# REQUEST FOR AUTHORISATION OF A CLINICAL TRIAL ON A MEDICINAL PRODUCT FOR HUMAN USE TO THE COMPETENT AUTHORITIES AND FOR OPINION OF THE ETHICS COMMITTEES IN THE COMMUNITY

To be filled in by the applicant

The questions in this form for the request for authorisation from the Competent Authority are also relevant for the opinion from an Ethics Committee (it represents module 1 of the form for applying to an ethics committee) and can be used as part of that application. Please indicate the relevant purpose in a box below.

REQUEST FOR AUTHORISATION TO THE COMPETENT AUTHORITY: Yes  $\bullet$  REQUEST FOR OPINION OF THE ETHICS COMMITTEE: No  $\bullet$ 

#### A. TRIAL IDENTIFICATION

A.1 A.2 A.3	Member State in which the submit EudraCT number: Full title of the trial:	ssion is being made:	Netherlands - Competent Authority 2017-002751-28
			nd, Placebo-Controlled Efficacy and ojects with Multiple Osteochondromas
A.3.1		Randomized, Double-Blir	technical, language: nd, Placebo-Controlled Efficacy and njects with Multiple Osteochondromas
A.3.2	Name or abbreviated title of the templish MO-Ped Tri		
A.4	Sponsor's protocol code number,	version and date1:	
A.4.1	Sponsor's protocol code number:		PVO-2A-201
A.4.2	Sponsor's protocol version:		Amend 2
A.4.3	Sponsor's protocol date:		2019-04-23
A.5	Additional international study ide	ntifiers (e.g. WHO, ISRCTN²	, US NCT Number <sup>3</sup> ) if available
A.5.1	ISRCTN number:		
A.5.2	US NCT number:		NCT03442985
A.5.3	WHO Universal Trial Number (UTI	l):	
A.5.4	Other Identifier:		
A.6	Is this a resubmission?	4 6	No •
	If 'Yes', indicate the resubmission		
A.7	Is the trial part of an agreed Paed		No •
A.8	EMA Decision number of Paediatr	c investigation Plan:	

# **B. IDENTIFICATION OF THE SPONSOR RESPONSIBLE FOR THE REQUEST**

B.1	SPONSOR	
B.1.1	Name of organisation:	Clementia Pharmaceuticals Inc.
B.1.2	Name of the person to contact:	
B.1.2.1	Given name	5.1.2.e
B.1.2.2	Middle name	
B.1.2.3	Family name	5.1.2.e
B.1.3	Address:	
B.1.3.1	Street address	1000, De La Gauchetière West, Suite 1200
B.1.3.2	Town/city	Montreal, Quebec
B.1.3.3	Post code	H3B 4W5
B.1.3.4	Country	Canada
B.1.4	Telephone number:	+33 <sup>5.1.2.e</sup>
B.1.5	Fax number:	
B.1.6	E-mail:	5.1.2.e @ipsen.com

B.2	LEGAL REPRESENTATIVE <sup>5</sup> O THIS TRIAL (if different from		SOR IN THE COMMUNITY FOR THE PURPOSE OF
B.2.1	Name of organisation:	5.1.1.c	
B.2.2	Name of person to contact:		
B.2.2.1	Given name	5.1.2.e	
B.2.2.2	Middle name		
B.2.2.3	Family name	5.1.2.e	
B.2.3	Address:		
B.2.3.1	Street address	5.1.1.c	
B.2.3.2	Town/city	5.1.1.c	
B.2.3.3	Post code	5.1.1.c	
B.2.3.4	Country	5.1.1.c	!
B.2.4	Telephone number:	5.1.2.e	
B.2.5	Fax number:		
B.2.6	E-mail:	5.1.2.e	@ppdi.com

B.3	STATUS OF THE SPONS	OR:	
B.3.1	Commercial:	Yes •	
B.3.2	Non commercial:	No ∙	

B.4	Source(s) of Monetary or Material Support for the clinical trial (repeat as necessary):	
B.4.1	Name of organisation:	Clementia Pharmaceuticals Inc.
B.4.2	Country:	Canada

B.5	Contact point <sup>6</sup> designated by the sponsor for further information on the trial		
B.5.1	Name of organisation:	Clementia Pharmaceuticals Inc.	
B.5.2	Functional name of contact point (e.g. "Clinical Trial Information Desk"):	Clinical Trials Information	
B.5.3	Address:		
B.5.3.1	Street address	1000, De La Gauchetière West, Suite 1200	
B.5.3.2	Town/city	Montreal, Quebec	
B.5.3.3	Post code	H3B 4W5	
B.5.3.4	Country	Canada	
B.5.4	Telephone number:		
B.5.5	Fax number:		
B.5.6	E-mail: (use a functional e-mail address rather than a personal one)	©clementiapharma.com	

# C. APPLICANT IDENTIFICATION, (please tick the appropriate box)

C.1	REQUEST FOR THE COMPETENT AUTHORITY		
C.1.1	Sponsor		
C.1.2	Legal representative of the sponsor		
C.1.3	Person or organisation author	ised by the sponsor to make the application	Yes •
C.1.4	Complete the details of the ap	pplicant below even if they are provided elsev	where on the form:
C.1.4.1	Name of Organisation:	PPD Netherlands BV	
C.1.4.2	Name of contact person:		
C.1.4.2.1	Given name	5.1.2.e	
C.1.4.2.2	Middle name		
C.1.4.2.3	Family name	5.1.2.e	
C.1.4.3	Address:		
C.1.4.3.1	Street address	Bornweg 12c	
C.1.4.3.2	Town/city	Bennekom	
C.1.4.3.3	Post code	6721 AH	
C.1.4.3.4	Country	Netherlands	
C.1.4.4	Telephone number:	+31 318 65 5.1.2.e	
C.1.4.5	Fax number:	+31 318 65 5.1.2.e	
C.1.4.6	E-mail:	5.1.2.e @ppdi.com	
C.1.5	Request to receive a copy of (		
C.1.5.1	Do you want a copy of the CT	A form data saved on EudraCT as an XML	No •
	file?		
C.1.5.1.1	If Yes provide the e-mail address(es) to which it should be sent (up to 5 addresses):		
C.1.5.1.2		a password protected link(s) <sup>7</sup> ?	No •
If you answ	wer No to question C.1.5.1.2 th	e .xml file will be transmitted by less secure	e-mail link(s)

#### **D. INFORMATION ON EACH IMP**

IMP IDENTIFICATION

**D.1** 

Information on each 'bulk product' before trial-specific operations (blinding, trial specific packaging and labelling) should be provided in this section for each investigational medicinal product (IMP) being tested including each comparator and each placebo, if applicable. **For placebo go directly to D.8**. If the trial is performed with several products use extra pages and give each product a sequential number in D.1.1. If the product is a combination product, information should be given for each active substance.

Indicate which of the following is described below, then repeat as necessary for each of the numbered IMPs to

This refers to the IMP number:	PR1
IMP being tested	Yes •
IMP used as a comparator	No •
STATUS OF THE IMP	
nas a marketing authorisation in the Member State concerned	
If 'Yes', specify the product to be used in the clinical trial:	
Trade name	
Authorisation granted by a Member State):	
Is the IMP modified in relation to its Marketing Authorisation? <b>No.</b>	
is the IMP modified in relation to its Marketing Authorisation?	ot Answered •
If 'Yes', please specify:	ot Answered •
	ot Answered •
	IMP being tested IMP used as a comparator  STATUS OF THE IMP  Has the IMP to be used in the trial a marketing authorisation? No has a marketing authorisation in the Member State concerned ame and marketing authorisation holder are not fixed in the If 'Yes', specify the product to be used in the clinical trial:

51212	concerned, but the protocol allows that any brand of the IMP with a Marketing Authorisation in that Member State be administered to the trial subjects and it is not possible to clearly identify the IMP(s) in advance of the trial start	
D.2.2.1	In the protocol, is treatment defined only by active substance?	Not Answered •
D.2.2.1.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.2	In the protocol, do treatment regimens allow different combinations of marketed products used according to local clinical practice at some or all investigator sites in the MS?	Not Answered •
D.2.2.2.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.3	The products to be administered as IMPs are defined as belonging to an ATC group <sup>9</sup>	Not Answered ●
D.2.2.3.1	If 'Yes', give the ATC group of the applicable authorised c the level that can be defined) in D.3.3	odes in the ATC code field (level 3 or
D.2.2.4	Other:	Not Answered ●
D.2.2.4.1	If 'Yes', please specify:	

D.2.3	IMPD submitted:	
D.2.3.1	Full IMPD:	Yes •
D.2.3.2	Simplified IMPD:	No ◆
D.2.3.3	Summary of product characteristics (SmPC) only:	No ◆
D.2.4	Has the use of the IMP been previously authorised in a	Yes •

	clinical trial conducted by the sponsor in the Community?	
D.2.4.1	Fr Ita Ne Po Sp	elgium ance aly etherlands ortugal oain nited Kingdom
D.2.5	Has the IMP been designated in this indication as an orphan drug in the Community?	Yes •
D.2.5.1	If 'Yes', give the orphan drug designation number <sup>10</sup> :	EMA/OD/025/18

D.2.6	Has the IMP been the subject of scientific advice related to this clinical trial?	No •
D.2.6.1	If 'Yes' to D.2.6, please indicate source of advice and pro	ovide a copy in the CTA request:
D.2.6.1.1	CHMP <sup>11</sup> ?	No •
D.2.6.1.2	National Competent Authority?	No •
	,	

D.3	DESCRIPTION OF THE IMP	
D.3.1	Product name where applicable <sup>12</sup> :	Palovarotene 2.5
D.3.2	Product code where applicable <sup>13</sup> :	
D.3.3	ATC codes, if officially registered <sup>14</sup> :	
D.3.4	Pharmaceutical form (use standard terms):	Capsule, hard
D.3.4.1	Is this a specific paediatric formulation?	No ∙
D.3.5	Maximum duration of treatment of a subject accordin	g to the protocol:
	24 months	
D.3.6	Dose allowed:	
D.3.6.1	For first trial only:	
	Specify per day or total	Not Answered •
	Specify total dose (number and unit):	
	Route of administration (relevant to the first dose):	
D.3.6.2	For all trials	
	Specify per day or total	Per day •
	Specify total dose (number and unit):	2.5 mg milligram(s)
	Route of administration (relevant to the maximum dose):	Oral use
D.3.7	Routes of administration (use standard terms):	Oral use

D.3.8	Name of each active substance (INN or proposed INN if available):	
	Palovarotene	•
D.3.9	Other available name for each active substance ( prov	vide all available):
D.3.9.1	CAS <sup>15</sup> number	410528-02-8
D.3.9.2	Current sponsor code	Palovarotene
D.3.9.3	Other descriptive name	
İ	PALOVAROTENE	
D.3.9.4	EV Substance code	SUB75998
D.3.9.5	Full Molecular formula	
	C27H30N2O2	
D.3.9.6	Chemical/biological description of the Active Substance	ce control of the con
	Palovarotene is an orally bioavailable reinoic acid receptor gamma (RARy) selective	
	agonist. RARy agonists potently impair heteroto	pic endochondral ossification by
redirecting prechondrogenic mesenchymal stem cells (MSCs) to a r		cells (MSCs) to a non osseous soft
	tissue fate.	
D.3.10	Strength (specify all strengths to be used):	
D.3.10.1	Concentration unit:	mg milligram(s)
D.3.10.2	Concentration type ("exact number", "range", "more	equal
	than" or "up to"):	-

D 2 44	T. CIMP	
D.3.11	Type of IMP	
Does the IMP	contain an active substance:	
D.3.11.1	Of chemical origin?	Yes •
D.3.11.2	Of biological / biotechnological origin (other than	No ∙
	Advanced Therapy IMP (ATIMP)?	
Is this a:		
D 2 11 2	Advanced Thereny IMD (ATIMD)?	No.
D.3.11.3 D.3.11.3.1	Advanced Therapy IMP (ATIMP)?  Somatic cell therapy medicinal product <sup>16</sup> ?	No • No •
D.3.11.3.1 D.3.11.3.2	Gene therapy medicinal product <sup>17</sup> ?	No •
D.3.11.3.2	Tissue Engineered Product <sup>18</sup> ?	No •
D.3.11.3.4	Combination ATIMP (i.e. one involving a medical	No •
D.3.11.3.4	device <sup>19</sup> )?	140 •
D.3.11.3.5	Has the Committee on Advanced Therapies issued a	No •
5.5.111.5.5	classification for this product?	
D.3.11.3.5.1	If 'Yes' please provide that classification and its referen	ce number:
D.3.11.4	Combination product that includes a device, but does	No ◆
1	not involve an Advanced Therapy?	
D.3.11.5	Radiopharmaceutical medicinal product?	No •
D.3.11.6	Immunological medicinal product (such as vaccine,	No •
D 2 11 7	allergen, immune serum)?	No •
D.3.11.7 D.3.11.8	Plasma derived medicinal product? Extractive medicinal product?	No •
D.3.11.6 D.3.11.9	Recombinant medicinal product?	No •
D.3.11.10	Medicinal product containing genetically modified	No •
D.3.11.10	organisms?	140 •
D.3.11.10.1	Has the authorisation for contained use or release	No •
2.0.121.2012	been granted?	
D.3.11.10.2	Is it pending?	No ∙
D.3.11.11	Herbal medicinal product?	No ∙
D.3.11.12	Homeopathic medicinal product?	No ◆
D.3.11.13	Another type of medicinal product?	No ◆
D.3.11.13.1	If 'another type of medicinal product' specify the type	of medicinal product:
D 2 42	M 1 6 11 (6 4 130)	
D.3.12	Mode of action ( <i>free text</i> <sup>20</sup> )	
	An RARy selective agonist, palovarotene exerts its	
	through post translational regulation of BMP signature phosphorylation and promoting proteasome-regularity.	
	to the BMP signaling pathway. Multiple osteochol	
	mutations that ultimately cause dysregulation of	
D.3.13	Is it an IMP to be used in a first-in-human clinical trial?	
D.3.13.1	If 'Yes', are there risk factors identified, according to th	
	and and a first successful facilities, according to the	g

D.4	SOMATIC CELL THERAPY INVESTIGATI MODIFICATION)	ONAL MEDICINAL PRODUCT (NO GENETIC
D.4.1	Origin of cells	
D.4.1.1	Autologous	No ◆
D.4.1.2	Allogeneic	No •
D.4.1.3	Xenogeneic	No ◆
D.4.1.3.1	If 'Yes', specify the species of origin:	
D.4.2	Type of cells	
D.4.2.1	Stem cells	No ◆
D.4.2.2	Differentiated cells	No ◆
D.4.2.2.1	If 'Yes', specify the type (e.g. keratinocyte	s, fibroblasts, chondrocytes):
D.4.2.3	Others:	No ∙

# D.4.2.3.1 If others, specify:

D.5	GENE THERAPY INVESTIGATIONAL MEDICINAL PRO	DUCTS
D.5.1	Gene(s) of interest:	
D.5.2	In vivo gene therapy:	No •
D.5.3	Ex vivo gene therapy:	No ●
D.5.4	Type of gene transfer product	
D.5.4.1	Nucleic acid (e.g. plasmid):	No ●
	If 'Yes', specify if:	
D.5.4.1.1	Naked:	No ●
D.5.4.1.2	Complexed	No ●
D.5.4.2	Viral vector:	No ●
D.5.4.2.1	If 'Yes', specify the type: adenovirus, retrovirus, AAV,:	
D.5.4.3	Others	No ◆
D.5.4.3.1	If others, specify:	
D.5.5	Genetically modified somatic cells:	No ●
If 'Yes', speci	fy the origin of the cells:	
D.5.5.1	Autologous:	No ◆
D.5.5.2	Allogeneic:	No ◆
D.5.5.3	Xenogeneic:	No ●
D.5.5.3.1	If 'Yes', specify the species of origin:	
D.5.5.4	Specify type of cells (hematopoietic stem cells):	

