is							
measurement	provided (e.g. imaging modality method,	X						
	measurement, and timing described).							
	Specified instrument and personnel for measurement	v						
	of predictive factors	X						
	Continuous variables are reported or appropriate (i.e.							
	not data- dependent) cut-off points are used and	X						
	specified a priori							
	Blinding: were estimators of risk factor status and of		x					
	outcomes blinded?		Λ					
	The prognostic factor(s) of interest is (are) adequately							
	measured in study participants to sufficiently limit		Lo	w risk of	bas			
	potential bias		1		1			
Outcome	Is the outcome(s) clearly defined?		x					
measurement								
	The outcome measure and method used are adequately		Mode	rate risk	of bas			
	valid and reliable to limit misclassification bias							
Study confounding	Do the authors address potential confounders?	x						
	Important potential confounders are appropriately							
	accounted for, limiting potential bias with respect to		Lov	w risk of	bias			
	the prognostic factor of interest.					T T T		
Analysis and	There is sufficient presentation of data to assess the							
reporting	adequacy of the analysis strategy and there is no		X					
	selective reporting			L	<u> </u>			
	The statistical analysis is appropriate for the study		), 1	, .,	C1 ·			
	design, limiting potential for the presentation of		Mode	rate risk	of bias			
37A 4 1 1 1 1 1	invalid results	1012						
INA": not applicable.	Note: The above table was adapted from: Hayden et al., 2	W13.						

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

narı et al., 2019	<b>ID:</b> 68614385					
Items to be considered for assessment of potential						
	Yes	Partly	No	Unsure	NA*	
Inclusion and exclusion criteria are adequately						
		X				
start/finish date of recruitment]						
		X				
Study sample represents population of interest on key			•			
characteristics, sufficient to limit potential bias to		Mode	rate risk	of bias		
results						
Response rate (i.e., proportion of study sample						
				x		
adequate						
Participants lost to follow-up are adequately described						
for key characteristics				X		
missing data				X		
Loss to follow-up is not associated with key		M 1	1	C1:		
characteristics	Moderate risk of bias					
Clear definition of the prognostic factors measured is						
provided (e.g. imaging modality method,	X					
measurement, and timing described).						
of predictive factors	X					
Continuous variables are reported or appropriate (i.e.						
not data- dependent) cut-off points are used and	X					
specified a priori						
outcomes blinded?			X			
The prognostic factor(s) of interest is (are) adequately			•			
measured in study participants to sufficiently limit		Lo	w risk of	f bias		
potential bias						
Is the outcome(s) clearly defined?						
		X				
The outcome measure and method used are adequately		Mada	mata mials	of biog		
valid and reliable to limit misclassification bias		Mode	rate risk	or blas		
Do the authors address potential confounders?						
_	X					
Important potential confounders are appropriately						
accounted for, limiting potential bias with respect to		Lo	w risk of	f bias		
the prognostic factor of interest.						
There is sufficient presentation of data to assess the						
adequacy of the analysis strategy and there is no	X					
selective reporting					<u>L</u>	
The statistical analysis is appropriate for the study						
	Low risk of bias					
design, limiting potential for the presentation of		Lo	w risk of	f bias		
	described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome(s) clearly defined?  The outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting	Items to be considered for assessment of potential opportunity for bias  Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  x  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting	Items to be considered for assessment of potential opportunity for bias   Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]   Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]   Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results   Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate   Participants lost to follow-up are adequately described for key characteristics   Statement as to the possible effect on the results from missing data   Loss to follow-up is not associated with key characteristics   Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).   Specified instrument and personnel for measurement of predictive factors   Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori   Blinding: were estimators of risk factor status and of outcomes blinded?   The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias   Is the outcome measure and method used are adequately valid and reliable to limit misclassification bias   Do the authors address potential confounders?   X   Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.   There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting	Items to be considered for assessment of potential opportunity for bias   Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]   Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]   Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results   Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate   Participants lost to follow-up are adequately described for key characteristics   Statement as to the possible effect on the results from missing data   Loss to follow-up is not associated with key characteristics   Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).   Specified instrument and personnel for measurement of predictive factors   Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori   Blinding: were estimators of risk factor status and of outcomes blinded?   X   The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias   Is the outcome measure and method used are adequately measured in study participants to sufficiently limit potential bias   Is the outcome measure and method used are adequately walid and reliable to limit misclassification bias   Low risk of potential bias   Do the authors address potential confounders?   X   Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.   There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting	Items to be considered for assessment of potential opportunity for bias   Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]   Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]   Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results   Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate   Participants lost to follow-up are adequately described for key characteristics   X	

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Lakhkar et al., 2006

**ID:** 74903014

<b>First Author:</b> Lakn	kar et al., 2000	ID: /49	03014			
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]		x			
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]	х				
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Mode	rate risk	of bias	
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate			х		
	Participants lost to follow-up are adequately described for key characteristics					x
	Statement as to the possible effect on the results from missing data					х
	Loss to follow-up is not associated with key characteristics		Lo	w risk of	bias	
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	х				
	Specified instrument and personnel for measurement of predictive factors		Х			
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х				
	Blinding: were estimators of risk factor status and of outcomes blinded?			х		
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Mode	rate risk	of bias	
Outcome measurement	Is the outcome(s) clearly defined?	х				
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Lo	w risk of	bias	
Study confounding	Do the authors address potential confounders?	х				
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Low risk of bias				
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		х			
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Mode	rate risk	of bias	
NA*: not applicable	Note: The above table was adapted from: Hayden et al., 2	2013.				

