



EuroBloodNet sponsored clinical trials

Speaker: Pierre Fenaux



















EuroBloodNet sponsored clinical trials

- Academic trials differing from industry sponsored trials and large institution sponsored trials
- Often in a field not largely explored by pharma companies
- Close cooperation with a pharma company which provides
 - The study drug
 - research funding
- International (at least 2 EU countries)
- Centralized submission (CTIS)



EuroBloodNet sponsored clinical trials

- EuroBloodNet performs all trial sponsor requirements
 - Submission
 - Drug shipping
 - Data monitoring
 - Pharmacovigilance
 - Publication...
- Currently 2 trials (both in inherited anemias)
 - Satisfy (E Van Beers, A Glenthoj)
 - Luspara (T Leblanc)



Luspara trial: Luspatercept in rare inherited anemias

- Congenital
 - sideroblastic anemia
 - Dyserythropoietic anemia
 - Blackfan Diamond anemia (not transfusion dependent)
- Luspatercept at increasing dose
- 3 countries: F, I,E



10th Translational Research Conference
Malahide (Dublin), Ireland
October 16-18, 2026
#ESHMDS2026

Overlap MDS/MPN Disorders and Clonal Hematopoiesis

Chairs: Pierre Fenaux, Katharina Götze, Mikkael Sekeres

DEADLINE FOR ABSTRACTS: JULY 6th, 2026

To register and for further information: www.esh.org - info@esh.org





Investigator initiated trials

sponsored by ERN-EuroBloodNet

Speaker: Dr. Eduard J. van Beers







Research funding: Vertex, Agios, Horizon Europe,
Dutch National Science Council

Co-Ordinator TFA Research and Trials Eurobloodnet
Associated Professor Rare Anemia University
Medical Center Utrecht, the Netherlands
Chair Sickle Cell Research Consortium and Registry
(SCORE), the Netherlands
Chair HOVON benign hematology working group

Patients for whom drugs need to be developed

7,000

Rare diseases exist and new ones are discovered each year



Rare disease affects...

30 million

people in the United States



30 million

people in the European Union

350 million

people worldwide

The vast majority of rare disease patients are



From: <u>www.chisite.org/blog/equitable-access-to-rare-disease-therapies-workshop</u>
Center for Healthcare innovation





ATMP/RNA (11)

iene

beremagene geperpavec delandistrogene moxeparvovec valoctocogene roxaparvovec

BINA

avacincaptad pegol eplontersen nedosiran tofersen

Cell

donislecel

exagamglogene autotemcel lovotibeglogene autotemcel

Vowst

Antibodies/Proteins (16)

Human Proteins

efbemalenograstim alfa

pegzilarginase

Prothrombin Complex Concentrate

Antibodies

bimekizumab lebrikizumab lecanemab mirikizumab nirsevimab retifanlimab rozanolixizumab tislelizumab

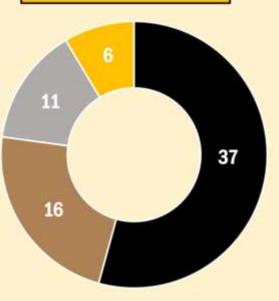
toripalimab

BI-specific Antibodies

elranatamab epcoritamab glofitamab talquetamab

Vaccines (6)

Abrysvo Arexvy Cyfendus txchiq Penbraya Qdenga



EMA, FDA, MHRA 2023

Small Molecules/Peptides (37)

bexagliflozin birch bark triterpenes daprodustat capivasertib elacestrant etrasimod fezolinetant flotufolastat F 18 fruquintinib gefapixant gepirone iptacopan ivosidenib leniolisib lotilaner momelotinib motixafortide nirmatrelvir+ritonavir nirogacestat omaveloxolone perfluorhexyloctane palovarotene pirtobrutinib quizartinib repotrectinib rezafungin

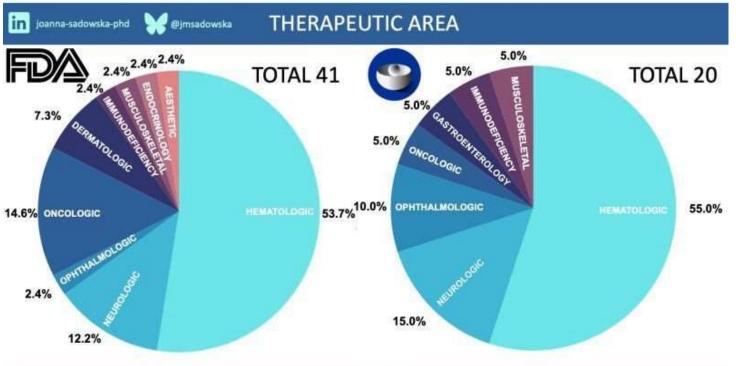
ritlecitinib sotagliflozin sparsentan sulbactam+durlobactam taurolidine+heparin trofinetide