<b>D.6</b> The indicatio	<b>D.6 TISSUE ENGINEERED PRODUCT</b> The indication which determines that this is a Tissue Engineered Product as opposed to a Cell Therapy product		
is given in se	ection E.1.1.		
D.6.1	Origin of cells		
D.6.1.1	Autologous	No •	
D.6.1.2	Allogeneic	No •	
D.6.1.3	Xenogeneic	No •	
D.6.1.3.1	If 'Yes', specify the species of origin	n:	
D.6.2	Type of cells		
D.6.2.1	Stem cells	No •	
D.6.2.2	Differentiated cells	No ◆	
D.6.2.2.1	If 'Yes', specify the type of cells(e.g	g. keratinocytes, fibroblasts, chondrocytes,):	
D.6.2.3	Others:	No ∙	
D.6.2.3.1	If others, specify:		

D.7	PRODUCTS CONTAINING DEVICES (i.e. MEDICAL DEVICES, SCAFFOLDS ETC.)	
D.7.1	Give a brief description of the device:	
D.7.2	What is the name of the device?	
D.7.3 D.7.4	Is the device implantable? Does this product contain:	No •
D.7.4.1	A medical device?	No ∙
D.7.4.1.1 D.7.4.1.1.1	Does this medical device have a CE mark? The notified body is:	No •
D.7.4.2 D.7.4.3 D.7.4.4 D.7.4.5 D.7.4.5.1	Bio-materials? Scaffolds? Matrices? Other? If other, specify:	No • No • No •

D.1	IMP IDENTIFICATION	
	which of the following is described below, then repeat as no in the trial (assign numbers from $1-n$ ):	ecessary for each of the numbered IMPs to
D.1.1	This refers to the IMP number:	PR2
D.1.2	IMP being tested	Yes •
D.1.3	IMP used as a comparator	No ●

	Has the IMP to be used in the trial a marketing authorisation? No • las a marketing authorisation in the Member State concerned by this application, but ame and marketing authorisation holder are not fixed in the protocol, go to section
D.2.1.1 D.2.1.1.1 D.2.1.1.1.1 D.2.1.1.2 D.2.1.1.3	If 'Yes', specify the product to be used in the clinical trial:  Trade name  EV Product Code (where applicable)  Name of the Marketing Authorisation Holder:  Marketing Authorisation number (if Marketing  Authorisation granted by a Member State):  Is the IMP modified in relation to its Marketing Authorisation?  Not Answered •
D.2.1.1.4 D.2.1.1.4.1 D.2.1.2 D.2.1.2.1	Is the IMP modified in relation to its Marketing Authorisation? <b>Not Answered</b> •  If 'Yes', please specify:  The country that granted the Marketing Authorisation  Is this the Member State concerned with this application? <b>Not Answered</b> •

D.2.2	Situations where an IMP to be used in the CT has a Marketing Authorisation in the Member State concerned, but the protocol allows that any brand of the IMP with a Marketing Authorisation in that Member State be administered to the trial subjects and it is not possible to clearly identify the IMP(s) in advance of the trial start	
D.2.2.1	In the protocol, is treatment defined only by active <b>Not Answered</b> • substance?	
D.2.2.1.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.2	In the protocol, do treatment regimens allow different combinations of marketed products used according to local clinical practice at some or all investigator sites in the MS?	
D.2.2.2.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.3	The products to be administered as IMPs are defined as <b>Not Answered</b> • belonging to an ATC group <sup>9</sup>	
D.2.2.3.1	If 'Yes', give the ATC group of the applicable authorised codes in the ATC code field (level 3 or the level that can be defined) in D.3.3	

D.2.2.4 D.2.2.4.1	Other: If 'Yes', please specify:	Not Answered ◆
0.2.2.1.1	Trico / picase specify.	

D.2.3 D.2.3.1 D.2.3.2 D.2.3.3	IMPD submitted: Full IMPD: Simplified IMPD: Summary of product characteristics (SmPC) only:	Yes • No • No •
D.2.4	Has the use of the IMP been previously authorised clinical trial conducted by the sponsor in the Community?	in a Yes•
D.2.4.1	· · · · · · · · · · · · · · · · · · ·	Belgium France Italy Netherlands Portugal Spain Jnited Kingdom
D.2.5	Has the IMP been designated in this indication as a orphan drug in the Community?	n <b>Yes •</b>
D.2.5.1	If 'Yes', give the orphan drug designation number <sup>1</sup>	: EMA/OD/025/18

D.2.6	Has the IMP been the subject of scien to this clinical trial?	ific advice related No ●
D.2.6.1	If 'Yes' to D.2.6, please indicate source	e of advice and provide a copy in the CTA request:
D.2.6.1.1	CHMP <sup>11</sup> ?	No ●
D.2.6.1.2	National Competent Authority?	No ∙

D.3	DESCRIPTION OF THE IMP	
D.3.1	Product name where applicable <sup>12</sup> :	Palovarotene 5 mg
D.3.2	Product code where applicable <sup>13</sup> :	
D.3.3	ATC codes, if officially registered <sup>14</sup> :	
D.3.4	Pharmaceutical form (use standard terms):	Capsule, hard
D.3.4.1	Is this a specific paediatric formulation?	No •
D.3.5	Maximum duration of treatment of a subject according	g to the protocol:
	24 months	
D.3.6	Dose allowed:	
D.3.6.1	For first trial only:	
	Specify per day or total	Not Answered ●
	Specify total dose (number and unit):	
	Route of administration (relevant to the first dose):	
D.3.6.2	For all trials	
	Specify per day or total	Per day •
	Specify total dose (number and unit):	5 mg milligram(s)
	Route of administration (relevant to the maximum	Oral use
	dose):	
D.3.7	Routes of administration (use standard terms):	Oral use

D.3.8	Name of each active substance (INN o	or proposed INN if available):	
	Palovarotene		
D.3.9	Other available name for each active	substance ( provide all available):	
D.3.9.1	CAS <sup>15</sup> number	410528-02-8	
D.3.9.2	Current sponsor code	Palovarotene	ļ
D.3.9.3	Other descriptive name		
	PALOVAROTENE		
D.3.9.4	EV Substance code	SUB75998	
D.3.9.5	Full Molecular formula		
	C27H30N2O2		

D.3.9.6	Chemical/biological description of the Active Substance Palovarotene is an orally bioavailable reinoic acid receptor gamma (RARY) selective agonist. RARY agonists potently impair heterotopic endochondral ossification by redirecting prechondrogenic mesenchymal stem cells (MSCs) to a non osseous soft tissue fate.	
D.3.10	Strength (specify all strengths to be used):	
D.3.10.1	Concentration unit:	mg milligram(s)
D.3.10.2	Concentration type ("exact number", "range", "more than" or "up to"):	equal
D.3.10.3	Concentration (number).	5

D.3.11	Type of IMP	
D.3.11.1	contain an active substance: Of chemical origin?	Yes •
D.3.11.2  Is this a:	Of biological / biotechnological origin (other than Advanced Therapy IMP (ATIMP)?	No •
D.3.11.3	Advanced Therapy IMP (ATIMP)?	No •
D.3.11.3.1 D.3.11.3.2	Somatic cell therapy medicinal product <sup>16</sup> ? Gene therapy medicinal product <sup>17</sup> ?	No
D.3.11.3.2	Tissue Engineered Product <sup>18</sup> ?	No •
D.3.11.3.4	Combination ATIMP (i.e. one involving a medical device <sup>19</sup> )?	No •
D.3.11.3.5	Has the Committee on Advanced Therapies issued a classification for this product?	No ◆
D.3.11.3.5.1	If 'Yes' please provide that classification and its referen	ce number:
D.3.11.4	Combination product that includes a device, but does not involve an Advanced Therapy?	No •
D.3.11.5	Radiopharmaceutical medicinal product?	No ∙
D.3.11.6	Immunological medicinal product (such as vaccine, allergen, immune serum)?	No ◆
D.3.11.7	Plasma derived medicinal product?	No •
D.3.11.8 D.3.11.9	Extractive medicinal product? Recombinant medicinal product?	No
D.3.11.9 D.3.11.10	Medicinal product containing genetically modified	No •
D.3.11.10	organisms?	NO •
D.3.11.10.1	Has the authorisation for contained use or release been granted?	No ◆
D.3.11.10.2	Is it pending?	No •
D.3.11.11	Herbal medicinal product?	No •
D.3.11.12 D.3.11.13	Homeopathic medicinal product? Another type of medicinal product?	No
D.3.11.13	If 'another type of medicinal product' specify the type	
		oa. produce.
D.3.12 Mode of action (free text <sup>20</sup> )  An RARy selective agonist, palovarotene exerts its action on bone and cartilage through post translational regulation of BMP signaling by inhibiting Smad phosphorylation and promoting proteasome-regulated degradation of Smads specific to the BMP signaling pathway. Multiple osteochondroma is caused by genetic mutations that ultimately cause dysregulation of BMP signaling.  D.3.13 Is it an IMP to be used in a first-in-human clinical trial? No •		
D.3.13.1	If 'Yes', are there risk factors identified, according to th	
		- 3

D.4	SOMATIC CELL THERAPY INVESTIGATIONAL MEDICINAL PRODUCT (NO GENETIC MODIFICATION)	
D.4.1	Origin of cells	
D.4.1.1	Autologous	No ◆
D.4.1.2	Allogeneic	No ◆

D.4.1.3 D.4.1.3.1	Xenogeneic If 'Yes', specify the species of origin	<b>No •</b> n:
D.4.2 D.4.2.1 D.4.2.2 D.4.2.2.1	Type of cells Stem cells Differentiated cells If 'Yes', specify the type (e.g. kerat	No ● No ● inocytes, fibroblasts, chondrocytes):
D.4.2.3 D.4.2.3.1	Others: If others, specify:	No ◆

D.5	GENE THERAPY INVESTIGATIONAL MEDICINAL PRO	DUCTS
D.5.1	Gene(s) of interest:	
D.5.2	In vivo gene therapy:	No •
D.5.3	Ex vivo gene therapy:	No ●
D.5.4	Type of gene transfer product	
D.5.4.1	Nucleic acid (e.g. plasmid):	No ●
	If 'Yes', specify if:	
D.5.4.1.1	Naked:	No ●
D.5.4.1.2	Complexed	No ●
D.5.4.2	Viral vector:	No ●
D.5.4.2.1	If 'Yes', specify the type: adenovirus, retrovirus, AAV,:	
D.5.4.3	Others	No ∙
D.5.4.3.1	If others, specify:	
D.5.5	Genetically modified somatic cells:	No ∙
If 'Yes', speci	fy the origin of the cells:	
D.5.5.1	Autologous:	No ●
D.5.5.2	Allogeneic:	No ●
D.5.5.3	Xenogeneic:	No ●
D.5.5.3.1	If 'Yes', specify the species of origin:	
D.5.5.4	Specify type of cells (hematopoietic stem cells):	

D.6 TISSUE ENGINEERED PRODUCT  The indication which determines that this is a Tissue Engineered Product as opposed to a Cell Therapy product is given in section E.1.1.		
D.6.1 D.6.1.1 D.6.1.2 D.6.1.3 D.6.1.3.1	Origin of cells Autologous Allogeneic Xenogeneic If 'Yes', specify the species of origin:	No • No • No •
D.6.2 D.6.2.1 D.6.2.2 D.6.2.2.1	Type of cells Stem cells Differentiated cells If 'Yes', specify the type of cells(e.g. ke	No ● No ● ratinocytes, fibroblasts, chondrocytes,):
D.6.2.3 D.6.2.3.1	Others: If others, specify:	No •

D.7	PRODUCTS CONTAINING DEVICES (i.e. MEDI	CAL DEVICES, SCAFFOLDS ETC.)
D.7.1	Give a brief description of the device:	
D.7.2	What is the name of the device?	
D.7.3 D.7.4	Is the device implantable? Does this product contain:	No •
D.7.4.1	A medical device?	No ∙
D.7.4.1.1 D.7.4.1.1.1	Does this medical device have a CE mark? The notified body is:	No •
D.7.4.2 D.7.4.3 D.7.4.4 D.7.4.5 D.7.4.5.1	Bio-materials? Scaffolds? Matrices? Other? If other, specify:	No • No • No •

D.1	IMP IDENTIFICATION	
	which of the following is described below, then repeat as no in the trial (assign numbers from $1-n$ ):	ecessary for each of the numbered IMPs to
D.1.1	This refers to the IMP number:	PR3
D.1.2	IMP being tested	Yes •
D.1.3	IMP used as a comparator	No ●

D.2	STATUS OF THE IMP
	Has the IMP to be used in the trial a marketing authorisation? No • has a marketing authorisation in the Member State concerned by this application, but ame and marketing authorisation holder are not fixed in the protocol, go to section
D.2.1.1 D.2.1.1.1 D.2.1.1.1.1 D.2.1.1.2 D.2.1.1.3 D.2.1.1.4 D.2.1.1.4.1	If 'Yes', specify the product to be used in the clinical trial:  Trade name  EV Product Code (where applicable)  Name of the Marketing Authorisation Holder:  Marketing Authorisation number (if Marketing Authorisation granted by a Member State):  Is the IMP modified in relation to its Marketing Authorisation?  Not Answered •  If 'Yes', please specify:
D.2.1.2 D.2.1.2.1	The country that granted the Marketing Authorisation  Is this the Member State concerned with this application? Not Answered •

D.2.2	Situations where an IMP to be used in the CT has a Marketing Authorisation in the Member State concerned, but the protocol allows that any brand of the IMP with a Marketing Authorisation in that Member State be administered to the trial subjects and it is not possible to clearly identify the IMP(s) in advance of the trial start	
D.2.2.1	In the protocol, is treatment defined only by active substance?	Not Answered •
D.2.2.1.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.2	In the protocol, do treatment regimens allow different combinations of marketed products used according to local clinical practice at some or all investigator sites in the MS?	
D.2.2.2.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.3	The products to be administered as IMPs are defined as <b>Not Answered</b> • belonging to an ATC group <sup>9</sup>	
D.2.2.3.1	If 'Yes', give the ATC group of the applicable authorised codes in the ATC code field (level 3 or the level that can be defined) in D.3.3	

D.2.2.4 D.2.2.4.1	Other: If 'Yes', please specify:	Not Answered ◆
0.2.2.1.1	Trico / picase specify.	

