

DECRETO NR. 14

del 31/01/2025

OGGETTO: BANDO ERAPERMED JOINT TRANSNATIONAL CALL FOR PROPOSALS 2021 – EROGAZIONE IN FAVORE DEL CENTRO CARDIOLOGICO MONZINO IRCCS, PARTNER DEL PROGETTO ACRONIMO PER CARD (ERAPERMED 2021-062) (CUP B47G22000130002)

*L'atto si compone di 30 pagine  
di cui 24 pagine di allegati*

## IL DIRETTORE GENERALE DELLA FONDAZIONE REGIONALE PER LA RICERCA BIOMEDICA

### PREMESSO CHE:

- Il Centro Cardiologico Monzino IRCCS (di seguito "Beneficiario"), Partner nr. 2 del progetto dal titolo *"Personalised Prognostics and Diagnostics for Improved Decision Support in Cardiovascular Diseases"*, Acronimo PerCard, ERAPERMED2021-062, Responsabile Scientifico Prof. Claudio Tondo, è risultato ammesso a finanziamento nell'ambito del programma europeo ERA PerMed JTC 2021 per un importo complessivo pari a € 221.000,00;
- il Beneficiario ha inviato, a FRRB, a mezzo PEC, in data 27.12.2021 (Prot. nr. 20210350E) la *"Dichiarazione di svolgimento di attività non economica ai sensi delle norme in materia di aiuti di Stato"* e la *"Dichiarazione di accettazione del contributo"*;

### CONSIDERATO CHE:

- il progetto Acronimo PERCARD (ERAPERMED2021-062) ha avuto avvio in data 01.02.2022 per una durata di 36 mesi, come comunicato dal Responsabile Scientifico (PEC Prot. 20220018E) del 25.01.2022 e riportato nella Convenzione stipulata tra FRRB ed il Centro Cardiologico Monzino IRCCS;
- il Beneficiario, in fase di avvio progetto, ha comunicato la rinuncia all'anticipo con comunicazione del 07.04.2022 (PEC Prot. 20220103E);
- secondo quanto stabilito dall'Articolo 8.1 della Convenzione sopracitata, l'erogazione al Beneficiario sarà effettuata da FRRB secondo le seguenti modalità:  
*"due tranches successive entro 60 giorni dalla presentazione della prima e della seconda rendicontazione annuale, previa accettazione della documentazione ricevuta da parte di FRRB. L'importo del contributo sarà calcolato in base ai costi eleggibili effettivamente rendicontati da ciascun Beneficiario"*;
- in data 05.05.2023 è stato autorizzato il pagamento della prima rata del contributo pari a € 22.477,21;

### DATO ATTO ALTRESI' CHE:

- in data 11.04.2024 è pervenuta dal Beneficiario (PEC Prot. 20240132E), la documentazione relativa al secondo anno di attività – periodo 01.02.2023 –

31.01.2024- del progetto PerCard, richiesta da FRRB con mail del 18.01.2024;

- in data 01.07.2024 il Direttore Generale di FRRB ha comunicato al Beneficiario l'esito positivo dell'istruttoria di verifica della rendicontazione economica pervenuta richiedendo, al contempo, l'invio della richiesta di erogazione e della dichiarazione sulla ritenuta del 4%;

#### **CONSIDERATO CHE:**

- all'art. 8.3 della Convenzione sopracitata si precisa che:  
*"Nel caso di soggetti privati, l'erogazione del contributo sarà subordinata [...] all'ottenimento, per il tramite della Banca Dati Nazionale Antimafia, della documentazione antimafia (solo nel caso di contributi superiori a € 150.000,00) nei modi e nei termini di cui all'Art. 92 D. Lgs. 159/2011 e successive modifiche;*
- in attuazione a tale articolo FRRB ha per il tramite della Banca Dati Nazionale Antimafia (BDNA), in relazione al Beneficiario, la seguente richiesta di informazione antimafia:  
protocollo nr. PR\_MIUTG\_Ingresso\_0376923\_20241126 del 26.11.2024 per il Centro Cardiologico Monzino IRCCS con sede legale in Milano via Filodrammatici nr. 10;
- alla data odierna, trascorso il termine minimo di 30 giorni dall'invio della nuova richiesta di informazione antimafia relativa al soggetto privato lombardo assegnatario di un contributo superiore a € 150.000,00 nell'ambito del progetto europeo PerCard, FRRB è in attesa del nulla osta da parte della competente Prefettura;
- ai sensi dell'art. 92 comma 3 del D. Lgs. 159/2011 i contributi, i finanziamenti, le agevolazioni e le altre erogazioni possono essere corrisposti sotto *condizione risolutiva* e l'amministrazione interessata può revocare le autorizzazioni e le concessioni o recedere dai contratti, fatto salvo il pagamento del valore delle opere già eseguite ed il rimborso delle spese sostenute per l'esecuzione del rimanente, nei limiti delle utilità conseguite. Le facoltà di revoca e di recesso si applicano anche quando gli elementi relativi a tentativi di infiltrazione mafiosa siano accertati successivamente alla stipula del contratto, alla concessione dei lavori o all'autorizzazione del subcontratto;

**PRESO ATTO** che il Responsabile dell'Area Amministrativa, Dr. Marco Trincavelli, ha verificato che lo stanziamento di € 55.027,86 è finanziariamente sostenibile al capitolo di spesa 20.15.5031, rientrante nei bandi previsti nel Piano di Azione FRRB relativo all'esercizio 2020, approvato da Regione Lombardia con DGR n. XI/3476 del 05/08/2020 e incassato da FRRB in data 09/11/2020;

**VERIFICATA** la regolarità contributiva dell'ente assegnatario del contributo – Fondazione IRCCS Centro Cardiologico Monzino – tramite acquisizione d'ufficio del DURC da parte di FRRB;

**RICHIAMATI:**

- la DGR nr. IX/2401 del 26.10.2011 con la quale la Regione Lombardia ha costituito la "Fondazione Regionale per la Ricerca Biomedica" (di seguito "FRRB"), il cui scopo statutario è quello di promuovere la ricerca scientifica e sanitaria nel settore delle Scienze della Vita;
- la DGR n. XI/5786 del 21.12.2021 con la quale è stato approvato il nuovo Statuto di FRRB;
- DGR XI/3476 del 05.08.2020 con la quale è stato approvato il Piano di Azione 2020;
- la DGR n. XII/1670 del 28 dicembre 2023 con la quale è stato approvato lo schema di Accordo di collaborazione tra FRRB e Regione Lombardia;
- La DDG n° XII/64 del 27/03/2023 avente ad oggetto: "Determinazioni in ordine alla Designazione del Direttore Generale della Fondazione Regionale per la Ricerca Biomedica (FRRB)" e la Deliberazione del Consiglio di Amministrazione di FRRB del 31/03/2023 che ha nominato la Dott.ssa Veronica Comi quale Direttore Generale;

