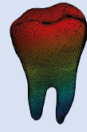


INNOWIDE PROJECT: Helping SMEs go global

OralSIM
www.oralSIM.es



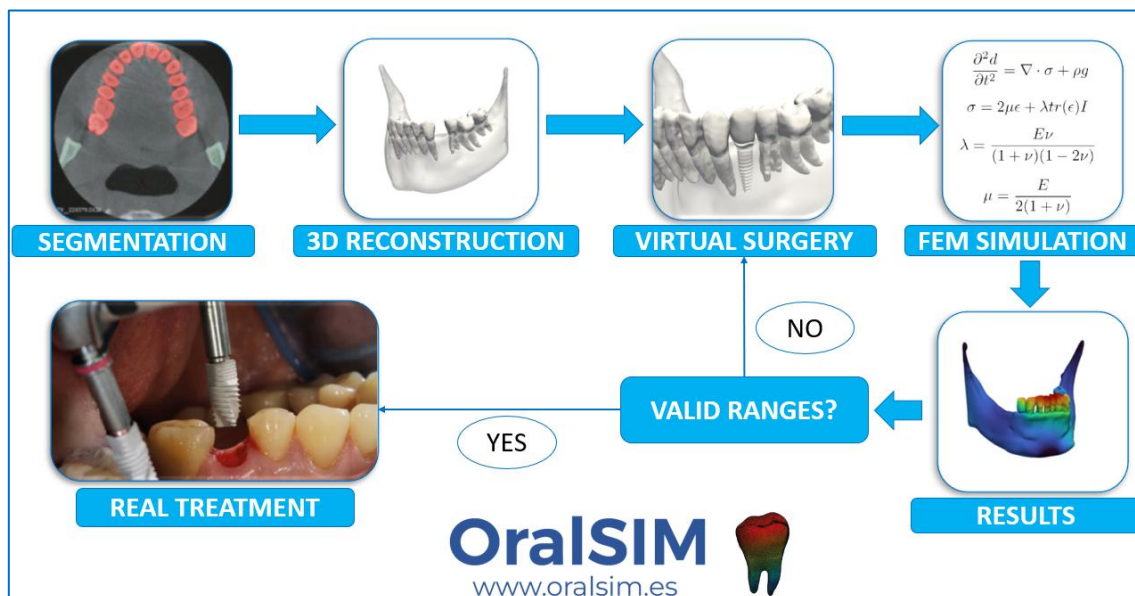
“US market feasibility of
OralSIM technology”

Dental implants are widely recognised as the most reliable solution for tooth loss. However, ensuring their clinical and aesthetic success involves a delicate balance of multiple factors, including implant material properties, precise design considerations and patient's anatomy and bone quality.

Traditional approaches, relying solely on clinical experience, patient examination and medical imaging, often fall short in delivering optimal implant biomechanical outcomes potentially reducing implant's lifespan (mechanical failure is around 10%, and this figure is linked also with aesthetic failure, with a 33% incidence in patients undergoing implant treatments).

What if we could combine the power of dentistry and engineering to create a more predictable, precise, and patient-centric implantation process, reducing failure rates in a 40% and dental office appointments in a 35%?

Our groundbreaking software **OralSIM** employs Artificial Intelligence (AI) and the Finite Element Method (FEM) to provide accurate biomechanical response of implant treatments. Our AI tool automatically generates a comprehensive 3D digital replica of the patient's oral cavity, meticulously reconstructed from Cone Beam Computed Tomography (CBCT) imagery. After placing the implant on virtual patient's anatomy using our user-friendly 3D environment, FEM simulations provide the biomechanical response of the treatment (stress-deformation patterns on teeth, implants and surrounding bone and tissue) and implant survival can be evaluated.



By leveraging well-established mathematical foundations and computational techniques, we deliver unparalleled precision and accuracy. Our software offers an immersive and visually stunning experience (AR environment and holographic display) for detailed examination of

implant placement, enabling clinicians to explore the outcomes of different implant scenarios dynamically and interactively.

Previously inaccessible areas and challenging measurements become easily accessible. Visualise stress distributions, analyse deformation patterns, study implant-bone interactions and make well-informed decisions based on evidence.

