

Integrated Impact Assessment Report for Clinical Commissioning Policies				
Policy Reference Number	Number ID-012			
Policy Title	•	Canakinumab for periodic fever syndromes Proposal <u>for routine commission</u> (ref A3.1)		
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Integrated Impact Assessment – Index				
Section A – Activity	Section B - Service	Section C – Finance		
A1 Current Patient Population & Demography / Growth	B1 Service Organisation	C1 Tariff		
A2 Future Patient Population & Demography	B2 Geography & Access	C2 Average Cost per Patient		
A3 Activity	B3 Implementation	C3 Overall Cost Impact of this Policy to NHS England		
A4 Existing Patient Pathway	B4 Collaborative Commissioning	C4 Overall cost impact of this policy to the NHS as a whole		
A5 Comparator (next best alternative treatment) Patient Pathway		C5 Funding		
A6 New Patient Pathway		C6 Financial Risks Associated with Implementing this Policy		
A7 Treatment Setting		C7 Value for Money		
A8 Coding		C8 Cost Profile		
A9 Monitoring				

About this Impact Assessment: instructions for completion and explanatory notes

- Each section is divided into themes.
- Each theme sets out a number of questions.
- All questions are answered by selecting a drop down option or including free text.
- Free text boxes are provided to enable succinct relevant commentary to be added which explains the rationale for response or assumption. Please limit responses to 3 sentences of explanatory text.
- Data in this document is either drawn from one of the relevant policy documents or a source for the information is provided.
- Where assumptions are included where data is not available, this is specified.

Section A - Activity Impact

A1 Current Patient Population & Demography / Growth

A1.1 Prevalence of the disease/condition.		Familial Mediterranean fever (FMF)	Tumour necrosis factor receptor associated periodic syndrome (TRAPS)	Hyperimmunoglobulin D syndrome / mevalonate Kinase deficiency (HIDS/MKD)	Total
	Children 2- 17 Prevalence	8	12	8	28
	Children 2- 17 Incidence	2	1	2	5
	Adults Prevalence	27	72	26	125
	Adults Incidence	3	5	2	10
	Total	40	90	38	168
	Source: PWC	G Clinical expert	opinion based	d on the euro fever subn	nission
A1.2 Number of patients currently eligible for the treatment according to the proposed policy commissioning criteria.	168 Source: Clinic Please specif	cal experts on the	e PWG		

	All 168 people would be eligible for treatment with canakinumab, however expert opinion is that only around 80% would start the treatment and the remaining people would remain on their existing treatment options. Expert clinical opinion is that, although anakinra is commissioned by NHS England because it isn't licensed, canakinumab, which is a licensed indication, will be offered to all people currently on anakinra irrespective of the starting criteria.
A1.3 Age group for which the treatment is proposed according to the policy commissioning criteria.	Other Please specify From 2 years old and onwards
A1.4 Age distribution of the patient population eligible according to the proposed policy commissioning criteria	33 children (age 2 -17) 135 adults Source Clinical experts PWG
A1.5 How is the population currently distributed geographically?	unknown The population is mainly treated in 2 sites in London with centres also in Leeds and Newcastle.
A2 Future Patient Population & Demography	
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new policy) in 2, 5, and 10 years?	Increasing – Clinical expert opinion is that the population will increase by around a third over the next ten years due to better diagnostics and awareness. Source: PWG Clinical expert opinion

A2.2 Are there likely to be changes in demography of the patient population and would this impact on activity/outcomes?	Not known			
	Source: Clinica	al experts PWG		
A2.3 Expected net increase or decrease in the number of patients who will be eligible for the service, according to the proposed service specification commissioning criteria, per year in years 2-5		FMF	TRAPS	HIDS/MKD
	YR2 +/-	+3	+12	+2
and 10?	YR3 +/-	+4	+18	+3
	YR4 +/-	+5	+24	+5
	YR5 +/-	+7	+30	+6
	YR10 +/-	+13	+60	+14
assumptions made.	eligible popula as greater awa	tion because of	improved diagnostic anditions. Therefore	en an increase in the cs and testing as well growth is estimated
A3 Activity				
			ning position of an	

		akinumab should s an additional tre	be made available t atment option.	o the whole eligible	
A3.2 What is the annual activity associated with the existing pathway for the eligible population?	Current num	Current numbers of patients on Canakinumab			
		FMF	TRAPS	HIDS/MKD	
	YR2	0	6	3	
	YR3	0	6	3	
	YR4	0	6	3	
	YR5	0	6	3	
	YR10	0	8	5	
	expect this n	8 known people ha	ave a periodic fever around a third in th umab, shown in yea	e period. There are	
A3.3 What is the estimated annual activity associated with the proposed policy proposition pathway for the eligible population?	•	d that 80% of the be eligible for trea		condition (as detailed in	
A3.4 What is the estimated annual activity associated with the new best alternative comparator pathway for the eligible population? If the only alternative is the existing pathway, please state 'not applicable' and move to A4.	, ,		available for the differen		

A4 Existing Patient Pathway

A4.1 **Existing pathway:** Describe the relevant currently routinely commissioned:

- Treatment or intervention
- Patient pathway
- Eligibility and/or uptake estimates.