**VISTI:**

- il Regolamento (UE) nr. 1291/2013 del Parlamento Europeo e del Consiglio dell'11 dicembre 2013 che istituisce il Programma Quadro di Ricerca e Innovazione (2014-2020) "Horizon 2020" quale strumento di finanziamento della ricerca scientifica e dell'innovazione per progetti di ricerca o azioni volte all'innovazione scientifica e tecnologica che portino un significativo impatto sulla vita dei cittadini europei;
- il Grant Agreement nr. 779282 firmato il 21.11.2017 tra la Commissione Europea ed un

partenariato internazionale coordinato dall'Istituto de Salud Carlos III e composto da 32 enti provenienti da 23 paesi con il quale è stato approvato il progetto "ERA-Net Cofund in Personalised Medicine — ERA PerMed";

- la Comunicazione della Commissione Europea nr. 2014/C 198/01 "Disciplina degli aiuti di Stato a favore di ricerca, sviluppo e innovazione";
- il Regolamento UE nr. 2021/1237 della Commissione del 23 luglio 2021 che ha modificato il Regolamento UE nr. 651/2014 che dichiara alcune categorie di aiuti compatibili con il mercato interno in applicazione degli articoli 107 e 108 del Trattato;

**ATTESTATE:**

- la regolarità amministrativa contabile da parte del Responsabile dell'Area Amministrativa, Dott. Marco Trincavelli;
- la regolarità tecnica da parte della Responsabile dell'Area Bandi, Progetti e Qualità, Dott.ssa Paola Rebagliati;

**DECRETA**

per i motivi espressi in premessa, parte integrante del presente provvedimento:

- di dare atto che lo stanziamento di € 55.027,86 è finanziariamente sostenibile al capitolo di spesa 20.15.5031, rientrante nei bandi previsti nel Piano di Azione FRRB relativo all'esercizio 2020, approvato da Regione Lombardia con DGR n. XI/3476 del 05/08/2020 e incassato da FRRB in data 09/11/2020;
- di autorizzare la spesa di € 55.027,86 finanziariamente sostenibile al capitolo di spesa 20.15.5029, rientrante nei bandi previsti nel Piano di Azione FRRB relativo all'esercizio 2020, approvato da Regione Lombardia con DGR n. XI/3476 del 05/08/2020 e incassato da FRRB in data 09/11/2020;
- di liquidare in favore dell'IRCCS Centro Cardiologico Monzino con sede legale in Milano, via Filodrammatici nr. 10, un importo pari a € 55.027,86 corrispondente alle spese sostenute e considerate eleggibili da FRRB a conclusione delle attività relative alla seconda annualità del progetto Acronimo PERCARD (ERAPERMED2021-062), di cui € 2.201,11 che FRRB verserà all'erario a titolo di ritenuta 4% e € 52.826,75 a titolo di contributo alla ricerca

- di provvedere alla pubblicazione del presente Decreto sul sito web di FRRB, a cura del Responsabile del procedimento ai sensi della Legge 241/1990, Dott.ssa Giulia Maria Rossignolo;
- di provvedere all'assolvimento degli obblighi di pubblicazione ai sensi del d.lgs. n. 33/2013 da parte del personale incaricato

IL DIRETTORE GENERALE  
Veronica Comi

Il Responsabile dell' Area Amministrativa	Il Responsabile dell' Area Bandi, Progetti e Qualità
Dott. Marco Trincavelli	Dott.ssa Paola Rebagliati

## COST STATEMENT

Rev.0 del 31/10/2022

EU PROJECT (please select)	ERAPERMED	
JTC	2021	
PROJECT ID	ERAPERMED2021-062	
PROJECT TITLE AND ACRONYM	Personalised Prognostics and Diagnostics for Improved Decision Support in Cardiovascular Diseases (PerCard)	
LOMBARDY BENEFICIARY	Centro Cardiologico Monzino I.R.C.C.S.	
NAME OF PRINCIPAL INVESTIGATOR	Prof. Claudio Tondo	
CUP NUMBER	B47G22000130002	
REPORTING PERIOD (FROM-TO)	01/02/2023-31/01/2024	YEAR (please select) 2
IS VAT RECOVERABLE? (YES/NO)	Yes, VAT Pro-rata (85%)	

COST CATEGORIES	TOTAL BUDGET	REPORTING PERIOD 1	REPORTING PERIOD 2	REPORTING PERIOD 3	TOTAL COST STATEMENT	DEVIATION FROM ORIGINAL BUDGET
TOTAL PERSONNEL COSTS	€ 90.000,00	€ 15.849,32	€ 43.976,98		€ 59.826,30	€ 30.173,70
CONSUMABLES	€ 63.000,00	€ 615,17	€ 1.879,57		€ 2.494,74	€ 60.505,26
EQUIPMENT (LEASING OR ON HIRE)	€ 0,00	€ 0,00	€ 0,00		€ 0,00	€ 0,00
TRAVEL & ACCOMODATION	€ 18.000,00	€ 2.266,52	€ 0,00		€ 2.266,52	€ 15.733,48
PUBLICATIONS	€ 6.000,00	€ 0,00	€ 0,00		€ 0,00	€ 6.000,00
OTHER DIRECT COSTS	€ 3.000,00	€ 0,00	€ 0,00		€ 0,00	€ 3.000,00
<b>SUBTOTAL</b>	<b>€ 180.000,00</b>	<b>€ 18.731,01</b>	<b>€ 45.856,55</b>	<b>€ 0,00</b>	<b>€ 64.587,56</b>	<b>€ 115.412,44</b>
OVERHEADS	€ 36.000,00	€ 3.746,20	€ 9.171,31	€ 0,00	€ 12.917,51	€ 23.082,49
SUBCONTRACTING COSTS	€ 5.000,00	€ 0,00	€ 0,00		€ 0,00	€ 5.000,00
<b>TOTAL REQUESTED BUDGET</b>	<b>€ 221.000,00</b>	<b>€ 22.477,21</b>	<b>€ 55.027,86</b>	<b>€ 0,00</b>	<b>€ 77.505,07</b>	<b>€ 143.494,93</b>



**CONSUMABLES***Please refer to the JTC guidelines for the eligibility of costs*

<b>NAME</b>	<b>ITEM DESCRIPTION</b>	<b>INVOICE NR.</b>	<b>INVOICE DATE</b>	<b>PAYMENT DATE</b>	<b>EURO AMOUNT</b>
Eppendorf S.r.l.	Ep Dualfilter T.I.P.S 50-1250ul	220046197	30/06/2023	25/09/2023	189,92
Eppendorf S.r.l.	Provette Eppendorf Safe-lock, 1.5 Ml	220048122	04/10/2023	26/01/2024	129,15
Euroclone Spa	Ps-tube, 5 Ml 12,0/75 Mm,2. 2000 Pcs	7826	30/06/2023	25/09/2023	47,06
Vwr International Pbi S.R.L.	Rack, cryogenic box, comfort, acciaio inossidabile. 25 scomparti 5x5	3074004037	05/10/2023	26/01/2024	172,12
Vwr International Pbi S.R.L.	Rack Cryogenic Box. Scatole H 100m 3x5	3074012998	09/11/2023	26/02/2024	363,22
Vwr International Pbi S.R.L.	Spese Di Trasporto	3074002566	30/09/2023	22/12/2023	9,5
Gway Srl	N. 2 Acrobat Pro For Teams Gen-feb23	1/107	17/03/2023	23/06/2023	80,72
Gway Srl	N.2 Acrobat Pro For Teams Mar-dic23	1/107	17/03/2023	23/06/2023	403,58
Gway Srl	N.2 Acrobat Pro For Teams Gen-dic24	1/107	17/03/2023	23/06/2023	484,3
<b>TOTAL € AMOUNT</b>					<b>1.879,57</b>