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Lakshmi et al., 2013 **ID:** 6378401

First Author: Lak	Sillili et al., 2015	ID: 03/	0401					
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*		
		165	1 ai tiy	110	Clisuie	11//		
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	х						
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]	х						
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Lo	w risk of	bias			
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate	х						
	Participants lost to follow-up are adequately described for key characteristics	х						
	Statement as to the possible effect on the results from missing data			X				
	Loss to follow-up is not associated with key characteristics	Low risk of bias						
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	X						
	Specified instrument and personnel for measurement of predictive factors	Х						
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х						
	Blinding: were estimators of risk factor status and of outcomes blinded?	х						
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Lo	w risk of	bias			
Outcome measurement	Is the outcome(s) clearly defined?	х						
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Lo	w risk of	bias			
Study confounding	Do the authors address potential confounders?	х						
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Low risk of bias						
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		х					
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Mode	rate risk	of bias			
NA* not applicable	Note: The above table was adapted from: Hayden et al., 2	2013						

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Malik et al., 2013 **ID:** 6378519

rirst Author: Mai	ik et al., 2015	ID: 03/	0319				
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population	Inclusion and exclusion criteria are adequately	105	1 til til	110	CHSUIC	1121	
/sample selection	described [including explicit diagnostic criteria, start/finish date of recruitment]	x					
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame	X					
	are adequately described]						
	Study sample represents population of interest on key						
	characteristics, sufficient to limit potential bias to results		Lo	w risk of	bias		
Study attrition	Response rate (i.e., proportion of study sample						
	completing the study and providing outcome data) is adequate	X					
	Participants lost to follow-up are adequately described for key characteristics			х			
	Statement as to the possible effect on the results from missing data				Х		
	Loss to follow-up is not associated with key characteristics		Hig	h risk of	f bias		
Prognostic factor	Clear definition of the prognostic factors measured is						
measurement	provided (e.g. imaging modality method,			X			
	measurement, and timing described).						
	Specified instrument and personnel for measurement		x				
	of predictive factors		A				
	Continuous variables are reported or appropriate (i.e.						
	not data- dependent) cut-off points are used and				X		
	specified a priori						
	Blinding: were estimators of risk factor status and of outcomes blinded?				X		
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias	High risk of bias					
Outcome measurement	Is the outcome(s) clearly defined?		X				
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Mode	rate risk	of bias		
Study confounding	Do the authors address potential confounders?		x				
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Moderate risk of bias					
Analysis and	There is sufficient presentation of data to assess the						
reporting	adequacy of the analysis strategy and there is no		x				
- <del>-</del>	selective reporting						
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Moderate risk of bias					
**************************************	invalid results						
NA*: not applicable.	Note: The above table was adapted from: Hayden et al., 2	2013.					

**First Author:** Masihi et al., 2019 **ID:** 68614415

First Author: Mas	ID: 686	14415						
	Items to be considered for assessment of potential							
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*		
Study population	Inclusion and exclusion criteria are adequately							
/sample selection	described [including explicit diagnostic criteria,	X						
•	start/finish date of recruitment]							
	Baseline study sample [i.e. individuals entering the							
	study and their key characteristics and sampling frame	X						
	are adequately described]							
	Study sample represents population of interest on key							
	characteristics, sufficient to limit potential bias to		Lov	w risk of	bias			
	results							
Study attrition	Response rate (i.e., proportion of study sample							
	completing the study and providing outcome data) is			X				
	adequate							
	Participants lost to follow-up are adequately described			v				
	for key characteristics			X				
	Statement as to the possible effect on the results from			v				
	missing data			X				
	Loss to follow-up is not associated with key	Moderate risk of bias						
	characteristics		Mode	oi bias				
Prognostic factor	Clear definition of the prognostic factors measured is							
measurement	provided (e.g. imaging modality method,	X						
	measurement, and timing described).							
	Specified instrument and personnel for measurement			v				
	of predictive factors			X				
	Continuous variables are reported or appropriate (i.e.							
	not data- dependent) cut-off points are used and	X						
	specified a priori							
	Blinding: were estimators of risk factor status and of			x				
	outcomes blinded?			Λ				
	The prognostic factor(s) of interest is (are) adequately							
	measured in study participants to sufficiently limit		Mode	rate risk	of bias			
	potential bias		1	1	T	1		
Outcome	Is the outcome(s) clearly defined?	x						
measurement		**						
	The outcome measure and method used are adequately		Lov	w risk of	bias			
	valid and reliable to limit misclassification bias		1	11011 01	1	ı		
Study confounding	Do the authors address potential confounders?	x						
		**						
	Important potential confounders are appropriately							
	accounted for, limiting potential bias with respect to		Lov	w risk of	bias			
	the prognostic factor of interest.			ı	T T			
Analysis and	There is sufficient presentation of data to assess the							
reporting	adequacy of the analysis strategy and there is no	X						
	selective reporting							
	The statistical analysis is appropriate for the study			. 1 . 0	1.			
	design, limiting potential for the presentation of	Low risk of bias						
	invalid results  Note: The above table was adapted from: Hayden et al. 2	1012						

