



W DAWAKO[®]
Wearable Bioimaging in Motion[™]

Jornada Ayudas para empresas innovadoras

NEOTEC 2022 | EXPERIENCIA

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ABOUT US

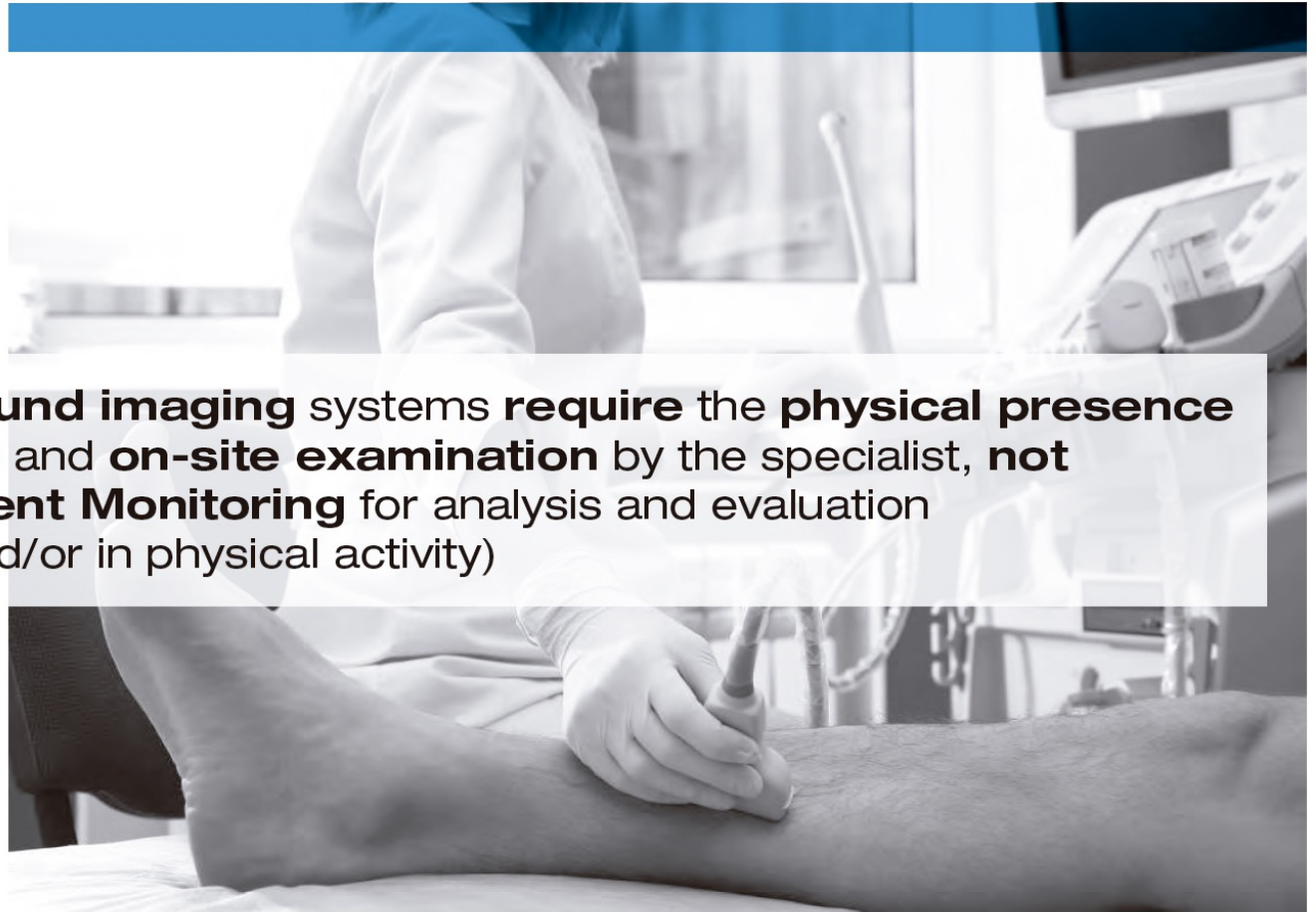
Next-generation
Wearable Ultrasound Imaging
AI-powered technology
for Remote Patient Monitoring



