



Twinning in Research and Education to improve survival in Childhood Solid Tumours in Lithuania

KICK-OFF MEETING
18th of January 2021
Project overview

Vilnius University Hospital Santaros Klinikos
VULSK, Coordinator

Jelena Rascon





TREL

Twinning in **R**esearch and **E**ducation to improve survival in **C**hildhood **S**olid Tumours in **L**ithuania

Funded under the WIDESPREAD-2020-5 – Twinning call GA: 952438

Grant amount - 898 927.50 EUR

Start date – January 2021

End date – December 2023

H2020-WIDESPREAD-2020-5 – Twinning call

Scope

Strengthen **RESEARCH** profile of an institution from a Widening country

Enhance the Scientific and Technology capacity

Improve the capability to compete successfully for research funding

Funding

Training, learning, exchange of experience



The composite indicator on Research Excellence below 70% of EU27 average



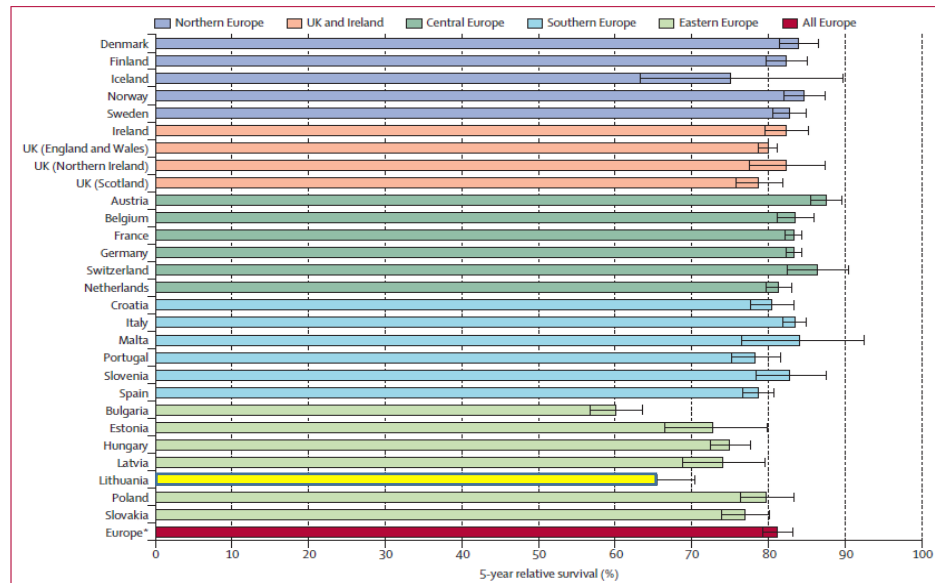
TREL

Twinning in Research and Education to improve survival in Childhood Solid Tumours in Lithuania

Pediatric Oncology – Solid Tumours in Focus

TREL Background

Five year overall survival of children treated for solid tumors (non-CNS) in 2000-2007



TREL Background

Geographical variability in survival of European children with central nervous system tumours

CNS childhood tumours diagnosed in 2000–07: incidence rates (IRs) and 1- and 5-year survival with 95% confidence interval (CI) by country and tumour behaviour.