TRAPS, HIDS/MKD and FMF are rare conditions with limited treatment options. Current clinical treatment for all conditions include non-steroidal anti-inflammatory drugs (NSAIDs) and short-term high doses of glucocorticoids (for TRAPS and HIDS/MKD only). These help to manage fever, inflammation and pain associated with the conditions. However, these treatments do not control the underlying cause of the symptoms or reduce the frequency of attacks. Continued use of glucocorticoids and NSAIDs are associated with adverse effects such as osteoporosis and increased risk of gastrointestinal and cardiovascular events, respectively. Colchicine is also used in people with FMF to control fever attacks and to prevent secondary amyloidosis. However, colchicine is associated with adverse effects of diarrhoea and transient elevation of transaminases (liver enzymes) and the rare adverse effects of liver dysfunction, leukopenia (low white blood cells), and neuromyopathy (disease affecting nerves and muscles). People with FMF who do not respond to or are intolerant to colchicine have very few treatment options (EPAR: Canakinumab).

At present we estimate that current practice for people who are FMF colchine resistant is that all 10 children with the condition are treated with anakinra and of the 30 adults with the condition, 27 receive standard care (steroids or NSAIDS) and 3 are treated with anakinra.

We estimate that current practice for people with TRAPS is that of the 13 children with the condition, 12 are treated with anakinra and 1 is treated with etanercept. We estimate that of the 77 adults with the condition, 25 receive standard care (steroids or NSAIDS), 40 are treated with anakinra, 4 are treated with etanercept and 5 are treated with canakinumab.

We estimate that current practice for people with HIDS is that of the 10 children with the condition, 8 are treated with anakinra and 2 are treated with canakinumab. We estimate that of the 28 adults with the condition, 6

	receive standard care (steroids or NSAIDS), 20 are treated with anakinra, 1 is treated with tocilizumab and 1 is treated with canakinumab. Source: Policy proposition/Resource impact assessment using data provided by the clinicians on the policy working group
A4.2. What are the current treatment access and stopping criteria?	Not applicable
A4.3 What percentage of the total eligible population is expected to: a) Be clinically assessed for treatment b) Be considered to meet an exclusion criteria following assessment c) Choose to initiate treatment d) Comply with treatment e) Complete treatment?	Please see resource template for breakdown. Source: PWG Clinical experts
A5 Comparator (next best alternative treatment) Patient Pathwa (NB: comparator/next best alternative does not refer to current pathway but to an	
A5.1 Next best comparator:	<u>No</u>
Is there another 'next best' alternative treatment which is a relevant comparator? If yes, describe relevant	Source: Policy Working Group
Treatment or interventionPatient pathwayActual or estimated eligibility and uptake	

A5.2 What percentage of the total eligible population is estimated to: a) Be clinically assessed for treatment b) Be considered to meet an exclusion criteria following assessment c) Choose to initiate treatment d) Comply with treatment e) Complete treatment?	N/A
A6 New Patient Pathway	
A6.1 What percentage of the total eligible population is expected to: a) Be clinically assessed for treatment b) Be considered to meet an exclusion criteria following assessment c) Choose to initiate treatment d) Comply with treatment e) Complete treatment?	If not known, please specify a) 100% b) 0% c) 80% d) 100% e) 97% Source: PWG Clinical experts
A6.2 Specify the nature and duration of the proposed new treatment or intervention.	Life long Source: Company Submission
A7 Treatment Setting	
A7.1 How is this treatment delivered to the patient?	Select all that apply: Emergency/Urgent care attendance

	Acute Trust: inpatient			
	Acute Trust: day patient			
	Acute Trust: outpatient		\boxtimes	
	Mental Health provider: in	patient		
	Mental Health provider: or	utpatient		
	Community setting			
	Homecare			
	Other			
	Please specify:			
	Canakinumab can only be	prescribed for	or ped	ople with TRAPS, HIDS/MKD
	and FMF by providers who	have an NH	IS En	gland contract and are
	compliant with the service	specification	for s	pecialised immunology (all
	ages) <u>B09/S/a</u> , paediatric r	medicine and	d rheu	ımatology E03/S/b.
A7.2 What is the current number of contracted providers for the	NORTH	2		
eligible population by region?	MIDLANDS & EAST	0		
	LONDON	2		
	SOUTH	0		