[DAWAKO Envision video](#)

Dawako Medtech is a medical device startup, established in the University of Valencia Science Park (Spain) in the summer of 2018, with the vision of enabling a new paradigm of **Wearable Bioimaging Solutions** for **Digital Health** and **Precision Medicine** to improve human health and physiological performance

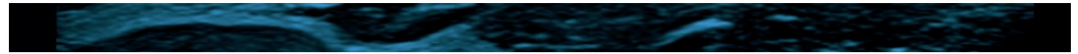
THE PROBLEM



Current medical **ultrasound imaging** systems **require** the **physical presence** of the patient in the clinic and **on-site examination** by the specialist, **not allowing Remote Patient Monitoring** for analysis and evaluation (in-home, ambulatory and/or in physical activity)

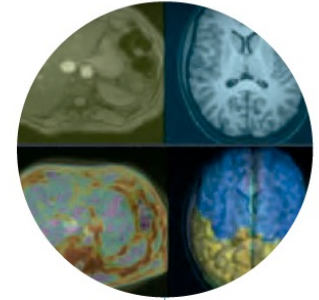
Other disadvantage of current ultrasound imaging technologies

- Underused technology and **limited use** to trained healthcare professionals
- **Operator-dependent** systems and subject to interpretation (ambiguity)
- Inconvenient: specialist **time consumption** and need for **clinical setting**
- **High-cost:** the price of an ultrasound system ranges from \$2k - \$100k



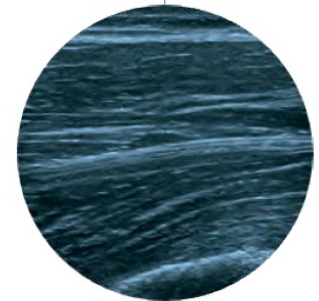
Quantitative Imaging Biomarker and Radiomics

- **Quantitative Imaging Biomarker** is the extraction of **quantifiable features** from **medical images** for the assessment of normal (findings) or the severity, degree of change or status of a disease, injury or chronic condition relative to normal (findings)*
- **Radiomics** refers to the process of extracting large amounts of features from radiologic images and combining them with clinical, biological, genetic, or any other type of complementary data to build diagnostic, prognostic, or predictive models **
- In summary, the **Radiomics processes** includes: (1) image acquisition, (2) image segmentation, (3) feature extraction, (4) feature selection and classification (model building), and (5) statistical and radio-informatics analyses***



Ultrasound Imaging technology

- Is one of **the most common diagnostic imaging methods** used in the **diagnosis** of tumors in the thyroid, breast, prostate, liver, pancreatic, ovarian, uterine and kidney
- Ultrasound imaging is a **convenient technique to visualize normal and pathological tissue** as it is **non-invasive** and **real-time**. As there is **no ionizing radiation**, serial follow up studies can be performed to check for recurrence using ultrasound



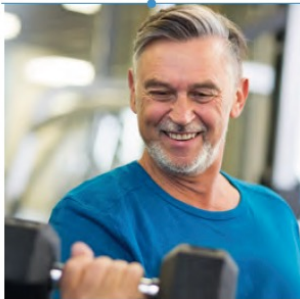
Source: * Sullivan et al., 2015. ** Bach Cuadra M et al., 2020. *** Gillies et al., 2016

THE NEW PARADIGM



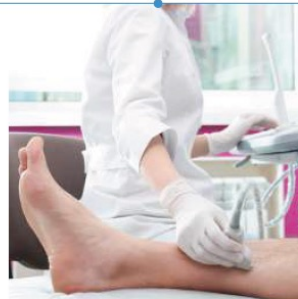
DAWAKO enables the new paradigm in the field of traditional medical imaging systems, based on the next-generation of **Wearable Ultrasound Imaging AI-powered technology for Remote Patient Monitoring and intelligent analysis of Quantitative Imaging Biomarkers** along with physiological parameters in a cost-effective way, with impact and application in three (3) **clinical domains**:

