## Supplementary table. GRADE-CERQual Qualitative Evidence Profile.

Summary of review	Studies	Methodological limitations	Coherence	Adequacy	Relevance	CERQual	Explanation of CERQual assessment
finding	contributing to					assessment of	
	the finding					confidence in	
						the evidence	
Theme 1: Understanding t	he risk of developing	RA					
Individuals at-risk of RA	[29-34]	Moderate concerns: two studies	No or very	No or very minor	Moderate concerns: four studies	Moderate	Moderate concerns about
have gained knowledge		[Simons, Stack] with minor concerns	minor concerns.	concerns.	were with FDRS but only one of	confidence	methodological limitations and
of RA through		(unclear recruitment, no critical			these included NA FDRs; two		relevance
experiencing symptoms		examination of own role in designing			studies were of at-risk		
or witnessing the impact		and conducting the study, no critical			individuals with symptoms; no		
of RA on their relatives		examination of own role during			studies of at-risk individuals with		
		analysis); three studies [Munro, van			early clinical arthritis; all studies		
		Boheemen, Newsum] with moderate			were recruited through		
		concerns (unclear recruitment, no			secondary care; five studies		
		justification of data collection setting,			were from high-income		
		no critical examination of own role in			countries, whilst one study		
		designing and conducting or the study,			didn't report the setting.		
		no discussion of issues raised/effects of					
		study on participants, no explanation of					
		how the data presented were selected					
		from the original sample, no critical					
		examination of own role during					
		analysis, no identification of new areas					
		where research is necessary); one study					
		with serious concerns [Novotny] (no					
		discussions around recruitment, no					
		justification for data collection setting,					ļ
		no critical examination of own role in					

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		designing and conducting the study,					
		insufficient ethical considerations, no					
		discussion of issues raised/effects of					
		study on participants, no critical					
		examination of own role during					
		analysis, inadequate discussion of					
		evidence, no discussion of credibility of					
		findings, no discussion of study's					
		contribution, no identification of new					
		areas where research is necessary).					
Individuals at-risk of RA	[30-32, 34]	Minor concerns: two studies [Simons,	No or very	No or very minor	Moderate concerns: three	High	Moderate concerns about
identified a need for		Stack] with minor concerns (unclear	minor concerns.	concerns.	studies were with FDRS but only	confidence	methodological limitations and
more knowledge about		recruitment, no critical examination of			one of these included NA FDRs;		relevance.
RA and risk factors		own role in designing and conducting			only one study of at-risk		
		the study, no critical examination of			individuals with symptoms; no		
		own role during analysis); two studies			studies of individuals with early		
		[Munro, van Boheemen] with moderate			clinical arthritis; three studies		
		concerns (unclear recruitment, no			were recruited through		
		justification of data collection setting,			secondary care; three studies		
		no critical examination of own role in			were from high-income		
		designing and conducting the study, no			countries, whilst one study did		
		discussion of issues raised/effects of			not report the setting.		
		study on participants), no critical					
		examination of own role during					
		analysis, no identification of new areas					
		where research is necessary.					
		Recruitment, data coll justified, issues					
		raised by study, critical ex own role in					
		raised by study, critical ex own role in					

		designing, new areas where research is					
		necessary.					
Individuals at-risk of RA	[29-32]	Moderate concerns: two studies	No or very	Minor concerns: four	Moderate concerns: four studies	Moderate	Moderate concerns about
perceived that certain		[Simons, Stack] with minor concerns	minor concerns.	studies contributed to	were with FDRS but only one of	confidence	methodological limitations and
factors increase the risk		(unclear recruitment, no critical		this finding – two had	these included NA FDRs; no		relevance, minor concerns about
of developing RA		examination of own role in designing		rich supporting data	representation of at-risk		adequacy.
		and conducting the study, no critical		and two had	individuals with symptoms or		
		examination of own role during		superficial supporting	individuals with early clinical		
		analysis); one study with moderate		datal, but this is a	arthritis; all studies were		
		concerns [Munro] (unclear recruitment,		superficial descriptive	recruited through secondary		
		no justification of data collection		finding (identification	care; all studies were from high-		
		setting, no critical examination of own		of risk factors only).	income countries.		
		role in designing and conducting the					
		study, no critical examination of own					
		role during analysis, no discussion of					
		issues raised/effects of study on					
		participants); one study with serious					
		concerns [Novotny] (no discussions					
		around recruitment, no justification for					
		data collection setting, no critical					
		examination of own role in designing					
		and conducting the study, insufficient					
		ethical considerations, no discussion of					
		issues raised/effects of study on					
		participants, no critical examination of					
		own role during analysis, inadequate					
		discussion of evidence, no discussion of					
		credibility of findings, no discussion of					
		study's contribution, no identification of					
		new areas where research is necessary).					