D.2.3 D.2.3.1 D.2.3.2 D.2.3.3	IMPD submitted: Full IMPD: Simplified IMPD: Summary of product characteristics (SmPC) only:	Ī	′es • No • Io •
D.2.4	Has the use of the IMP been previously authorised clinical trial conducted by the sponsor in the Community?	in a <b>Y</b>	′es •
D.2.4.1	· <i>'</i>	Belgium France Italy Netherlar Portugal Spain United Ki	
D.2.5	Has the IMP been designated in this indication as a orphan drug in the Community?	an <b>Y</b>	es •
D.2.5.1	If 'Yes', give the orphan drug designation number	.0 <b>:</b> E	MA/OD/025/18

D.2.6	Has the IMP been the subject of scien to this clinical trial?	ific advice related No ●
D.2.6.1	If 'Yes' to D.2.6, please indicate source	e of advice and provide a copy in the CTA request:
D.2.6.1.1	CHMP <sup>11</sup> ?	No ●
D.2.6.1.2	National Competent Authority?	No ∙

D.3	DESCRIPTION OF THE IMP	
D.3.1	Product name where applicable <sup>12</sup> :	Palovarotene 1 mg
D.3.2	Product code where applicable <sup>13</sup> :	
D.3.3	ATC codes, if officially registered <sup>14</sup> :	
D.3.4	Pharmaceutical form (use standard terms):	Capsule, hard
D.3.4.1	Is this a specific paediatric formulation?	No •
D.3.5	Maximum duration of treatment of a subject according	to the protocol:
	24 months	
D.3.6	Dose allowed:	
D.3.6.1	For first trial only:	
	Specify per day or total	Not Answered •
	Specify total dose (number and unit):	
	Route of administration (relevant to the first dose):	
D.3.6.2	For all trials	
	Specify per day or total	Per day •
	Specify total dose (number and unit):	1 mg milligram(s)
	Route of administration (relevant to the maximum	Oral use
	dose):	
D.3.7	Routes of administration (use standard terms):	Oral use

D.3.8	Name of each active substance (INN or proposed INN if available):		
	Palovarotene		
D.3.9	Other available name for each active substance (provide all available):		
D.3.9.1	CAS <sup>15</sup> number	410528-02-8	
D.3.9.2	Current sponsor code	Palovarotene	
D.3.9.3	Other descriptive name		
	PALOVAROTENE		
D.3.9.4	EV Substance code	SUB75998	
D.3.9.5	Full Molecular formula		
	C27H30N2O2		

D.3.9.6	Chemical/biological description of the Active Substance Palovarotene is an orally bioavailable reinoic acid receptor gamma (RARY) selective agonist. RARY agonists potently impair heterotopic endochondral ossification by redirecting prechondrogenic mesenchymal stem cells (MSCs) to a non osseous soft tissue fate.	
D.3.10	Strength (specify all strengths to be used):	
D.3.10.1	Concentration unit:	mg milligram(s)
D.3.10.2	Concentration type ("exact number", "range", "more than" or "up to"):	equal
D.3.10.3	Concentration (number).	1

D.3.11	Type of IMP			
Does the IMP contain an active substance:				
D.3.11.1	Of chemical origin?	Yes •		
D.3.11.2	Of biological / biotechnological origin (other than Advanced Therapy IMP (ATIMP)?	No ∙		
Is this a:	, ,			
D.3.11.3	Advanced Therapy IMP (ATIMP)?	No •		
D.3.11.3.1	Somatic cell therapy medicinal product <sup>16</sup> ?	No ◆		
D.3.11.3.2	Gene therapy medicinal product <sup>17</sup> ?	No ∙		
D.3.11.3.3	Tissue Engineered Product <sup>18</sup> ?	No ●		
D.3.11.3.4	Combination ATIMP (i.e. one involving a medical device <sup>19</sup> )?	No •		
D.3.11.3.5	Has the Committee on Advanced Therapies issued a classification for this product?	No •		
D.3.11.3.5.1	If 'Yes' please provide that classification and its referen	ce number:		
D.3.11.4	Combination product that includes a device, but does not involve an Advanced Therapy?	No •		
D.3.11.5	Radiopharmaceutical medicinal product?	No ◆		
D.3.11.6	Immunological medicinal product (such as vaccine, allergen, immune serum)?	No •		
D.3.11.7	Plasma derived medicinal product?	No ∙		
D.3.11.8	Extractive medicinal product?	No ◆		
D.3.11.9	Recombinant medicinal product?	No ∙		
D.3.11.10	Medicinal product containing genetically modified organisms?	No •		
D.3.11.10.1	Has the authorisation for contained use or release been granted?	No •		
D.3.11.10.2	Is it pending?	No •		
D.3.11.11	Herbal medicinal product?	No ◆		
D.3.11.12	Homeopathic medicinal product?	No ●		
D.3.11.13	Another type of medicinal product?	No ●		
D.3.11.13.1	If 'another type of medicinal product' specify the type of	of medicinal product:		
D.3.12	Mode of action ( <i>free text</i> <sup>20</sup> ) <b>An RARγ selective agonist, palovarotene exerts its through post translational regulation of BMP signs</b>	aling by inhibiting Smad		
	phosphorylation and promoting proteasome-regul to the BMP signaling pathway. Multiple osteochol	ndroma is caused by genetic		
D 2.42	mutations that ultimately cause dysregulation of			
D.3.13	Is it an IMP to be used in a first-in-human clinical trial?			
D.3.13.1	If 'Yes', are there risk factors identified, according to th	e guidance FIH? <sup>21</sup>		

D.4	SOMATIC CELL THERAPY INVESTIGATIONAL MEDICINAL PRODUCT (NO GENETIC MODIFICATION)	
D.4.1	Origin of cells	
D.4.1.1	Autologous	No •
D.4.1.2	Allogeneic	No ◆

Xenogeneic  If 'Yes' specify the species of origin	No •	
, ,	No •	
Differentiated cells	No •	
If 'Yes', specify the type (e.g. kerati	nocytes, fibroblasts, chondrocytes):	
Others:	No •	
If others, specify:		
	If 'Yes', specify the species of origin:  Type of cells Stem cells Differentiated cells If 'Yes', specify the type (e.g. kerating) Others:	If 'Yes', specify the species of origin:  Type of cells Stem cells Differentiated cells If 'Yes', specify the type (e.g. keratinocytes, fibroblasts, chondrocytes):  Others:  No •

D.5	GENE THERAPY INVESTIGATIONAL MEDICINAL PRO	DUCTS
D.5.1	Gene(s) of interest:	
D.5.2	In vivo gene therapy:	No •
D.5.3	Ex vivo gene therapy:	No ●
D.5.4	Type of gene transfer product	
D.5.4.1	Nucleic acid (e.g. plasmid):	No ●
	If 'Yes', specify if:	
D.5.4.1.1	Naked:	No ●
D.5.4.1.2	Complexed	No ●
D.5.4.2	Viral vector:	No ●
D.5.4.2.1	If 'Yes', specify the type: adenovirus, retrovirus, AAV,:	
D.5.4.3	Others	No ∙
D.5.4.3.1	If others, specify:	
D.5.5	Genetically modified somatic cells:	No ∙
If 'Yes', speci	fy the origin of the cells:	
D.5.5.1	Autologous:	No ●
D.5.5.2	Allogeneic:	No ◆
D.5.5.3	Xenogeneic:	No ●
D.5.5.3.1	If 'Yes', specify the species of origin:	
D.5.5.4	Specify type of cells (hematopoietic stem cells):	

D.6 TISSUE ENGINEERED PRODUCT  The indication which determines that this is a Tissue Engineered Product as opposed to a Cell Therapy product is given in section E.1.1.		
D.6.1	Origin of cells	
D.6.1.1	Autologous	No ◆
D.6.1.2	Allogeneic	No ∙
D.6.1.3	Xenogeneic	No •
D.6.1.3.1	If 'Yes', specify the species of origin:	
D.6.2	Type of cells	
D.6.2.1	Stem cells	No •
D.6.2.2	Differentiated cells	No ◆
D.6.2.2.1	If 'Yes', specify the type of cells(e.g. keratinocytes, fibroblasts, chondrocytes,):	
D.6.2.3	Others:	No •
D.6.2.3.1	If others, specify:	

D.7	PRODUCTS CONTAINING DEVICES (i.e. MEDICAL DEVICES, SCAFFOLDS ETC.)	
D.7.1	Give a brief description of the device:	
D.7.2	What is the name of the device?	
D.7.3 D.7.4	Is the device implantable? Does this product contain:	No ◆
D.7.4.1	A medical device?	No ∙
D.7.4.1.1 D.7.4.1.1.1	Does this medical device have a CE mark? The notified body is:	No •
D.7.4.2	Bio-materials?	No ∙
D.7.4.3	Scaffolds?	No ∙
D.7.4.4	Matrices?	No ●
D.7.4.5	Other?	No ∙
D.7.4.5.1	If other, specify:	

D.1	IMP IDENTIFICATION	
	Indicate which of the following is described below, then repeat as necessary for each of the numbered IMPs to be used in the trial (assign numbers from 1-n):	
D.1.1	This refers to the IMP number:	PR4
D.1.2	IMP being tested	Yes •
D.1.3	IMP used as a comparator	No •

D.2.1 Has the IMP to be used in the trial a marketing authorisation? No •  If the IMP has a marketing authorisation in the Member State concerned by this application, but the trade name and marketing authorisation holder are not fixed in the protocol, go to section D.2.2.  D.2.1.1 If 'Yes', specify the product to be used in the clinical trial: D.2.1.1.1 Trade name D.2.1.1.1.1 EV Product Code (where applicable) D.2.1.1.2 Name of the Marketing Authorisation Holder: D.2.1.1.3 Marketing Authorisation number (if Marketing	D.2	STATUS OF THE IMP
D.2.1.1.1 Trade name D.2.1.1.1.1 EV Product Code (where applicable) D.2.1.1.2 Name of the Marketing Authorisation Holder:	If the IMP has a marketing authorisation in the Member State concerned by this application, but the trade name and marketing authorisation holder are not fixed in the protocol, go to section	
Authorisation granted by a Member State):	D.2.1.1.1 D.2.1.1.1.1 D.2.1.1.2 D.2.1.1.3	Trade name EV Product Code (where applicable) Name of the Marketing Authorisation Holder: Marketing Authorisation number (if Marketing Authorisation granted by a Member State):
D.2.1.1.4 Is the IMP modified in relation to its Marketing Authorisation? <b>Not Answered</b> • D.2.1.1.4.1 If 'Yes', please specify:  D.2.1.2 The country that granted the Marketing Authorisation D.2.1.2.1 Is this the Member State concerned with this application? <b>Not Answered</b> •	D.2.1.1.4.1 D.2.1.2	If 'Yes', please specify:  The country that granted the Marketing Authorisation

D.2.2	Situations where an IMP to be used in the CT has a Marketing Authorisation in the Member State concerned, but the protocol allows that any brand of the IMP with a Marketing Authorisation in that Member State be administered to the trial subjects and it is not possible to clearly identify the IMP(s) in advance of the trial start	
D.2.2.1	In the protocol, is treatment defined only by active substance?	Not Answered •
D.2.2.1.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.2	In the protocol, do treatment regimens allow different combinations of marketed products used according to local clinical practice at some or all investigator sites in the MS?	
D.2.2.2.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.3	The products to be administered as IMPs are defined as <b>Not Answered</b> • belonging to an ATC group <sup>9</sup>	
D.2.2.3.1	If 'Yes', give the ATC group of the applicable authorised codes in the ATC code field (level 3 or the level that can be defined) in D.3.3	

D.2.2.4 D.2.2.4.1	Other: If 'Yes', please specify:	Not Answered ◆
0.2.2.1.1	Trico / picase specify.	

D.2.3	IMPD submitted:	
D.2.3.1	Full IMPD:	Yes •
D.2.3.2	Simplified IMPD:	No ●
D.2.3.3	Summary of product characteristics (SmPC) only:	No •
D.2.4	Has the use of the IMP been previously authorised in clinical trial conducted by the sponsor in the Community?	a <b>Yes•</b>
D.2.4.1	Fra Ita Net Por Spa	therlands tugal
D.2.5	Has the IMP been designated in this indication as an orphan drug in the Community?	Yes •
D.2.5.1	If 'Yes', give the orphan drug designation number <sup>10</sup> :	EMA/OD/025/18

D.2.6	Has the IMP been the subject of scien to this clinical trial?	ific advice related No ●
D.2.6.1	If 'Yes' to D.2.6, please indicate source	e of advice and provide a copy in the CTA request:
D.2.6.1.1	CHMP <sup>11</sup> ?	No ●
D.2.6.1.2	National Competent Authority?	No ∙

D.3	DESCRIPTION OF THE IMP	
D.3.1	Product name where applicable <sup>12</sup> :	Palovarotene 1.5 mg
D.3.2	Product code where applicable <sup>13</sup> :	
D.3.3	ATC codes, if officially registered <sup>14</sup> :	
D.3.4	Pharmaceutical form (use standard terms):	Capsule, hard
D.3.4.1	Is this a specific paediatric formulation?	No •
D.3.5	Maximum duration of treatment of a subject according	to the protocol:
	24 months	•
D.3.6	Dose allowed:	
D.3.6.1 For first trial only:		
	Specify per day or total	Not Answered ●
	Specify total dose (number and unit):	
	Route of administration (relevant to the first dose):	
D.3.6.2	For all trials	
	Specify per day or total	Per day •
	Specify total dose (number and unit):	1.5 mg milligram(s)
	Route of administration (relevant to the maximum	Oral use
	dose):	
D.3.7	Routes of administration (use standard terms):	Oral use
	,	

D.3.8	Name of each active substance (INN or proposed INN if available):		
	Palovarotene		
D.3.9	Other available name for each active s	railable name for each active substance ( provide all available):	
D.3.9.1	CAS <sup>15</sup> number	410528-02-8	
D.3.9.2	Current sponsor code	Palovarotene	
D.3.9.3	Other descriptive name		
	PALOVAROTENE		
D.3.9.4	EV Substance code	SUB75998	
D.3.9.5	Full Molecular formula		
	C27H30N2O2		

D.3.9.6	Chemical/biological description of the Active Substance Palovarotene is an orally bioavailable reinoic acid receptor gamma (RARY) selective agonist. RARY agonists potently impair heterotopic endochondral ossification by redirecting prechondrogenic mesenchymal stem cells (MSCs) to a non osseous soft tissue fate.	
D.3.10	Strength (specify all strengths to be used):	
D.3.10.1	Concentration unit: mg milligram(s)	
D.3.10.2	Concentration type ("exact number", "range", "more <b>equal</b> than" or "up to"):	
D.3.10.3	Concentration (number).	1.5

D.3.11	Type of IMP		
Does the IMP D.3.11.1 D.3.11.2 Is this a:	contain an active substance: Of chemical origin? Of biological / biotechnological origin (other than Advanced Therapy IMP (ATIMP)?	Yes • No •	
D.3.11.3 D.3.11.3.1 D.3.11.3.2 D.3.11.3.3 D.3.11.3.4 D.3.11.3.5	1.3.1 Somatic cell therapy medicinal product <sup>16</sup> ? 1.3.2 Gene therapy medicinal product <sup>17</sup> ? 1.3.3 Tissue Engineered Product <sup>18</sup> ? 1.3.4 Combination ATIMP (i.e. one involving a medical device <sup>19</sup> )? 1.3.5 Has the Committee on Advanced Therapies issued a classification for this product?		
D.3.11.3.5.1	If 'Yes' please provide that classification and its reference		
D.3.11.4  D.3.11.5  D.3.11.6  D.3.11.7  D.3.11.8  D.3.11.9  D.3.11.10  D.3.11.10.1  D.3.11.10.1  D.3.11.11.2  D.3.11.13  D.3.11.13  D.3.11.13.1	Combination product that includes a device, but does not involve an Advanced Therapy? Radiopharmaceutical medicinal product? Immunological medicinal product (such as vaccine, allergen, immune serum)? Plasma derived medicinal product? Extractive medicinal product? Recombinant medicinal product? Medicinal product containing genetically modified organisms? Has the authorisation for contained use or release been granted? Is it pending? Herbal medicinal product? Homeopathic medicinal product? Another type of medicinal product' specify the type of 'another type of medicinal product' specify the type of	on product that includes a device, but does e an Advanced Therapy? maceutical medicinal product? gical medicinal product (such as vaccine, mmune serum)? rived medicinal product? medicinal product? ant medicinal product? product containing genetically modified i? uthorisation for contained use or release ted? ng? whici medicinal product? No endicinal product?	
<ul> <li>D.3.12 Mode of action (free text<sup>20</sup>)         An RARγ selective agonist, palovarotene exerts its action on bone and cartilage through post translational regulation of BMP signaling by inhibiting Smad phosphorylation and promoting proteasome-regulated degradation of Smads specific to the BMP signaling pathway. Multiple osteochondroma is caused by genetic mutations that ultimately cause dysregulation of BMP signaling.</li> <li>D.3.13 Is it an IMP to be used in a first-in-human clinical trial? No •</li> <li>D.3.13.1 If 'Yes', are there risk factors identified, according to the guidance FIH?<sup>21</sup></li> </ul>			

D.4	SOMATIC CELL THERAPY INVESTIGATIONAL MEDICINAL PRODUCT (NO GENETIC MODIFICATION)	
D.4.1	Origin of cells	
D.4.1.1	Autologous	No ◆
D.4.1.2	Allogeneic	No ◆

D.4.1.3	Xenogeneic	No ∙	
D.4.1.3.1	If 'Yes', specify the species of origin:		
D.4.2	Type of cells		
D.4.2.1	Stem cells	No ◆	
D.4.2.2	Differentiated cells	No ◆	
D.4.2.2.1	If 'Yes', specify the type (e.g. keratin	ocytes, fibroblasts, chondrocytes):	
D.4.2.3	Others:	No •	
D.4.2.3.1	If others, specify:		