Geriatric / Aging & Clinical Nutrition



Early diagnosis and effective intervention of **Sarcopenia** syndrome

Sports Medicine & Physical Therapy



Personalized care on MSK Health & Rehabilitation
(Return-to-Play)

Clinical Research



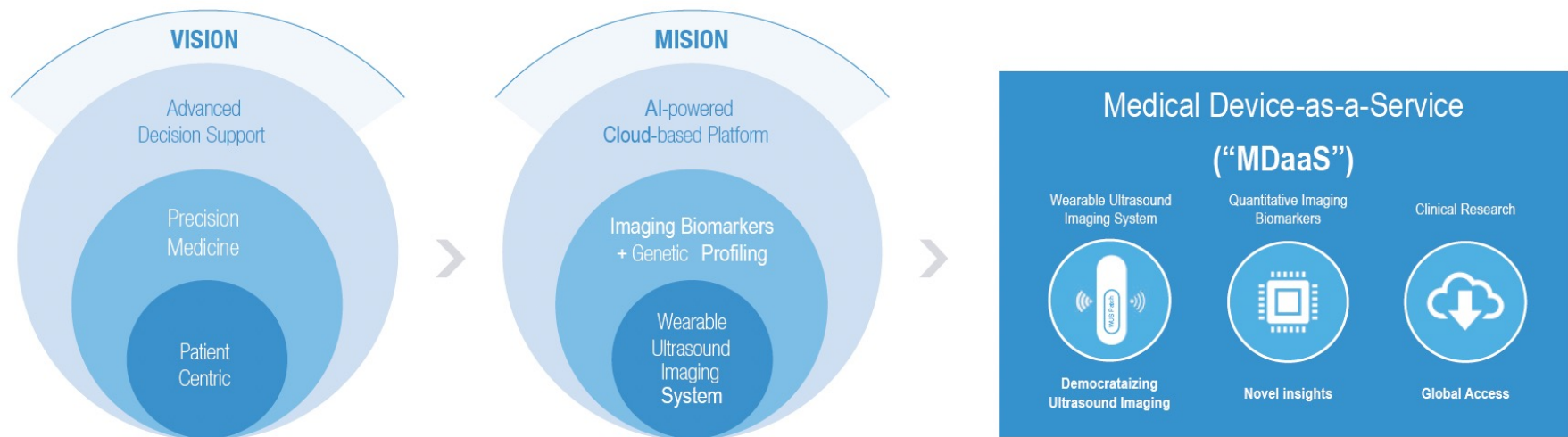
Clinical trials / CROs
(Oncology & Cardiology)

THE NEW PARADIGM



The Dawako Medtech's next-gen **Wearable Bioimaging technology** enables an innovative business model

Medical Device-as-a-Service (“MDaaS”)



WEARABLE ULTRASOUND AND AI-POWERED IMAGING TECHNOLOGY



DAWAKO's **Wearable Bioimaging technology** integrates two (2) systems:

- **Wearable Ultrasound® Imaging Patch** a novel multi-modal system that simultaneously acquires ultrasonic imaging, bioelectric signals, oxygenation status and/or biochemical measurements – including but not limited to electromyography (“EMG”), electrocardiography (“ECG”), and/or photoplethysmography (“PPG”) – in various biomedical and clinical applications

- **PIIXMED™ Ultrasound Imaging System** is a Software-as-a-Medical Device (SaMD) based on proprietary AI-algorithms for the extraction of quantitative imaging biomarkers and advanced analysis of ultrasound images along with physiological parameters for Remote Patient Monitoring and the generation of advanced structured reports