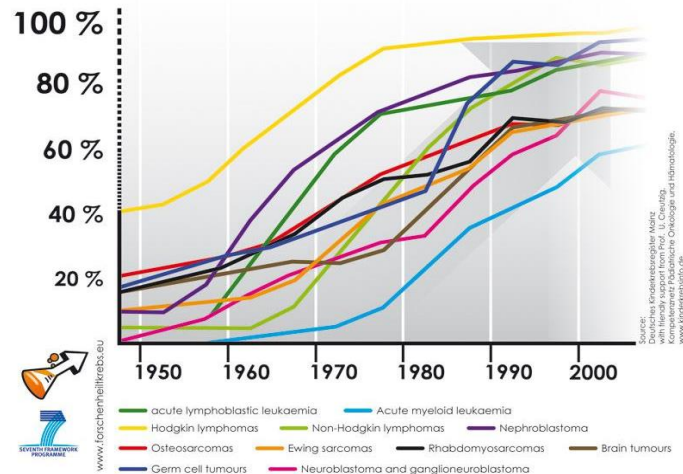
Country	CNS malignant tumours					CNS non-malignant tumours					CNS malignant and non-malignant tumours				
	One-year survival (%)	95% CI	Five-year survival (%)	95% CI	IR ^a	One-year survival (%)	95% CI	Five-year survival (%)	95% CI	IR ^a	One-year survival (%)	95% CI	Five-year survival (%)	95% CI	IR ^a
Denmark	80.3	72–86	60.6	51–69	1.6	93.4	88–97	92.6	87–96	1.7	87.1	83–91	77.1	71–82	3.3
Finland	86.1	81–90	75.3	69–81	3	97.1	89–99	94.5	83–98	0.9	88.7	85–92	79.5	74–84	4
Norway	84.5	78–89	62.5	54–70	2.4	96.9	93–99	94.7	90–97	2.2	90.5	87–93	78.3	73–83	4.6
Ireland	77.0	69–83	59.7	50–68	2	97.7	91–99	89.3	79–95	1.3	84.8	79–90	70.9	64–77	3.3
UK – England & Wales	75.8	74–78	57.1	54–60	2.1	95.3	94–96	92.7	91–94	1.5	83.8	82–85	71.8	70–74	3.6
UK – Northern Ireland	78.3	66–87	55.1	41–67	2.1	95.4	83–99	92.3	78–98	1.5	85.4	77–91	70.5	60–79	3.6
UK – Scotland	72.3	64–79	52.2	43–61	1.9	97.2	92–99	92.8	85–97	1.5	83.3	78–87	69.8	63–76	3.5
Austria	81.6	76–86	63.8	57–70	2.5	100	94.2	94.2	85–98	0.8	86.3	82–90	72.1	67–77	3.3
Belgium	76.2	70–82	64.1	57–71	2.4	96.1	90–99	93.1	86–97	1.3	83.1	78–87	74.1	68–79	3.7
France	73.1	71–75	51.8	49–54	2.1	97.9	97–99	95.8	95–97	1.6	83.9	83–85	70.8	69–73	3.8
Germany	79.9	78–82	59.1	57–62	2	98	97–99	96	95–97	1.4	87.2	86–88	73.9	72–76	3.4
Switzerland	73.5	59–84	57.8	42–71	1.7	100	100	100	1.2	84.4	75–91	75	64–83	2.9	
The Netherlands	69.2	65–73	46.4	42–51	2.1	97	95–98	95.7	93–97	1.5	80.9	78–83	67.0	64–70	3.6
Croatia	88.0	83–92	69.6	62–76	3.2	97.1	89–99	93.7	84–98	1.1	90.4	86–93	75.6	69–81	4.4
Italy	80.8	77–84	61.3	57–66	2.4	98	96–99	96	93–98	1.4	87.2	85–89	74.1	71–77	3.8
Malta	78.6	47–93	61.2	29–82	2.4	100	100	100	0.8	84.2	59–95	71.8	44–87	3.2	
Portugal	74.1	68–79	53.4	46–60	2.6	91.9	83–96	84.9	74–91	0.9	78.7	74–83	61.4	55–67	3.5
Slovenia	78.6	63–88	57.2	40–71	1.8	100	100	100	0.9	85.9	75–92	72.4	59–82	2.7	
Spain	81.8	78–85	62.1	57–67	2.6	94.7	90–97	88.5	82–93	1.1	85.8	83–88	70.0	66–74	3.7
Bulgaria	55.4	48–63	38.1	30–46	1.8	94.1	65–99	87.8	60–97	0.2	59.0	52–66	42.8	35–50	2
Estonia	76.3	59–87	61.1	43–75	2.2	91.3	70–98	83.7	56–95	1.3	82.0	70–90	69.9	57–81	3.5
Hungary	75.5	70–80	55.1	49–61	2.5	95.1	91–99	91.9	86–95	1.3	82.2	79–85	67.6	63–72	3.7
Latvia	81.2	70–89	65.6	53–76	2.4	100	100	100	0	81.4	70–89	65.8	53–76	2.4	
Lithuania	77.6	65–86	49.2	36–61	1.7	100	100	100	23–92	0.1	79.0	67–87	53.1	41–64	1.8
Poland	85.7	79–91	61.7	52–70	2.2	100	92–99	97.9	92–99	1.4	84.2	80–91	62.1	53–70	2.4
Slovakia	74.2	66–81	52.7	43–61	2	97.9	92–99	97.9	92–99	1.4	84.2	79–88	71.9	65–77	3.4
European pool	77.1	76–78	57.1	56–58	2.2	96.7	96–97	94.4	94–95	1.4	84.7	84–85	71.3	71–72	3.5