A7.3 Does the proposition require a change of delivery setting or capacity requirements?	No Please specify: No changes required Source: Policy Working Group	
A8 Coding		
A8.1 Specify the datasets used to record the new patient pathway	Select all that apply:	
activity.	Aggregate Contract Monitoring *	
*expected to be populated for all commissioned activity	Patient level contract monitoring	
	Patient level drugs dataset	
	Patient level devices dataset	
	Devices supply chain reconciliation dataset	
	Secondary Usage Service (SUS+)	
	Mental Health Services DataSet (MHSDS)	
	National Return**	
	Clinical Database**	
	Other**	
	**If National Return, Clinical database or other	selected, please specify:
A8.2 Specify how the activity related to the new patient pathway	Select all that apply:	
will be identified.	OPCS v4.8	
		<u> </u>

	ICD10	
	Treatment function code	
	Main Speciality code	
	HRG	
	SNOMED	
	Clinical coding / terming methodology used by clinical profession	
A8.3 Identification Rules for Drugs:	Already specified in current NHS England D	Prugs List document
How are drug costs captured?	If the drug has already been specified in the current NHS England I List please specify drug name and drug indication:	
	Canakinumab for Cryopyrin associated periodi	c syndrome (CAPS)
A8.4 Identification Rules for Devices: How are device costs captured?	Not applicable	

	N/A If the activity is not captured please specify whether the proposed identification rules have been documented and agreed with the Identification Rules team. Choose an item.
A9 Monitoring	
A9.1 Contracts Specify any new or revised data flow or data collection requirements, needed for inclusion in the NHS Standard Contract Information Schedule.	None None
A9.2 Excluded Drugs and Devices (not covered by the Zero	Select all that apply:
Cost Model) For treatments which are tariff evaluded drugs or devices not	Drugs or Device MDS □
For treatments which are tariff excluded drugs or devices not covered by the Zero Cost Model, specify the pharmacy or device	Blueteq
monitoring required, for example reporting or use of prior approval systems.	Other prior approval
A9.3 Business intelligence Is there potential for duplicate reporting?	<u>No</u>
A9.4 Contract monitoring Is this part of routine contract monitoring?	<u>No</u>
A9.5 Dashboard reporting Specify whether a dashboard exists for the proposed intervention?	No If no, will one be developed?

	No
A9.6 NICE reporting	<u>No</u>
Are there any directly applicable NICE or equivalent quality standards which need to be monitored in association with the new policy?	
Section E	B - Service Impact
B1 Service Organisation	
B1.1 Describe how the service is currently organised? (i.e. tertiary centres, networked provision etc.)	NHS England contract and are compliant with the service specification for specialised immunology (all ages) <u>B09/S/a</u> , paediatric medicine and rheumatology E03/S/b.
	Source: Policy proposition section 10
B1.2 Will the proposition change the way the commissioned	<u>No</u>
service is organised?	Please specify:
	See B.1.1
	Source: Policy proposition section 10
B1.3 Will the proposition require a new approach to the	No change to delivery of care
organisation of care?	Please specify:
	No change in services is required.

B2.1 Where do current referrals come from?	Select all that apply:				
	GP ⊠				
	Secondary care	\boxtimes			
	Tertiary care	\boxtimes			
	Other				
B2.2 What impact will the new policy have on the sources of referral?	No impact				
	Please specify:				
	be an increase in the nu		nge in referrals, however there may errals.		
B2.3 Is the new policy likely to improve equity of access?	No impact				
	Source: Equalities Impa	ct Assessm	pent		
B2.4 Is the new policy likely to improve equality of access and/or	No impact				
outcomes?	Source: Equalities Impa	ct Assessm	ent		
B3 Implementation					
B3.1 Will commissioning or provider action be required before implementation of the proposition can occur?	No action required				
B3.2 Time to implementation:	No - go to B3.4				
Is a lead-in time required prior to implementation?					