D.5	GENE THERAPY INVESTIGATIONAL MEDICINAL PRO	DUCTS
D.5.1	Gene(s) of interest:	
D.5.2	In vivo gene therapy:	No •
D.5.3	Ex vivo gene therapy:	No ●
D.5.4	Type of gene transfer product	
D.5.4.1	Nucleic acid (e.g. plasmid):	No ●
	If 'Yes', specify if:	
D.5.4.1.1	Naked:	No ●
D.5.4.1.2	Complexed	No ●
D.5.4.2	Viral vector:	No ●
D.5.4.2.1	If 'Yes', specify the type: adenovirus, retrovirus, AAV,:	
D.5.4.3	Others	No ∙
D.5.4.3.1	If others, specify:	
D.5.5	Genetically modified somatic cells:	No ∙
If 'Yes', speci	fy the origin of the cells:	
D.5.5.1	Autologous:	No ●
D.5.5.2	Allogeneic:	No ◆
D.5.5.3	Xenogeneic:	No ●
D.5.5.3.1	If 'Yes', specify the species of origin:	
D.5.5.4	Specify type of cells (hematopoietic stem cells):	

<b>D.6 TISSUE ENGINEERED PRODUCT</b> The indication which determines that this is a Tissue Engineered Product as opposed to a Cell Therapy product is given in section E.1.1.		
D.6.1 D.6.1.1 D.6.1.2 D.6.1.3 D.6.1.3.1	Origin of cells Autologous Allogeneic Xenogeneic If 'Yes', specify the species of origin:	No • No • No •
D.6.2 D.6.2.1 D.6.2.2 D.6.2.2.1	Type of cells Stem cells Differentiated cells If 'Yes', specify the type of cells(e.g. ke	No ● No ● ratinocytes, fibroblasts, chondrocytes,):
D.6.2.3 D.6.2.3.1	Others: If others, specify:	No •

D.7	PRODUCTS CONTAINING DEVICES (i.e. MEDI	CAL DEVICES, SCAFFOLDS ETC.)
D.7.1	Give a brief description of the device:	
D.7.2	What is the name of the device?	
D.7.3 D.7.4	Is the device implantable? Does this product contain:	No •
D.7.4.1	A medical device?	No ∙
D.7.4.1.1 D.7.4.1.1.1	Does this medical device have a CE mark? The notified body is:	No •
D.7.4.2 D.7.4.3 D.7.4.4 D.7.4.5 D.7.4.5.1	Bio-materials? Scaffolds? Matrices? Other? If other, specify:	No • No • No •

D.1	IMP IDENTIFICATION	
	which of the following is described below, then repeat as $n_0$ in the trial (assign numbers from 1-n):	ecessary for each of the numbered IMPs to
D.1.1	This refers to the IMP number:	PR5
D.1.2	IMP being tested	Yes •
D.1.3	IMP used as a comparator	No ●

D.2	STATUS OF THE IMP
	Has the IMP to be used in the trial a marketing authorisation? No • has a marketing authorisation in the Member State concerned by this application, but ame and marketing authorisation holder are not fixed in the protocol, go to section
D.2.1.1 D.2.1.1.1 D.2.1.1.1.1 D.2.1.1.2 D.2.1.1.3	If 'Yes', specify the product to be used in the clinical trial: Trade name EV Product Code (where applicable) Name of the Marketing Authorisation Holder: Marketing Authorisation number (if Marketing Authorisation granted by a Member State):
D.2.1.1.4 D.2.1.1.4.1 D.2.1.2	Is the IMP modified in relation to its Marketing Authorisation? <b>Not Answered</b> •  If 'Yes', please specify:  The country that granted the Marketing Authorisation
D.2.1.2 D.2.1.2.1	Is this the Member State concerned with this application? <b>Not Answered</b> •

D.2.2	Situations where an IMP to be used in the CT has a Marketing Authorisation in the Member State concerned, but the protocol allows that any brand of the IMP with a Marketing Authorisation in that Member State be administered to the trial subjects and it is not possible to clearly identify the IMP(s) in advance of the trial start		
D.2.2.1	In the protocol, is treatment defined only by active substance?	Not Answered ●	
D.2.2.1.1	If 'Yes', give active substance in D.3.8 or D.3.9		
D.2.2.2	In the protocol, do treatment regimens allow different combinations of marketed products used according to local clinical practice at some or all investigator sites in the MS?	Not Answered ●	
D.2.2.2.1	If 'Yes', give active substance in D.3.8 or D.3.9		
D.2.2.3	The products to be administered as IMPs are defined as belonging to an ATC group <sup>9</sup>	Not Answered ●	
D.2.2.3.1	If 'Yes', give the ATC group of the applicable authorised of the level that can be defined) in D.3.3	codes in the ATC code field (level 3 or	

D.2.2.4 D.2.2.4.1	Other: If 'Yes', please specify:	Not Answered ◆
0.2.2.1.1	Trico / picase specify.	

D.2.3 D.2.3.1 D.2.3.2 D.2.3.3	IMPD submitted: Full IMPD: Simplified IMPD: Summary of product characteristics (SmPC) only:	Ī	'es • No • Io •
D.2.4	Has the use of the IMP been previously authorised clinical trial conducted by the sponsor in the Community?	in a <b>Y</b>	′es •
D.2.4.1	· ,	Belgium France Italy Netherlan Portugal Spain United Kii	
D.2.5	Has the IMP been designated in this indication as orphan drug in the Community?	an <b>Y</b>	es •
D.2.5.1	If 'Yes', give the orphan drug designation number	10 <b>:</b> E	MA/OD/025/18

D.2.6	Has the IMP been the subject of scie to this clinical trial?	tific advice related No ●
D.2.6.1	If 'Yes' to D.2.6, please indicate sou	e of advice and provide a copy in the CTA request:
D.2.6.1.1	CHMP <sup>11</sup> ?	No ●
D.2.6.1.2	National Competent Authority?	No ●

D.3	DESCRIPTION OF THE IMP	
D.3.1	Product name where applicable <sup>12</sup> :	Palovarotene 2 mg
D.3.2	Product code where applicable <sup>13</sup> :	
D.3.3	ATC codes, if officially registered <sup>14</sup> :	
D.3.4	Pharmaceutical form (use standard terms):	Capsule, hard
D.3.4.1	Is this a specific paediatric formulation?	No ∙
D.3.5	Maximum duration of treatment of a subject according	to the protocol:
	24 months	
D.3.6	Dose allowed:	
D.3.6.1	For first trial only:	
	Specify per day or total	Not Answered ●
	Specify total dose (number and unit):	
	Route of administration (relevant to the first dose):	
D.3.6.2	For all trials	
	Specify per day or total	Per day •
	Specify total dose (number and unit):	2 mg milligram(s)
	Route of administration (relevant to the maximum dose):	Oral use
D.3.7	Routes of administration (use standard terms):	Oral use

D.3.8	Name of each active substance (INN o	or proposed INN if available):	
	Palovarotene		
D.3.9	Other available name for each active	substance ( provide all available):	
D.3.9.1	CAS <sup>15</sup> number	410528-02-8	
D.3.9.2	Current sponsor code	Palovarotene	ļ
D.3.9.3	Other descriptive name		
	PALOVAROTENE		
D.3.9.4	EV Substance code	SUB75998	
D.3.9.5	Full Molecular formula		
	C27H30N2O2		

D.3.9.6	Chemical/biological description of the Active Substanc Palovarotene is an orally bioavailable reinoic aci agonist. RARy agonists potently impair heterotogredirecting prechondrogenic mesenchymal stem tissue fate.	d receptor gamma (RARγ) selective pic endochondral ossification by
D.3.10	Strength (specify all strengths to be used):	
D.3.10.1	Concentration unit:	mg milligram(s)
D.3.10.2	Concentration type ("exact number", "range", "more than" or "up to"):	equal
D.3.10.3	Concentration (number).	2

D.3.11	Type of IMP	
Does the IMP	contain an active substance:	
D.3.11.1	Of chemical origin?	Yes •
D.3.11.2	Of biological / biotechnological origin (other than Advanced Therapy IMP (ATIMP)?	No ∙
Is this a:	, ,	
D.3.11.3	Advanced Therapy IMP (ATIMP)?	No •
D.3.11.3.1	Somatic cell therapy medicinal product <sup>16</sup> ?	No ◆
D.3.11.3.2	Gene therapy medicinal product <sup>17</sup> ?	No ∙
D.3.11.3.3	Tissue Engineered Product <sup>18</sup> ?	No ●
D.3.11.3.4	Combination ATIMP (i.e. one involving a medical device <sup>19</sup> )?	No •
D.3.11.3.5	Has the Committee on Advanced Therapies issued a classification for this product?	No •
D.3.11.3.5.1	If 'Yes' please provide that classification and its referen	ce number:
D.3.11.4	Combination product that includes a device, but does not involve an Advanced Therapy?	No •
D.3.11.5	Radiopharmaceutical medicinal product?	No ◆
D.3.11.6	Immunological medicinal product (such as vaccine, allergen, immune serum)?	No •
D.3.11.7	Plasma derived medicinal product?	No ∙
D.3.11.8	Extractive medicinal product?	No ◆
D.3.11.9	Recombinant medicinal product?	No ∙
D.3.11.10	Medicinal product containing genetically modified organisms?	No •
D.3.11.10.1	Has the authorisation for contained use or release been granted?	No •
D.3.11.10.2	Is it pending?	No •
D.3.11.11	Herbal medicinal product?	No ◆
D.3.11.12	Homeopathic medicinal product?	No ●
D.3.11.13	Another type of medicinal product?	No ●
D.3.11.13.1	If 'another type of medicinal product' specify the type of	of medicinal product:
D.3.12	Mode of action ( <i>free text</i> <sup>20</sup> ) <b>An RARγ selective agonist, palovarotene exerts its through post translational regulation of BMP signs</b>	aling by inhibiting Smad
	phosphorylation and promoting proteasome-regul to the BMP signaling pathway. Multiple osteochol	ndroma is caused by genetic
D 2.42	mutations that ultimately cause dysregulation of	
D.3.13	Is it an IMP to be used in a first-in-human clinical trial?	
D.3.13.1	If 'Yes', are there risk factors identified, according to th	e guidance FIH? <sup>21</sup>

D.4	SOMATIC CELL THERAPY INVESTIGATIONAL MEDICINAL PRODUCT (NO GENETIC MODIFICATION)	
D.4.1	Origin of cells	
D.4.1.1	Autologous	No •
D.4.1.2	Allogeneic	No ◆

D.4.1.3 D.4.1.3.1	Xenogeneic If 'Yes', specify the species of orig	No ● gin:
D.4.2 D.4.2.1 D.4.2.2 D.4.2.2.1	Type of cells Stem cells Differentiated cells If 'Yes', specify the type (e.g. ker	No ● No ● atinocytes, fibroblasts, chondrocytes):
D.4.2.3 D.4.2.3.1	Others: If others, specify:	No •

D.5	GENE THERAPY INVESTIGATIONAL MEDICINAL PRO	DUCTS
D.5.1	Gene(s) of interest:	
D.5.2	In vivo gene therapy:	No •
D.5.3	Ex vivo gene therapy:	No ●
D.5.4	Type of gene transfer product	
D.5.4.1	Nucleic acid (e.g. plasmid):	No ●
	If 'Yes', specify if:	
D.5.4.1.1	Naked:	No ●
D.5.4.1.2	Complexed	No ●
D.5.4.2	Viral vector:	No ●
D.5.4.2.1	If 'Yes', specify the type: adenovirus, retrovirus, AAV,:	
D.5.4.3	Others	No ∙
D.5.4.3.1	If others, specify:	
D.5.5	Genetically modified somatic cells:	No ∙
If 'Yes', speci	fy the origin of the cells:	
D.5.5.1	Autologous:	No ●
D.5.5.2	Allogeneic:	No ◆
D.5.5.3	Xenogeneic:	No ●
D.5.5.3.1	If 'Yes', specify the species of origin:	
D.5.5.4	Specify type of cells (hematopoietic stem cells):	

<b>D.6</b> The indicatio is given in se		gineered Product as opposed to a Cell Therapy product
D.6.1	Origin of cells	
D.6.1.1	Autologous	No ◆
D.6.1.2	Allogeneic	No ∙
D.6.1.3	Xenogeneic	No •
D.6.1.3.1	If 'Yes', specify the species of origin:	
D.6.2	Type of cells	
D.6.2.1	Stem cells	No •
D.6.2.2	Differentiated cells	No ◆
D.6.2.2.1	If 'Yes', specify the type of cells(e.g. ker	atinocytes, fibroblasts, chondrocytes,):
D.6.2.3	Others:	No •
D.6.2.3.1	If others, specify:	

D.7	PRODUCTS CONTAINING DEVICES (i.e. MEDICAL DEVICES, SCAFFOLDS ETC.)	
D.7.1	Give a brief description of the device:	
D.7.2	What is the name of the device?	
D.7.3 D.7.4	Is the device implantable? Does this product contain:	No •
D.7.4.1	A medical device?	No ∙
D.7.4.1.1 D.7.4.1.1.1	Does this medical device have a CE mark? The notified body is:	No •
D.7.4.2 D.7.4.3 D.7.4.4 D.7.4.5 D.7.4.5.1	Bio-materials? Scaffolds? Matrices? Other? If other, specify:	No • No • No •

D.1	IMP IDENTIFICATION	
	which of the following is described below, then repeat as not the trial (assign numbers from 1-n):	ecessary for each of the numbered IMPs to
D.1.1	This refers to the IMP number:	PR6
D.1.2	IMP being tested	Yes •
D.1.3	IMP used as a comparator	No ∙

D.2	STATUS OF THE IMP	
	If the IMP has a marketing authorisation in the Member State concerned by this application, but the trade name and marketing authorisation holder are not fixed in the protocol, go to section	
D.2.1.1 D.2.1.1.1 D.2.1.1.1.1 D.2.1.1.2 D.2.1.1.3	If 'Yes', specify the product to be used in the clinical trial: Trade name EV Product Code (where applicable) Name of the Marketing Authorisation Holder: Marketing Authorisation number (if Marketing Authorisation granted by a Member State):	
D.2.1.1.4 D.2.1.1.4.1 D.2.1.2	Is the IMP modified in relation to its Marketing Authorisation? <b>Not Answered</b> •  If 'Yes', please specify:  The country that granted the Marketing Authorisation	
D.2.1.2.1	Is this the Member State concerned with this application? <b>Not Answered</b> •	

D.2.2	Situations where an IMP to be used in the CT has a Marke concerned, but the protocol allows that any brand of the that Member State be administered to the trial subjects a the IMP(s) in advance of the trial start	IMP with a Marketing Authorisation in
D.2.2.1	In the protocol, is treatment defined only by active substance?	Not Answered •
D.2.2.1.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.2	In the protocol, do treatment regimens allow different combinations of marketed products used according to local clinical practice at some or all investigator sites in the MS?	Not Answered ●
D.2.2.2.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.3	The products to be administered as IMPs are defined as belonging to an ATC group <sup>9</sup>	Not Answered ●
D.2.2.3.1	If 'Yes', give the ATC group of the applicable authorised codes in the ATC code field (level 3 or the level that can be defined) in D.3.3	

D.2.2.4 D.2.2.4.1	Other: If 'Yes', please specify:	Not Answered ◆
0.2.2.1.1	Trico / picase specify.	