$p = 0.64, P < 0.001$

$p^b = -0.002, P = 0.99$

$p^b = 0.12, P = 0.42$

Survival Rates of Children and Young Adults Suffering from Cancer



TREL Background

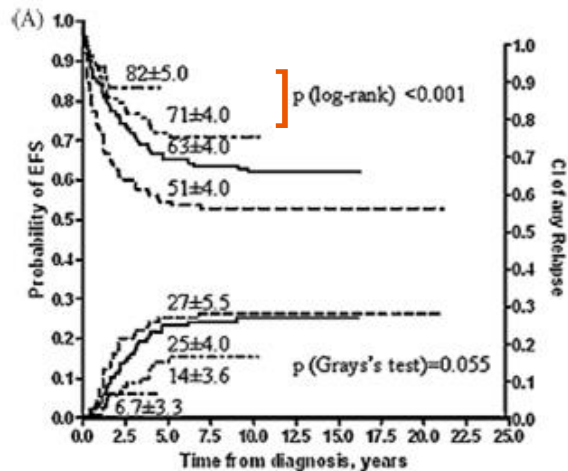


Insufficient networking between Lithuanian researchers and European leading research centres.

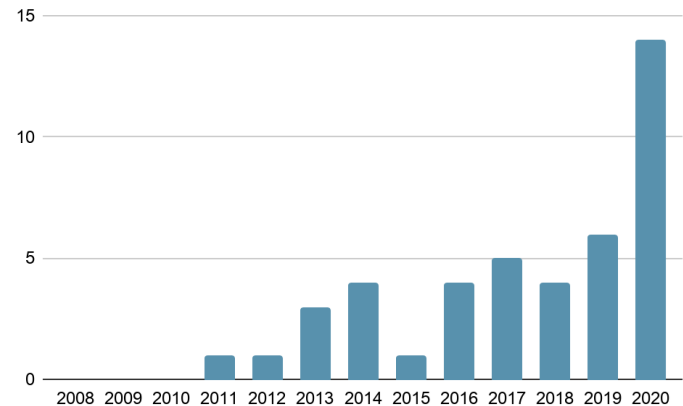
Coordinating sites of European
CTG in paediatric oncology

Twining with Nordic countries within NOPHO ALL-2008 protocol

EFS increased 11% within 5 years*



Number of high-ranked publications on childhood ALL



TREL Consortium

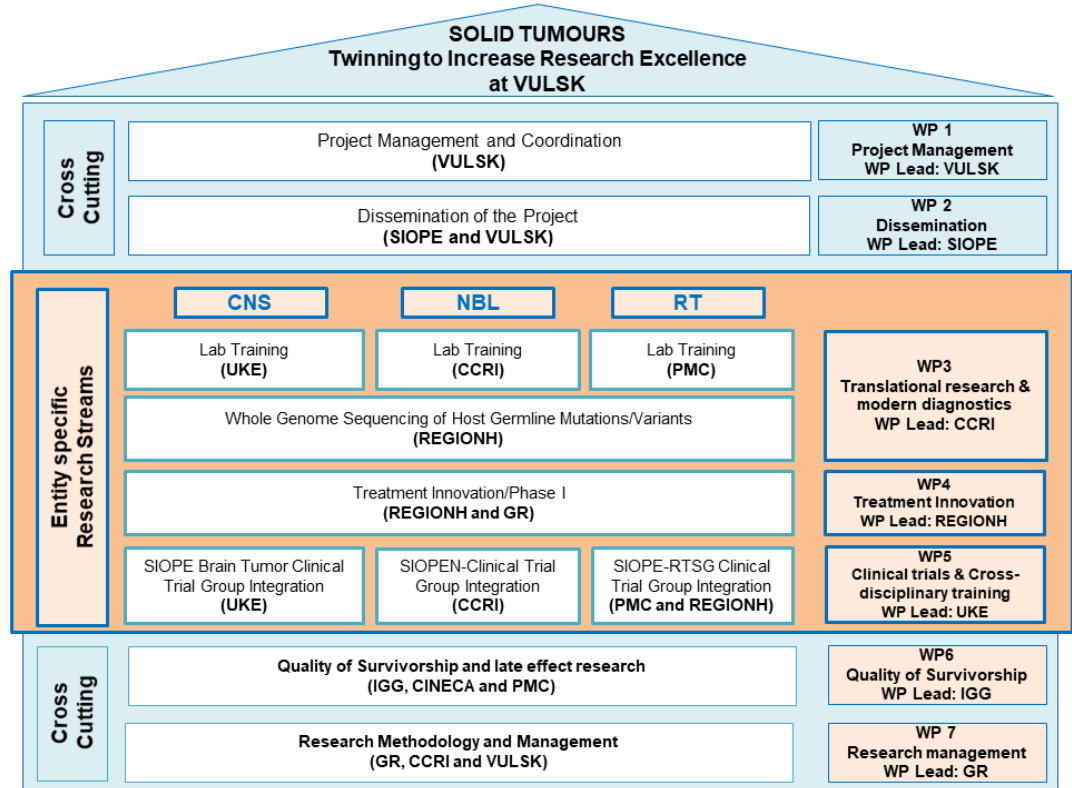
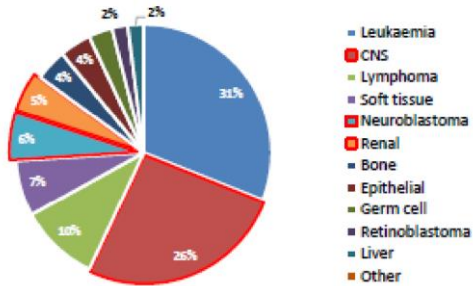
Participant organisation	Country
1. Vilnius Universiteto Ligonine Santaros Klinikos	LT*
2. Children's Cancer Research Institute	AU
3. University Medical Center Hamburg-Eppendorf	DE
4. Region Hovedstaden	DK
5. Princess Maxima Centre	NL
6. Istituto Giannina Gaslini	IT
7. Consorzio Interuniversitario	IT
8. Institute Gustave Roussy	FR
9. European Society for Paediatric Oncology	BE