**EQUIPMENT (LEASING OR ON HIRE)**

NAME	ITEM DESCRIPTION	INVOICE NR.	INVOICE DATE	EURO AMOUNT	% OF USE OF THE EQUIPMENT FOR PROJECT'S PURPOSES	AMORTISATION MONTHS	EURO AMOUNT
<b>TOTAL € AMOUNT</b>							<b>0,00</b>

**TRAVEL AND ACCOMODATION***Max 10% of direct costs*

NAME	REASON FOR TRAVELING	DESTINATION	PERIOD (FROM - TO)	EURO AMOUNT
<b>TOTAL € AMOUNT</b>				<b>0,00</b>

**PUBLICATIONS***max 5% of direct costs*

NAME	DESCRIPTION	INVOICE NR.	INVOICE DATE	EURO AMOUNT
<b>TOTAL € AMOUNT</b>				<b>0,00</b>

**OTHER DIRECT COSTS***Please refer to the JTC guidelines for the eligibility of costs*

NAME	ITEM DESCRIPTION	INVOICE NR.	INVOICE DATE	PAYMENT DATE	EURO AMOUNT
<b>TOTAL € AMOUNT</b>					<b>0,00</b>

**SUBCONTRACTING***Max 20% of direct costs*

NAME	PROCEDURE APPLIED	DESCRIPTION (provide details on service duration)	INVOICE NR.	INVOICE DATE	EURO AMOUNT
				<b>TOTAL € AMOUNT</b>	<b>0,00</b>

I declare that all the documentation listed in this table is archived at the Beneficiary premises and available in case of financial audits.

Name of the Beneficiary Legal Representative

Ing. Mauro Melis

Signature of the Beneficiary Legal Representative

Date, Place and Stamp:

20 March 2024, Milan

Three handwritten signatures in blue ink, arranged horizontally from left to right. The first signature is a stylized 'M', the second is a circular scribble, and the third is a cursive 'GP'.



**Centro Cardiologico  
Monzino**

Istituto di Ricovero e Cura a Carattere Scientifico  
Via Parea, 4 20138 Milano  
W [www.cardiologicomonzino.it](http://www.cardiologicomonzino.it)

**RICHIESTA EROGAZIONE CONTRIBUTO  
DICHIARAZIONE SOSTITUTIVA DI ATTO NOTORIO  
(D.P.R. 445/2000)**

*Spett.le  
Fondazione Regionale per  
la Ricerca Biomedica  
P.za Città di Lombardia 1  
20124 Milano*

PEC: [fondazioneregionalericercabiomedica@pec.it](mailto:fondazioneregionalericercabiomedica@pec.it)

**OGGETTO: Richiesta di erogazione contributo relativo al progetto ERAPERMED2021-062 (acronimo "PERCARD")**

**TITOLO PROGETTO: Progetto PerCard - ERAPERMED2021-062**

**RESPONSABILE SCIENTIFICO: Prof. Claudio Tondo**

**CODICE CUP: B47G22000130002**

Il sottoscritto Mauro Melis

Nato ad [REDACTED] il [REDACTED]

Residente a [REDACTED]

CAP [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] prov. [REDACTED]

In qualità di Rappresentante Legale dell'Ente Centro Cardiologico Monzino s.p.a.,  
partecipante al progetto in oggetto

con sede legale in comune di Milano

CAP 20121 Via Filodrammatici nr. 10 prov. MI

CODICE FISCALE/PARTITA IVA 13055640158



## Centro Cardiologico Monzino

Istituto di Ricovero e Cura a Carattere Scientifico  
Via Parea, 4 20138 Milano  
W [www.cardiologicomonzino.it](http://www.cardiologicomonzino.it)

INDIRIZZO E-MAIL PEC: [direzione.scientifica@cardiologicomonzino.it](mailto:direzione.scientifica@cardiologicomonzino.it)

### **CHIEDE**

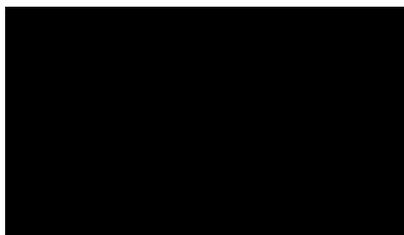
l'erogazione della seconda rata pari a € 55.027,86.

Le coordinate per il versamento sono le seguenti:

- ❖ Banca: BANCA POPOLARE DI SONDRIO
- ❖ Indirizzo: Via Santa Maria Fulcorina 1 – 20123 MILANO
- ❖ Codice IBAN: IT03 I056 9601 6000 0000 2658 X72

Cordiali saluti,  
Milano, 02/07/2024

F.to DIGITALMENTE  
dal LEGALE RAPPRESENTANTE  
(o suo delegato, ai sensi dell'Art. 24  
del DLgs n. 82/2005)





## MODELLO DICHIARAZIONE RITENUTA 4%\*

Il/La Sottoscritto/a **Mauro Melis**

nato/a a [REDACTED]

il [REDACTED]

in qualità di rappresentante legale della società/ente: Centro Cardiologico Monzino I.R.C.C.S.

P. IVA IT13055640158

Cod. Fiscale 13055640158

Domiciliato per la carica in Milano

in (via/piazza) via Filodrammatici, 10

consapevole che le dichiarazioni mendaci sono punite penalmente ai sensi dell'art. 76 del D.P.R. 28 dicembre 2000, n. 445, e che codesta Amministrazione effettuerà controlli, anche a campione, sulle dichiarazioni rese

### DICHIARA

che, ai fini dell'applicazione della ritenuta del 4% prevista dal secondo comma dell'art. 28 del D.P.R. 29 settembre 1973, n. 600, il contributo oggetto della richiesta a cui viene allegata la presente dichiarazione è da considerarsi come segue: (1)

#### SOLO PER ENTI COMMERCIALI

L'ente beneficiario svolge attività commerciale in via esclusiva o principale; **(soggetto a ritenuta)**

#### SOLO PER ENTI NON COMMERCIALI

- L'ente beneficiario, pur non svolgendo attività commerciale in via esclusiva o principale, destina il contributo alla riduzione di oneri gestionali o alla copertura di disavanzi di gestione cui concorrono entrate derivanti da attività di natura commerciale; **(soggetto a ritenuta; nel caso di quota di finanziamento/cofinanziamento U.E., tale quota non è soggetta a ritenuta)**
- Il contributo è destinato unicamente alla copertura di spese o di disavanzi alla cui formazione concorrono solo entrate di carattere istituzionale; (2) **(non soggetto a ritenuta)**
- L'ente beneficiario è un'organizzazione non lucrativa di utilità sociale – ONLUS – (organizzazione iscritta nel registro provinciale di volontariato, cooperativa sociale, ecc., di cui all'art. 10, D. Lgs. n. 460/97); (3) **(non soggetto a ritenuta)**



**IN GENERALE**

- Il contributo viene dichiarato esente dalla ritenuta medesima in virtù di un'espressa deroga ai *sensi della legge* \_\_\_\_\_; (4) **(non soggetto a ritenuta)**

Il sottoscritto **dichiara**, altresì, che provvederà a comunicare tempestivamente eventuali variazioni che dovessero intervenire a modificare la presente dichiarazione, ivi comprese, in particolare, quelle previste dall'art. 149 del D.P.R. 22 dicembre 1986, n. 917 (in rif. alla perdita della qualifica di ente non commerciale).