D.2.3	IMPD submitted:	
D.2.3.1	Full IMPD:	Yes •
D.2.3.2	Simplified IMPD:	No ●
D.2.3.3	Summary of product characteristics (SmPC) only:	No •
D.2.4	Has the use of the IMP been previously authorised in clinical trial conducted by the sponsor in the Community?	a <b>Yes•</b>
D.2.4.1	Fra Ita Net Por Spa	therlands tugal
D.2.5	Has the IMP been designated in this indication as an orphan drug in the Community?	Yes •
D.2.5.1	If 'Yes', give the orphan drug designation number <sup>10</sup> :	EMA/OD/025/18

D.2.6	Has the IMP been the subject of scien to this clinical trial?	ific advice related No ●
D.2.6.1	If 'Yes' to D.2.6, please indicate source	e of advice and provide a copy in the CTA request:
D.2.6.1.1	CHMP <sup>11</sup> ?	No ●
D.2.6.1.2	National Competent Authority?	No ∙

D.3	DESCRIPTION OF THE IMP	
D.3.1	Product name where applicable <sup>12</sup> :	Palovarotene 3 mg
D.3.2	Product code where applicable <sup>13</sup> :	
D.3.3	ATC codes, if officially registered <sup>14</sup> :	
D.3.4	Pharmaceutical form (use standard terms):	Capsule, hard
D.3.4.1	Is this a specific paediatric formulation?	No •
D.3.5	Maximum duration of treatment of a subject according	g to the protocol:
	24 months	
D.3.6	Dose allowed:	
D.3.6.1	For first trial only:	
	Specify per day or total	Not Answered ●
	Specify total dose (number and unit):	
	Route of administration (relevant to the first dose):	
D.3.6.2	For all trials	
	Specify per day or total	Per day •
	Specify total dose (number and unit):	3 mg milligram(s)
	Route of administration (relevant to the maximum	Oral use
	dose):	
D.3.7	Routes of administration (use standard terms):	Oral use
	,	

D.3.8	Name of each active substance (INN o	or proposed INN if available):	
	Palovarotene		
D.3.9	Other available name for each active s	substance ( provide all available):	
D.3.9.1	CAS <sup>15</sup> number	410528-02-8	
D.3.9.2	Current sponsor code	Palovarotene	
D.3.9.3	Other descriptive name		
	PALOVAROTENE		
D.3.9.4	EV Substance code	SUB75998	
D.3.9.5	Full Molecular formula		
	C27H30N2O2		

D.3.9.6	Chemical/biological description of the Active Substance Palovarotene is an orally bioavailable reinoic acid receptor gamma (RARY) selective agonist. RARY agonists potently impair heterotopic endochondral ossification by redirecting prechondrogenic mesenchymal stem cells (MSCs) to a non osseous soft tissue fate.	
D.3.10	Strength (specify all strengths to be used):	
D.3.10.1	Concentration unit:	mg milligram(s)
D.3.10.2	Concentration type ("exact number", "range", "more than" or "up to"):	equal
D.3.10.3	Concentration (number).	3

D.3.11	Type of IMP	
Does the IMP D.3.11.1 D.3.11.2 Is this a:	contain an active substance: Of chemical origin? Of biological / biotechnological origin (other than Advanced Therapy IMP (ATIMP)?	Yes • No •
D.3.11.3 D.3.11.3.1 D.3.11.3.2 D.3.11.3.3 D.3.11.3.4 D.3.11.3.5	Advanced Therapy IMP (ATIMP)?  Somatic cell therapy medicinal product <sup>16</sup> ?  Gene therapy medicinal product <sup>17</sup> ?  Tissue Engineered Product <sup>18</sup> ?  Combination ATIMP (i.e. one involving a medical device <sup>19</sup> )?  Has the Committee on Advanced Therapies issued a classification for this product?	No • No • No • No • No •
D.3.11.3.5.1	If 'Yes' please provide that classification and its reference	ce number:
D.3.11.4	Combination product that includes a device, but does not involve an Advanced Therapy?	No •
D.3.11.5	Radiopharmaceutical medicinal product?	No •
D.3.11.6	Immunological medicinal product (such as vaccine, allergen, immune serum)?	No •
D.3.11.7	Plasma derived medicinal product?	No •
D.3.11.8 D.3.11.9	Extractive medicinal product?	No •
D.3.11.9 D.3.11.10	Recombinant medicinal product?  Medicinal product containing genetically modified	No
3.3.11.110	organisms?	
D.3.11.10.1	Has the authorisation for contained use or release been granted?	No ●
D.3.11.10.2	Is it pending?	No ∙
D.3.11.11	Herbal medicinal product?	No •
D.3.11.12 D.3.11.13	Homeopathic medicinal product? Another type of medicinal product?	No
D.3.11.13	If 'another type of medicinal product' specify the type of	
D.3.12  D.3.13  D.3.13.1	Mode of action (free text <sup>20</sup> )  An RARy selective agonist, palovarotene exerts its through post translational regulation of BMP signal phosphorylation and promoting proteasome-regulation to the BMP signaling pathway. Multiple osteochor mutations that ultimately cause dysregulation of I is it an IMP to be used in a first-in-human clinical trial? If 'Yes', are there risk factors identified, according to the	s action on bone and cartilage aling by inhibiting Smad lated degradation of Smads specific ndroma is caused by genetic BMP signaling. No •

D.4	SOMATIC CELL THERAPY INVESTIGATIONAL MEDICINAL PRODUCT (NO GENETIC MODIFICATION)	
D.4.1	Origin of cells	
D.4.1.1	Autologous	No ∙
D.4.1.2	Allogeneic	No ◆

D.4.1.3 D.4.1.3.1	Xenogeneic If 'Yes', specify the species of origin	<b>No •</b> n:
D.4.2 D.4.2.1 D.4.2.2 D.4.2.2.1	Type of cells Stem cells Differentiated cells If 'Yes', specify the type (e.g. kerat	No ● No ● inocytes, fibroblasts, chondrocytes):
D.4.2.3 D.4.2.3.1	Others: If others, specify:	No ◆

D.5	GENE THERAPY INVESTIGATIONAL MEDICINAL PRO	DUCTS
D.5.1	Gene(s) of interest:	
D.5.2	In vivo gene therapy:	No •
D.5.3	Ex vivo gene therapy:	No ●
D.5.4	Type of gene transfer product	
D.5.4.1	Nucleic acid (e.g. plasmid):	No ●
	If 'Yes', specify if:	
D.5.4.1.1	Naked:	No ●
D.5.4.1.2	Complexed	No ●
D.5.4.2	Viral vector:	No ●
D.5.4.2.1	If 'Yes', specify the type: adenovirus, retrovirus, AAV,:	
D.5.4.3	Others	No ∙
D.5.4.3.1	If others, specify:	
D.5.5	Genetically modified somatic cells:	No ∙
If 'Yes', speci	fy the origin of the cells:	
D.5.5.1	Autologous:	No ●
D.5.5.2	Allogeneic:	No ◆
D.5.5.3	Xenogeneic:	No ●
D.5.5.3.1	If 'Yes', specify the species of origin:	
D.5.5.4	Specify type of cells (hematopoietic stem cells):	

<b>D.6 TISSUE ENGINEERED PRODUCT</b> The indication which determines that this is a Tissue Engineered Product as opposed to a Cell Therapy product is given in section E.1.1.		
D.6.1 D.6.1.1 D.6.1.2 D.6.1.3 D.6.1.3.1	Origin of cells Autologous Allogeneic Xenogeneic If 'Yes', specify the species of origin:	No • No • No •
D.6.2 D.6.2.1 D.6.2.2 D.6.2.2.1	Type of cells Stem cells Differentiated cells If 'Yes', specify the type of cells(e.g. ke	No ● No ● ratinocytes, fibroblasts, chondrocytes,):
D.6.2.3 D.6.2.3.1	Others: If others, specify:	No •

D.7	PRODUCTS CONTAINING DEVICES (i.e. MEDI	CAL DEVICES, SCAFFOLDS ETC.)
D.7.1	Give a brief description of the device:	
D.7.2	What is the name of the device?	
D.7.3 D.7.4	Is the device implantable? Does this product contain:	No •
D.7.4.1	A medical device?	No ∙
D.7.4.1.1 D.7.4.1.1.1	Does this medical device have a CE mark? The notified body is:	No •
D.7.4.2 D.7.4.3 D.7.4.4 D.7.4.5 D.7.4.5.1	Bio-materials? Scaffolds? Matrices? Other? If other, specify:	No • No • No •

D.1	IMP IDENTIFICATION	
	which of the following is described below, then repeat as no in the trial (assign numbers from 1-n):	ecessary for each of the numbered IMPs to
D.1.1	This refers to the IMP number:	PR7
D.1.2	IMP being tested	Yes •
D.1.3	IMP used as a comparator	No ●

	Has the IMP to be used in the trial a marketing authorisation? No • las a marketing authorisation in the Member State concerned by this application, but ame and marketing authorisation holder are not fixed in the protocol, go to section
D.2.1.1 D.2.1.1.1 D.2.1.1.1.1 D.2.1.1.2 D.2.1.1.3	If 'Yes', specify the product to be used in the clinical trial:  Trade name  EV Product Code (where applicable)  Name of the Marketing Authorisation Holder:  Marketing Authorisation number (if Marketing  Authorisation granted by a Member State):  Is the IMP modified in relation to its Marketing Authorisation?  Not Answered •
D.2.1.1.4 D.2.1.1.4.1 D.2.1.2 D.2.1.2.1	Is the IMP modified in relation to its Marketing Authorisation? <b>Not Answered</b> •  If 'Yes', please specify:  The country that granted the Marketing Authorisation  Is this the Member State concerned with this application? <b>Not Answered</b> •

D.2.2	Situations where an IMP to be used in the CT has a Marketing Authorisation in the Member State concerned, but the protocol allows that any brand of the IMP with a Marketing Authorisation in that Member State be administered to the trial subjects and it is not possible to clearly identify the IMP(s) in advance of the trial start	
D.2.2.1	In the protocol, is treatment defined only by active substance?	Not Answered •
D.2.2.1.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.2	In the protocol, do treatment regimens allow different combinations of marketed products used according to local clinical practice at some or all investigator sites in the MS?	Not Answered ●
D.2.2.2.1	If 'Yes', give active substance in D.3.8 or D.3.9	
D.2.2.3	The products to be administered as IMPs are defined as <b>Not Answered</b> • belonging to an ATC group <sup>9</sup>	
D.2.2.3.1	If 'Yes', give the ATC group of the applicable authorised of the level that can be defined) in D.3.3	codes in the ATC code field (level 3 or

D.2.2.4 D.2.2.4.1	Other: If 'Yes', please specify:	Not Answered ◆
0.2.2.1.1	Trico / picase specify.	

D.2.3 D.2.3.1 D.2.3.2 D.2.3.3	IMPD submitted: Full IMPD: Simplified IMPD: Summary of product characteristics (SmPC) only:	Ī	′es • No • Io •
D.2.4	Has the use of the IMP been previously authorised clinical trial conducted by the sponsor in the Community?	in a <b>Y</b>	′es •
D.2.4.1	· <i>'</i>	Belgium France Italy Netherlar Portugal Spain United Ki	
D.2.5	Has the IMP been designated in this indication as a orphan drug in the Community?	an <b>Y</b>	es •
D.2.5.1	If 'Yes', give the orphan drug designation number	.0 <b>:</b> E	MA/OD/025/18

D.2.6	Has the IMP been the subject of scientific to this clinical trial?	advice related No •
D.2.6.1	If 'Yes' to D.2.6, please indicate source of	advice and provide a copy in the CTA request:
D.2.6.1.1	CHMP <sup>11</sup> ?	No ●
D.2.6.1.2	National Competent Authority?	No ∙

D.3	DESCRIPTION OF THE IMP	
D.3.1	Product name where applicable <sup>12</sup> :	Palovarotene 4 mg
D.3.2	Product code where applicable <sup>13</sup> :	
D.3.3	ATC codes, if officially registered <sup>14</sup> :	
D.3.4	Pharmaceutical form (use standard terms):	Capsule, hard
D.3.4.1	Is this a specific paediatric formulation?	No •
D.3.5	Maximum duration of treatment of a subject according	ng to the protocol:
	24 months	
D.3.6	Dose allowed:	
D.3.6.1	For first trial only:	
	Specify per day or total	Not Answered ●
	Specify total dose (number and unit):	
	Route of administration (relevant to the first dose):	
D.3.6.2	For all trials	
	Specify per day or total	Per day •
	Specify total dose (number and unit):	4 mg milligram(s)
	Route of administration (relevant to the maximum	Oral use
	dose):	
D.3.7	Routes of administration (use standard terms):	Oral use

D.3.8	Name of each active substance (INN or proposed INN if available):		
	Palovarotene		
D.3.9	Other available name for each active substance (provide all available):		
D.3.9.1	CAS <sup>15</sup> number	CAS <sup>15</sup> number 410528-02-8	
D.3.9.2	Current sponsor code	Palovarotene	
D.3.9.3	Other descriptive name		
	PALOVAROTENE		
D.3.9.4	EV Substance code	SUB75998	
D.3.9.5	Full Molecular formula		
	C27H30N2O2		

D.3.9.6	Chemical/biological description of the Active Substance Palovarotene is an orally bioavailable reinoic acid receptor gamma (RARY) selective agonist. RARY agonists potently impair heterotopic endochondral ossification by redirecting prechondrogenic mesenchymal stem cells (MSCs) to a non osseous soft tissue fate.	
D.3.10	Strength (specify all strengths to be used):	
D.3.10.1	Concentration unit:	mg milligram(s)
D.3.10.2	Concentration type ("exact number", "range", "more than" or "up to"):	equal
D.3.10.3	Concentration (number).	4

D.3.11	Type of IMP			
Does the IMP contain an active substance:				
D.3.11.1	Of chemical origin?	Yes •		
D.3.11.2	Of biological / biotechnological origin (other than Advanced Therapy IMP (ATIMP)?	No ∙		
Is this a:	, ,			
D.3.11.3	Advanced Therapy IMP (ATIMP)?	No •		
D.3.11.3.1	Somatic cell therapy medicinal product <sup>16</sup> ?	No ◆		
D.3.11.3.2	Gene therapy medicinal product <sup>17</sup> ?	No ∙		
D.3.11.3.3	Tissue Engineered Product <sup>18</sup> ?	No ●		
D.3.11.3.4	Combination ATIMP (i.e. one involving a medical device <sup>19</sup> )?	No •		
D.3.11.3.5	Has the Committee on Advanced Therapies issued a classification for this product?	No •		
D.3.11.3.5.1	If 'Yes' please provide that classification and its referen	ce number:		
D.3.11.4	Combination product that includes a device, but does not involve an Advanced Therapy?	No •		
D.3.11.5	Radiopharmaceutical medicinal product?	No ◆		
D.3.11.6	Immunological medicinal product (such as vaccine, allergen, immune serum)?	No •		
D.3.11.7	Plasma derived medicinal product?	No ∙		
D.3.11.8	Extractive medicinal product?	No ◆		
D.3.11.9	Recombinant medicinal product?	No ∙		
D.3.11.10	Medicinal product containing genetically modified organisms?	No •		
D.3.11.10.1	Has the authorisation for contained use or release been granted?	No •		
D.3.11.10.2	Is it pending?	No •		
D.3.11.11	Herbal medicinal product?	No ◆		
D.3.11.12	Homeopathic medicinal product?	No ●		
D.3.11.13	Another type of medicinal product?	No ●		
D.3.11.13.1	If 'another type of medicinal product' specify the type of	of medicinal product:		
D.3.12	Mode of action ( <i>free text</i> <sup>20</sup> ) <b>An RARγ selective agonist, palovarotene exerts its through post translational regulation of BMP signs</b>	aling by inhibiting Smad		
	phosphorylation and promoting proteasome-regul to the BMP signaling pathway. Multiple osteochol	ndroma is caused by genetic		
D 2.42	mutations that ultimately cause dysregulation of			
D.3.13	Is it an IMP to be used in a first-in-human clinical trial?			
D.3.13.1	If 'Yes', are there risk factors identified, according to th	e guidance FIH? <sup>21</sup>		

D.4	SOMATIC CELL THERAPY INVESTIGATIONAL MEDICINAL PRODUCT (NO GENETIC MODIFICATION)	
D.4.1	Origin of cells	
D.4.1.1	Autologous	No ∙
D.4.1.2	Allogeneic	No ◆

D.4.1.3	Xenogeneic	No ∙	
D.4.1.3.1	If 'Yes', specify the species of origin:		
D.4.2	Type of cells		
D.4.2.1	Stem cells	No ◆	
D.4.2.2	Differentiated cells	No ◆	
D.4.2.2.1	If 'Yes', specify the type (e.g. keratin	ocytes, fibroblasts, chondrocytes):	
D.4.2.3	Others:	No •	
D.4.2.3.1	If others, specify:		