*Coordinato



TREL Concept

Three most common pediatric solid tumours





TREL Methodology

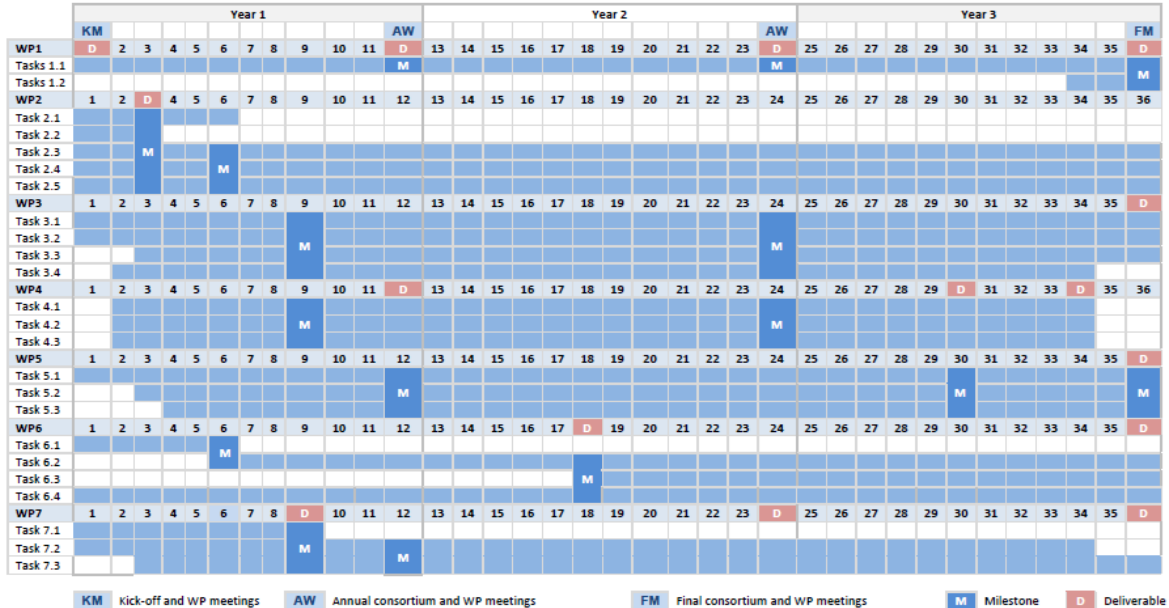
1. Educational meetings at VULSK related to each WP
2. Secondments of VULSK staff to partners' premises
3. Virtual tumour boards using CPMS platform
4. Participation in international WP related knowledge-transfer meetings
5. Research:
 - Biology:
 - Translational research on tumour material
 - Fertility preservation research
 - Clinical:
 - Initiation of clinical trials on CNS, NB and RT
 - Implementation of SurPass – late-effect research