OralSIM empowers clinicians to make data driven decisions and optimise treatment planning. It operates seamlessly as a user-friendly web service, accessible from any device, operating system or web browser. By virtually testing surgical outcomes before proceeding with the actual procedure, clinicians gain confidence in their treatment plans, reducing the likelihood of unnecessary surgeries or aesthetic implant failures.

This not only saves time and costs but also enhances patient satisfaction and overall treatment outcomes.

More info available in www.dentalfem.com

Our purpose within the INNOWIDE project is to assess the feasibility of launching our technology within the US market.



INDOMINUS is specialised in computational engineering solutions within the medical industry and we are partnering with **MarketEntryUSA** (InnoSky LLC), a US company focused on supporting the product market entry into the US markets. Our technical team and their business experts in the medical industry (both in terms of

regulatory framework and legal issues but also on market analysis) are a perfect match to deeply assess the feasibility of our product within targeted country. By a 6 months-research project focusing on technology uptake (valuation, certification and homologation in particular FDA clearance), market prospection (quantitative and qualitative market analysis, competitors' identification, PESTLE analysis and market barriers determination) and compliance verification, we shall define and deploy a roadmap for **OralSIM** market launch within the US dental industry with the highest rates of success.

The project is funded by Eureka Network and the European Union as part of the European Partnership on Innovative SMEs (€60,000 grant over a 6-month duration under a lump sum scheme) and also benefits from additional opportunities (networking sessions with partners for larger-scale deployments of the technology, the chance to attend world-renowned trade fairs and also access to private investment sessions, among others)



Funded by
the European Union

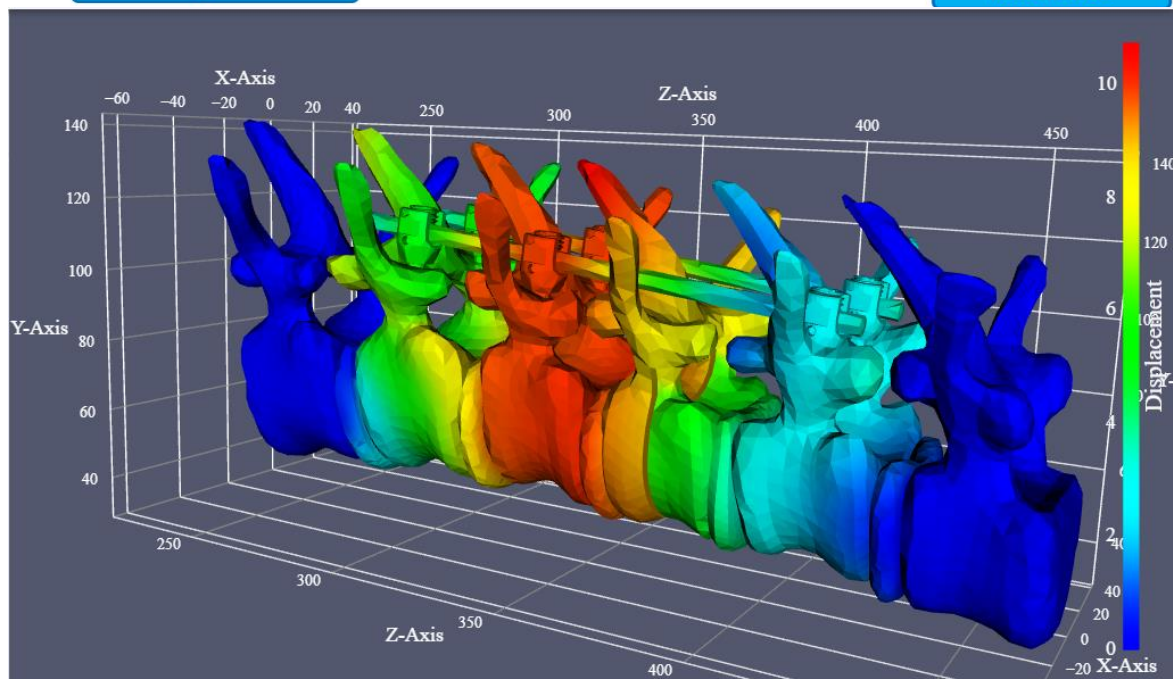
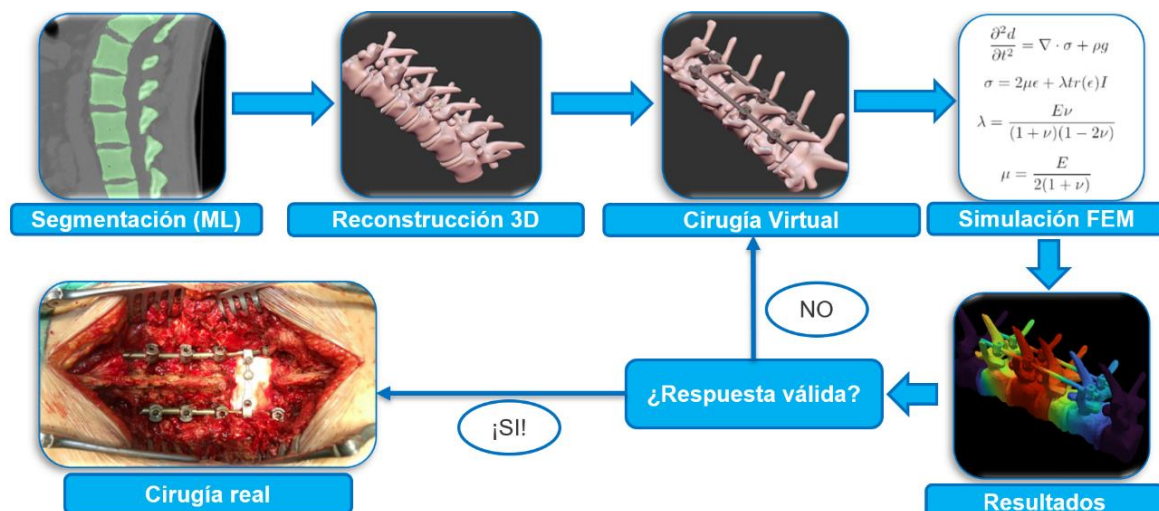