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Mullick et al., 1993 **ID:** 6378675

First Author: Mul	lick et al., 1993	<b>ID:</b> 637	8675					
	Items to be considered for assessment of potential							
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*		
Study population	Inclusion and exclusion criteria are adequately							
/sample selection	described [including explicit diagnostic criteria,	X						
_	start/finish date of recruitment]							
	Baseline study sample [i.e. individuals entering the							
	study and their key characteristics and sampling frame		X					
	are adequately described]							
	Study sample represents population of interest on key							
	characteristics, sufficient to limit potential bias to		Lov	w risk of	bias			
	results							
Study attrition	Response rate (i.e., proportion of study sample							
	completing the study and providing outcome data) is	X						
	adequate							
	Participants lost to follow-up are adequately described	v						
	for key characteristics	X						
	Statement as to the possible effect on the results from					v		
	missing data					X		
	Loss to follow-up is not associated with key	Low risk of bias						
	characteristics		Lo	w risk or	uias			
Prognostic factor	Clear definition of the prognostic factors measured is							
measurement	provided (e.g. imaging modality method,	X						
	measurement, and timing described).							
	Specified instrument and personnel for measurement		x					
	of predictive factors		Λ					
	Continuous variables are reported or appropriate (i.e.							
	not data- dependent) cut-off points are used and		X					
	specified a priori							
	Blinding: were estimators of risk factor status and of				X			
	outcomes blinded?				Α			
	The prognostic factor(s) of interest is (are) adequately							
	measured in study participants to sufficiently limit		Mode	rate risk	of bias			
	potential bias		1		1			
Outcome	Is the outcome(s) clearly defined?		x					
measurement								
	The outcome measure and method used are adequately		Mode	rate risk	of bias			
	valid and reliable to limit misclassification bias							
Study confounding	Do the authors address potential confounders?		x					
	Important potential confounders are appropriately							
	accounted for, limiting potential bias with respect to		Mode	rate risk	of bias			
	the prognostic factor of interest.			I				
Analysis and	There is sufficient presentation of data to assess the							
reporting	adequacy of the analysis strategy and there is no		X					
	selective reporting					<u> </u>		
	The statistical analysis is appropriate for the study				C1 :			
	design, limiting potential for the presentation of	Moderate risk of bias						
NT 4 16 1 1 1 1 1	invalid results	1012						
∟NA*: not applicable.	Note: The above table was adapted from: Hayden et al., 2	ZU13.						

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Nagar et al., 2015 **ID:** 6378692

First Author: Nagar et al., 2015			8692				
	Items to be considered for assessment of potential						
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population	Inclusion and exclusion criteria are adequately						
/sample selection	described [including explicit diagnostic criteria,	X					
	start/finish date of recruitment]						
	Baseline study sample [i.e. individuals entering the						
	study and their key characteristics and sampling frame		X				
	are adequately described]						
	Study sample represents population of interest on key			. 1 . 0			
	characteristics, sufficient to limit potential bias to	Low risk of bias					
Charles attailed an	results			l		l	
Study attrition	Response rate (i.e., proportion of study sample						
	completing the study and providing outcome data) is adequate	X					
	Participants lost to follow-up are adequately described						
	for key characteristics				X		
	Statement as to the possible effect on the results from						
	missing data					X	
	Loss to follow-up is not associated with key		<u> </u>				
	characteristics	Low risk of bias					
Prognostic factor	Clear definition of the prognostic factors measured is						
measurement	provided (e.g. imaging modality method,	X					
	measurement, and timing described).						
	Specified instrument and personnel for measurement						
	of predictive factors			X			
	Continuous variables are reported or appropriate (i.e.						
	not data- dependent) cut-off points are used and	X					
	specified a priori						
	Blinding: were estimators of risk factor status and of			x			
	outcomes blinded?						
	The prognostic factor(s) of interest is (are) adequately						
	measured in study participants to sufficiently limit		Mode	rate risk	of bias		
0.4	potential bias		1	<u> </u>	<u> </u>	ı	
Outcome	Is the outcome(s) clearly defined?		X				
measurement	The outcome measure and method used are adequately						
	valid and reliable to limit misclassification bias		Mode	rate risk	of bias		
Study confounding	Do the authors address potential confounders?						
Study comounding	Do the authors address potential comounders:	X					
	Important potential confounders are appropriately						
	accounted for, limiting potential bias with respect to	Low risk of bias					
	the prognostic factor of interest.						
Analysis and	There is sufficient presentation of data to assess the						
reporting	adequacy of the analysis strategy and there is no		X				
	selective reporting						
	The statistical analysis is appropriate for the study						
	design, limiting potential for the presentation of	Moderate risk of bias					
	invalid results						
3 T A JA . 11 1 1 1	Night The short table and advantage from Headen at al. 2	010					