TREL Methodology – Secondment plan

	RECEIVING TRAINING AT				
VULSK staff function & efforts	WP3	WP4	WP5	WP6	WP7
Biologist	REGIONH				
Biologist	CCRI-UKE				
Clinical chemist		IGR-REGIONH			
Clinical pharmacologist		IGR-REGIONH			
Geneticist	REGIONH				
Neurosurgeon			UKE		
Nurse				IGG	CCRI
Oncologist 1	REGIONH	IGR-REGIONH			
Oncologist 2			PMC		
Oncologist 3		REGIONH			
Oncologist 4		IGR		IGG	CCRI
Oncologist 5			CCRI		
Oncologist 6			UKE		
Pathologist 1	PMC-REGIONH				
Pathologist 2	CCRI				
Pathologist 3	UKE				
Pathologist 4			UKE		
Pharmacist		REGIONH			
Radiologist			UKE-CCRI-PMC		

TREL Timeline





TREL Output – Milestones and Deliverables

Milestone N°	Milestone name
MS1.1	Organization of annual consortium meetings
MS1.2	Development of sustainability plan
MS2.1	TREL project logo available
MS2.2	TREL communication tools available
MS3.1	Multidisciplinary workshop at VULSK on the relevance of genome analysis for translational and clinical research
MS3.2	Implementation of illumine methylation 850k arrays technique at VULSK
MS4.1	Multidisciplinary workshop at VULSK on innovative therapies

Deliv. N°	Deliverable name
D1.1	Kick-off package: PAG and AB meetings, reporting templates, distribution lists
D1.2	TREL project annual and final reports
D2.1	Dissemination and Communication plan established
D2.2	Project website launched
D3.1	Report on implementation of new diagnostic techniques in NBL, CNS and RT.
D3.2	Standard operating procedure on work flow of bioinformaticians at VULSK
D4.1	Defining a SOP regulating blood sample take for drug monitoring in clinical practice
D4.2	Standard operating procedure on fresh frozen tumour samples collection and shipment to REGIONH for molecular sequencing
D5.1	Agreement to initiate a clinical trial on CNS tumours signed



TREL Output – Quantitative indicators

Number of:

- **peer-reviewed publications** focused on paediatric solid tumours with higher impact factors;
- **VULSK researchers** (advanced and early stage) have joined international research groups;
- Virtual **tumour boards**/patients discussed
- **tissue samples analysed** for diagnostic purposes using advanced technologies implemented throughout the project
- **agreements** signed to initiate academia-driven and industry-sponsored research projects;
- **survivors** provided with follow-up recommendations due to implementation of **SurPass**
- international research **working groups** including VULSK representatives;
- **cross-border patients** seeking for advice of VULSK specialists



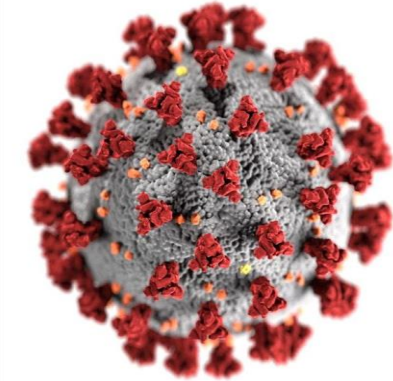
TREL Output – Qualitative impact

- Increased **research excellence** of VULSK
- **Enhanced** reputation, **attractiveness** and networking channels
- **Improved visibility for** industry and academia initiated **innovative actions**
- **Scaling up** follow-up care of cancer survivors and **late-effect research**
- Improved **innovation management** abilities including data and IP protection
- Improved capability of VULSK **to compete for research funding**



To improve survival in childhood cancer

TREL Challenge



Covid19

2021 virtual activities

- Multidisciplinary workshop(s)
- Virtual tumour boards
- Research activities

2021 -2023 – face-to-face twinning



TREL Local Team



Jelena Rascon
TREL Coordinator



Norberta Balaišytė
TREL Project Manager



Alma Čerkauskienė
TREL Coordinator Assistant



Indrė Klimantavičienė
Project manager and administrator



Liuda Grigentienė
Project financial manager

Looking forward to collaborating!