Theme 2: Preventive inter	ventions to reduce the	e risk of developing RA					

Individuals at-risk of RA	[28-30, 32, 34]	Moderate concerns: one study [Simons]	No or very	No or very minor	Moderate concerns: four studies	Moderate	Moderate concerns about
acknowledged that		with minor concerns (unclear	minor concerns.	concerns.	were with FDRS but only one of	confidence	methodological limitations and
preventive interventions		recruitment, no critical examination of			these included NA FDRs; two		relevance.
have a role in modifying		own role in designing and conducting			studies of at-risk individuals with		
risk		the study, no critical examination of			symptoms; no studies of		
		own role during analysis); one study			individuals with early clinical		
		[Novotny] with serious concerns (no			arthritis; all studies were		
		discussions around recruitment, no			recruited through secondary		
		justification for data collection setting,			care; four studies were from		
		no critical examination of own role in			high-income countries, whilst		
		designing and conducting the study,			one study did not report the		
		insufficient ethical considerations, no			setting.		
		discussion of issues raised/effects of					
		study on participants, no critical					
		examination of own role during					
		analysis, inadequate discussion of					
		evidence, no discussion of credibility of					
		findings, no discussion of study's					
		contribution, no identification of new					
		areas where research is necessary);					
		three studies with moderate concerns					
		[Munro, Mosor] (unclear recruitment,					
		no justification of data collection					
		setting, no critical examination of own					
		role in designing and conducting the					
		study, no discussion of issues					
		raised/effects of study on participants),					
		no critical examination of own role					
		during analysis, no identification of new					
		areas where research is necessary).					

	Moderate concerns: one study [Simons] with minor concerns (unclear recruitment, no critical examination of own role in designing and conducting	Minor concerns: some participants are	Moderate concerns: three studies	Moderate concerns: two studies were with FDRS but only one of	Low confidence	Moderate concerns about methodological limitations, adequacy
	recruitment, no critical examination of		three studies	were with FDRS but only one of	confidence	methodological limitations, adequacy
	,	narticinants are				
	own role in designing and conducting	participants are	contributed but one	these included NA FDRs; only		and relevance.
	own role in designing and conducting	willing to	study provided very	one study of at-risk individuals		
	the study, no critical examination of	engage	superficial data (one	with symptoms; no studies of at-		
	own role during analysis); two studies	regardless of	quote).	risk individuals with early clinical		
	with moderate concerns [Munro, van	potential		arthritis; all studies were		
	Boheeemen] (unclear recruitment, no	treatment		recruited through secondary		
	justification of data collection setting,	effectiveness,		care; two studies were from		
	no critical examination of own role in	and some		high-income countries, whilst		
	designing and conducting the study, no	individuals are		one study did not report the		
	discussion of issues raised/effects of	more likely to		setting.		
	study on participants), no critical	engage than				
	examination of own role during	others –				
	analysis, no identification of new areas	especially with				
	where research is necessary).	regards to				
		lifestyle				
		changes.				
3-30, 34]	Moderate concerns: one study [Simons]	No or very	Moderate concerns:	Moderate concerns: two studies	Moderate	Moderate concerns about
	with minor concerns (unclear	minor concerns.	four studies	were with FDRs, but neither	confidence	methodological limitations, adequacy
	recruitment, no critical examination of		contributed and three	included representation of NA		and relevance.
	own role in designing and conducting		provided superficial	FDRs; two studies of at-risk		
	the study, no critical examination of		data only, but this is a	individuals with symptoms; no		
	own role during analysis); two studies		simple, descriptive	studies of early clinical arthritis;		
	[Mosor, van Boheemen] with moderate		finding.	all studies were recruited		
	concerns (no justification of data			through secondary care; three		
	collection setting, no critical			studies were from high-income		
	examination of own role in designing			countries, whilst one study did		
	and conducting the study, no discussion			not report the setting.		