D.5	GENE THERAPY INVESTIGATIONAL MEDICINAL PRO	DUCTS
D.5.1	Gene(s) of interest:	
D.5.2	In vivo gene therapy:	No •
D.5.3	Ex vivo gene therapy:	No ●
D.5.4	Type of gene transfer product	
D.5.4.1	Nucleic acid (e.g. plasmid):	No ●
	If 'Yes', specify if:	
D.5.4.1.1	Naked:	No ●
D.5.4.1.2	Complexed	No ●
D.5.4.2	Viral vector:	No ●
D.5.4.2.1	If 'Yes', specify the type: adenovirus, retrovirus, AAV,:	
D.5.4.3	Others	No ∙
D.5.4.3.1	If others, specify:	
D.5.5	Genetically modified somatic cells:	No ∙
If 'Yes', speci	fy the origin of the cells:	
D.5.5.1	Autologous:	No ●
D.5.5.2	Allogeneic:	No ◆
D.5.5.3	Xenogeneic:	No ●
D.5.5.3.1	If 'Yes', specify the species of origin:	
D.5.5.4	Specify type of cells (hematopoietic stem cells):	

D.6 TISSUE ENGINEERED PRODUCT  The indication which determines that this is a Tissue Engineered Product as opposed to a Cell Therapy product is given in section E.1.1.		
D.6.1 D.6.1.1 D.6.1.2 D.6.1.3 D.6.1.3.1	Origin of cells Autologous Allogeneic Xenogeneic If 'Yes', specify the species of origin:	No • No • No •
D.6.2 D.6.2.1 D.6.2.2 D.6.2.2.1	Type of cells Stem cells Differentiated cells If 'Yes', specify the type of cells(e.g. ke	No ● No ● ratinocytes, fibroblasts, chondrocytes,):
D.6.2.3 D.6.2.3.1	Others: If others, specify:	No •

D.7	PRODUCTS CONTAINING DEVICES (i.e. MEDICAL DEVICES, SCAFFOLDS ETC.)		
D.7.1	Give a brief description of the device:		
D.7.2	What is the name of the device?		
D.7.3 D.7.4	Is the device implantable? Does this product contain:	No ◆	
D.7.4.1	A medical device?	No ∙	
D.7.4.1.1	Does this medical device have a CE mark?	No ◆	
D.7.4.1.1.1	The notified body is:		
D.7.4.2	Bio-materials?	No •	
D.7.4.3	Scaffolds?	No ∙	
D.7.4.4	Matrices?	No ∙	
D.7.4.5	Other?	No ∙	
D.7.4.5.1	If other, specify:		

# **D.8 INFORMATION ON PLACEBO (if relevant; repeat as necessary)**

D.8.1	Is there a placebo:	Yes •	
D.8.2	This refers to placebo number:	PL1	
D.8.3	Pharmaceutical form:	Capsule, hard	
D.8.4	Route of administration:	Oral use	
D.8.5	Which IMP is it a placebo for? Specify IMP		
D.8.5.1	Composition, apart from the active substar		
D.8.5.2	Is it otherwise identical to the IMP?	Yes •	
D.8.5.2.1	If not, specify major ingredients:		
D.8.5	Which IMP is it a placebo for? Specify IMP		
D.8.5.1	Composition, apart from the active substar	ice(s):	
D.8.5.2	Is it otherwise identical to the IMP?	Yes •	
D.8.5.2.1	If not, specify major ingredients:		
D.8.5	Which IMP is it a placebo for? Specify IMP	Number(s) from D.1.1 PR5	
D.8.5.1	Composition, apart from the active substar	ce(s):	
D.8.5.2	Is it otherwise identical to the IMP?	Yes •	
D.8.5.2.1	If not, specify major ingredients:		
D.8.5	Which IMP is it a placebo for? Specify IMP		
D.8.5.1	Composition, apart from the active substar		
D.8.5.2	Is it otherwise identical to the IMP?	Yes •	
D.8.5.2.1	If not, specify major ingredients:		
D.8.2	This refers to placebo number:	PL2	
D.8.3	Pharmaceutical form:	Capsule, hard	
D.8.4	Route of administration:	Oral use	
D.8.5	Which IMP is it a placebo for? Specify IMP		
D.8.5.1	Composition, apart from the active substar	· ,	
D.8.5.2	Is it otherwise identical to the IMP?	Yes •	
D.8.5.2.1	If not, specify major ingredients:		
D.8.5	Which IMP is it a placebo for? Specify IMP		
D.8.5.1	Composition, apart from the active substar		
D.8.5.2	Is it otherwise identical to the IMP?	Yes •	
D.8.5.2.1	If not, specify major ingredients:		

D.8.5.1	Composition, apart from the active substance(s):		
D.8.5.2	Is it otherwise identical to the IMP?	5 <b>•</b>	
D.8.5.2.1	If not, specify major ingredients:		

# D.9 SITE(S) WHERE THE QUALIFIED PERSON CERTIFIES BATCH RELEASE<sup>22</sup>

This section is dedicated to **finished** IMPs, i.e. medicinal products randomised, packaged, labelled and certified for use in the clinical trial. If there is more than one site or more than one IMP is certified, use extra pages and give each IMP its number from section D.1.1 or D.8.2 In the case of multiple sites indicate the product certified by each site

Do not fill in section D.9.2 for an IMP that:

Has a MA in the EU and

Is sourced from the EU market and

Is used in the trial without modification( e.g. not overencapsulated) and

The packaging and labelling is carried out for local use only as per article 9.2. of the Directive 2005/28/EC (GCP Directive)

If all these conditions are met tick ?and list the number(s) of each IMP including placebo from sections D.1.1 and D.8.2 to which this applies

#### D.9.2 Who is responsible in the Community for the certification of the finished IMPs? This site is responsible for certification of (list the PR1 number(s) of each IMP including placebo from PR<sub>2</sub> PR3 sections D.1.1 and D.8.2): PR4 PR5 PR<sub>6</sub> PR7 PL1 PL2 please tick the appropriate box: D.9.2.1 Manufacturer No • D.9.2.2 Importer Yes • D.9.2.3 Name of the organisation: 5.1.1.c D.9.2.4 Address: Street Address D.9.2.4.1 5.1.1.c Town/City D.9.2.4.2 5.1.1.c Post Code D.9.2.4.3 5.1.1.c D.9.2.4.4 Country 5.1.1.c D.9.2.5 Give the manufacturing authorisation number: 5.1.1.c If No authorisation, give the reasons: D.9.2.5.1

Where the product does not have a MA in the EU, but is supplied in bulk and final packaging and labelling for local use is carried out in accordance with article 9.2 of Directive 2005/28/EC (GCP Directive) then enter the site where the product was finally certified for release by the Qualified Person for use in the clinical trial at D.9.2 above.

D.9.2	Who is responsible in the Community for the certification of the finished IMPs?			
	This site is responsible for certification of (list the number(s) of each IMP including placebo from sections D.1.1 and D.8.2):	PR1 PR2 PR3		

		PR4 PR5 PR6 PR7
	please tick the appropriate box:	PL1 PL2
D.9.2.1 D.9.2.2 D.9.2.3 D.9.2.4	Manufacturer Importer Name of the organisation: Address:	No ◆ Yes ◆ 5.1.1.c
D.9.2.4 D.9.2.4.1 D.9.2.4.2 D.9.2.4.3 D.9.2.4.4 D.9.2.5 D.9.2.5.1	Street Address Town/City Post Code Country Give the manufacturing authorisation number: If No authorisation, give the reasons:	5.1.1.c 5.1.1.c 5.1.1.c 5.1.1.c 5.1.1.c

Where the product does not have a MA in the EU, but is supplied in bulk and final packaging and labelling for local use is carried out in accordance with article 9.2 of Directive 2005/28/EC (GCP Directive) then enter the site where the product was finally certified for release by the Qualified Person for use in the clinical trial at D.9.2 above.

## **E. GENERAL INFORMATION ON THE TRIAL**

This section should be used to provide information about the aims, scope and design of the trial. When the protocol includes a sub-study in the MS concerned section E.2.3 should be completed providing information about the sub-study. To identify it check the sub-study box in the 'Objective of the trial' question below.

E.1	MEDICAL CO	NDITION OR DISEASE	UNDER INVESTIGA	TION	
E.1.1	Specify the m <b>English</b>	edical condition(s) to be Multiple Osteoch		xt):	
E.1.1.1	Medical condit <b>English</b>			rized by growing benign tebrae.	tumors in
E.1.1.2	Therapeutic area  Diseases [C] - Musculoskeletal Diseases [C05]  MedDRA version, system organ class, level, term and classification code <sup>24</sup> :				
E.1.2	Version Sys 20.0 100 fan	on, system organ class, stem Organ Class 010331 - Congenital, nilial and genetic orders	Classification Code	Term  Hereditary multiple osteochondromas	Level <b>PT</b>
E.1.3	Is any of the conditions being studied a rare disease <sup>25</sup> ?		Yes •		

E.2	OBJECTIVE OF THE TRIAL		
E.2.1	Main objective: <b>English</b>	To evaluate the efficacy of two dosage regimens of palovarotene compared with placebo in preventing new osteochondromas (OCs) in subjects with multiple osteochondromas (MO) due to exostosin 1 (Ext1) or exostosin 2 (Ext2) mutations.	
E.2.2	Secondary objective English	To compare the following effects of palovarotene with placebo:  - The volume of osteochondromas (OCs) as assessed by magnetic resonance imaging (MRI).  - The proportion of subjects with no new (OCs).  - The rate of new or worsening skeletal deformities.  - The rate of MO-related surgeries  Additional secondary objectives:  - Overall palovarotene safety.  - The pharmacokinetics of palovarotene at steady state.  - The palatability of drug product when sprinkled onto specific foods.  Exploratory Objective: To compare the following effects of palovarotene with placebo:  - The change in volume of OC cartilage caps as assessed by MRI.  - The rate of new or worsening functional limitations.  - Pain and pain interference due to OCs.  - Quality of life.	
E.2.3 E.2.3.1	Is there a sub-stud If 'Yes', give the fu	dy? No •  Ill title, date and version of each sub-study and their related objectives:	

E.3	PRINCIPAL INCLUSION CRITERIA (list the most important)		
	English	1. Written, signed, and dated informed subject/parent consent and age	
		appropriate assent (performed according to local regulations).	

- 2. A clinical diagnosis of MO with a disease-causing Ext1 or Ext2 mutations confirmed by a central laboratory.
- 3. Male and female subjects with a chronological age of 2-14 years, inclusive.
- 4. Female subjects must be premenarchal at screening.
- 5. Bone age at screening of ≤14 years, 0 months per the Greulich-Pyle method as assesed by a central reader.
- 6. Symptomatic MO, defined as the occurrence of any one of the following at screening:
- Five or more clinically-evident OCs and the presence of a new or enlarging OC in the preceding 12 months.
- Five or more clinically-evident OCs and the presence of a painful OC.
- A skeletal deformity.
- A joint limitation.
- Prior surgery for a MO-related complication.
- 7. If a subject had a prior surgery for MO, the subject should not be screened until at least 8 weeks post-surgery to allow for at least 12 weeks of stabilization of symptoms prior to first dose. Surgical orthopedic implants are allowed if they were in situ for ≥12 weeks prior to the baseline MRI
- 8. If a subject is currently receiving pain medications, the dose must be stable (ie, <20% variance) for 2 weeks prior to screening.
- 9. The ability to undergo whole body MRI with or without sedation/general anesthesia.
- 10. Male and female subjects of child bearing potential who are heterosexually active must agree to use two effective methods of birth control, one of which must be highly effective during treatment and for 1 month after treatment discontinuation, unless they commit to true abstinence from heterosexual sex. Heterosexually active females of child bearing potential (FOCBP) must also agree to start effective methods of birth control at screening. An FOCBP is defined as a female who is ≥13 years

of age or is post-menarchal, whichever is earlier.

11. Subjects must be accessible for treatment with study drug and follow-up.

### **E.4** PRINCIPAL EXCLUSION CRITERIA (list the most important)

#### **English**

- 1. A weight < 10 kg.
- 2. Other known syndromic conditions such as Langer-Giedion or Potocki Shaffer.
- 3. Any subject with neurologic signs suggestive of spinal cord impingement.
- 4. If subject is currently using vitamin A or beta carotene, multivitamins containing vitamin A or beta carotene, or herbal preparations, fish oil, and unable or unwilling to discontinue use of these products during palovarotene treatment. For eligibility, no washout is required prior to the first dose of study drug.
- 5. Exposure to synthetic oral retinoids within 4 weeks prior to enrollment.
- 6. Concurrent treatment with tetracycline or any tetracycline derivatives, due to the potential increased risk of pseudotumor cerebri.
- 7. History of allergy or hypersensitivity to retinoids, gelatin or lactose (other than lactose intolerance).
- 8. Concomitant medications that are strong inhibitors or inducers of cytochrome P450 (CYP450) 3A4 activity.
- 9. Amylase or lipase >2 times the above the upper limit of normal (>2×ULN) or with a history of chronic pancreatitis.
- 10. Elevated aspartate aminotransferase (AST) or alanine aminotransferase (ALT) >2.5x ULN.

- 11. Fasting triglycerides >400 mg/dL with or without therapy.
- 12. Subjects with uncontrolled cardiovascular, renal, hepatic, pulmonary, gastrointestinal, endocrine, metabolic, ophthalmologic, immunologic, psychiatric, or other significant disease. These include subjects requiring glucocorticoid at doses >0.2mg/kg or up to 10 mg prednisone equivalent daily.
- 13. Subjects experiencing suicidal ideation (type 4 or 5) or any suicidal behavior within the past month or any suicidal behavior within the past year as defined by the Columbia-Suicide Severity Rating Scale (C SSRS).
- 14. Subjects unable or unwilling to complete the study or all study-related procedures, including imaging.
- 15. Any surgical implant that is contraindicated for MRI. Dental braces are permitted.
- 16. Participation in any clinical research study within 4 weeks prior to enrollment or simultaneous participation in any clinical research study.
- 17. Any reason that, in the opinion of the Investigator, would lead to the inability of the subject and/or family to comply with the protocol.

E.5	END POINT(S):	
E.5.1	Primary End Point ( <b>English</b>	repeat as necessary) <sup>26</sup> The primary efficacy endpoint will compare palovarotene with placebo on the annualized rate of new OCs as assessed by whole body MRI.
E.5.1.1	Timepoint(s) of eva <b>English</b>	luation of this end point  At month 12 and month 24. Whole body MRIs and upper/lower limb radiographs will be performed every 12 months.
E.5.2	Secondary End Poir <b>English</b>	Secondary efficacy endpoints will compare palovarotene with placebo on the following:  - The change from baseline in the total volume of OCs as assessed by whole body MRI at Months 12 and 24.  - The proportion of subjects with no new OCs as assessed by whole body MRI at Months 12 and 24.  - The annualized rate of new or worsening deformities as assessed by radiographic imaging of both upper and lower limbs.  - The annualized rate of MO-related surgeries. Surgeries include any procedure indicated for the treatment of MO, such as an excision of a symptomatic OC or correction of a limb deformity.
E.5.2.1	Timepoint(s) of eva <b>English</b>	aluation of this end point  At Months 12 and 24. Whole body MRIs will be performed every 12 months.