Data 02 luglio 2024

Firma digitale

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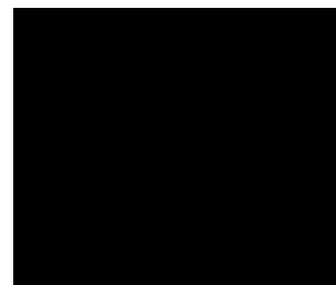
**\*Allegare fotocopia della Carta di Identità o di un documento equipollente.**

(1) apporre una crocetta sul punto interessato

(2) rif. art. 143, comma 1 D.P.R. 22 dicembre 1986, n. 917; le entrate derivano esclusivamente da contributi dei soci o degli Enti Pubblici e comunque, anche nel caso in cui ci fossero entrate di altro genere di natura commerciale, queste ultime vengono gestite con contabilità separata rispetto a quella istituzionale per la quale si richiede il contributo (art. 144, co. 2 D.P.R. 917/86)

(3) rif. art. 16 D.Lgs 460/97.

(4) indicare gli estremi della disposizione normativa.





**INFORMATIVA IN MATERIA DI TRATTAMENTO DEI DATI PERSONALI**  
**ai sensi degli artt. 13 e 14 del Regolamento (UE) 2016/679 (GDPR)**  
**“Modulo raccolta dati Dichiarazione Ritenuta 4%”**

**INFORMATIVA SULLA PRIVACY**

1.  **Titolare del trattamento e DPO** Titolare del trattamento dei dati personali è la Fondazione Regionale per la Ricerca Biomedica, avente sede legale in Milano, Piazza Città di Lombardia nr. 1 con sedi operative in Milano, Piazza Città di Lombardia nr. 1 e in Bruxelles (BE), Casa della Lombardia nr. 2, Place du Champ de Mars - Tel. 02/67650166, e-mail [info@frrb.it](mailto:info@frrb.it), PEC [fondazioneregionalericercabiomedica@pec.it](mailto:fondazioneregionalericercabiomedica@pec.it), sito web [www.frrb.it](http://www.frrb.it).

Al fine di meglio tutelare gli Interessati, nonché in ossequio al dettato normativo, il Titolare ha nominato un proprio DPO, Data Protection Officer (nella traduzione italiana “RPD, Responsabile della protezione dei dati personali”) nella figura del Dottor Ivano Pecis, contattabile scrivendo alla mail [privacy@frrb.it](mailto:privacy@frrb.it) o alla PEC [dpo.frrb@pec.it](mailto:dpo.frrb@pec.it).

2.  **Finalità, Basi giuridiche e tipologia di Dati trattati** FRRB tratta i dati personali esclusivamente per le finalità e in ragione delle basi giuridiche di seguito indicate: i dati personali da Lei forniti sono necessari per gli adempimenti previsti per legge ed in particolare al fine garantire il trattamento dei dati presenti e previsti nel modello “Dichiarazione ritenuta 4%”.

3.  **Autorizzati e Responsabili del trattamento** I dati personali sono trattati da personale dipendente di FRRB, previamente autorizzato al trattamento e appositamente istruito e formato. I dati personali possono essere trattati anche da soggetti esterni, formalmente nominati dal Titolare del Trattamento quali Responsabili del trattamento ai sensi dell’art. 28 GDPR, appartenenti alle seguenti categorie: società che erogano servizi tecnico/informatici; società che erogano servizi di comunicazioni telematiche e, in particolar modo, di posta elettronica; società che erogano servizi di gestione e conservazione documentale; soggetti cui la FRRB ha affidato lo svolgimento dell’istruttoria di ammissibilità/ricevibilità della domanda.

4.  **Destinatarî e Pubblicazione dei dati personali** I dati personali degli Interessati potranno essere comunicati ad altri soggetti che trattano i dati in qualità di Titolari autonomi del trattamento: potranno essere comunicati al personale interno della Fondazione o a consulenti esterni debitamente istruiti dal Titolare. in caso di contenzioso, all’Autorità giudiziaria e ai legali del Titolare.

5.  **Natura del conferimento dei dati** Il conferimento dei dati richiesti è necessario. Il mancato conferimento (totale o parziale) non consente il corretto prosieguo dell’iter amministrativo di valutazione ed eventuale accoglimento della dichiarazione.

6.  **Periodo di conservazione dei dati** I dati personali degli Interessati vengono conservati dalla Fondazione per un periodo di tempo massimo di 10 anni dalla data di sottoscrizione della dichiarazione, fatta salva la necessità di prolungare la conservazione dei dati sino alla definizione di eventuali contenziosi, ovvero sino alla conclusione di eventuali attività di vigilanza e controllo operate da Enti terzi.

7.  **Trasferimento dei dati in Paesi extra-SEE** FRRB può avvalersi, anche per il tramite dei propri Responsabili del trattamento, di società di servizi di comunicazione telematica e, in particolar modo, di posta elettronica, che potrebbero collocare o far transitare i messaggi e le informazioni personali degli utenti anche in Paesi non appartenenti allo Spazio Economico Europeo (SEE) o che in tali Paesi potrebbero salvare copie di backup dei dati. Al fine di garantire un adeguato livello di protezione dei dati personali, queste società possono attuare il trasferimento solo verso Paesi (o settori di questi) che sono stati oggetto di apposite decisioni di adeguatezza adottate dalla Commissione europea, oppure sulla base di Clausole Contrattuali Standard approvate dalla Commissione stessa.