	of issues raised/effects of study on					
	participants, no critical examination of					
3-5	30, 34]	justification of data collection setting, no critical examination of own role in designing and conducting the study, no discussion of issues raised/effects of study on participants), no critical examination of own role during analysis, no identification of new areas where research is necessary). 30, 34] Moderate concerns: one study [Simons] with minor concerns (unclear recruitment, no critical examination of own role in designing and conducting the study, no critical examination of own role during analysis); two studies [Mosor, van Boheemen] with moderate concerns (no justification of data collection setting, no critical examination of own role in designing and conducting the study, no discussion of issues raised/effects of study on	justification of data collection setting, no critical examination of own role in designing and conducting the study, no discussion of issues raised/effects of study on participants), no critical examination of own role during analysis, no identification of new areas where research is necessary).effectiveness, and some individuals are more likely to engage than others – especially with regards to lifestyle changes.30, 34]Moderate concerns: one study [Simons] with minor concerns (unclear recruitment, no critical examination of own role in designing and conducting the study, no critical examination of own role during analysis); two studies [Mosor, van Boheemen] with moderate concerns (no justification of data collection setting, no critical examination of own role in designing and conducting the study, no discussion of issues raised/effects of study onNo or very	justification of data collection setting, no critical examination of own role in designing and conducting the study, no discussion of issues raised/effects of study on participants), no critical examination of own role during analysis, no identification of new areas where research is necessary).effectiveness, more likely to engage than others - especially with regards to lifestyle changes.30, 34]Moderate concerns: one study [Simons] with minor concerns (unclear recruitment, no critical examination of own role in designing and conducting the study, no critical examination of own role during analysis); two studies [Mosor, van Boheemen] with moderate concerns (no justification of data collection setting, no critical examination of own role in designing and conducting the study, no discussion of issues raised/effects of study onNo or very minor concerns.Moderate concerns: four studies contributed and three provided superficial data only, but this is a simple, descriptive finding.	justification of data collection setting, no critical examination of own role in designing and conducting the study, no discussion of issues raised/effects of study on participants), no critical examination of own role during analysis, no identification of new areas where research is necessary).effectiveness, and some individuals are more likely to engage than others - especially with regards to lifestyle changes.care; two studies were from high-income countries, whilst one study did not report the setting.30, 34]Moderate concerns: one study [Simons] with minor concerns (unclear recruitment, no critical examination of own role in designing and conducting the study, no critical examination of own role during analysis); two studies [Mosor, van Boheemen] with moderate concerns (no justification of data collection setting, no critical examination of own role in designing and conducting the study, no discussion o fissues raised/effects of study onNo or very minor concerns.Moderate concerns: minor concerns.80, 34]Moderate concerns: (no justification of cown role in designing and conducting the study, no critical examination of own role in designing and conducting the study, no critical examination of own role in designing and conducting the study, no discussion of issues raised/effects of study onModerate studies individuals with symptoms; no studies of early clinical arthritis; all studies were from high-income countries, whilst one study did not report the setting.	justification of data collection setting, no critical examination of own role in designing and conducting the study, no discussion of issues raised/effects of study on participants), no critical examination of own role during analysis, no identification of new areas where research is necessary).effectiveness, and some individuals are more likely to especially with regards to lifestyle changes.Moderate concerns: two studies setting.Care; two studies were from high-income countries, whilst one study did not report the setting.30, 34]Moderate concerns: one study [Simons] with minor concerns (unclear recruitment, no critical examination of own role in designing and conducting the study, no critical examination of own role during analysis); two studies contributed and three provided superficial data only, but this is a simple, descriptive finding.Moderate concerns: four studies contributed and three included representation of NA FDRs; two studies of art-risk individuals with symptoms; no studies or early clinical arthritis; all studies were from high-income countries, whilst one study did not report the setting.Moderate confidence(Mosor, van Boheemen] with moderate concerns (no justification of own role in designing and conducting the study, no discussion of issues raised/effects of study onNo or very minor concerns (and beginning and conducting the study, no discussion of issues raised/effects of study onModerate concerns: finding.Moderate concerns: finding.Moderate concerns: two studies of art-risk all studies were from high-income countries, whilst one study did not report the setting.