PUBLIC FUNDING 2020-2023

ENISA 2020 | Plan de empresa + Ampliación Capital
AVI-INNEST 2021-2023 | Proyecto iSARC-GENETICS
CDTI - NEOTEC 2022-2023 | Proyecto WUS System



Actuación cofinanciada por la Unión Europea a través del Programa Operativo del Fondo Europeo de Desarrollo Regional (FEDER) de la Comunitat Valenciana 2014-2020



PUBLIC FUNDING 2020-2023

CDTI - NEOTEC 2021

Proyecto Wearable Ultrasound (WUS) System



ANEXO II COMISIÓN DE EVALUACIÓN DE SUBVENCIONES NEOTEC 2021 - Propuestas Elegibles											
Expediente	Título Proyecto	Solicitante	NIF	Presupuesto	Subvención	Nota Final	Valoración plan explot.	Valoración Tecnolog. Innov	Capac. Gestion Equipo	Valoración Impacto	
SNEO-20211303	FUSIÓN DE SILICIO PARA ALMACENAMIENTO ELÉCTRICO	SILBAT ENERGY STORAGE SOLUTIONS SL	B-88425236	370.492,00	314.918,2	90,50	27	33	27	3,5	
SNEO-20211465	DESARROLLO DE SENSORES ÓPTICOS DE AMPLIO ESPECTRO BASADOS EN GRAFENO Y PUNTOS CUÁNTICOS	QURV TECHNOLOGIES SL	B-01735406	787.395,00	325.000	90,00	26,5	33,5	26	4	
SNEO-20211014	PLATAFORMA DE COHERENT QUANTUM ANNEALING PARA APLICACIONES DE OPTIMIZACIÓN DE PROCESOS Y MACHINE LEARNING	QILIMANJARO QUANTUM TECH SL	B-67429670	391.343,00	325.000	90,00	28	33	25	4	
SNEO-20211172	AVANCES EN AUTO-ATENCIÓN, APRENDIZAJE INCREMENTAL Y NEURO-EVOLUCIÓN, TRAZABILIDAD INTELIGENTE Y AUTOMÁTICA DE MERCANCÍAS	ALLREAD MACHINE LEARNING TECHNOLOGIES SL	B-674111918	452.049,00	324.999	90,00	28	30	28	4	
SNEO-20211017	PLAN DE EMPRESA DE ONA THERAPEUTICS S.L.	ONA THERAPEUTICS SL	B-67371484	468.009,00	325.000	89,00	24,5	32	28	4,5	
SNEO-20211491	APLICACIÓN DESCENTRALIZADA PARA LA EMISIÓN DE SECURITY TOKENS	BRICK TOKEN SL	B-67557603	404.780,00	325.000	89,00	26	30	29	4	
SNEO-20211147	ENAI: PLATAFORMA DE MACHINE LEARNING PARA ENTRENAR INTELIGENCIAS ARTIFICIALES	NEURAPTIC SL	B-71411128	485.994,00	325.000	87,50	26	32	27	2,5	
SNEO-20211018	PLAN DE EMPRESA ONECHAIN IMMUNOTHERAPEUTICS S.L.	ONECHAIN IMMUNOTHERAPEUTICS SL	B-01634310	382.998,00	325.000	86,50	25,5	30,5	26,5	4	
SNEO-20211048	SISTEMA DE ALARMA TEMPRANA PARA EL CONTROL DE INFRAESTRUCTURAS MEDIANTE ALGORITMOS DE INTELIGENCIA ARTIFICIAL	DETEKTIA EARTH SURFACE MONITORING SL	B-42222570	380.940,00	323.799	86,50	24,5	30	28	4	
SNEO-20211217	ECOSISTEMA CACIA: CONTROL AUTÓNOMO DE CALIDAD BASADO EN INTELIGENCIA ARTIFICIAL	INDEEP VISION SL	B-55348643	376.354,00	250.000	86,00	25	30	28	3	