8.  **Diritti dell’Interessato** Il Regolamento (UE) 2016/679 riconosce agli Interessati diversi diritti esercitabili contattando il Titolare o il DPO ai recapiti indicati al punto 1 della presente informativa. Tra i diritti esercitabili, purché ne ricorrano i presupposti di volta in volta previsti dalla normativa (in particolare, artt. 15 e seguenti del Regolamento) vi sono: il diritto di conoscere se la Fondazione ha in corso trattamenti di dati personali che riguardano l’Interessato e, in tal caso, di avere accesso ai dati oggetto del trattamento e alle informazioni a questo relative; il diritto alla rettifica dei dati personali inesatti che riguardano l’interessato e/o all’integrazione di quelli incompleti; il diritto alla cancellazione dei dati personali che riguardano l’interessato; il diritto alla limitazione del trattamento; il diritto di opporsi al trattamento; il diritto alla portabilità dei dati personali; il diritto di revocare il consenso in qualsiasi momento, senza che ciò pregiudichi la liceità del trattamento, basato sul consenso, effettuato prima della revoca. Per ricevere maggiori informazioni sui diritti esercitabili, ciascun Interessato può rivolgersi direttamente al Titolare o al DPO. In ogni caso, l’Interessato ha anche il diritto di presentare un formale Reclamo all’Autorità garante per la protezione dei dati personali, secondo le modalità reperibili sul sito internet [www.garanteprivacy.it](http://www.garanteprivacy.it)

**Joint Transnational Call for Proposals (2021) for**  
“Multidisciplinary Research Projects on Personalised  
Medicine – **DEVELOPMENT OF CLINICAL SUPPORT TOOLS FOR  
PERSONALISED MEDICINE IMPLEMENTATION**”

**2<sup>nd</sup> Annual Report**

 **ERA PerMed**

## 1. General information

Project title	Personalised Prognostics and Diagnostics for Improved Decision Support in Cardiovascular Diseases
Project acronym	PerCard
Project duration (months)	36
Starting date	1.1.2022
Period covered by the report:	01/01/2023 – 31/12/2023
Periodic report:	2nd
Project website and social media accounts	<a href="https://projects.tuni.fi/percard/">https://projects.tuni.fi/percard/</a>

## 2. Project Consortium

### Coordinator (Partner 1):

Affiliation, Address:	Tampere University (TUNI), Kalevantie 4, 33100 Tampere
Country:	Finland
Name of Principal Investigator:	Mark van Gils
E-Mail:	<a href="mailto:mark.vangils@tuni.fi">mark.vangils@tuni.fi</a>
Phone:	+358 50 4066610
Type of institution (academic, clinical, industrial)	academic
Funding Organisation:	Research Council of Finland

### Project Partners:

Partner no.	Affiliation	Country	Name of Principal Investigator	Type of partner (academic, clinical, industrial)
2	Politecnico di Milano (POLIMI)	Italy	Luca Mainardi	academic
3	Centro Cardiologico Monzino (CCM)	Italy	Claudio Tondo	clinical
4	Protestant University of Applied Sciences Ludwigsburg (PUL)	Germany	Kirsten Brukamp	academic

There were no changes in the project team during the reporting period.

### 3. Publishable summary of the context and overall objectives of the projec

PerCard explores the value of combining integrated heterogeneous data sources with AI/ML to increase the validity of risk assessment for cardiovascular disease in different populations. The consortium develops specialised models for populations as well as mitigates the issue of gender-bias in existing risk assessment methods. Emphasis is put on methods that are easily transferable from research to practice and accessible and affordable for the wider population.

PerCard develops and uses new data analysis methods (AI, ML, signal processing, including ensemble classifiers and multi-modal approaches) to develop more powerful risk assessment methods that are accurate, robust, and explainable. The project provides advancements especially in the field of explainable AI and AI for time-series analysis. PerCard delivers an integrated decision support system for understandable personalised risk/prognosis assessment of morbidity and mortality in cardiovascular settings and tests this robustly in retrospective and prospective settings. End-users are involved throughout the entire research, development and validation process. ELSA considerations, including gender, accessibility to all, ethics of AI and decision support are an inherent part of the project.

To capitalise on earlier investments and speed up development, PerCard re-uses large retrospective databases to start with (Finland, Italy). PerCard uses robust validation methods to guarantee generalisability, combining independent test sets as well as prospective test data collection as truly independent reference.

To succeed, PerCard brings together an international interdisciplinary consortium of top-level partners: Tampere University (TUNI, co-ordinator, data analysis and link to Finnish clinical research), Polytechnic University of Milan (POLIMI, data analysis), Centro Cardiologico Monzino (CCM, clinical research), and Protestant University of Applied Sciences Ludwigsburg, Germany (PUL, ELSA considerations).

### 4. General overview of the objectives and deliverables for the period covered

Objectives/Deliverables			
No.	Title	Partner in charge	Short Description
D1.2	Harmonised retrospective data catalogue completed and available to consortium	TUNI	Shifted from period 1 due to using more suitable and valuable database (KARDIO/MADDEC) than originally planned. Different datasets in Finland and Italy were investigated and assessed in relation to the defined use cases. A catalogue listing the different contents and formats of the combined databases is created.
D1.3	Results of cross-validation on retrospective data of the AI/ML methods	TUNI	AI/ML methods developed in WP2 were trained and tested using retrospective data, in first instance from CCM. Work is continuing also in year 3 with further use cases and inclusion of wider retrospective data.
T1.3	Prospective data collection	CCM	Prospective data collection at CCM has started in early 2023 and is continuing.
D2.1	Definition of needs/opportunities for AI-based decision support	POLIMI	Shifted from period 1 due to making it a publication. A literature overview, to which all partners participated, was performed to

	algorithms in prognostics & diagnostics for CVD.		identify current limitations and opportunities, for AI-based decision support in CVD.
D2.2	Open software library for AI-based time-series feature extraction.	POLIMI	Combining all algorithms developed in WP2 that concern signal analysis. Ongoing task, ECG data (some of it in paper form) to be digitized before finalizing this task.
D3.2	Decision Support Software Tool - initial	TUNI	First version of the software tool, implementing the principle of the first chosen use case was presented to the consortium in August 2023. After this, further development continued
D4.2	ELSA recommendations for PerCard		Shifted from year 1 due to delayed start of partner PUL. Summary of the different workshop's recommendations finalised during year 2
D4.3	Qualitative research results.	PUL	Shifted due to delayed start of partner PUL. Preparation of work (interviews, forum discussions with different stakeholders) to be performed in the beginning of year 3.

*Add lines as relevant.*

## 5. Work performed during the reporting period and main results achieved so far

*Please describe the work performed per WP.*

<b>WP 1</b>	<b>Clinical Research and Validation</b>		
Leading Partner: CCM			
Additional involved Partners: TUNI, POLIMI, PUL			
Planned timeline (according to GANTT chart): M1-M36		Actual timeline: M1-M36	
<p><b>Work performed, Challenges, Achievements</b> WP1 continued its work, using the clinical use cases that were defined in the consortium in year 1 as main theme. Two groups of use cases were defined: group 1 dealing with risk assessment of adversary events (esp. atrial fibrillation) after cardiac surgery, and group 2 dealing with longer-term cardiovascular risks and mortality. For group 1, retrospective data at TUNI and CCM that was harmonised, and for this group the prospective CCM data collection has been ongoing in year 2 (forming an independent test set for the developed algorithms and software solution). Group 2 will mainly concentrate on longer-term risk prediction. From CCM, for Group 1 there is a n=1258 CABG and n=2445 post-AMI cases, and for group 2 n=1248 CABG retrospective available. Prospective data-collection matches to the post-AMI data. TUNI retrospective data matches to all 3 CCM groups, in first instance also concentrating on harmonization with the post-AMI set. Complete harmonisation of the different databases from different partners, took longer than originally foreseen due to the extra work required at TUNI side, due to the complexity of the different databases and formats in which the data were stored. However, the added value (both in large number of patients as well as the richness of recordings) fully offsets this delay. Furthermore, the different partners had access to different parts of the CCM databases already before M12, so that the work in WP2 and WP3 could commence. The prospective data collection at CCM is progressing well, with 148 patients enrolled at the</p>			

time of writing, it is being registered at clinicaltrials.gov. Data collection will also continue through the 3<sup>rd</sup> project year to collect as many cases as possible for independent testing with good accuracy.