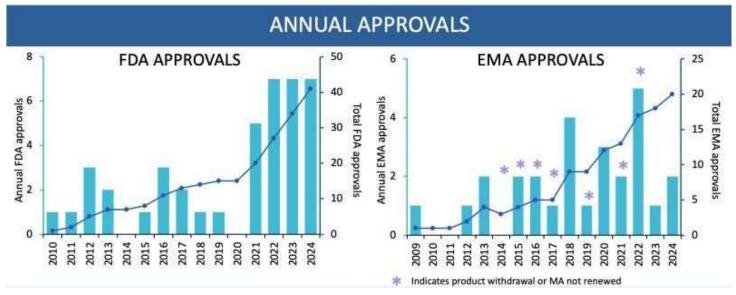
vadadustat vamorolone zavegepant zilucoplan

zuranolone



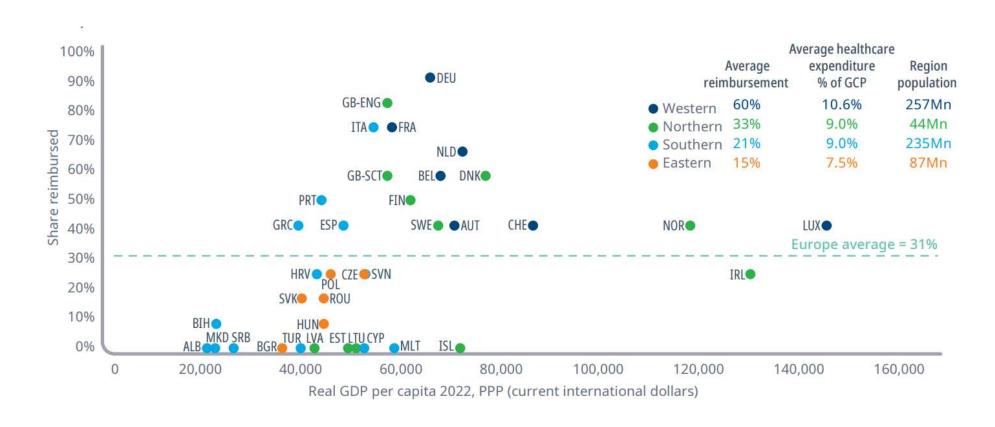
CELL AND GENE THERAPIES IN THE US AND EUROPE





Status of re-imbursement of gene and cell therapy in Europe

(Apr 2023)



Source: European Medicines Agency, IQVIA EFPIA Patients W.A.I.T. Indicator 2022 Survey, Apr 2023; International Monetary Fund, Oct 2023; IQVIA Institute, Jan 2024.



Gene en cell therapy pipeline

Global Status	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024
Preclinical	1,522	1,528	1,471	1,436	1,393
Phase I	256	270	301	314	318
Phase II	267	274	282	279	289
Phase III	30	33	35	34	35
Pre- registration	7	6	4	5	6
Total	2,082	2,111	2,093	2,068	2,041



Drug repurposing promises greater chance of clinical success



- 1. Clinical benefit has already been demonstrated
 - in at least some patient populations
 - in at least some dosage forms and scheduling
- 2. Safety has already been demonstrated
 - in at least some patient populations
 - in at least some dosage forms and scheduling
- 3. Drug product can be practically manufactured
 - in at least some routes of administration
 - in at least some dosage forms

Drug repurposing

Traditional pathway

withdrawn Drug:

in development

on market:

in patent

out of patent

Label extension (non/-pharma driven) stage of disease similar disease

paediatric usage different disease same mode of action

different disease different mode of action



- Faster Approval and Market Entry (Label extension is the best!)
- Lower Development Costs
- Higher Success Rate
- Addresses Unmet Medical Needs Faster
- Lower Risk of Side Effects and Safer for Patients
- Environmental and Ethical Advantages

Classical: thalidomide, senicapoc

Alternative: mitapivat, oncological product became benign hematology product

ASK FOR HELP:

- Eurobloodnet <u>pierre.fenaux@aphp.fr</u> trial conduct /sponsorship
- Eurobloodnet <u>e.j.vanbeers-3@umcutrecht.nl</u> general tips directions in trialing
- EATRIS/ REMEDIAALL https://remediaall.org/ regulatory advice





Registration

NCT05935202

Setup

Investigator initiated, prospective, multicenter, single-arm phase 2 trial.

Locations

· Denmark and The Netherlands

Sibling study in Toronto, Canada

Sponsor

Non-profit EuroBloodNet Association

Funding

Agios Pharmaceuticals



Key Inclusion Criteria





Membranopathy or CDAII



Genetically confirmed ACMG class 3, 4, or 5



Age ≥18 years

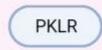


Hb concentration: <13.0 g/dL for males <11.0 g/dL for females



Adequate organ function

Key Exclusion Criteria



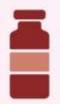
Pyruvate kinase deficiency diagnosed with decreased PK activity or two pathogenic PKLR alleles



Blood transfusion within last 3 months or >5 units the last year



Significant medical comorbidity

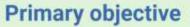


Receiving hematopoietic stimulating agents











Safety

Type, incidence, severity and relationship of mitapivat to AE and SAE

Secondary objectives



Hemoglobin

≥1 q/dL increase Average increase



Hemolysis

LDH, bilirubin, haptoglobin



Erythropoiesis EPO, erythroferrone, sTfR



Health related quality of life

SF-36 v1 PKDIA



Spleen

Change in size in non-splenectomized

Exploratory objectives



Red blood cell

Lifespan Metabolism Membrane flexibility and stability



Iron metabolism

Hepcidin, ferritin, transferrin saturation MRI: Hepatic and cardiac iron







Eurobloodnet as sponsor:

Excellent solution to avoid institutional restrictions on nonmarketed drug research, data transfer, contracting etc

Excellent support CTIS submission and clinical trial oversight

Drug delivery operations and QC

Academic Pricing

You are in control!



Conclusions

- 1. Investigator initiated trials are ideal for drug repurposing/label extension in hematology
- 2. Eurobloodnet can help
- 3. Satisfy is an example of such a study
- 4. Collaborate and have fun!





THANK YOU!



Hematological Diseases (ERN EuroBloodNet)