SNEO-20211094	SISTEMA INTELIGENTE DE PROSPECCIÓN DE VENTAS PARA EMPRESAS B2B, BASADO EN MECANISMOS AVANZADOS DE INTELIGENCIA ARTIFICIAL Y TÉCNICAS DE BIG DATA	BLOOBIRDS SL	B-67294611	379.320,00	250.000	86,00	28	29	25	4	
SNEO-20211323	AITHENA MODELO DE VUELO	IENAI SPACE SL	B-88350517	388.730,00	325.000	85,50	23,5	32,5	25,5	4	
SNEO-20211524	EGPAI, LA PRIMERA INTELIGENCIA ARTIFICIAL DE PROPÓSITO GENERAL EUROPEA	AVATAR COGNITION BARCELONA SL	B-67263830	402.994,00	325.000	85,50	25	32	25	3,5	
SNEO-20211459	PLATAFORMA COLABORATIVA DE GESTIÓN INTELIGENTE E INTEGRAL DE CONTRATOS BASADA EN PROCESAMIENTO DE LENGUAJE NATURAL EN EL ÁMBITO JURÍDICO Y EN IDIOMA ESPAÑOL	BOUNSEL SL	B-40556524	382.445,00	325.000	85,50	24,5	28	28,5	4,5	
SNEO-20211149	MOTOR ALGORÍTMICO MATEMÁTICO PARA EL TRANSPORTE URBANO EN VEHÍCULO COMPARTIDO	HOOP SOLUTIONS SL	B-88304126	378.669,00	321.868,65	85,50	27	27	27,5	4	
SNEO-20211269	G2-ZERO - FUENTES DE FOTONES INDIVIDUALES PLUG AND PLAY	G2ZERO SL	B-02924728	376.532,00	320.052	85,00	28,5	33,5	20	3	
SNEO-20211202	DESARROLLO DE UN SISTEMA INTEGRAL DE DATOS DE ALTA FIDELIDAD E INTELIGENCIA CLIMÁTICA PARA EVALUAR IMPACTOS DE CAMBIO CLIMÁTICO EN ACTIVOS Y OPERACIONES	CLIMATE SCALE SL	B-67496059	381.405,00	324.194,25	85,00	28	30	23	4	
SNEO-20211490	BITERIGHT: AUTOMATIZACIÓN DE TRATAMIENTOS PROTÉSICOS DENTALES MEDIANTE MACHINE LEARNING & INGENIERÍA DE PROCESOS	ADVANCED DENTAL SYSTEMS SL	B-02748424	358.000,00	250.000	85,00	25	29	27	4	
SNEO-20211084	SISTEMA INTELIGENTE DE IMAGEN BIOMÉDICA PARA LA MONITORIZACIÓN REMOTA DE PACIENTES Y EL ANÁLISIS DE BIOMARCADORES DE IMAGEN CUANTITATIVOS DE PARÁMETROS FISIOLÓGICOS	DAWAKO MEDTECH SL	B-40514416	396.350,00	325.000	85,00	24	29	28	4	
SNEO-20211432	DIVILO: UNA ENTIDAD DE PAGO CON LICENCIA EN BANCO DE ESPAÑA 100% DIGITAL CREADA PARA FACILITAR A LAS EMPRESAS Y AUTÓNOMOS EL ACCESO A UN SISTEMA DE PAGO Y COBRO SEGURO, TRANSPARENTE Y EFICIENTE EN EL MERCADO GLOBAL	DIVILO FINTECH SL	B-88581129	363.576,00	250.000	85,00	28,5	28	25	3,5	

PUBLIC FUNDING 2020-2023



CDTI - NEOTEC 2021

Proyecto Wearable Ultrasound (WUS) System

- **Experiencias previas:**

2008-2021

- **Lecciones aprendidas:**

Plan de comercialización (BP asunciones + LOIs)

Tecnología Innovadora (saber comunicar, IPR)

Equipo (experimentado y con capacidad de gestión)

Impacto (generación de empleo, PhD)



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