E.6	SCOPE OF THE TRIAL - Tick all boxes where applicable	
E.6.1	Diagnosis	No ◆
E.6.2	Prophylaxis	No ◆
E.6.3	Therapy	No ◆
E.6.4	Safety	Yes •
E.6.5	Efficacy	Yes •
E.6.6	Pharmacokinetic	Yes •
E.6.7	Pharmacodynamic	No ◆
E.6.8	Bioequivalence	No ◆
E.6.9	Dose Response	Yes •
E.6.10	Pharmacogenetic	No ◆
E.6.11	Pharmacogenomic	No ∙

E.6.12	Pharmacoeconomic	No ∙	
E.6.13	Others	No ◆	
E.6.13.1	If others, specify:		

E.7	TRIAL TYPE AND PHASE <sup>27</sup>		
E.7.1	Human pharmacology (Phase I)	No •	
Is it: E.7.1.1	First administration to humans	No ∙	
E.7.1.2	Bioequivalence study	No ◆	
E.7.1.3	Other:	No ∙	
E.7.1.3.1	If other, please specify:		
E.7.2	Therapeutic exploratory (Phase II)	Yes •	
E.7.3	Therapeutic confirmatory (Phase III)	No ∙	
E.7.4	Therapeutic use(Phase IV)	No ∙	

E.8	DESIGN OF THE TRIAL	
E.8.1	Controlled	Yes •
	If 'Yes', specify:	
E.8.1.1	Randomised:	Yes •
E.8.1.2	Open:	No •
E.8.1.3	Single blind:	No •
E.8.1.4	Double blind:	Yes •
E.8.1.5	Parallel group:	Yes •
E.8.1.6	Cross over:	No •
E.8.1.7	Other:	No •
E.8.1.7.1	If other specify:	
E.8.2	If controlled, specify the comparator:	
E.8.2.1	Other medicinal product(s)	No •
E.8.2.2	Placebo	Yes •
E.8.2.3	Other	No ◆
E.8.2.3.1	If 'Yes' to other, specify:	
E.8.2.4	Number of treatment arms in the trial	3
E.8.3	Single site in the Member State concerned	
E.8.4	Multiple sites in the Member State concern	
E.8.4.1	Number of sites anticipated in Member Sta	
E.8.5	Multiple Member States:	Yes •
E.8.5.1	Number of sites anticipated in the EEA:	9
E.8.6	Trial involving sites outside the EEA:	
E.8.6.1	Trial being conducted both within and outsi	
E.8.6.2	Trial being conducted completely outside of	
E.8.6.3	If E.8.6.1 or E.8.6.2 are Yes, specify the re	gions in which trial sites are planned:
	Australia	
	Belgium	
	Canada	
	France	
	Italy	
	Japan Nathaulauda	
	Netherlands	
	Portugal	
	Spain	
	Turkey United Kingdom	
	United Kingdom United States	
E.8.6.4	If E.8.6.1 or E.8.6.2 are Yes, specify the nu	umber of sites 21
L.0.0.4	anticipated outside of the EEA:	ווווטכו טו אונפא בב
E.8.7	Trial having an independent data monitorin	g committee: Yes •
E.8.8		visit of the last subject, please enter "LVLS". If it is not
2.0.0	LVLS provide the definition:	. Visit of the last subject, picase criter LVLS . If it is not
	English last patient last visi	•
	English iast patient iast visi	•

E.8.9	Initial estimate of the duration of the trial <sup>28</sup> (y	rears, months and days)	
E.8.9.1	In the Member State concerned	2 years 10 months 0 days	
E.8.9.2	In all countries concerned by the trial	2 years 11 months 0 days	
E.8.10	Proposed date of start of recruitment		
E.8.10.1	In the Member State concerned	2019-02-01	
E.8.10.2	In any country	2018-03-01	

## **F. POPULATION OF TRIAL SUBJECTS**

F.1	AGE RANGE			
F.1.1	Are the trial subjects under 18?		Yes •	
	If 'Yes', specify the estimated numb planned in each age range for the w		240	
		Approx. No. of		
		patients <sup>29</sup>		
F.1.1.1	In utero	. ()	No ∙	
F.1.1.2	Preterm newborn infants (up to gestational age < 37 weeks)	()	No ●	
F.1.1.3	Newborns (0-27 days)	()	No ∙	
F.1.1.4	Infants and toddlers (28 days - 23 months)	()	No ●	
F.1.1.5	Children (2-11 years)	<b>(192</b> )	Yes •	
F.1.1.6	Adolescents (12-17 years)	(48)	Yes •	
F.1.2	Adults (18-64 years)	()	No ◆	
F.1.3	Elderly (>= 65 years)	()	No ◆	

F.2	GENDER	
F.2.1	Female	Yes •
F.2.2	Male	Yes •

F.3	GROUP OF TRIAL SUBJECTS	
F.3.1	Healthy volunteers	No ◆
F.3.2	Patients	Yes •
F.3.3	Specific vulnerable populations	Yes •
F.3.3.1	Women of child bearing potential not using contraception	No •
F.3.3.2	Women of child bearing potential using contraception	Yes •
F.3.3.3	Pregnant women	No •
F.3.3.4	Nursing women	No •
F.3.3.5	Emergency situation	No •
F.3.3.6	Subjects incapable of giving consent personally	No •
F.3.3.6.1	If 'Yes', specify:	
F.3.3.7	Others:	No ∙
F.3.3.7.1	If 'Yes', specify:	

F.4 PLANNED NUMBER OF SUBJECTS TO BE INCLUDED:			
F.4.1	In the member state	10	
F.4.2	For a multinational trial:		
F.4.2.1	In the EEA	80	
F.4.2.2	2 In the whole clinical trial <b>240</b>		

F.5	PLANS FOR TREATMENT OR CARE AFTER THE SUBJECT HAS ENDED HIS/HER				
	PARTICIPAT	PARTICIPATION IN THE TRIAL. please specify (free text):			
	English At the end of the study, subjects will have the option of participating an open label extension study (PVO-2A-202)				
		,			

# G. CLINICAL TRIAL SITES/INVESTIGATORS IN THE MEMBER STATE CONCERNED BY THIS REQUEST

G.1	CO-ORDINATING INVESTIGATOR (for multicentre trial) and principal investigator (for single centre trial)	
G.1.1	Given name:	
G.1.2	Middle name, if applicable:	
G.1.3	Family name:	
G.1.4	Qualification (MD)	
G.1.5	Professional address:	
G.1.5	Institution name	
G.1.5	Institution department	
G.1.5.1	Street address	
G.1.5.2	Town/city	
G.1.5.3	Post code	
G.1.5.4	Country	
G.1.6	Telephone number:	
G.1.7	Fax number:	
G.1.8	E-mail:	

G.2	PRINCIPAL INVESTIGATORS forms)	6 (for multicenti	e trial ; where necessary, use additional
G.2.1	Given name:		
G.2.2	Middle name, if applicable:		
G.2.3	Family name:	5.1.2.e	
G.2.4	Qualification (MD)		
G.2.5	Professional address:		
G.2.5	Institution name	OLVG	
G.2.5	Institution department		
G.2.5.1	Street address	Oosterpark	9
G.2.5.2	Town/city	Amsterdam	
G.2.5.3	Post code	1091 AC	
G.2.5.4	Country	Netherland	S
G.2.6	Telephone number:	+31 20 599	5.1.2.e
G.2.7	Fax number:		
G.2.8	E-mail:	5.1.2.e	@olvg.nl

G.3	CENTRAL TECHNICAL FACILITIES TO BE USED IN THE CONDUCT OF THE TRIAL		
		al facility, in which the measurement or assessment of the centralised (repeat as needed for multiple organisations).	
G.3.1	Name of organisation:	PPD Laboratories	
G.3.2	Department	Global Central Labs	
G.3.3	Name of contact person:		
G.3.3.1	Given name	5.1.2.e	
G.3.3.2	Middle name		
G.3.3.3	Family name	5.1.2.e	
G.3.4	Address:		
G.3.4.1	Street address	Granta Park, Great Abington	
G.3.4.2	Town/city	CAMBRIDGE	
G.3.4.3	Post code	CB21 6GQ	
G.3.4.4	Country	United Kingdom	
G.3.5	Telephone number:	+44 5.1.2.e	
G.3.6	Fax number:		
G.3.7	E-mail:	5.1.2.e @ppdi.com	
G.3.8	Enter the details of any duties	subcontracted to this central technical facility in this trial	
G.3.8.1	Routine clinical pathology testir	·	

G.3.8.2	Clinical chemistry	Yes •
G.3.8.3	Clinical haematology	Yes •
G.3.8.4	Clinical microbiology	Yes •
G.3.8.5	Histopathology	No ∙
G.3.8.6	Serology/ endocrinology	No •
G.3.8.7	Analytical chemistry	No ∙
G.3.8.8	ECG analysis/ review	Yes •
G.3.8.9	Medical image analysis/ review - X-ray, MRI, ultrasound, etc.	No ◆
G.3.8.10	Primary/ surrogate endpoint test	No ◆
G.3.8.11	Other Duties subcontracted?	No ∙
G.3.8.11.1	If 'Yes', specify the other duties	

F		
G.3	CENTRAL TECHNICAL FACILITIES TO BE US	ED IN THE CONDUCT OF THE TRIAL
	Laboratory or other technical facility, in whimain evaluation criteria are centralised (rep	
G.3.1	Name of organisation: 5.1.1.c	
G.3.2	Department	<del></del>
G.3.3	Name of contact person:	
G.3.3.1	Given name 5.1.2.e	
G.3.3.2	Middle name	<del>-</del>
G.3.3.3	Family name 5.1.2.e	
G.3.4	Address:	
G.3.4.1	Street address 5.1.1.c	
G.3.4.2	Town/city 5.1.1.c	
G.3.4.3	Post code 5.1.1.c	
G.3.4.4	Country 5.1.1.c	
G.3.5	Telephone number: 5.1.2.e	
G.3.6	Fax number:	<del></del>
G.3.7	E-mail: 5.1.2.e	
G.3.8	Enter the details of any duties subcontracted to t	this central technical facility in this trial
G.3.8.1	Routine clinical pathology testing	No ∙
G.3.8.2	Clinical chemistry	No ∙
G.3.8.3	Clinical haematology	No ∙
G.3.8.4	Clinical microbiology	No ∙
G.3.8.5	Histopathology	No ∙
G.3.8.6	Serology/ endocrinology	No ∙
G.3.8.7	Analytical chemistry	Yes •
G.3.8.8	ECG analysis/ review	No ∙
G.3.8.9	Medical image analysis/ review - X-ray, MRI, ultrasound, etc.	No •
G.3.8.10	Primary/ surrogate endpoint test	No ●
G.3.8.11	Other Duties subcontracted?	No ●
G.3.8.11.1	If 'Yes', specify the other duties	

#### CENTRAL TECHNICAL FACILITIES TO BE USED IN THE CONDUCT OF THE TRIAL G.3 Laboratory or other technical facility, in which the measurement or assessment of the main evaluation criteria are centralised (repeat as needed for multiple organisations). G.3.1 Name of organisation: G.3.2 Department 5.1.1.c G.3.3 Name of contact person: Given name 5.1.2.e G.3.3.1 G.3.3.2 Middle name 5.1.2 .e G.3.3.3 Family name G.3.4 Address: G.3.4.1 Street address 5.1.1.c G.3.4.2 Town/city

G.3.4.3	Post code	5.1.1.c
G.3.4.4	Country	5.1.1.c
G.3.5	Telephone number:	5.1.2.e
G.3.6	Fax number:	
G.3.7	E-mail:	5.1.2.e
G.3.8	Enter the details of any duties subco	ntracted to this central technical facility in this trial
G.3.8.1	Routine clinical pathology testing	No •
G.3.8.2	Clinical chemistry	No •
G.3.8.3	Clinical haematology	No •
G.3.8.4	Clinical microbiology	No ●
G.3.8.5	Histopathology	No ●
G.3.8.6	Serology/ endocrinology	No •
G.3.8.7	Analytical chemistry	No •
G.3.8.8	ECG analysis/ review	No •
G.3.8.9	Medical image analysis/ review - X-	ay, MRI, Yes •
	ultrasound, etc.	
G.3.8.10	Primary/ surrogate endpoint test	No •
G.3.8.11	Other Duties subcontracted?	No •
G.3.8.11.1	If 'Yes', specify the other duties	

#### **G.3** CENTRAL TECHNICAL FACILITIES TO BE USED IN THE CONDUCT OF THE TRIAL Laboratory or other technical facility, in which the measurement or assessment of the main evaluation criteria are centralised (repeat as needed for multiple organisations). G.3.1 Name of organisation: 5.1.1.c G.3.2 Department Name of contact person: G.3.3 G.3.3.1 Given name 5.1.2 e G.3.3.2 Middle name G.3.3.3 Family name 5.1.2.e G.3.4 Address: G.3.4.1 Street address 5.1.1.c G.3.4.2 Town/city 5.1.1.c G.3.4.3 Post code 5.1.1.c G.3.4.4 Country 5.1.1.c Telephone number: G.3.5 5.1.2.e G.3.6 Fax number: G.3.7 E-mail: 5.1.2.e Enter the details of any duties subcontracted to this central technical facility in this trial G.3.8 G.3.8.1 Routine clinical pathology testing No • G.3.8.2 Clinical chemistry No • G.3.8.3 Clinical haematology No • G.3.8.4 Clinical microbiology No • G.3.8.5 Histopathology No • Serology/ endocrinology G.3.8.6 No • G.3.8.7 Analytical chemistry No • G.3.8.8 ECG analysis/ review No • G.3.8.9 Medical image analysis/ review - X-ray, MRI, No • ultrasound, etc. G.3.8.10 Primary/ surrogate endpoint test No • G.3.8.11 Other Duties subcontracted? Yes •

G.3	CENTRAL TECHNICAL FACILITIES TO BE USED IN THE CONDUCT OF THE TRIAL		
	Laboratory or other technical facility, in which the measurement or assessment of main evaluation criteria are centralised (repeat as needed for multiple organisations).		
G.3.1 G.3.2	Name of organisation: Department	5.1.1.c	

G.3.8.11.1

If 'Yes', specify the other duties

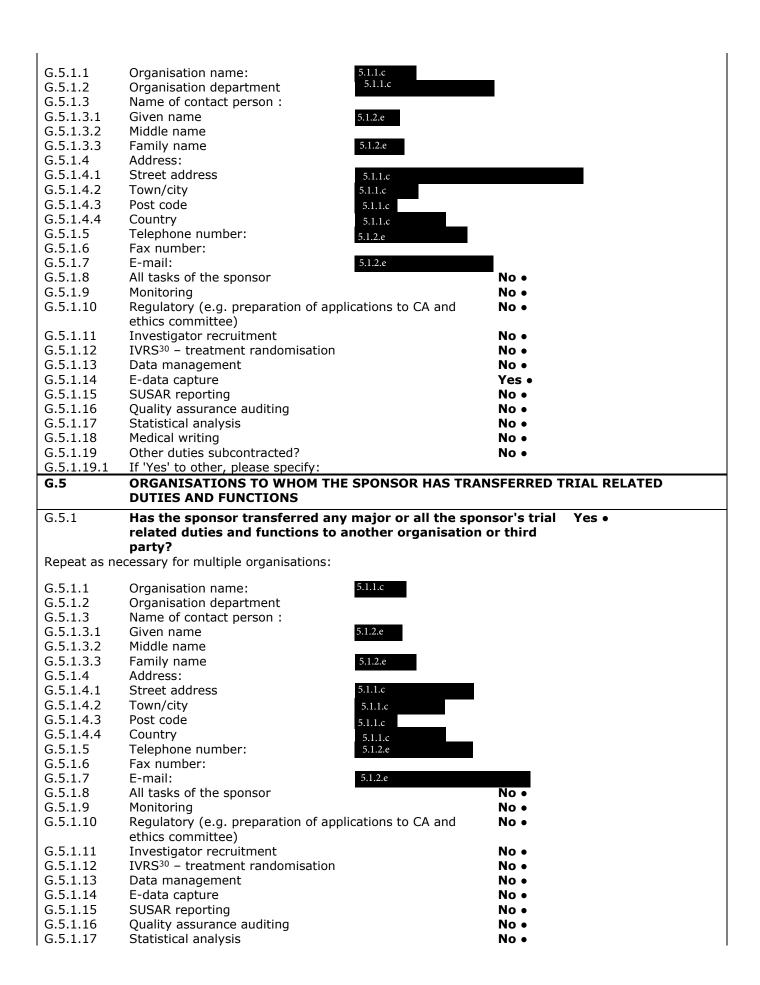
**Central ECG reader** 

G.3.3	Name of contact person:	
G.3.3.1	Given name 5.1.2	.e
G.3.3.2	Middle name	
G.3.3.3	Family name 5.1.2	e
G.3.4	Address:	
G.3.4.1	Street address 5.1.1	.c
G.3.4.2	Town/city 5.1.1	.c
G.3.4.3	Post code 5.1.1	.c
G.3.4.4	Country 5.1.1	c
G.3.5	Telephone number: 5.1.	
G.3.6	Fax number:	
G.3.7	E-mail: 5.1.	2.e
G.3.8	Enter the details of any duties subcontra-	cted to this central technical facility in this trial
G.3.8.1	Routine clinical pathology testing	No ∙
G.3.8.2	Clinical chemistry	No ∙
G.3.8.3	Clinical haematology	No ∙
G.3.8.4	Clinical microbiology	No ∙
G.3.8.5	Histopathology	No ∙
G.3.8.6	Serology/ endocrinology	No ∙
G.3.8.7	Analytical chemistry	No ◆
G.3.8.8	ECG analysis/ review	No ∙
G.3.8.9	Medical image analysis/ review - X-ray, N	MRI, No •
	ultrasound, etc.	
G.3.8.10	Primary/ surrogate endpoint test	No ◆
G.3.8.11	Other Duties subcontracted?	Yes •
G.3.8.11.1	If 'Yes', specify the other duties	Genotyping