Programa Activa Startups

INDOMINUS ADVANCED SOLUTIONS ha desarrollado el proyecto de I+D:

“VIRTUAL_SPINE: simulación de tratamientos de columna vertebral”

en el marco del programa Activa Startups, financiado por el Ministerio de Industria y Turismo, que ha aportado 9.500 euros a la resolución del reto de innovación, que se ha llevado junto con la startup CORPUS COMPUTATIONAL BIOMECHANICS



Ayudas de Igape Galicia Rural Emrende. Operación Cofinanciada por la Unión Europea. Programa de Desarrollo Rural de Galicia 2014-2020

INDOMINUS se siente orgullosa de haber sido beneficiaria de una ayuda de Igape destinada a la creación de empresas para actividades no agrícolas en zonas rurales de Galicia.

El objetivo principal de estas ayudas es contribuir a la diversificación económica, creación de empleo, sostenibilidad del medio rural y equilibrio territorial, tanto en términos económicos como sociales.

El resultado que se pretende es la creación y desarrollo de PYMES para actividades no agrícolas en zonas rurales y al creación de empleo.

AXENCIA
GALEGA DE
INNOVACIÓN

PROXECTO ORALSIM DA EMPRESA INDOMINUS AS S.L. (004)

Para promover o desenvolvemento tecnolóxico, a innovación e unha investigación de calidade.

Esta operación está financiada pola Xunta de Galicia, a través de axudas concedidas pola Axencia Galega de Innovación, dentro do programa de axudas á empresa RECUPERACIÓN EXCELENCIA NEOTEC 2021-IN870A.



UNIÓN EUROPEA



Unidos para conseguir un tejido empresarial más competitivo

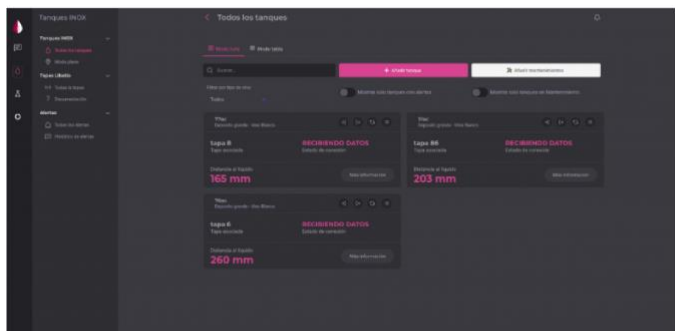


Este proyecto está cofinanciado por el
Fondo Europeo de Desarrollo Regional



Una manera de hacer Europa

INDOMINUS ha sido beneficiaria del Fondo Europeo de Desarrollo Regional cuyo objetivo es mejorar la competitividad de las Pymes y gracias al cual ha puesto en marcha un Plan de Marketing Digital Internacional con el objetivo de mejorar su posicionamiento online en mercados exteriores durante el año 2021. Para ello ha contado con el apoyo del Programa XPANDE DIGITAL de la Cámara de Comercio de Pontevedra, Vigo y Vilagarcía de Arousa.