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Najam et al., 2016 **ID:** 6378705

am et al., 2016	ID: 03/8/03						
Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*		
Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]		,	х				
Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]			x				
characteristics, sufficient to limit potential bias to results		Hig	h risk of	bias			
completing the study and providing outcome data) is adequate		х					
for key characteristics		х					
missing data			х				
characteristics	High risk of bias						
Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	х						
Specified instrument and personnel for measurement of predictive factors			х				
not data- dependent) cut-off points are used and specified a priori	х						
outcomes blinded?			x				
The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Mode	rate risk	of bias			
•			х				
valid and reliable to limit misclassification bias		Hig	h risk of	bias			
_				х			
Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	High risk of bias						
There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting			X				
The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Hig	h risk of	bias			
	Items to be considered for assessment of potential opportunity for bias  Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome (s) clearly defined?  The outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Items to be considered for assessment of potential opportunity for bias  Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome (s) clearly defined?  The outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Items to be considered for assessment of potential opportunity for bias  Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data-dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome (s) clearly defined?  The outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Items to be considered for assessment of potential opportunity for bias   Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]   Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]   Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results   Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate   Participants lost to follow-up are adequately described for key characteristics   Statement as to the possible effect on the results from missing data   Loss to follow-up is not associated with key characteristics   Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described),   x measurement, and timing described),   x measurement, and timing described)   x   x   x   x   x   x   x   x   x	Items to be considered for assessment of potential opportunity for bias		

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Nouh et al., 2011 **ID:** 6378752

First Author: Nouh et al., 2011			8752				
	Items to be considered for assessment of potential						
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population	Inclusion and exclusion criteria are adequately						
/sample selection	described [including explicit diagnostic criteria,	X					
•	start/finish date of recruitment]						
	Baseline study sample [i.e. individuals entering the						
	study and their key characteristics and sampling frame	X					
	are adequately described]						
	Study sample represents population of interest on key						
	characteristics, sufficient to limit potential bias to		Lov	v risk of	bias		
	results						
Study attrition	Response rate (i.e., proportion of study sample						
	completing the study and providing outcome data) is	X					
	adequate						
	Participants lost to follow-up are adequately described						
	for key characteristics					X	
	Statement as to the possible effect on the results from						
	missing data				X		
	Loss to follow-up is not associated with key	Low risk of bias					
	characteristics		LOV	w risk oi	Dias		
Prognostic factor	Clear definition of the prognostic factors measured is						
measurement	provided (e.g. imaging modality method,	X					
	measurement, and timing described).						
	Specified instrument and personnel for measurement						
	of predictive factors	X					
	Continuous variables are reported or appropriate (i.e.						
	not data- dependent) cut-off points are used and	X					
	specified a priori						
	Blinding: were estimators of risk factor status and of						
	outcomes blinded?				X		
	The prognostic factor(s) of interest is (are) adequately						
	measured in study participants to sufficiently limit		Lov	w risk of	bias		
	potential bias						
Outcome	Is the outcome(s) clearly defined?						
measurement	·		X				
	The outcome measure and method used are adequately		Lor	v risk of	bios		
	valid and reliable to limit misclassification bias		LO	w 118K OI	uias		
Study confounding	Do the authors address potential confounders?						
		X					
	Important potential confounders are appropriately						
	accounted for, limiting potential bias with respect to		Lov	v risk of	bias		
	the prognostic factor of interest.						
Analysis and	There is sufficient presentation of data to assess the						
reporting	adequacy of the analysis strategy and there is no		X				
	selective reporting			<u> </u>		<u> </u>	
	The statistical analysis is appropriate for the study						
	design, limiting potential for the presentation of		Mode	rate risk	of bias		
	invalid results						
NA*: not applicable.	Note: The above table was adapted from: Hayden et al., 2	2013.					