G.4	NETWORKS TO BE INVOLVED IN THE TRIAL (e.g. Paediatric Networks involved in the trial)
G.4.1	Name of organisation:
G.4.2	Name of contact person:
G.4.2.1	Given name
G.4.2.2	Middle name
G.4.2.3	Family name
G.4.3	Address:
G.4.3.1	Street address
G.4.3.2	Town/city
G.4.3.3	Post code
G.4.3.4	Country
G.4.4	Telephone number:
G.4.5	Fax number:
G.4.6	E-mail:
G.4.7	Activities carried out by the network:

G.5	ORGANISATIONS TO WHOM DUTIES AND FUNCTIONS	THE SPONSOR HAS TRANSFERRED TRIAL RELATED	
G.5.1	Has the sponsor transferred any major or all the sponsor's trial Yes • related duties and functions to another organisation or third party?		
Repeat as r	necessary for multiple organisation	ns:	
G.5.1.1	Organisation name:	PPD Inc	
G.5.1.2	Organisation department	Project Management	
G.5.1.3	Name of contact person:		
G.5.1.3.1	Given name	5.1.2.e	
G.5.1.3.2	Middle name		
G.5.1.3.3	Family name	5.1.2.e	
G.5.1.4	Address:		
G.5.1.4.1	Street address	Bocskai ut 134-146, E epulet, II. emelet	

G.5.1.4.2	Town/city	Budapest
G.5.1.4.3	Post code	H-1113
G.5.1.4.4	Country	Hungary
G.5.1.5	Telephone number:	+36
G.5.1.6	Fax number:	+36 5.1.2.e 5.1.2.e
G.5.1.7	E-mail:	5.1.2.e @ppdi.com
G.5.1.8	All tasks of the sponsor	No ∙
G.5.1.9	Monitoring	Yes •
G.5.1.10	Regulatory (e.g. preparation of applic	cations to CA and Yes •
	ethics committee)	
G.5.1.11	Investigator recruitment	No ◆
G.5.1.12	IVRS <sup>30</sup> – treatment randomisation	Yes •
G.5.1.13	Data management	Yes •
G.5.1.14	E-data capture	No ◆
G.5.1.15	SUSAR reporting	Yes •
G.5.1.16	Quality assurance auditing	No ◆
G.5.1.17	Statistical analysis	No •
G.5.1.18	Medical writing	No •
G.5.1.19	Other duties subcontracted?	No •
G.5.1.19.1	If 'Yes' to other, please specify:	CRONCOR HAC TRANSFERRED TRIAL RELATER
G.5	DUTIES AND FUNCTIONS	SPONSOR HAS TRANSFERRED TRIAL RELATED
G.5.1	Has the sponsor transferred any	
I	related duties and functions to a	nother organisation or third
	party?	
Repeat as no	ecessary for multiple organisations:	
G.5.1.1	Organisation name:	5.1.1.c
G.5.1.2	Organisation department	5.1.1.c
G.5.1.3	Name of contact person :	
G.5.1.3.1	Given name	5.1.2.e
G.5.1.3.2	Middle name	
G.5.1.3.3	Family name	5.1.2.e
G.5.1.4	Address:	
G.5.1.4.1	Street address	5.1.1.c
G.5.1.4.2	Town/city	5.1.1.c
G.5.1.4.3	Post code	5.1.1.c
G.5.1.4.4	Country	5.1.1.c
G.5.1.5	Telephone number:	5.1.2.e
G.5.1.6	Fax number:	
G.5.1.7	E-mail:	5.1.2.e
G.5.1.8	All tasks of the sponsor	No ◆
G.5.1.9	Monitoring	No ◆
G.5.1.10	Regulatory (e.g. preparation of applied	cations to CA and <b>No</b> •
0 = 4 44	ethics committee)	
G.5.1.11	Investigator recruitment	No •
G.5.1.12	IVRS <sup>30</sup> – treatment randomisation	No •
G.5.1.13	Data management	No •
G.5.1.14 G.5.1.15	E-data capture	No •
G.5.1.15 G.5.1.16	SUSAR reporting Quality assurance auditing	No
G.5.1.16 G.5.1.17	Statistical analysis	Yes •
G.5.1.17 G.5.1.18	Medical writing	res • No •
G.5.1.19	Other duties subcontracted?	No •
G.5.1.19.1	If 'Yes' to other, please specify:	110 -
G.5		SPONSOR HAS TRANSFERRED TRIAL RELATED
	DUTIES AND FUNCTIONS	
G.5.1	Has the sponsor transferred any	maior or all the sponsor's trial Yes •
<del></del>	related duties and functions to a	
	party?	-
Repeat as no	ecessary for multiple organisations:	



0.5.4.40		<u>.</u> .
G.5.1.18	Medical writing	No ◆
G.5.1.19	Other duties subcontracted?	Yes •
G.5.1.19.1	If 'Yes' to other, please specify:	Patient Travel
G.5	ORGANISATIONS TO WHOM THE DUTIES AND FUNCTIONS	SPONSOR HAS TRANSFERRED TRIAL RELATED
G.5.1	Has the sponsor transferred any related duties and functions to a	
Repeat as ne	party? cessary for multiple organisations:	
G.5.1.1	Organisation name:	5.1.1.c
G.5.1.2	Organisation department	5.1.1.c
G.5.1.3	Name of contact person :	
G.5.1.3.1	Given name	5.1.2.e
G.5.1.3.2	Middle name	
G.5.1.3.3	Family name	5.1.2.e
G.5.1.4	Address:	·
G.5.1.4.1	Street address	5.1.1.c
G.5.1.4.2	Town/city	5.1.1.c
G.5.1.4.3	Post code	5.1.1.c
G.5.1.4.4	Country	5.1.1.c
G.5.1.5	Telephone number:	5.1.2.e
G.5.1.6	Fax number:	5.1.2.e
G.5.1.7	E-mail:	5.1.2.e
G.5.1.8	All tasks of the sponsor	No ◆
G.5.1.9	Monitoring	No •
G.5.1.10	Regulatory (e.g. preparation of appli	cations to CA and No ●
	ethics committee)	
G.5.1.11	Investigator recruitment	No •
G.5.1.12	IVRS <sup>30</sup> – treatment randomisation	No ∙
G.5.1.13	Data management	No ∙
G.5.1.14	E-data capture	No ∙
G.5.1.15	SUSAR reporting	No ◆
G.5.1.16	Quality assurance auditing	No ◆
G.5.1.17	Statistical analysis	No ◆
G.5.1.18	Medical writing	No •
G.5.1.19	Other duties subcontracted?	Yes •
G.5.1.19.1	If 'Yes' to other, please specify:	IP labeling, packaging, and central depot
G.5	ORGANISATIONS TO WHOM THE DUTIES AND FUNCTIONS	SPONSOR HAS TRANSFERRED TRIAL RELATED
G.5.1	Has the sponsor transferred any	
	related duties and functions to a party?	nother organisation or third
Repeat as ne	cessary for multiple organisations:	
G.5.1.1	Organisation name:	5.1.1.c
G.5.1.2	Organisation department	
G.5.1.3	Name of contact person :	
G.5.1.3.1	Given name	5.1.2.e
G.5.1.3.2	Middle name	· <del></del>
G.5.1.3.3	Family name	5.1.2.e
G.5.1.4	Address:	
G.5.1.4.1	Street address	
G.5.1.4.2	Town/city	5.1.1.c
G.5.1.4.3	Post code	5.1.1.c
G.5.1.4.4	Country	5.1.1.c
G.5.1.5	Telephone number:	5.1.2.e 5.1.2.e
G.5.1.6	Fax number:	
G.5.1.7	E-mail:	5.1.2.e
G.5.1.8	All tasks of the sponsor	No ◆
G.5.1.9	Monitoring	No •

G.5.1.10	Regulatory (e.g. preparation of applicat ethics committee)	ions to CA and No •	
G.5.1.11	Investigator recruitment	No ◆	
G.5.1.12	IVRS <sup>30</sup> – treatment randomisation	No •	
G.5.1.13	Data management	No ◆	
G.5.1.14	E-data capture	No ◆	
G.5.1.15	SUSAR reporting	No ◆	
G.5.1.16	Quality assurance auditing	No •	
G.5.1.17	Statistical analysis	No •	
G.5.1.18	Medical writing	No ◆	
G.5.1.19	Other duties subcontracted?	Yes •	
G.5.1.19.1	If 'Yes' to other, please specify: Re	emote Visits	

## H. COMPETENT AUTHORITY / ETHICS COMMITTEE IN THE MEMBER STATE CONCERNED BY THIS REQUEST

### H.1 TYPE OF APPLICATION

If this application is addressed to the Competent Authority, please tick the Ethics Committee box and give information on the Ethics committee concerned. If this application is addressed to the Ethics Committee, please tick the Competent Authority box and give the information on the Competent Authority concerned.

H.1.1	Competent Authority	No •	
H.1.2	Ethics Committee	Yes •	

H.2	INFORMATION ON ETHICS COMMITTEE		
H.2.1	Name:	METC Brabant	
H.2.2	Address		
H.2.2.1	Street address	dr. Deelenlaan 9	
H.2.2.2	Town/city	Tilburg	
H.2.2.3	Post code	5042 AD	
H.2.2.4	Country	Netherlands	
H.2.3	Date of submission:		

H.3	OPINION	
H.3.1	To be requested	No ●
H.3.2	Pending	No ●
H.3.3	Given If 'Given', specify:	Yes •
H.3.3.1	Date of opinion:	2018-11-23
H.3.3.2	Opinion favourable	Yes •
H.3.3.3	Opinion not favourable If not favourable, give:	No ●
H.3.3.3.1	The reasons	
H.3.3.3.2	The eventual anticipated date	of resubmission:

## I. SIGNATURE OF THE APPLICANT IN THE MEMBER STATE

I.1	I hereby confirm that /confirm on behalf of the sponsor (delete which is not applicable) that:		
	<ul> <li>the information provided is complete;</li> </ul>		
	<ul> <li>the attached documents contain an accurate account of the information available;</li> </ul>		
	<ul> <li>the clinical trial will be conducted in accordance with the protocol; and</li> </ul>		
	<ul> <li>the clinical trial will be conducted, and SUSARs and result-related information will be</li> </ul>		
	reported, in accordance with the applicable legislation.		

I.2	APPLICANT OF THE REQUEST FOR THE COMPETENT AUTHORITY (as stated in section C.1):
I.2.1	Date:
I.2.2	Signature <sup>31</sup> :
I.2.3	Print name:

I.3	APPLICANT OF THE REQUEST FOR THE ETHICS COMMITTEE (as stated in section C.2):
I.3.1	Date:
I.3.2	Signature <sup>32</sup> :
I.3.3	Print name:

### **ENDNOTES**

- <sup>1</sup> Any translation of the protocol should be assigned the same date and version as those in the original document
- <sup>2</sup> International Standard Randomised Controlled Trial Number. Sponsors may wish to use an International Standardised Random Controlled Trial Number (ISRCTN) to identify their trial in addition to the EudraCT number; for instance if their trial is part of a multinational trial with sites outside the Community. They can obtain the number and guidance from the Current Controlled Trials website <a href="http://www.controlled-trials.com/isrctn">http://www.controlled-trials.com/isrctn</a> to which there is a link from the EudraCT database website <a href="http://eudract.ema.europa.eu">http://eudract.ema.europa.eu</a>. When available they should provide it in Section A.6 of the application form.
- <sup>3</sup> US National Clinical Trial (NCT) Numbers required on the FDA clinical trial application form.
- <sup>4</sup> For a resubmission following previous withdrawal of an application or unfavourable opinion of an ethics committee, or previous withdrawal of an application or refusal of a request by the competent authority, enter a letter in the sequence, A for first resubmission, B for second, C for third et seq.
- <sup>5</sup> In accordance with Article 19 of Directive 2001/20/EC.
- <sup>6</sup> The contact point should give functional information rather than details of one "person", in order to avoid the need for update and maintenance of these contact details.
- <sup>7</sup> This requires a EudraLink account. (See https://eudract.ema.europa.eu/document.html for details)
- <sup>8</sup> According to national legislation.
- <sup>9</sup> Available from the Summary of Product Characteristics (SmPC)
- <sup>10</sup> According to the Community register on orphan medicinal products (Regulation (EC) n° 141/2000): http://ec.europa.eu/enterprise/pharmaceuticals/register/index.htm
- 11 Committee for Medicinal Products for Human Use of the European Medicines Agency
- <sup>12</sup> To be provided only when there is No trade name. This is the name routinely used by a sponsor to identify the IMP in the CT documentation (protocol, IB...).
- <sup>13</sup> To be provided only when there is No trade name. This is a code designated by the sponsor which represents the name routinely used by the sponsor to identify the product in the CT documentation. For example, a code may be used for combinations of drugs or drugs and devices.
- <sup>14</sup> Available from the Summary of Product Characteristics (SmPC).
- <sup>15</sup> Chemical Abstracts Service.
- <sup>16</sup> Complete also section D.4 Cell therapy as defined in Annex 1 part IV of Directive 2001/83/EC as amended.
- <sup>17</sup> Complete also section D.5 Gene Therapy as defined in Annex 1 part IV of Directive 2001/83/EC as amended.
- <sup>18</sup> Complete also section D.6 Tissue Engineered Product as defined in Article 2(1)(b) of Regulation1394/2007/EC.
- 19 Complete also section D.7
- $^{20}$  The mode of action should briefly describe the chemical, biochemical, immunological or biological means the IMP uses to effect its pharmaceutical action.
- <sup>21</sup> Guideline on strategies to identify and mitigate risks for first-in-human clinical trials with investigational medicinal products. EMEA/CHMP/SWP/28367/2007 19 July 2007
- <sup>22</sup> In accordance with paragraph 38 of Annex 13 of Volume 4 of the Rules Governing Medical Products in the European Union.
- <sup>23</sup> In the case of healthy volunteer trials, the intended indication for the product under development should be provided.
- <sup>24</sup> Applicants are encouraged to provide the MedDRA lower level term if applicable and classification code. These can be accessed from the EMEA EudraCT website (<a href="http://eudract.ema.europa.eu/">http://eudract.ema.europa.eu/</a>).
- <sup>25</sup> Points to consider on the calculation and reporting of the prevalence of a condition for Orphan drug designation: COM/436/01 (http://www.ema.europa.eu/htms/human/orphans/intro.htm).
- <sup>26</sup> The protocol will usually identify a single primary end point but there may be a co-primary end point in some cases and/or a number of secondary end points.
- <sup>27</sup> The descriptions of the trial types provided are those recommended in preference to Phases. See page 5 of Community guideline CPMP/ICH/291/95. The development of a new indication after initial approval of a medicine should be considered as a new development plan.
- <sup>28</sup> From the first inclusion until the last visit of the last subject.
- <sup>29</sup> These numbers will be initial estimates. Applicants will not be required to update this information nor do they constitute an authorisation or restriction on the inclusion of these numbers of patients in the trial. The numbers of subjects whose inclusion is authorised are those set out in the authorised version of the protocol, or subsequent authorised amendments.
- <sup>30</sup> Interactive Voice Response System: commonly used for randomisation of treatment and controlling the shipment of stock of product.
- <sup>31</sup> On an application to the Competent Authority only, the applicant to the Competent Authority needs to sign.

<sup>32</sup> On an application to the	e Ethics Committee or	nly, the applicant to	the Ethics Committee	needs to sign.