B3.3 Time to implementation: If lead-in time is required prior to implementation, will an interim plan for implementation be required?	No - go to B3.4
B3.4 Is a change in provider physical infrastructure required?	No physical infrastructure changes will be required.
B3.5 Is a change in provider staffing required?	<u>No</u>
B3.6 Are there new clinical dependency and/or adjacency requirements that would need to be in place?	No Please specify: No changes required.
B3.7 Are there changes in the support services that need to be in place?	No Please specify: No changes required, monitoring and tests are roughly in line with current arrangements.
B3.8 Is there a change in provider and/or inter-provider governance required? (e.g. ODN arrangements / prime contractor)	<u>No</u>
B3.9 Is there likely to be either an increase or decrease in the number of commissioned providers? If yes, specify the current and	No change Please complete table:
estimated number of providers required in each region	Region Current no. of providers State expected range Provisional or confirmed

	North	2	9	<u>c</u>		
	Midlands & East					
	London	2	9	<u>C</u>		
	South					
	Total	4	<u> </u>	<u>C</u>		
	Please specif					
B3.10 Specify how revised provision will be secured by NHS England as the responsible commissioner.	Select all that apply:					
	Publication a					
	Market intervention required					
	Competitive decrease pro					
	Price-based effectiveness					
	Any qualified					
	National Cor	S 🗆				
	Procurement	t				
	Other					
		contract and are nmunology (all age	compliant with the serves) <u>B09/S/a,</u> paediatric			

B4 Place-based Commissioning					
B4.1 Is this service currently subject to, or planned for, place-based commissioning arrangements? (e.g. future CCG lead, devolved commissioning arrangements, STPs)	<u>No</u>				
Section C	- Finance Ir	npact			
C1 Tariff/Pricing					
C1.1 How is the service contracted and/or charged?	Select all that apply:				
Only specify for the relevant section of the patient pathway	Drugs	Not separately charged – part of local or national tariffs			
		Excluded from tariff – pass through	\boxtimes		
		Excluded from tariff - other			
		Not separately charged – part of local or national tariffs			
	Devices	Excluded from tariff (excluding ZCM) – pass through			
		Excluded from tariff (excluding ZCM) – other			
		Via Zero Cost Model			
		Paid entirely by National Tariffs			
	A adividu	Paid entirely by Local Tariffs	\boxtimes		
	Activity	Partially paid by National Tariffs			
		Partially paid by Local Tariffs			

	Part/fully paid under a Block arrangement	
	Part/fully paid under Pass-Through arrangements	
	Part/fully paid under Other arrangements	
C1.2 Drug Costs Where not included in national or local tariffs, list each drug or combination, dosage, quantity, list price including VAT if applicable and any other key information e.g. Chemotherapy Regime.	The list price of canakinumab 150mg per 1ml is £9,927.80 excludin £11,913.36 including VAT 1 vial for injection Source BNF	ng VAT
C1.3 Device Costs Where not included in national or local tariff, list each element of the excluded device, quantity, list or expected price including VAT if applicable and any other key information. NB: Discounted prices or local prices must not be included as these are subject to commercial confidentiality and must not be disclosed.	N/A	
C1.4 Activity Costs covered by National Tariffs List all the HRG codes, HRG descriptions, national tariffs (excluding MFF), volume and other key costs (e.g. specialist top	Description National Tariff 18/19 National Tariff with MFF Average 1.1	
up %)	Emergency Medicine, Category 2 Investigation with Category 4 Treatment (VB04Z)	216
	Follow up outpatient 131 appointment	144

	paediatrics (420) (WF01A)				
	Follow up outpatient appointment adults nephrology (361) (WF01A)	115	127		
	6 Monthly assessment at the National Amyloidosis Centre	1,025	1,128		
	Inborn Errors of Metabolism with CC Score 3+ (KC04A)	3,123	3,435		
	Paediatric Other Gastrointestinal Disorders with CC Score 4+ (PF26A)	2,144	2,358		
C1.5 Activity Costs covered by Local Tariff List all the HRGs (if applicable), HRG or local description, estimated average tariff, volume and any other key costs. Also	Description	National Tariff 18/19 (£)	National Tariff 18/19 with MFF Average of 1.1		
indicate whether the Local Tariff(s) is/are newly proposed or established and if newly proposed how is has been derived, validated and tested.	Average of dialysis in reference cost 16/17 for adults	151	167		
validated and tested.	Tariffs LD01A – LD10A.				
C1.6 Other Activity Costs not covered by National or Local Tariff	N/A				
1					
Include descriptions and estimates of all key costs.					

C2 Average Cost per Patient

C2.1 What is the estimated cost per patient to NHS England, in years 1-5, including follow-up where required?

Are there any changes expected in year 6-10 which would impact the model?

	FMF	TRAPS	HIDS/MKD
YR1	£19,751	£7,021	£20,843
YR2	£69,837	£48,458	£80,610
YR3	£61,855	£64,749	£105,250
YR4	£62523	£62,734	£106,470
YR5	£60,132	£61,433	£109,793

If yes, please specify:

It is assumed that there will be further growth in total patient numbers over this period.