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Pares et al., 2008 **ID:** 6378809

rirst Author: Pare	es et al., 2006	ID: 03/	0009				
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population	Inclusion and exclusion criteria are adequately	103	1 ar cry	110	Chiatre	1 1/2 1	
/sample selection	described [including explicit diagnostic criteria,	х					
	start/finish date of recruitment]				+		
	Baseline study sample [i.e. individuals entering the						
	study and their key characteristics and sampling frame are adequately described]	X					
	Study sample represents population of interest on key						
	characteristics, sufficient to limit potential bias to results		Lo	w risk of	f bias		
Study attrition	Response rate (i.e., proportion of study sample						
oracy arrivon	completing the study and providing outcome data) is	x					
	adequate						
	Participants lost to follow-up are adequately described						
	for key characteristics					X	
	Statement as to the possible effect on the results from						
	missing data					X	
	Loss to follow-up is not associated with key		_				
	characteristics	Low risk of bias					
Prognostic factor	Clear definition of the prognostic factors measured is						
measurement	provided (e.g. imaging modality method,	X					
	measurement, and timing described).						
	Specified instrument and personnel for measurement						
	of predictive factors	X					
	Continuous variables are reported or appropriate (i.e.						
	not data- dependent) cut-off points are used and	X					
	specified a priori						
	Blinding: were estimators of risk factor status and of				v		
	outcomes blinded?				X		
	The prognostic factor(s) of interest is (are) adequately						
	measured in study participants to sufficiently limit		Mode	rate risk	of bias		
	potential bias		_	_			
Outcome	Is the outcome(s) clearly defined?	x					
measurement							
	The outcome measure and method used are adequately		Lo	w risk of	f bias		
~	valid and reliable to limit misclassification bias			1			
Study confounding	Do the authors address potential confounders?	X					
	Important potential confounders are appropriately						
	accounted for, limiting potential bias with respect to	Low risk of bias					
	the prognostic factor of interest.						
Analysis and	There is sufficient presentation of data to assess the						
reporting	adequacy of the analysis strategy and there is no	X					
	selective reporting						
	The statistical analysis is appropriate for the study						
	design, limiting potential for the presentation of		Lo	w risk of	f bias		
	invalid results						
NA*: not applicable	Note: The above table was adapted from: Hayden et al., 2	2013.					

First Author: Pattinson et al., 1991

**ID:** 74903015

ison et al., 1991	ID: /49	00010				
Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*	
Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	х					
Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]	х					
characteristics, sufficient to limit potential bias to results		Lo	w risk of	bias		
Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate					X	
Participants lost to follow-up are adequately described for key characteristics					X	
Statement as to the possible effect on the results from missing data					Х	
Loss to follow-up is not associated with key characteristics		Lo	w risk of	bias		
Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	х					
Specified instrument and personnel for measurement of predictive factors		х				
Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х					
Blinding: were estimators of risk factor status and of outcomes blinded?	х					
The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias		Lo	w risk of	bias		
Is the outcome(s) clearly defined?		X				
The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Mode	rate risk	of bias		
_	x					
Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Low risk of bias					
There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		Х				
The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results	Moderate risk of bias					
	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data-dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome (s) clearly defined?  The outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome (s) clearly defined?  The outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  x  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome measure and method used are adequately walid and reliable to limit misclassification bias  Is the outcome measure and method used are adequately valid and reliable to limit misclassification bias  Do the authors address potential confounders?  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome measure and method used are adequately walid and reliable to limit misclassification bias  Do the authors address potential confounders?  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]  Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]  Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results  Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate  Participants lost to follow-up are adequately described for key characteristics  Statement as to the possible effect on the results from missing data  Loss to follow-up is not associated with key characteristics  Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).  Specified instrument and personnel for measurement of predictive factors  Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori  Blinding: were estimators of risk factor status and of outcomes blinded?  The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias  Is the outcome (s) clearly defined?  The outcome measure and method used are adequately walid and reliable to limit misclassification bias  Do the authors address potential confounders?  Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.  There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting  The statistical analysis is appropriate for the study design, limiting potential for the presentation of	

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Pattinson et al., 1993 ID: 6378815

First Author: Patt	<b>ID:</b> 637	8815						
	Items to be considered for assessment of potential							
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*		
Study population	Inclusion and exclusion criteria are adequately							
/sample selection	described [including explicit diagnostic criteria,	X						
_	start/finish date of recruitment]							
	Baseline study sample [i.e. individuals entering the							
	study and their key characteristics and sampling frame	X						
	are adequately described]							
	Study sample represents population of interest on key							
	characteristics, sufficient to limit potential bias to		Lov	v risk of	bias			
	results							
Study attrition	Response rate (i.e., proportion of study sample							
	completing the study and providing outcome data) is	X						
	adequate							
	Participants lost to follow-up are adequately described	v						
	for key characteristics	X						
	Statement as to the possible effect on the results from				v			
	missing data				X			
	Loss to follow-up is not associated with key	Low risk of bias						
	characteristics		LO	W IISK OI	Ulas			
Prognostic factor	Clear definition of the prognostic factors measured is							
measurement	provided (e.g. imaging modality method,	X						
	measurement, and timing described).							
	Specified instrument and personnel for measurement		x					
	of predictive factors		Λ					
	Continuous variables are reported or appropriate (i.e.							
	not data- dependent) cut-off points are used and	X						
	specified a priori							
	Blinding: were estimators of risk factor status and of				X			
	outcomes blinded?				Λ			
	The prognostic factor(s) of interest is (are) adequately							
	measured in study participants to sufficiently limit		Mode	rate risk	of bias			
	potential bias				1			
Outcome	Is the outcome(s) clearly defined?	x						
measurement								
	The outcome measure and method used are adequately		Lov	w risk of	bias			
	valid and reliable to limit misclassification bias							
Study confounding	Do the authors address potential confounders?	x						
	Important potential confounders are appropriately							
	accounted for, limiting potential bias with respect to		Lov	w risk of	bias			
	the prognostic factor of interest.							
Analysis and	There is sufficient presentation of data to assess the							
reporting	adequacy of the analysis strategy and there is no	X						
	selective reporting			L	<u> </u>	<u> </u>		
	The statistical analysis is appropriate for the study			. 1 .	1.			
	design, limiting potential for the presentation of	sentation of			bias			
ATAW 11 11	invalid results	1012						
INA": not applicable.	Note: The above table was adapted from: Hayden et al., 2	W13.						