**Has there been a deviation from the original work plan or from the original timeline?** In year 1 it was decided to use Finnish Anger and KARDIO databases instead of the originally listed Young Finns and Health2000, since they were found more suitable for the selected use cases and were considerably richer in quantity and quality. This also implied more complexity, and longer duration for the harmonization work. This was a well-motivated choice made by the consortium – investing in high-quality scientific results in the long term at the less-significant trade-off of having some delay in the dates of deliverables. The prospective data collection started well. There was a minor temporary break due to staff resourcing issues at CCM in autumn 2023, but these have been resolved. Prospective data collection is continuing also in year 3, to get as many as possible cases as investment for scientifically valuable results.

## WP 2 | New information discovery using AI and ML

**Leading Partner:** POLIMI

**Additional involved Partners:** TUNI, CCM, PUL

**Planned timeline (according to GANTT chart):**  
M1-M36

**Actual timeline:** M1-M36

**Work performed, Challenges, Achievements** WP2 started in T2.1 in year 1 by defining the needs and opportunities for AI-based decision support in CVD with a systematic literature study with a thorough literature study on what is the state of the art and opportunities/requirements regarding AI/ML for cardiac risk prognosis and diagnosis. In year 2 this was compiled into a high-level scientific paper, to allow maximum dissemination and value. The paper was accepted to the journal *Computers in Biology and Medicine* February 2024. Task 2.2 has carried on with initial signal processing and biomarker extraction efforts especially on ECG, based on earlier developed methods at POLIMI. One challenge was the need to digitize paper-based ECGs from retrospective datasets. Tight co-operation with WP3 was in place, especially in the latter half of the reporting period, to transfer selected algorithms to software implementation state in WP3. In Task 2.3, Advanced AI/ML approaches and Explainable AI methods (TUNI) have been investigated to be combined with ML-classification heartbeat-classifier tools developed at POLIMI, this work will be submitted as paper to conference and results will be incorporated in WP3's decision support solution.

**Has there been a deviation from the original work plan or from the original timeline?** Deliverable 2.1, was upgraded from 'standard deliverable' to scientific paper to generate higher impact. This also meant that journal reviews and resubmissions took their time. Otherwise, the tasks have been advancing as planned. Some minor complications arose with need to digitize in the order of 200 paper-ECGs to allow further processing, as well as the fact that we mainly concentrated on CCM data as the large Finnish database was still being prepared. This implies that the D2.2 'Open-software library for time-series feature extraction' will be available in year 3. These considerations do not affect reaching the overall goal of the workpackage though. Also compensating for this, the D2.3 "Open software library for AI-based multivariable decision support in CVD" planned for year 3 is well ahead of schedule in writing. Staff change at POLIMI meant that knowledge needed to be transferred to a new researcher – this went smoothly.

## WP 3 | Personalised CVD Decision Support in Clinical Practice

<b>Leading Partner: TUNI</b>	
<b>Additional involved Partners: POLIMI, PUL, CCM</b>	
<b>Planned timeline (according to GANTT chart):</b> M1-M36	<b>Actual timeline: M1-M36</b>
<p><b>Work performed, Challenges, Achievements</b> After defining the initial version of the requirements for a Decision Support Solution in the first year, the work proceeded towards the first implementations. A workshop with clinical experts was held in January 2023 in Milan, further elaborating scenarios and user preferences for the chosen use cases. After this, the software development work was started and a first deployable proof-of-principle prototype (with 'placeholder' patient data) was discussed together with the consortium in August 2023. Towards the end of the reporting period, tight co-operation with WP2 led to the transfer of the first WP2 algorithms to the Decision Support Software tool implementation. A first functional version was available for the consortium in M26. This work is in continuous co-operation with WP4 (ELSA considerations) and WP1 (clinical input), and has been carried out with active participation from all partners.</p>	
<p><b>Has there been a deviation from the original work plan or from the original timeline?</b> T3.2 and T3.3 started later than planned, due to the fact that they need results from WP2 first, as well as the final harmonized data from WP1. Work proceeded, in first instance using algorithms based on CCM retrospective data that was available. Widening algorithm tuning with TUNI data is happening at the start of period 3. This shift in timing, however, has no consequence for the software implementation of WP3 itself.</p>	

<b>WP 4</b>	<b>Ethical, Legal and Societal Aspects (ELSA)</b>
<b>Leading Partner: PUL</b>	
<b>Additional involved Partners: TUNI, POLIMI, CCM</b>	
<b>Planned timeline (according to GANTT chart):</b> M1-M36	<b>Actual timeline: M1-M36</b>
<p><b>Work performed, Challenges, Achievements</b> The work concentrated on continuation of tasks, especially T4.2 (ELSA integration): in tight interaction with all partners, and in particular WP3 and WP2 - it was discussed how the different aspects regarding especially Ethical and Legal aspects play a role in Decision Support Systems for CVD. Also, the ELSA aspects have been taken up as part of the literature review in WP2. The fact that the formal approval of the German funding organisation (for WP4 leader PUL) took well until the end of the first year to be finished, caused staff recruitment delays for partner PUL. These were solved in year 2, and all the work had been done via the extra efforts of the PI of PUL, which was a major achievement. At the end of the reporting period concrete plans were advancing for the qualitative research (interview and focus group meetings) with clinicians, former patients, academics and industry representatives from Italy, Finland and Germany.</p>	
<p><b>Has there been a deviation from the original work plan or from the original timeline?</b> Overall the timeline of WP4 had a delay due to late formal approval from the German funding organization. This delay has been largely reduced during year 2.</p>	

<b>WP 1</b>	<b>PerCard management</b>
<b>Leading Partner: TUNI</b>	
<b>Additional involved Partners: POLIMI, CCM, PUL</b>	

Planned timeline (according to GANTT chart): M1-M36	Actual timeline: M1-M36 M1-M36
<p>Work performed, Challenges, Achievements Project management (T5.1) continued throughout the year 2. Two face-to-face meetings, in Milan in January and Ludwigsburg in October, were major consortium-wide events. These were complemented by monthly/bi-monthly meetings with the different PI's as well as WP-specific meetings (See Sec 5). An Advisory Board meeting was held (M20) with participation of patient organisation and industry representatives with useful feedback that was taken to heart in the further implementation work. Further dissemination continued nationally and internationally (See Sec 9). One researcher from Polimi has been granted 'affiliated researcher staff position' to TUNI to co-operate efficiently in data-analysis in WP2, this is to be extended to also include CCM researchers. Risk tables were discussed and updated in every consortium wide meeting. Overall the progress is going well, and the atmosphere of co-operation good – all partners are contributing actively. Some deliverables were decided to be delivered to somewhat later in time (see WP discussions). This was as a well-thought out trade-off of reaching scientific significant impact vs calendar months in the original Gantt chart.</p>	
<p>Has there been a deviation from the original work plan or from the original timeline? As discussed, the decision to use a richer retrospective database in Finland meant more harmonization work – this resulted in a delay of the full retrospective dataset. This was not a major issue as other WP work could proceed with CCM data as start.</p>	

## 6. Transnational Collaboration, Meetings and Mobility

Describe consortium meetings (physical and virtual) including more than 2 partners (date, location, purpose, results).