C3 Overall Cost Impact of this Policy to NHS England

C3.1 Specify the budget impact of the proposal on NHS England in relation to the relevant pathway.

Cost pressure

Please specify:

	FMF	TRAPS	HIDS/MKD	Total
Year 1 (£m)	£0.6	£0.5	£0.7	£1.8
Year 2 (£m)	£2.2	£4.4	£3.2	£9.8
Year 5 (£m)	£2.8	£6.5	£4.8	£14.1
Year 10 (£m)	£3.6	£6.9	£5.6	£16.1

C3.2 If the budget impact on NHS England cannot be identified set out the reasons why this cannot be measured.	Not applicable				
C3.3 If the activity is subject to a change of commissioning responsibility, from CCG to NHS England, has a methodology for the transfer of funds been identified, and calculated?	Not applicable				
C4 Overall cost impact of this policy to the NHS as a whole					
C4.1 Specify the budget impact of the proposal on other parts of	Budget impact	for CCGs:			
he NHS.	Cost saving				
	Budget impact	for provider	s:		
	Cost neutral				
	Please specify	/ :			
	We are assuming that CCG's will benefit through reduced outpatient treatments, A&E attendances, inpatients spells etc. The effect on				
	providers will be cost neutral as the reduced activity should lead to offsetting of both associated income and costs.				ioda to dir
C4.2 Taking into account responses to C3.1 and C4.1, specify the	Cost pressure	e			
budget impact to the NHS as a whole.	Please specify				
		FMF	TRAPS	HIDS/MKD	Total
	Year 1 (£m)	£0.8	£0.7	0.8	£2.3
	Year 2 (£m)	£3.0	£4.9	£3.6	£11.5
	, ,	ı	1		

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	Year 5 (£m)	£4.0	£7.3	£5.3	£16.6
	Year 10 (£m)	£4.9	£7.8	£6.3	£19.0
C4.3 Where the budget impact is unknown set out the reasons why this cannot be measured	Not applicable)			
C4.4 Are there likely to be any costs or savings for non-NHS commissioners and/or public sector funders?	<u>Unknown</u>				
C5 Funding					
C5.1 Where a cost pressure is indicated, state known source of funds for investment, where identified, e.g. decommissioning less clinically or cost-effective services.	CPAG prioritis	sation reser	ve.		
C6 Financial Risks Associated with Implementing this Policy					
C6.1 What are the material financial risks to implementing this policy?	The financial r	risk is that t	here could pote	entially be a high	n budget impact.
C6.2 How can these risks be mitigated?	canakinumab. what the uptal	Expert clirke of canak	nical opinion is t		

C6.3 What scenarios (differential assumptions) have been explicitly tested to generate best case, worst case and most likely total cost scenarios?	We have assumed that because the comparator treatment for canakinumab is unlicensed, that canakinumab will be offered to everybody. We have assumed that 80% of people will accept the of treatment with canakinumab.	fer of		
C6.4 What scenario has been approved and why?	The scenario of 80% uptake has been approved because the clinicians on the PWG thought that was a reasonable estimate based on their experience with the drug for another condition. From a legal standing everybody should be offered the licensed treatment.			
C7 Value for Money				
C7.1 What published evidence is available that the treatment is cost effective as evidenced in the evidence review?	There is no published evidence of cost-effectiveness Please specify: The clinical evidence review for this technology found no studies re to cost effectiveness.	lating		
	to cost effectiveness.			
C7.2 Has other data been identified through the service	Select all that apply:			
C7.2 Has other data been identified through the service specification development relevant to the assessment of value for money?				
specification development relevant to the assessment of value for	Select all that apply: Available pricing data suggests the treatment is equivalent cost			
specification development relevant to the assessment of value for	Select all that apply: Available pricing data suggests the treatment is equivalent cost compared to current/comparator treatment Available pricing data suggests the treatment is lower cost			
specification development relevant to the assessment of value for	Select all that apply: Available pricing data suggests the treatment is equivalent cost compared to current/comparator treatment Available pricing data suggests the treatment is lower cost compared to current/comparator treatment Available clinical practice data suggests the new treatment has			

	The data supports a high level of certainty about the impact on value	
	The data does not support a high level of certainty about the impact on value	
	Please specify: Click here to enter text.	
C8 Cost Profile		
C8.1 Are there non-recurrent capital or revenue costs associated with this policy?	No non-recurrent capital / set up costs required.	
C8.2 If yes, confirm the source of funds to meet these costs.	N/A	