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Phupong et al., 2003 **ID:** 6378830

First Author: Phu	pong et al., 2003	<b>ID:</b> 637	/8830				
	Items to be considered for assessment of potential						
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population	Inclusion and exclusion criteria are adequately						
/sample selection	described [including explicit diagnostic criteria,	X					
•	start/finish date of recruitment]						
	Baseline study sample [i.e. individuals entering the						
	study and their key characteristics and sampling frame	X					
	are adequately described]						
	Study sample represents population of interest on key						
	characteristics, sufficient to limit potential bias to		Lov	w risk of	bias		
	results						
Study attrition	Response rate (i.e., proportion of study sample						
	completing the study and providing outcome data) is	X					
	adequate						
	Participants lost to follow-up are adequately described						
	for key characteristics	X					
	Statement as to the possible effect on the results from						
	missing data					X	
	Loss to follow-up is not associated with key			. 1 .			
	characteristics	Low risk of bias					
Prognostic factor	Clear definition of the prognostic factors measured is						
measurement	provided (e.g. imaging modality method,	X					
	measurement, and timing described).						
	Specified instrument and personnel for measurement						
	of predictive factors	X					
	Continuous variables are reported or appropriate (i.e.						
	not data- dependent) cut-off points are used and	X					
	specified a priori						
	Blinding: were estimators of risk factor status and of						
	outcomes blinded?	X					
	The prognostic factor(s) of interest is (are) adequately						
	measured in study participants to sufficiently limit	Low risk of bias					
	potential bias						
Outcome	Is the outcome(s) clearly defined?						
measurement	•	X					
	The outcome measure and method used are adequately		T		1.1		
	valid and reliable to limit misclassification bias		Lov	w risk of	Dias		
Study confounding	Do the authors address potential confounders?						
•	•	X					
	Important potential confounders are appropriately						
	accounted for, limiting potential bias with respect to		Lov	w risk of	bias		
	the prognostic factor of interest.						
Analysis and	There is sufficient presentation of data to assess the						
reporting	adequacy of the analysis strategy and there is no	X					
-	selective reporting				<u> </u>		
	The statistical analysis is appropriate for the study						
	design, limiting potential for the presentation of		Lov	w risk of	bias		
	invalid results						
MA*, not applicable	Note: The above table was adapted from: Hayden et al. 2	012					

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Rani et al., 2016

**ID:** 74903020

riist Autiloi. Rain	1D: 74903020						
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	х					
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]		X				
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results	Moderate risk of bias					
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate					х	
	Participants lost to follow-up are adequately described for key characteristics					X	
	Statement as to the possible effect on the results from missing data					х	
	Loss to follow-up is not associated with key characteristics	Low risk of bias					
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	x					
	Specified instrument and personnel for measurement of predictive factors		х				
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori		х				
	Blinding: were estimators of risk factor status and of outcomes blinded?			Х			
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias	Moderate risk of bias					
Outcome measurement	Is the outcome(s) clearly defined?	х					
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias	Low risk of bias					
Study confounding	Do the authors address potential confounders?		х				
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Moderate risk of bias					
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		x				
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Mode	rate risk	of bias		

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Rocca et al., 1995

**ID:** 74903016

First Author: Rocca et al., 1995			ID: /4903016					
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*		
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	Х	,					
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]		Х					
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results	Moderate risk of bias						
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate					Х		
	Participants lost to follow-up are adequately described for key characteristics					x		
	Statement as to the possible effect on the results from missing data					х		
	Loss to follow-up is not associated with key characteristics		Lo	w risk of	bias			
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	х						
	Specified instrument and personnel for measurement of predictive factors		х					
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х						
	Blinding: were estimators of risk factor status and of outcomes blinded?			х				
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias	Moderate risk of bias						
Outcome measurement	Is the outcome(s) clearly defined?		х					
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias	Moderate risk of bias						
Study confounding	Do the authors address potential confounders?		х					
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Moderate risk of bias						
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		х					
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Mode	rate risk	of bias			
NA*: not applicable	Note: The above table was adapted from: Hayden et al., 2	2013.						