<i>Participants</i>	<i>Date</i>	<i>Location</i>	<i>Purpose</i>	<i>Results</i>
All partners	26-27.1.2023	POLIMI and CCM, Milan	Face-to-face consortium meeting, updates and planning	Agreed actions for the next half year
All partners	14.4.2023	on-line	Update of progress in all WPs, planning of next steps	Agreed actions for next months
All partners	4.7.2023	on-line	Update of progress in all WPs, planning of next steps	Agreed actions for next months
All partners	21.8.2023	on-line	Demonstration and feedback on 1 <sup>st</sup> SW prototype	Inputs to further development
All partners + Advisory Board	12.9.2023	on-line	Project progress presentation and discussion	Inputs for further project directions

<i>Joint PerCard WP2-WP3 Meeting</i>	<i>4.10.2023</i>	<i>On-line</i>	<i>Plan integration of WP3 algorithm into WP3 DSS</i>	<i>Criteria and requirements for deployment defined.</i>
<i>All partners</i>	<i>12-13.10.2023</i>	<i>PUL, Ludwigsburg</i>	<i>Face-to-face consortium meeting, updates and planning</i>	<i>Agreed actions for the next half year</i>
<i>All partners</i>	<i>11.12.2023</i>	<i>on-line</i>	<i>Update of progress in all WPs, planning of next steps</i>	<i>Agreed actions for next months</i>
<i>Additionally, all WPs had focussed meetings in which several partners discussed together on work topics (eg data harmonization, algorithm development, joint paper writing, SW development, ELSA considerations). They are not listed separately here, but estimated to be in the order of &gt;20 meetings</i>				

*Please describe the benefits and the synergies of the collaboration including: any joint project or initiative, any staff exchange or cross-country recruitment, training opportunities for new staff, any obstacles to the transnational collaboration and the proposed solution (max 2,000 characters including spaces).*

The collaboration has worked well. Mainly co-operation has been working by having on-line planning and feedback meetings and then all staff working at their respective locations. TUNI and POLIMI have agreed to have one POLIMI staff member as 'external TUNI staff' to allow better co-operation with data analysis and access to ICT systems in practice. This will be extended to also include CCM staff in year 3. TUNI and POLIMI participated successfully to a HEU proposal in the field of CVD risk assessment using data-driven approaches (hypertrophic cardiomyopathy), "SMASH-HCM (Stratification, Management, and Guidance of Hypertrophic Cardiomyopathy Patients using Hybrid Digital Twin Solutions)" [https://www.linkedin.com/showcase/smash-hcm-project/?trk=organization\\_guest\\_main-feed-card\\_feed-actor-name](https://www.linkedin.com/showcase/smash-hcm-project/?trk=organization_guest_main-feed-card_feed-actor-name). It will guarantee further co-development of methods started in PerCard and expansion of co-operation and network, and recruitment and employment of staff at both TUNI and POLIMI. The 10M€ project is co-ordinated by TUNI and will run 2024-2027. TUNI and PUL are together in a two-stage EU proposal on multi-source data analysis, that successfully advanced to the second stage of the HORIZON-HLTH-2024-STAYHLTH-01-05-two-stage call. The topic is data-driven solutions for diabetes and depression patients. Here we further expand the ELSA collaboration. Full proposal deadline is 11 April 2024.

## 7. Data Management Plan

*Please describe all changes (if any) from the strategy described in the Data Management Plan (DMP) sent to the ERA PerMed Joint Call Secretariat. (Max. 2,000 characters including spaces).*

With the focussing of the use case, and comparison of the exact properties of the retrospective databases in Finland and Italy, it was realised that there are more suitable alternatives for the 2 earlier envisioned databases (YoungFinns and Health 2000) –we use now the Angesc data (including angiography), and in particular the MADDEC data ([https://link.springer.com/chapter/10.1007/978-981-10-5122-7\\_278](https://link.springer.com/chapter/10.1007/978-981-10-5122-7_278)) that have a considerably richer content (both in number of subjects as well as data features), and are more compatible with the CCM retrospective, and especially prospective data. This requires updates to Sec 1.3, Types of Data, of the DMP, that will be done at the start of year 3, once all data are stable.

## 8. Patients Involvement

Does your project involve a patient representative/organization? ~~yes~~/no: Finnish Heart Association

What is the role(s) of the patient representative(s)/organization(s) in your project (please select all that apply)?

INVOLVEMENT (where patient representative/organization are actively involved in the research project):

- Involvement in identifying research priorities within the project
- Serving as members of the project advisory or steering committee(s)
- Commenting and developing patient information leaflets or other research materials
- Undertaking interviews with research participants
- Carrying out specific aspects of the research projects
- Other (please specify)

PARTICIPATION (where patients take part in the research study):

- People being recruited to a clinical trial
- Completing a questionnaire or participating in a focus group as part of a research study
- Other (please specify)

ENGAGEMENT (where information and knowledge about research is provided and disseminated):

- Scientific conferences/open day with debates and discussions on research where patient representative(s)/organization(s) are invited to find out about the research projects
- Raising awareness of the project through media such as television programmes, newspapers and social media
- Dissemination to patient organizations and the patient community on the findings of a study
- Other (please specify)

## 9. Peer Reviewed Articles

Only include publications after the start date of the project, **with clear acknowledgement of ERA PerMed funding**: "This project was supported by [name of funding organization, or an acknowledgment as requested by your national funding organization], under the frame of ERA PerMed."

Type of Publication*	Partner No	Publication (authors, title, journal, year, issue, pp.)	DOI	Open access (yes/no)	Confirmation **
Article in journal	1,3,4	ACCEPTED February 2024: ECG-based data-driven solutions for diagnosis and prognosis of cardiovascular diseases: A systematic review Pedro A. Moreno-Sánchez*, Guadalupe García-Isla, Valentina D. A. Corino, Antti Vehkaoja, Kirsten Brukamp, Mark van Gils, Luca Mainardi. Computers in Biology and Medicine, 2024.		yes	<input checked="" type="checkbox"/>
Publication in conference proceedings,	1	ACCEPTED February 2024: Enhancing Arrhythmia Diagnosis with Data-Driven Methods: A 12-		yes	<input checked="" type="checkbox"/>

compiled in book series		Lead ECG-Based Explainable AI Model. Emmanuel C. Chukwu ~Emmanuel_C._Chukwu , Pedro A. Moreno-Sánchez. Proc Nordic Conference on Digital Health and Wireless Solutions, Oulu, May 2025, Springer Nature, 2025			
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Add lines as relevant.