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		own role during analysis, no					
		identification of new areas where					
		research is necessary); one study					
		[Novotny] with serious concerns (no					
		discussions around recruitment, no					
		justification for data collection setting,					
		no critical examination of own role in					
		designing and conducting the study,					
		insufficient ethical considerations, no					
		discussion of issues raised/effects of					
		study on participants, no critical					
		examination of own role during					
		analysis, inadequate discussion of					
		evidence, no discussion of credibility of					
		findings, no discussion of study's					
		contribution, no identification of new					
		areas where research is necessary).					
Seeing the impact of RA	[29, 30, 34]	Moderate concerns: one study [Simons]	No or very	No or very minor	Moderate concerns: two studies	Moderate	Moderate concerns about
on a relative would		with minor concerns (unclear	minor concerns	concerns.	were with FDRS but none	confidence	methodological limitations and
make individuals at-risk		recruitment, no critical examination of			included NA FDRs; only one		relevance.
of RA more willing to		own role in designing and conducting			study of at-risk individuals with		
consider preventive		the study, no critical examination of			symptoms; no studies of		
interventions		own role during analysis); one study			individuals with early clinical		
		with moderate concerns [van			arthritis; all studies were		
		Boheemen] (no justification of data			recruited through secondary		
		collection setting, no critical			care; two studies were from		
		examination of own role in designing			high-income countries, whilst		
		and conducting the study, no discussion			one study did not report the		
		of issues raised/effects of study on			setting.		
		participants, no critical examination of					
		own role during analysis, no					
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		identification of new press why we		1			
		identification of new areas where					
		research is necessary); one study					
		[Novotny] with serious concerns (no					
		discussions around recruitment, no					
		justification for data collection setting,					
		no critical examination of own role in					
		designing and conducting the study,					
		insufficient ethical considerations, no					
		discussion of issues raised/effects of					
		study on participants, no critical					
		examination of own role during					
		analysis, inadequate discussion of					
		evidence, no discussion of credibility of					
		findings, no discussion of study's					
		contribution, no identification of new					
		areas where research is necessary).					
Individuals at-risk of RA	[28-30, 32, 34]	Moderate concerns: one study [Simons]	No or very	No or very minor	Moderate concerns: three	Moderate	Moderate concerns about
had concerns about		with minor concerns (unclear	minor concerns.	concerns	studies were with FDRS but only	confidence	methodological limitations and
taking preventive		recruitment, no critical examination of			one of these included NA FDRs;		relevance.
medication		own role in designing and conducting			two studies of at-risk individuals		
		the study, no critical examination of			with symptoms; no studies of		
		own role during analysis); three studies			individuals with early clinical		
		with moderate concerns [Munro,			arthritis; four studies were		
		Mosor, van Boheemen] (unclear			recruited through secondary		
		recruitment, no justification of data			care; four studies were from		
		collection setting, no critical			high-income countries, whilst		
		examination of own role in designing			one study did not report the		
		and conducting the study, no discussion			setting.		
		of issues raised/effects of study on					
		participants, no critical examination of					
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		identification of new areas where					
		research is necessary); one study					
		[Novotny] with serious concerns (no					
		discussions around recruitment, no					
		justification for data collection setting,					
		no critical examination of own role in					
		designing and conducting the study,					
		insufficient ethical considerations, no					
		discussion of issues raised/effects of					
		study on participants, no critical					
		examination of own role during					
		analysis, inadequate discussion of					
		evidence, no discussion of credibility of					
		findings, no discussion of study's					
		contribution, no identification of new					
		areas where research is necessary.					
Individuals at-risk of RA	[28-30, 32, 34]	Moderate concerns: one study [Simons]	Minor concerns:	Minor concerns: five	Moderate concerns: three	Moderate	Minor concerns about coherence and
highlighted a need for		with minor concerns (unclear	some	studies contributed,	studies were with FDRs, but only	confidence	adequacy, moderate concerns about
more information about		recruitment, no critical examination of	participants are	three of these	one of these included NA FDRs;		methodological limitations and
their actual risk and		own role in designing and conducting	willing to	provided rich data, but	two studies of at-risk individuals		relevance.
preventive interventions		the study, no critical examination of	engage with	two provided	with symptoms; no studies of		
before engaging		own role during analysis); three studies	lifestyle changes	superficial data only.	early clinical arthritis; four		
		[Mosor, Munro, van Boheemen] with	regardless of		studies were recruited through		
		moderate concerns (unclear	their actual risk.		secondary care; four studies		
		recruitment, no justification of data			were from high-income		
		collection setting, no critical			countries, whilst one study did		
		examination of own role in designing			not report the setting.		