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Verma et al., 2016 **ID:** 6379243

First Author: Verma et al., 2016			ID: 03/9243					
Potential Bias	Items to be considered for assessment of potential opportunity for bias	Yes	Partly	No	Unsure	NA*		
	Inclusion and exclusion criteria are adequately	105	1 til til	110	Chistic	1121		
Study population /sample selection	described [including explicit diagnostic criteria,	Х						
	start/finish date of recruitment]				1			
	Baseline study sample [i.e. individuals entering the							
	study and their key characteristics and sampling frame	X						
	are adequately described]							
	Study sample represents population of interest on key							
	characteristics, sufficient to limit potential bias to		Lo	w risk of	bias			
	results							
Study attrition	Response rate (i.e., proportion of study sample							
	completing the study and providing outcome data) is	X						
	adequate							
	Participants lost to follow-up are adequately described							
	for key characteristics					X		
	Statement as to the possible effect on the results from							
	missing data				X			
	Loss to follow-up is not associated with key		_					
	characteristics		Lo	w risk of	bias			
Prognostic factor	Clear definition of the prognostic factors measured is							
measurement	provided (e.g. imaging modality method,	X						
measarement	measurement, and timing described).							
	Specified instrument and personnel for measurement							
	of predictive factors	X						
	Continuous variables are reported or appropriate (i.e.							
	not data- dependent) cut-off points are used and	v						
	specified a priori	X						
	Blinding: were estimators of risk factor status and of							
	outcomes blinded?				X			
	The prognostic factor(s) of interest is (are) adequately							
	measured in study participants to sufficiently limit		Lo	w risk of	bias			
	potential bias							
Outcome	Is the outcome(s) clearly defined?							
measurement	•	X						
	The outcome measure and method used are adequately			. 1 .		•		
	valid and reliable to limit misclassification bias		Lo	w risk of	bias			
Study confounding	Do the authors address potential confounders?							
~		X						
	Important potential confounders are appropriately		ı					
	accounted for, limiting potential bias with respect to	Low risk of bias						
	the prognostic factor of interest.		20	11011 01				
Analysis and	There is sufficient presentation of data to assess the							
reporting	adequacy of the analysis strategy and there is no	x						
reporting	selective reporting	^						
	The statistical analysis is appropriate for the study							
	design, limiting potential for the presentation of	Low risk of bias						
	invalid results		LO	w 115K 01	oias			
NA*, not applicable	Note: The above table was adapted from: Hayden et al., 2	0012						

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Waa et al., 2010 **ID:** 6379255

First Author: waa et al., 2010			ID: 03/9233				
n 4 4 ln'	Items to be considered for assessment of potential	<b>X</b> 7	D 4	NT.	<b>T</b> .	NT A ·	
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population /sample selection	Inclusion and exclusion criteria are adequately described [including explicit diagnostic criteria, start/finish date of recruitment]	Х					
	Baseline study sample [i.e. individuals entering the study and their key characteristics and sampling frame are adequately described]	х					
	Study sample represents population of interest on key characteristics, sufficient to limit potential bias to results		Low risk of bias				
Study attrition	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate	х					
	Participants lost to follow-up are adequately described for key characteristics	X					
	Statement as to the possible effect on the results from missing data	Х					
	Loss to follow-up is not associated with key characteristics	Low risk of bias					
Prognostic factor measurement	Clear definition of the prognostic factors measured is provided (e.g. imaging modality method, measurement, and timing described).	х					
	Specified instrument and personnel for measurement of predictive factors	Х					
	Continuous variables are reported or appropriate (i.e. not data- dependent) cut-off points are used and specified a priori	х					
	Blinding: were estimators of risk factor status and of outcomes blinded?			х			
	The prognostic factor(s) of interest is (are) adequately measured in study participants to sufficiently limit potential bias	Low risk of bias					
Outcome measurement	Is the outcome(s) clearly defined?		х				
	The outcome measure and method used are adequately valid and reliable to limit misclassification bias		Mode	rate risk	of bias		
Study confounding	Do the authors address potential confounders?		Х				
	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the prognostic factor of interest.	Moderate risk of bias					
Analysis and reporting	There is sufficient presentation of data to assess the adequacy of the analysis strategy and there is no selective reporting		х				
	The statistical analysis is appropriate for the study design, limiting potential for the presentation of invalid results		Mode	rate risk	of bias		
NA* not applicable	Note: The above table was adapted from: Hayden et al., 2	2013					

NA\*: not applicable. Note: The above table was adapted from: Hayden et al., 2013.