O proxecto LIBATIO

INDOMINUS ADVANCED SOLUTIONS resultou

beneficiaria da convocatoria Conecta Hubs para proxectos colaborativos nas áreas estratéxicas dos Hubs de innovación dixital que permiten avanzar na súa especialización e consolidación dentro do marco da RIS3 Galicia e cofinanciadas polo Fondo Europeo de Desenvolvemento Rexional (Feder) dentro do programa operativo Feder Galicia 2014-2020 (código de procedemento IN852C). O programa Conecta Hubs está subvencionado por la Axencia Galega de Innovación e conta co apoio da Vicepresidencia Segunda e a Consellería de Economía, Empresa e Innovación da Xunta de Galicia. Ademais de INDOMINUS, Viña Costeira, SC Robotics e Nigal forman o consorcio que executa o proxecto Libatio que ten como obxectivo xeral o desenvolvemento dun sistema d monitorización intelixente que achegue a transformación dixital ao Sector Vitivinícola mediante a integración do Internet das Cousas (IoT), da Intelixencia Artificial (Machine Learning) e da Simulación de Modelos Matemáticos por Computadora (Digital Twin) aplicados aos procesos de maduración e fermentación do viño. A falta de uns meses para o remate do proxecto, xa na súa anualidade 2023, os socios foron quen de conseguir unha gran parte dos avances previstos. Os mais significativos son:

- Deseño e instalación de tapas intelixentes para os depósitos de aceiro inoxidable onde se almacena o viño que permiten a monitorización das condicións ambiente no interior dos mesmos e incluso a toma de fotografías da superficie do líquido
- Modelización matemática do proceso de fermentación do viño apoiada na implementación de algoritmos de optimización e control do proceso con que se logran reducións significativas do consumo enerxético ligado ao mesmo, sen comprometer a calidade do produto final.
- Deseño e implementación dunha plataforma web para dar cabida a todos os datos do proceso de monitorización en tempo real e na se logran predicións baseadas en parámetros medibles (temperatura, humidade, presión, presenza de osíxeno...), co obxectivo de lograr a estandarización organoléptica do viño ao longo dos anos.
- Os últimos meses de execución do proxecto dedicáranse a realizar tarefas de axuste e validación do sistema, finalizar os procesos de certificación e homologación técnica e á difusión dos principais resultados obtidos.

[Visítanos na páxina do proxecto](#) para saber máis de cómo LIBATIO pode optimizar a túa produtividade vinícola

**Programa ConectaHubs
INDOMINUS ADVANCED SOLUTIONS**

**Promover o desenvolvemento tecnolóxico, a
innovación e unha investigación de calidade**

**Operación cofinanciada pola Unión Europea, a
través do FONDO EUROPEO DE
DESENVOLVEMENTO REXIONAL (FEDER)**

PROGRAMA OPERATIVO
FEDER GALICIA
2014-2020

Unha maneira de facer Europa



DIGIFED grant. Action funded together with European Union.

INDOMINUS is proud to be a beneficiary of DIGIFED grant. This funding programme aims to support SMEs and Start-ups in the development of smart applications in Europe.



EPICENTRE grant. Action funded together with European Union.

INDOMINUS is proud to be a beneficiary of EPICENTRE grant. This funding programme aims to support SMEs and Start-ups in the development of innovative solutions in collaborations with Corporates that make a significant impact in the sectors and value chains they belong to.



D E S I R E



**Co-funded by
the European Union**

DESIRE grant. Action funded together with European Union.

INDOMINUS is proud to be a beneficiary of DESIRE grant aimed at support SMEs to access the European eHealth and digital health market and enables them to embrace the green and digital transformation.