\* Type of publication: Article in journal, Publication in conference proceedings, Books-Monographs.

\*\* I, the coordinator, confirm that this publication includes content generated within our ERA PerMed project and that ERA PerMed was acknowledged as indicated above.

## 10. Further Dissemination Activities

Only include publications and activities after the start date of the project.

Type of dissemination activity*	Partner No	Description	Link	Target audience**
Workshop/seminar	1	1.3.2023 Presentation at University of Twente, The Netherlands	n/a	Biomedical Technology Research community
Workshop/seminar	2	1.4.2023 Presentation of PerCard at Politecnico di Milano Open Day	n/a	Perspective Master Students and PhDs
Workshop/seminar	1	5.4.2023 Presentation of the project and its objectives as a part of a talk: "Measurement and AI methods for risk prediction and assessment of cardiac and vascular patients" at the spring seminar of Finnish Cardiovascular Research Center Tampere.	n/a	Researchers and principal investigators mainly in clinical medicine field, also biomedical engineering.
Conference	1	4.5.2023 International Conference on Welfare Technology, Seinäjoki Finland	<a href="https://sedu.fi/ecwt-conference-evidenced-the-importance-and-broadness-of-welfare-technology/?lang=en">https://sedu.fi/ecwt-conference-evidenced-the-importance-and-broadness-of-welfare-technology/?lang=en</a>	Researchers, healthcare professionals, medical device manufacturers and service providers, students
Workshop/seminar	1	22.5.2023 Presentation at Brunel University, UK	n/a	Computer science and biomedical research community
Communication in a scientific conference	4	21.6.2023 Talk (K.B.) as well as published abstract and poster presentation: "Kirsten Brukamp, Luca Mainardi, Claudio Tondo, Mark van Gils: Personalisierte Prognostik und Diagnostik	n/a	Scientific community

		für eine verbesserte Entscheidungsunterstützung bei kardiovaskulären Erkrankungen: Künstliche Intelligenz in der Gesellschaft (PerCard-KIG)" [i.e. in English: "Kirsten Brukamp, Luca Mainardi, Claudio Tondo, Mark van Gils: Personalised Prognostics and Diagnostics for Improved Decision Support in Cardiovascular Diseases: Artificial Intelligence in Society (PerCard-KIG)", ELSA status seminar for funding programs, Federal Ministry of Research and Education (i.e. "Bundesministerium für Bildung und Forschung" BMBF) in Germany (funding sponsor), Berlin, Germany, June 21, 2023		
Communication in a scientific conference and training program for PhD students	4	5.7.2023 Talk: "Forschung und Entwicklung für Gesundheitstechnologien im Kontext der Sozial-, Verhaltens- und Wirtschaftswissenschaften" [i.e. in English: "Research and development for health technologies in the context of social, behavioral, and business sciences"], PhD student training program at universities of applied sciences in the federal state Land Baden-Württemberg, Technical University Stuttgart, Stuttgart, Germany, July 5, 2023	n/a	Scientific community: PhD students
Communication in a scientific conference	4	20.7.2023 Talk: "Artificial Intelligence in Health Care: Empirical Data from Research and Development Projects", 16th World Congress of Bioethics WCB, Basel, Switzerland, July 20, 2022	see below (1)	Scientific community
Workshop/seminar	1	7.11.2023 Presentation for Czech Ambassador to Finland, Finland	n/a	Researchers, policy makers, government representative
Communication in a scientific conference	4	21.11.2023 Talk: "Personalised Prognostics and Diagnostics for Improved Decision Support in Cardiovascular Diseases	n/a	Scientific community

		(PerCard)", EU Research Networking Meeting, University Albstadt-Sigmaringen, Campus Sigmaringen, Sigmaringen, Germany, November 21, 2023		
Communication in a talk at a university	4	22.11.2023 Talk: "Gesundheitstechnologien und Künstliche Intelligenz für Behandlungsunterstützung und Risikoerkennung in der Medizin" [i.e. in English: "Health Technologies and Artificial Intelligence for Treatment Support and Risk Assessment in Medicine"], Kiel University, Kiel, Germany, November 22, 2022	n/a	Scientific community
Communication in multiple talks at a university	PUL	Talks in courses on (1) research methods, (2) research project development, (3) project management, (4) health care innovations, study programs in Nursing (B.A.), Social Work (B.A.), and Social Work (M.A.), Protestant University Ludwigsburg, Ludwigsburg, Germany, 2022 and 2023	see below (2)	Academic community: Bachelor's and Master's students
Workshop/seminar	1	30.11.23. Poster presentation titled "Explainable AI analysis of a prediction model for detecting premature atrial and ventricular complexes" in the research days of Faculty of Medicine and Health Technology of Tampere University. The content of the poster is part of the works performed in T2.3	n/a	Scientific and industry community from Tampere region.

## Internet links:

(1) [https://organizers-congress.org/frontend/index.php?page\\_id=7871&v=List&do=15&day=all&ses=3737#anker\\_session\\_3737](https://organizers-congress.org/frontend/index.php?page_id=7871&v=List&do=15&day=all&ses=3737#anker_session_3737) [February 20, 2024]

(2) <https://www.eh-ludwigsburg.de/en/university/directory-of-persons/detail/k.brukamp> [February 20, 2024]

*Add lines as relevant.*

\* *Type of publication or dissemination activity: Master/PhD/MD thesis; Communication in scientific conferences or workshops; dissemination to the general public; e.g. Organisation of a Conference/Workshop, Press Release, Exhibition, Flyers, Social media, Web-site, Communication campaign; Other (please specify).*

\*\* *Target audience: scientific community, general public, policymakers, industry, etc.*

## Durc On Line

Numero Protocollo	INPS_43136047	Data richiesta	22/10/2024	Scadenza validità	19/02/2025
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Denominazione/ragione sociale	CENTRO CARDIOLOGICO S.P.A. "FONDAZIONE MONZINO" IN FORMA ABBREVIATA CENTRO CARDIOLOGICO MONZINO S.P.A.
Codice fiscale	13055640158
Sede legale	VIA FILODRAMMATICI 10 MILANO MI 20121

Con il presente Documento si dichiara che il soggetto sopra identificato **RISULTA REGOLARE** nei confronti di

I.N.P.S. I.N.A.I.L.
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Il Documento ha validità di 120 giorni dalla data della richiesta e si riferisce alla risultanza, alla stessa data, dell'interrogazione degli archivi dell'INPS, dell'INAIL e della CNCE per le imprese che svolgono attività dell'edilizia.