**First Author:** Yelikar et al., 2013 **ID:** 6379339

First Author: Yelikar et al., 2013			9339				
	Items to be considered for assessment of potential						
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population	Inclusion and exclusion criteria are adequately						
/sample selection	described [including explicit diagnostic criteria,	X					
_	start/finish date of recruitment]						
	Baseline study sample [i.e. individuals entering the						
	study and their key characteristics and sampling frame	X					
	are adequately described]						
	Study sample represents population of interest on key						
	characteristics, sufficient to limit potential bias to	Low risk of bias					
	results						
Study attrition	Response rate (i.e., proportion of study sample						
	completing the study and providing outcome data) is		X				
	adequate						
	Participants lost to follow-up are adequately described						
	for key characteristics				X		
	Statement as to the possible effect on the results from						
	missing data				X		
	Loss to follow-up is not associated with key	M 1 ( '1 C1'					
	characteristics	Moderate risk of bias					
Prognostic factor	Clear definition of the prognostic factors measured is						
measurement	provided (e.g. imaging modality method,	X					
	measurement, and timing described).						
	Specified instrument and personnel for measurement						
	of predictive factors		X				
	Continuous variables are reported or appropriate (i.e.						
	not data- dependent) cut-off points are used and	X					
	specified a priori						
	Blinding: were estimators of risk factor status and of			v			
	outcomes blinded?			X			
	The prognostic factor(s) of interest is (are) adequately						
	measured in study participants to sufficiently limit				isk of bias		
	potential bias						
Outcome	Is the outcome(s) clearly defined?		x				
measurement			Λ				
	The outcome measure and method used are adequately		Mode	rate risk	of bios		
	valid and reliable to limit misclassification bias		Mode	rate risk	oi bias		
Study confounding	Do the authors address potential confounders?						
		X					
	Important potential confounders are appropriately						
	accounted for, limiting potential bias with respect to		Lov	v risk of	bias		
	the prognostic factor of interest.						
Analysis and	There is sufficient presentation of data to assess the						
reporting	adequacy of the analysis strategy and there is no		X				
	selective reporting						
	The statistical analysis is appropriate for the study						
	design, limiting potential for the presentation of		Mode	rate risk	of bias		
	invalid results						
NA*: not applicable.	Note: The above table was adapted from: Hayden et al., 2	2013.					

 $NA^*$ : not applicable. Note: The above table was adapted from: Hayden et al., 2013.

First Author: Zarean et al., 2018 **ID:** 6379369

First Author: Zarean et al., 2018			9369				
	Items to be considered for assessment of potential						
Potential Bias	opportunity for bias	Yes	Partly	No	Unsure	NA*	
Study population	Inclusion and exclusion criteria are adequately						
/sample selection	described [including explicit diagnostic criteria,	X					
•	start/finish date of recruitment]						
	Baseline study sample [i.e. individuals entering the						
	study and their key characteristics and sampling frame		X				
	are adequately described]						
	Study sample represents population of interest on key						
	characteristics, sufficient to limit potential bias to	Moderate risk of bias					
	results		1,1000	rate risk	or oras		
Study attrition	Response rate (i.e., proportion of study sample						
Study attrition	completing the study and providing outcome data) is	X					
	adequate	Λ					
	Participants lost to follow-up are adequately described		1				
	for key characteristics					X	
	Statement as to the possible effect on the results from					X	
	missing data						
	Loss to follow-up is not associated with key	Low risk of bias					
D	characteristics		1	1	I	1	
Prognostic factor	Clear definition of the prognostic factors measured is						
measurement	provided (e.g. imaging modality method,	X					
	measurement, and timing described).						
	Specified instrument and personnel for measurement	x					
	of predictive factors	Λ					
	Continuous variables are reported or appropriate (i.e.						
	not data- dependent) cut-off points are used and	X					
	specified a priori						
	Blinding: were estimators of risk factor status and of						
	outcomes blinded?				X		
	The prognostic factor(s) of interest is (are) adequately						
	measured in study participants to sufficiently limit		Lov	w risk of	bias		
	potential bias						
Outcome	Is the outcome(s) clearly defined?						
measurement			X				
	The outcome measure and method used are adequately				01.		
	valid and reliable to limit misclassification bias		Mode	rate risk	of bias		
Study confounding	Do the authors address potential confounders?		1				
Study comounding	Do the authors address potential comounders.	X					
	Important potential confounders are appropriately						
	accounted for, limiting potential bias with respect to		Lov	w risk of	hias		
	the prognostic factor of interest.		LO	W 113K O1	Olas		
Analysis and	There is sufficient presentation of data to assess the		T			1	
	adequacy of the analysis strategy and there is no						
reporting		X					
	selective reporting  The statistical analysis is appropriate for the study						
	The statistical analysis is appropriate for the study		т		hina		
	design, limiting potential for the presentation of		Lov	w risk of	uias		
NTA 4 1 1 1 1	invalid results	1012					
NA*: not applicable.	Note: The above table was adapted from: Hayden et al., 2	źU13.					