		and conducting the study, no discussion					
		of issues raised/effects of study on					
		participants, no critical examination of					
		own role during analysis, no					
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		identification of new areas where					
		research is necessary); one study					
		[Novotny] with serious concerns (no					
		discussions around recruitment, no					
		justification for data collection setting,					
		no critical examination of own role in					
		designing and conducting the study,					
		insufficient ethical considerations, no					
		discussion of issues raised/effects of					
		study on participants, no critical					
		examination of own role during					
		analysis, inadequate discussion of					
		evidence, no discussion of credibility of					
		findings, no discussion of study's					
		contribution, no identification of new					
		areas where research is necessary).					
Theme 3: Perceptions and	outcomes of predictiv	ve testing					
Individuals at-risk of RA	[28, 30-33]	Moderate concerns: two studies	Minor concerns:	Minor concerns: five	Moderate concerns: three	Moderate	Minor concerns about coherence,
perceived predictive		[Simons, Stack] with minor concerns	some	studies contributed to	studies were with FDRs, but only	confidence	moderate concerns about
testing as useful		(unclear recruitment, no critical	contradictory	the finding, but one	one of these included NA FDRs;		methodological limitations and
		examination of own role in designing	statements on	provided superficial	only two studies of at-risk		relevance.
		and conducting the study, no critical	how useful it	data only.	individuals with symptoms; no		
		examination of own role during	would be to		studies of early clinical arthritis;		
		analysis); three studies [Mosor, Munro,	know risk status.		all studies were recruited		
		Newsum] with moderate concerns			through secondary care; all		
		(unclear recruitment, no justification of			studies were from high-income		
		data collection setting, no critical			countries.		
		examination of own role in designing					
		and conducting the study, no discussion					
		of issues raised/effects of study on					
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		participants, no explanation of how the					
		data presented were selected from the					
		original sample, no critical examination					
		of own role during analysis, no					
		identification of new areas where					
		research is necessary).					
Presence of symptoms,	[28, 31]	Minor concerns: one study [Stack] with	No or very	Serious concerns: only	Moderate concerns: only one	Low	Minor concerns about methodological
perceived effectiveness,		minor concerns (unclear recruitment,	minor concerns.	two studies	study with FDRs; no studies of	confidence	limitations, moderate concerns about
and understanding of		no critical examination of own role in		contributed to the	NA FDRs; only one study of at-		relevance, and serious concerns about
the impact of disease		designing and conducting the study, no		finding, and both had	risk individuals with symptoms;		adequacy.
affect individuals'		critical examination of own role during		superficial supporting	no studies of early clinical		
decision to undergo		analysis); one study [Mosor] with		data.	arthritis; all studies were		
predictive testing.		moderate concerns (no justification of			recruited through secondary		
		data collection setting, no critical			care; all studies were from high-		
		examination of own role in designing			income countries.		
		and conducting the study, no discussion					
		of issues raised/effects of study on					
		participants, no critical examination of					
		own role during analysis, no					
		identification of new areas where					
		research is necessary).					
Individuals at-risk of RA	[28, 31-33]	Moderate concerns: one study [Stack]	Minor concerns:	Minor concerns: four	Moderate concerns: two studies	Moderate	Moderate concerns regarding
had concerns about		with minor concerns (unclear	some	studies contributed to	of FDRs, but only one of these	confidence	methodological limitations and
predictive testing		recruitment, no critical examination of	contradictory	the finding, but one of	included NA FDRs; only two		relevance of the data.
		own role in designing and conducting	statements on	these provided	studies of at-risk individuals with		
		the study, no critical examination of	how useful it	superficial supporting	symptoms; no studies of early		
		own role during analysis); three studies	would be to	data only.	clinical arthritis; all studies were		
		[Mosor, Munro, Newsum] with	know risk status.		recruited through secondary		
		moderate concerns (unclear			care; all studies were from high-		
		recruitment, no justification of data			income countries.		
		collection setting, no critical					
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	examination of own role in designing			
	and conducting the study, no discussion			
	of issues raised/effects of study on			
	participants, no explanation of how the			
	data presented were selected from the			
	original sample, no critical examination			
	of own role during analysis, no			
	identification of new areas where			
	research is necessary).			